

Programme

Tuesday 9 March 2010

13:00 - Registration opens (Hotel Lobby)
15:00 Έναρξη εγγραφών

Wednesday 10 March 2010

10:00 - Registration opens (Hotel Lobby)
22:00 Έναρξη εγγραφών

Special Session – Quality of Life and Dementia

Ειδική Συνεδρία- Ποιότητα Ζωής και Άνοια

Chair: Karin Wolf-Ostermann, Tsantali Eleni

Location: Ilida Room

14:00 - 17:30	OC001	Karin Wolf-Ostermann	Quality of life and health outcomes in residents of shared housing arrangements in Berlin: results of the Dewege-study Ποιότητα ζωής και έκβαση υγείας σε κατοίκους που ζουν σε κοινές οικιστικές διευθετήσεις στο Βερολίνο : αποτελέσματα της μελέτης Dewege
	OC002	Gerlinde Strunk-Richter	Well-being of people with dementia in small house units Ευημερία των ασθενών με άνοια που ζουν σε μικρά σπίτια
	OC003	Hilde Verbeek	Small-scale living for people with dementia: implications for residents, family and professional caregivers in the Netherlands Διαβίωση μικρής κλίμακας για άτομα με άνοια : Επιπτώσεις για τους ενοίκους, τις οικογένειες και τους επαγγελματίες περιθάλποντες στην Ολλανδία

Programme

Wednesday 10 March 2010

Opening Ceremony

Τελετή Έναρξης

Chairs: Daisy Acosta & Magda Tsolaki

Location: Olympia Hall

18:30	Magda Tsolaki & Daisy Acosta Μάγδα Τσολάκη & Daisy Acosta	Welcome Καλωσόρισμα
18:40	Bishop of Thessaloniki Anthimos Παναγιώτατος Μητροπολίτης Θεσσαλονίκης, κ. Άνθιμος Bishop of Nerepis and Stavroupolis Varnavas Σεβασμιότατος Μητροπολίτης Νεαπόλεως και Σταυρουπόλεως κ. Βαρνάβας Rector, Aristotle University of Thessaloniki. Anastasios Manthos Πρύτανης του ΑΠΘ Αναστάσιος Μάνθος Minister of Health-Cyprus Υπουργός Υγείας Κύπρου Chair of Mental Health Petros Giannoulatos Διευθυντής Ψυχικής Υγείας Πέτρος Γιαννουλάτος Minister of Health-Greece Υπουργός Υγείας Κήρυξη της έναρξης του Συνεδρίου	
19:00	Chariklia Tziraki-Segal Χαρίκλεια Τζιγάκη - Segal	A journey of the heart Ένα ταξίδι της καρδιάς
19:10	Rector Helene Glykatzi-Ahrweiler Πρύτανης Ελένη Γλύκατζη Αρβελέρ	Hellenism and Civilisation Ελληνισμός και Πολιτισμός
19:40	Entertainment Greek songs over the centuries Chorus Didimotixiton, Conductor: G. Poulíos Ψυχαγωγικό πρόγραμμα. Ελληνικά τραγούδια όλων των εποχών Χορωδία Δυδιμοτειχιτών, Μαέστρος Γ. Πούλιος	
20:00	Welcome reception Δεξίωση καλωσορίσματος	
21:00	Close of welcome reception Λήξη της δεξίωσης καλωσορίσματος	

Programme

Thursday 11 March 2010

Plenary session– What's new in Alzheimer's disease

Ολομέλεια – Νεότερα για την Νόσο Alzheimer

Chairs: Athanassios Dimitriadis, Magda Tsolaki

Location: Olympia Hall

09:00	Sam Gandy	New treatment developments Νέες εξελίξεις στην θεραπεία
09:20	Frank Jessen	Neuroimaging perspectives Προοπτικές της Νευροαπεικόνισης
09:40	Pieter Jelle Visser	MCI and the early diagnosis of Alzheimer's disease Ήπια Νοητική Διαταραχή και πρόωμη διάγνωση της Νόσου Alzheimer
10:10	Bengt Winblad	Ongoing clinical trials in Alzheimer's disease Τρέχουσες κλινικές μελέτες στην Νόσο Alzheimer
10:30 - 11:00	Tea, coffee, posters & exhibition Τσαι, καφές, posters & έκθεση	

Plenary session – Global Alzheimer's movement

Ολομέλεια – Παγκόσμιο κίνημα για την Νόσο Alzheimer

Chairs: Marc Wortmann, Paraskevi Sakka

Location: Olympia Hall

11:00	Paraskevi Sakka Παρασκευή Σακκά	The story of the Greek Alzheimer Association Η ιστορία της Ελληνικής Εταιρείας Alzheimer
11:15	Daisy Acosta	Is dementia a priority within the World Health Organization? The Intervention Packages of Mental Health GAP Είναι η Άνοια προτεραιότητα για τον Παγκόσμιο Οργανισμό Υγείας; Τα πακέτα παρεμβάσεων ψυχικής υγείας GAP
11:30	Jean Georges Pekka Laine	Importance of planning – The European perspective Σημασία του προγραμματισμού – Η ευρωπαϊκή προοπτική
11:45	Peter Ashley	The role of people with dementia in advocacy Ο ρόλος των ατόμων με άνοια στην υπεράσπισή τους
12:00	Marc Wortmann	Forum discussion Συζήτηση
12:30 - 14:00	Lunch, exhibition & posters Γεύμα, έκθεση και posters	

Programme

Thursday 11 March 2010

Lunchtime Symposium – The Impact of AD on Patients, Caregivers, Physicians, and Society: A Tale of Two Studies Η Επίδραση της ΝΑ στους ασθενείς, στους περιθάλποντες και στην κοινωνία: Η ιστορία δύο μελετών

This session was made possible by Pfizer.

Chairs: Roy Jones, Daniel Christensen
Location: Grand Ballroom 2

This symposium, lead by Roy Jones and Daniel Christensen will use actual patient and caregiver video vignettes from Dr. Christensen's archive to underscore the significance of data from the IMportant Perspectives on Alzheimer's Care and Treatment (IMPACT) survey, which was sponsored by Eisai Inc. and Pfizer Inc, and for which Professor Jones served as Steering Committee Chair. This survey was designed to explore key attitudes, behaviours, and perceptions toward Alzheimer's disease (AD) across 5 European countries; identify barriers to optimal AD care; and determine a common "reason to care" about dementia. Data from this survey will serve to highlight the importance of the early and persistent treatment of AD in the context of one family's video-documented 6-year struggle with the disease.

12:30	Roy Jones	Introduction
12:35 - 13:30	Roy Jones & Daniel Christensen	An Introduction to the IMPACT Survey: European Attitudes Toward Alzheimer's Disease Alzheimer's Disease From Diagnosis to Autopsy: A 6-Year Video Case History Physician Attitudes Towards Presentation, Diagnosis, and Treatment of AD Consequences of Caring for Someone With AD Attitudes Surrounding Caregiver Burden

Parallel Session - Ageing and dementia - Services Παράλληλη συνεδρία - Γήρανση και Άνοια- Υπηρεσίες

Chairs: Socratis Papageorgiou, Fofi Constantinidou
Location: Olympia Hall C

14:00 - 15:30	OC005	Fofi Constantinidou Φώφη Κωνσταντινίδου	The relationship of AD8 and cognitive performance in Greek Cypriot adults: a preliminary study Η σχέση της κλίμακας AD8 και της νοητικής απόδοσης σε Κύπριους ενήλικες :μια προκαταρκτική μελέτη
	OC006	Claudia Miranda	The needs, social networks and quality of life of people with dementia living at home Οι ανάγκες, τα κοινωνικά δίκτυα και η ποιότητα ζωής ατόμων με άνοια που ζουν σπίτι τους
	OC007	Stelios Pantelopoulos Στέλιος Παντελόπουλος	SOCIABLE: a surface computing platform empowering more effective cognitive training interventions for healthy elderly and demented patients SOCIABLE: Πλατφόρμα υπολογιστών επιφάνειας η οποία ενδυναμώνει τις παρεμβάσεις νοητικής εκπαίδευσης σε υγιείς και ηλικιωμένους με άνοια

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14:00 - 15:30	OC008	Amy J Streater	Service users' involvement in the development of a maintenance cognitive stimulation therapy (CST) programme: a comparison of the views of people with dementia, staff and family caregivers. Η συμβολή των χρηστών υπηρεσιών στην ανάπτυξη ενός προγράμματος διατήρησης νοητικής διέγερσης : σύγκριση των απόψεων των ατόμων με άνοια, του προσωπικού και των περιθαλπόντων.
	OC009	Marie-Louise Hansen	Prognostic factors for weight loss over a one year period in patients recently diagnosed with mild Alzheimer's disease Προγνωστικοί παράγοντες για απώλεια βάρους στην περίοδο ενός έτους σε ασθενείς που διαγνώστηκαν πρόσφατα με ήπια νόσο Alzheimer
	OC010	Achille Tchalla	Risk factors of rapid cognitive decline (RCD) of dementia in a prospective study: 3 years follow-up Παράγοντες κινδύνου της ταχείας νοητικής έκπτωσης στην άνοια σε μια προοπτική μελέτη : παρακολούθηση 3 ετών
	OC011	Thilo Kroll	Alzheimer's disease: the challenges of managing multi-morbidity Η Νόσος Alzheimer : οι προκλήσεις της διαχείρισης της πολυνοσηρότητας
	OC012	Zlata Felc	Dementia knowledge among health workers and other adults in a Slovenian area Γνώσεις για την άνοια σε επαγγελματίες υγείας και άλλους ενήλικες στη Σλοβενία
	OC012B	Sokratis G. Papageorgiou Σωκράτης Γ. Παπαγεωργίου	Frequency and Causes of Early-onset Dementia in a Tertiary Referral Center in Athens Συχνότητα και αιτίες της πρώιμης άνοιας σε ένα τριτοβάθμιο κέντρο αναφοράς στην Αθήνα

Parallel Session – Quality of life 1
Παράλληλη συνεδρία – Ποιότητα ζωής 1
Chairs: Luiza Spuru, Anne Margriet Pot
Location: Olympia Hall B

14:00 - 15:30	OC013	Hidezo Mori	A creative care approach to the elderly with cognitive impairment in a group home in Japan Δημιουργική προσέγγιση περίθαλψης σε ηλικιωμένους με νοητική έκπτωση σε ομαδικό σπίτι στην Ιαπωνία
	OC014	Sherry L. Dupuis	A changing melody: triggering personal and social transformation in dementia care Μια εναλλασσόμενη μελωδία : πυροδοτώντας την προσωπική και κοινωνική μεταμόρφωση στην περίθαλψη της άνοιας

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OC015	Anne Margriet Pot	The use of global positioning system (GPS) among people with dementia and their family caregivers Η χρήση του παγκόσμιου συστήματος θεσιθεσίας (GPS) σε άτομα με άνοια και στους περιθάλποντες τους
OC016	Luiza Spuru	IT&C applications in the multi-factorial attempt of physically and/or cognitively disabled elderly at home Εφαρμογές τεχνολογίας πληροφορίας και επικοινωνιών στην πολυπαραγοντική προσπάθεια των φυσικά ή διανοητικά ανάπηρων ηλικιωμένων στο σπίτι
OC017	Sokratis G. Papageorgiou Σωκράτης Γ. Παπαγεωργίου	Rapidly progressive dementia: causes found in a Greek tertiary referral center, in Athens Ταχέως Εξελισσόμενη Άνοια: αιτίες που έχουν βρεθεί σε ένα ελληνικό τροτοβάθμιο κέντρο αναφοράς στην Αθήνα
OC019	Glenn Rees	Dementia care and knowledge translation Περιθαλψη της άνοιας και μετάφραση της γνώσης
OC020	Alison Phinney	Exploring experiences of everyday activity and social interaction in early dementia and their significance for sense of self and well-being Εξερεύνηση εμπειριών καθημερινών δραστηριοτήτων και κοινωνικής διάδρασης σε άνοια πρώιμου σταδίου και η σημασία τους για την αίσθηση του εαυτού και την ευημερία
OC153B	A Aybad	Care of Alzheimer's patients in the Middle East Περιθαλψη των ατόμων με άνοια στην Μέση Ανατολή

Parallel Session – Future treatments and diagnosis

Παράλληλη συνεδρία - Μελλοντικές Θεραπείες και Διάγνωση

Chairs: Henry Brodaty, Vasileios Kokkas

Location: Olympia Hall A

14:00 - 15:30	OC021	Kang-Wei Chang	The experiences of radiopharmaceuticals for Alzheimer's disease in Taiwan Οι εμπειρίες των ραδιοφαρμακευτικών σκευασμάτων στην Νόσο Alzheimer στην Taiwan
	OC022	Anders Lönneborg	Validation of a novel blood test for the early detection of Alzheimer's disease - challenges with an 'imperfect gold standard' Θεώρηση ενός καινοτόμου αιματολογικού τεστ για την πρόωμη διάγνωση της Νόσου Alzheimer- προκλήσεις για ένα λάθος «gold standard»
	OC023	Henry Brodaty	Improving general practice diagnosis of dementia Βελτιώνοντας την διάγνωση της άνοιας ως γενική πρακτική
	OC024	Pankaj Dwivedi	Intranasal delivery of insulin for the restoration of memory signalling in Alzheimer's disease Ενδορινική χορήγηση ινσουλίνης για την αποκατάσταση της μνήμης στην Νόσο Alzheimer

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OC025	Hee-Won Park	Crystal structures of jnk-interacting protein 1 and kinesin-1 light chain subunit: insights into molecular interactions with amyloid precursor protein Κρυσταλλικές δομές της jnk-αλληλεπιδρώσας πρωτεΐνης 1 και της κινάσης της ελαφράς αλύσου υπομονάδας: μοριακή αλληλεπίδραση με την πρόδρομη πρωτεΐνη του αμυλοειδούς
OC026	Samuel T Henderson	Ketone bodies as a therapeutic for Alzheimer's disease Τα κετονικά σώματα ως θεραπεία για την Νόσο Alzheimer'
OC027	Lu Gao	Accuracy of death certification of dementia in a community sample of older people Η ακρίβεια του πιστοποιητικού θανάτου από άνοια σε ένα δείγμα κοινότητας ηλικιωμένων ατόμων
OC027B	John D. Papatriantafyllou Γιάννης Δ. Παπατριανταφύλλου	Difficulties in detecting behavioral symptoms of frontotemporal lobar degeneration across cultures Δυσκολίες στην διάγνωση συμπεριφορικών συμπτωμάτων που προκαλούνται από μετωποκροταφική εκφύλιση σε διάφορες κουλτούρες

Parallel Session 4 – Activities of Greek branches of Alzheimer's Federation, all over Greece.

Ελληνική παράλληλη συνεδρία – Δραστηριότητες των Παραρτημάτων της Πανελληνίας Ομοσπονδίας Νόσου Alzheimer

Chairs: Aristidis Liapis, Paraskevi Sakka, Maria Tzanakaki, Magda Tsolaki

Πρόεδροι: Αριστείδης Λιάπης, Παρασκευή Σακκά, Μαρία Τζανακάκη, Μάγδα Τσολάκη

Location: Grand Ballroom 2

14:00- 15:30	Andrianaki Lina Ανδριανάκη Λίνα	Association of Alzheimer's disease and related disorders Athens Εταιρεία Νόσου Alzheimer και Συναφών Διαταραχών Αθηνών
	Kounti Fotini Κουντή Φωτεινή	Activities of the Association Alzheimer's disease and related disorders, Kalamaria Δραστηριότητες της Εταιρείας Νόσου Alzheimer και Συναφών Διαταραχών Καλαμαριάς
	Tzanakaki Maria Τζανακάκη Μαρία	Activities of the association of Alzheimer's disease, Chania Δραστηριότητες της Εταιρείας Νόσου Alzheimer στα Χανιά
	Michailidou Peny Μιχαϊλίδου Πένυ	Voluntarism and problems of Alzheimer's association in the city of Xanthi Εθελοντισμός και προβλήματα της Εταιρείας Alzheimer στην πόλη της Ξάνθης
	Kordelas Apostolos Κορδελάς Απόστολος	Services of the care unit of Alzheimer disease Volos Δραστηριότητες Μονάδας Alzheimer Βόλου
	Liapis Aristidis Λιάπης Αριστείδης	Greek Association of Alzheimer's disease and related disorders, Konistres Euboiia Ελληνική Εταιρεία Νόσου Alzheimer και Συναφών Διαταραχών, Κονίστρες Εύβοιας
	Liapis Aristidis Λιάπης Αριστείδης	Institute of Alzheimer, Volos ' Saint Sofia' Ινστιτούτο Alzheimer Βόλου " Η Αγία Σοφία "

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Parallel Session – Multidisciplinary approach of dementia
Παράλληλη συνεδρία – Πολυεπιστημονική προσέγγιση της άνοιας
Chair: Jacob Roy, Spyros Kasidiaris
Location: Kallipatira

14:00 - 15:30	OC030	Louise F McCabe	Sustaining and developing services for people with dementia in Kerala, India Διατηρώντας και αναπτύσσοντας υπηρεσίες για άτομα με άνοια στην Kerala, Ινδία
	OC031	David M Ndeti	A rapid situation assessment (RSA) of the needs of elderly people (65+) care-givers in urban community informal (slum) settings in Nairobi, Kenya Αξιολόγηση ταχεία των αναγκών των περιθαλπόντων ηλικιωμένων ατόμων (65+) σε ένα φτωχό αστικό περιβάλλον στο Nairobi, Kenya
	OC032	Sabine Jansen	Living alone with dementia Ζώντας μόνος με άνοια
	OC033	Jenny H La Fontaine	Dementia care advisers: an evaluation of the Worcestershire experience Σύμβουλοι περίθαλψης άνοιας: εκτίμηση της εμπειρίας στο Worcestershire
	OC034	MiaoYu Liao	Patient-centered dementia group home Ομαδικά σπίτια άνοιας προσανατολισμένα στον ασθενή
	OC035	Spyros P Kasidiaris Σπύρος Π. Κασιδιάρης	Cognitive function of elderly people in an open protection frame— correlation of findings with the results on people's efficiency Νοητική λειτουργία ηλικιωμένων σε ένα πλαίσιο ανοιχτής προστασίας- συσχετισμός των ευρημάτων με τα αποτελέσματα της αποδοτικότητας των ατόμων

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Thursday 11 March 2010

ADI Workshop - Arts & dementia

Ημερίδα ADI - Τέχνη και Άνοια

Chair: Marc Wortmann

Location: Ilida Room

14:00 - 15:30	WS2	Michael Hagedorn	Konfetti im Kopf - a photographic awareness campaign Konfetti im Kopf- μια φωτογραφική καμπάνια ενημέρωσης
	WS3	Ninoslav Mimica	Art therapy for people with dementia - case report Θεραπεία μέσω της τέχνης για άτομα με άνοια- αναφορά περίπτωσης
	WS4	Dario Garau Setzu	My mother's second life..... Η δεύτερη ζωή της μητέρας μου...
		Joseph Portelli	The show compassion tour
		Judith Fox	Living with dementia
		Berna Huebner	I remember when I paint
15:30 - 16:30		Tea, coffee, posters & exhibition Τσai, καφές, posters & έκθεση	

Parallel Session - Non pharmacological interventions

Παράλληλη συνεδρία - Μη φαρμακολογικές παρεμβάσεις

Chairs: Paraskevi Sakka, Fotini Kounti

Location: Olympia Hall C

16:00 - 17:30	OC037	Michal K Herz	My self, my loved one and our group – support groups for people in the early stages of AD Ο εαυτός μου, το αγαπημένο μου πρόσωπο και η ομάδα μας – ομάδες υποστήριξης για τα άτομα στα πρώτα στάδια της νόσου Alzheimer
	OC038	Mary T Newport	Case study: Dietary intervention using coconut oil to produce mild ketosis in a 58 year old APOE ε4+ male with early onset Alzheimer's disease Μελέτη Περίπτωσης : Διατροφική παρέμβαση με την χρήση ελαίου καρύδας ώστε να προκληθεί ήπια κέτωση σε έναν 58χρονο άνδρα με APOE ε4+ και πρώιμη έναρξη άνοιας.
	OC039	Areti L Efthymiou Αρετή Λ. Ευθυμίου	Effectiveness of a stress management program for Greek caregivers of patients attending a dementia day care center: a pilot study Αποτελεσματικότητα ενός προγράμματος διαχείρισης στρες για περιθαλπόντες ασθενών που επισκέπτονται ένα κέντρο ημέρας-πilotική εφαρμογή
	OC040	David Harvey	Early referral for support of dementia caregivers: evaluation of the first link demonstration project Πρώιμη αναφορά για την υποστήριξη των περιθαλπόντων στην άνοια : αξιολόγηση του πρώτου συνδεδεμένου προγράμματος

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OC041	Susanna Bergamaschi	Cortical plasticity and Alzheimer's disease: a study with evoked potentials Εγκεφαλική πλαστικότητα και Νόσος Alzheimer : μια μελέτη με προκλητά δυναμικά
OC042	Hua-Shan Wu	Spaced-retrieval: a memory intervention for improving eating performance of residents with dementia Η τεχνική Spaced-retrieval: μια παρέμβαση για την βελτίωση της διατροφικής συμπεριφοράς ατόμων με άνοια
OC043	Franka JM Meiland	Electronic guidance and awareness services for community-dwelling people with dementia and their carers Υπηρεσίες ηλεκτρονικής καθοδήγησης και ενημέρωσης για τα άτομα που ζουν στην κοινότητα και για τους περιθάλποντες τους
OC044	Christina Agogiatou Χριστίνα Αγωγιάτου	Practice of attention and parameters of executive function for patients with mild cognitive impairment (MCI) Εξάσκηση της προσοχής και παράμετροι εκτελεστικής λειτουργίας για ασθενείς με ήπια νοητική διαταραχή
	Anogiannakis Georgios Ανωγειαννάκης Γεώργιος	Telemedicine and clever houses Τηλεϊατρική και έξυπνα σπίτια

Parallel Session – Supporting & educating carers 1

Παράλληλη συνεδρία - Υποστηρίζοντας και εκπαιδεύοντας τους περιθάλποντες 1

Chairs: Eleni Karkazi, Betty Haralambous

Location: Olympia Hall B

16:00 - 17:30	OC045	Betty Haralambous	The dementia resource guide project Το πρόγραμμα οδηγός πόρων για την άνοια
	OC046	Pieter M Heyns	Does a caregiver has a future? Έχει ένας περιθάλποντας μέλλον ;
	OC047	Jo-Ann T Brown	Australian quality support groups project Το πρόγραμμα της Αυστραλίας για ποιοτικές ομάδες υποστήριξης
	OC048	Miriam Maldonado	Caregiver education: supporting the family caregiver through flexible sponsored training Εκπαίδευση των περιθαλπόντων : υποστήριξη των περιθαλπόντων μέσω ευέλικτης επιχορηγούμενης εκπαίδευσης
	OC050	Mei-Chun Lin	"Learning from experience": caring for people with dementia Μαθαίνοντας από την εμπειρία : φροντίζοντας ανθρώπους με άνοια
	OC051	Nirmala M Narula	Promotion of high ideal volunteerism Πρωώθηση εθελοντισμού υψηλών προδιαγραφών
	OC052	Jocelyne De Rotrou	Combined interventions in dementia for patients and caregivers. results of aidma: a French controlled study Συνδυαστικές παρεμβάσεις στην άνοια για ασθενείς και περιθάλποντες, αποτελέσματα της aidma: γαλλική μελέτη

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OC053	Francesca Neviani	The Italian version of the carer's needs assessment for dementia (CNAD): psychometric properties and influence of patients/carer characteristics on answer' profiles. Η ιταλική εκδοχή της αξιολόγησης των αναγκών του περιθάλποντα στην άνοια : ψυχομετρικές ιδιότητες και επίδραση των χαρακτηριστικών ασθενών/περιθάλπόντων στα προφίλ των απαντήσεων.
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Parallel Session– Update on drug treatments

Παράλληλη συνεδρία – Οι φαρμακευτικές θεραπείες σήμερα

Chairs: Jim Jackson, Theodoros Sclaviadis

Location: Olympia Hall A

16:00 - 17:30	OC054	Veronika Vakharova	Phosphatidylserine containing omega-3 fatty acids may improve memory abilities in non-demented elderly with memory complaints: a double blind placebo-controlled trial Η φωσφατιδυλοσερίνη που περιέχει ωμέγα 3 λιπαρά μπορεί να βελτιώσει τις ικανότητες μνήμης σε μη ανοϊκούς ηλικιωμένους που παραπονούνται για την μνήμη τους. Διπλή-τυφλή, ελεγχόμενη με placebo, κλινική μελέτη.
	OC055	Chrysi Koliaki Χρυσή Κολιάκη	The effect of Aniracetam, either as monotherapy or combined with cholinesterase inhibitors, on neuropsychological findings of patients with dementia in different stages. (data from the Greek amnesia study): aniracetam monotherapy compared with cholinesterases inhibitors. Τα αποτελέσματα της ανιρακετάμης, είτε ως μονοθεραπεία είτε σε συνδυασμό με αναστολείς της χολινεστεράσης σε ασθενείς με άνοια σε διάφορα στάδια (στοιχεία από την Ελληνική Μελέτη Μνήμης): μονοθεραπεία ανιρακετάμης σε σύγκριση με αναστολείς χολινεστερασών.
	OC056	Georg Adler	Prediction of treatment response to Rivastigmine in Parkinson's disease dementia Πρόβλεψη της θεραπευτικής ανταπόκρισης σε ριβαστιγμίνη σε άνοια της νόσου Parkinson
	OC057	Jim Jackson	Will translational research help find a cure for Alzheimer's disease? Θα βοηθήσει η μεταφραστική έρευνα να βρεθεί μια θεραπεία για την Νόσο Alzheimer;
	OC058	Vasileios T Papaliagkas Βασίλειος Τ. Παπαλιάγκας	Anticholinergic drugs in elderly people: study of an Alzheimer's day centre Αντιχολινεργικά φάρμακα σε ηλικιωμένους: Μελέτη σε ένα ελληνικό κέντρο ημέρας Alzheimer
	OC059	Harish C. Pant	The cyclin dependent kinase 5 inhibitor (cip) reduces a1-42 and p25/cdk5-mediated tau hyperphosphorylation and apoptosis in neurons Ο αναστολέας της εξαρτώμενης από την κυκλίνη κινάσης ελατώνει την υπερφωσφορυλίωση της τ πρωτεΐνης και την απόπτωση των νευρώνων που προκαλείται από a1-42 και p25/cdk5
	OC059B	Giovanni Frisoni	Alzheimer's Disease - New Treatments and Diagnosis
	OC060	Frank Pistor	A new Medical Food (Souvenaid) in AD Νέα Ιατρική διατροφή (Souvenaid) στην ΝΑ

Programme

Thursday 11 March 2010

Parallel Session – Greek Parallel session : National Strategic Reference Framework 2007-2013

Ελληνική παράλληλη συνεδρία –Εθνικό Στρατηγικό Πλαίσιο Αναφοράς 2007-2013

Chairs: Magda Tsolaki, Paraskevi Sakka

Location: Grand Ballroom 2

16:00 -	Mniestris Nikos	National Strategic Reference Framework 2007-2013
17:30	Μνιέστρης Νίκος	Εθνικό Στρατηγικό Πλαίσιο Αναφοράς 2007-2013

Parallel Session– Neuropsychology & dementia

Παράλληλη συνεδρία - Νευροψυχολογία και άνοια

Chairs: Tessa Christodoulou, Iliia Theotoka

Location: Kallipatira

16:00 - 17:30	OC062	Fofi Constantinidou Φώφη Κωνσταντινίδου	Quality of life, years of education and neuropsychological performance in older adults Ποιότητα ζωής, έτη εκπαίδευσης και νευροψυχολογική επίδοση σε ηλικιακά μεγαλύτερους ενήλικες
	OC063	Manveen Kaur	Efficacy of cholinesterase inhibitors on neuropsychiatric symptoms of dementia- a Malaysian experience. Δραστηκότητα των αναστολέων χολινεστεράσης σε νευροψυχιατρικά συμπτώματα της άνοιας – μια Μαλαισιανή εμπειρία
	OC064	Eleni Tsantali Ελένη Τσάνταλη	The overlearned past knowledge in non demented, MCI and demented participants as a factor of differential diagnosis Η γνώση των προηγούμενων ετών σε φυσιολογικούς ηλικιωμένους, ΗΝΔ και ασθενείς με άνοια ως παράγοντας διαφορικής διάγνωσης
	OC065	Rikus Van der Poel	Challenges in clinical interviewing and cognitive assessment in a rural South African community. Προκλήσεις στην κλινική συνέντευξη και την νοητική αξιολόγηση σε μια αγροτική κοινότητα της βορείου Αφρικής.
	OC066	Tessa Christodoulou Τέσσα Χριστοδούλου	Neuropsychological measures in differentiating between mild cognitive impairment (MCI) and Alzheimer's disease (AD) Νευροψυχολογικές μετρήσεις στη διαφορική διάγνωση μεταξύ ήπιας νοητικής διαταραχής και Νόσου Alzheimer
	OC067	Iliia Theotoka Ιλια Θεοτοκά	Validation study of panda questionnaire in Greek population Στάθμιση του ερωτηματολογίου panda σε ελληνικό πληθυσμό
	OC067C	Kortsidaki Ioanna Κορτσιδάκη Ιωάννα	Everything is a matter of education Τα πάντα είναι θέμα εκπαίδευσης

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Friday 12 March 2010

08:00	Registration opens Έναρξη εγγραφών	
Special IASSID Academy Workshop– Dementia and Adults with Intellectual Disabilities Ειδική Ημερίδα IASSID - Άνοια και Ενήλικες με Νοητική Υστέρηση Chairs: Matthew P. Janicki, Angela Hassiotis Location: Ilida		
08:30	Matthew P. Janicki	Overview of basic issues Περίληψη βασικών θεμάτων
09:00	John Tsiouris	Psychiatric and behavioral factors in dementia and ID Ψυχιατρικοί και συμπεριφορικοί παράγοντες στην άνοια και στη νοητική υστέρηση
10:00	Tea, coffee, posters & exhibition Τσάι, καφές, posters & έκθεση	
10:30	Angela Hassiotis	Caregiver and local services factors in dementia and ID Τοπικές υπηρεσίες και περιθάλποντες στην άνοια και στην νοητική υστέρηση
11:45	Roy Brown	Quality of life factors Παράγοντες ποιότητας ζωής
12:15	Questions & Answers	
12:30 - 14:00	Lunch, exhibition & posters Γεύμα, έκθεση και posters	
Plenary session– Non pharmacological interventions Ολομέλεια - Μη φαρμακολογικές παρεμβάσεις Chairs: Mary Mittelman, Wendy Fleming Location: Olympia Hall		
09:00	Presentation of the Fondation Médéric Alzheimer and ADI award on psychosocial research Παρουσίαση των βραβείων για την ψυχοκοινωνική έρευνα	
09:10	Esme Moniz-Cook	Psychosocial Interventions Ψυχοκοινωνικές παρεμβάσεις
09:40	Mary Mittelman	From Efficacy to Effectiveness: Translating the NYU Caregiver Intervention from Research to Practice Settings Από την δραστηκότητα στην αποτελεσματικότητα : Μεταφράζοντας την παρέμβαση NYU σε περιθάλποντες από έρευνα σε πρακτική
10:10	Robert Woods	Psychological interventions with people with dementia Ψυχολογικές παρεμβάσεις σε άτομα με άνοια
10:30 - 11:00	Tea, coffee, posters & exhibition Τσάι, καφές, posters & έκθεση	

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Friday 12 March 2010

Plenary session – Can we prevent Alzheimer's disease?

Ολομέλεια - Μπορούμε να αποτρέψουμε την Νόσο Alzheimer

Chairs: Henry Brodaty, George Anogiannakis

Location: Olympia Hall

11:00	Michael Valenzuela	Can physical and mental exercise prevent cognitive decline? Μπορεί η φυσική και νοητική άσκηση να εμποδίσει την νοητική πτώση;
11:20	Kountouras Jannis Κουντουράς Ιωάννης	Helicobacter pylori & neurodegenerative diseases Ελικοβακτηρίδιο του πυλωρού και νευροεκφυλιστικά νοσήματα
11:40	Barry Reisberg	The prevention working group of ADI Η ομάδα εργασίας πρόληψης της ADI
12:00	Paul Francis Angela Clayton-Turner	Brain donation by people with dementia and carers Δωρεά εγκεφάλου από ασθενείς με άνοια και τους περιθάλποντες τους
12:30 - 14:00	Lunch, exhibition & posters Γεύμα, έκθεση και posters	

Lunchtime Symposium – Caregiver insights into optimal dementia management

This session was made possible by Novartis

Chairs: TBC

Location: Grand Ballroom 2

This symposium will examine caregivers' perspectives on the day-to-day management of dementia. The programme will include recent recommendations for optimal patient care – including the role of the caregiver – and caregiver perspectives on dementia management and current treatments for dementia.

12:30 - 13:30	Magda Tsolaki	Title TBC
	Pablo Martinez-Lage	Title TBC

Parallel Session - Non pharmacological interventions 2

Παράλληλη συνεδρία - Μη φαρμακολογικές παρεμβάσεις 2

Chairs: Nancy B Emerson Lombardo, Nori Graham

Location: Olympia Hall C

14:00 - 15:30	OC068	Li-Chan Lin	The efficacy of spaced retrieval and Montessori methods in managing eating difficulties for residents with dementia Η αποτελεσματικότητα των προγραμμάτων spaced retrieval και Montessori στην αντιμετώπιση των προβλημάτων σίτισης των ασθενών με άνοια
	OC069	Wen-Yun Y Cheng	Application effects of walking program for cognitively impaired elders in Taiwan long-term care facility Αποτελεσματικότητα του προγράμματος «περπάτημα» για τους ασθενείς με νοητικά προβλήματα σε υπηρεσίες μακροχρόνιας φροντίδας

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Friday 12 March 2010

OC071	Evdokia Nikolaidou Ευδοκία Νικολαΐδου	Practice of linguistic skills: cognitive training intervention in patients with mild cognitive impairment Επίδραση του προγράμματος γυμναστικής "fit as a fiddle" στη φυσική κατάσταση, στη συμπεριφορά και στη διάθεση ηλικιωμένων με άνοια σε Ψυχογηριατρική Κλινική.
OC072	Georgia Batsila Γεωργία Μπατσίλα	Cognitive training programme through musical stimuli: a non pharmacological cognitive training intervention in patients with mild dementia Πρόγραμμα νοητικής εκπαίδευσης μέσω μουσικών ερεθισμάτων : μια μη φαρμακολογική παρέμβαση νοητικής εκπαίδευσης σε ασθενείς με ήπια άνοια
OC073	Aikaterini Soumpourou Αικατερίνη Σούμπουρου	Orientation in current events: a cognitive stimulation and training intervention for patients with MCI Προσανατολισμός στην επικαιρότητα: μια παρέμβαση νοητικής διέγερσης και εκπαίδευσης για ασθενείς με ήπια νοητική διαταραχή
OC074	Nancy B Emerson Lombardo	Nutritional supplement combination therapy improves cognition in 3xTg ad mice will be tested in cognitively normal adults. Ο συνδυασμός θεραπείας με συμπληρώματα διατροφής που βελτιώνει τις νοητικές λειτουργίες στα διαγονιδιακά ποντίκια 3xTg με NA θα χορηγηθεί σε φυσιολογικούς νοητικά ηλικιωμένους
OC075	Stavros C Zafeiropoulos Σταύρος Ζαφειρόπουλος	Computer based cognitive training for patients with mild cognitive impairment (MCI) Νοητική εκπαίδευση βασισμένη σε υπολογιστές για ασθενείς με ήπια νοητική διαταραχή

Parallel Session – Quality of life 2 Παράλληλη συνεδρία - Ποιότητα ζωής 2

Chair: Andreas Solias
Location: Olympia Hall B

14:00 - 15:30	OC076	Ioanna C Tsokanari Ιωάννα Τσοκανάρη	Forms of ageing, needs and dependency: public policies and the informal sector Μορφές γήρανσης, ανάγκες και εξάρτηση: δημόσιες πολιτικές και ο ιδιωτικός τομέας.
	OC077	Jenny H La Fontaine	Managing together an exploration of the family experience of managing the impact of dementia upon the relationship between grandparents and their grandchildren Εξερεύνηση της οικογενειακής εμπειρίας χειρισμού του αντίκτυπου της άνοιας στην σχέση μεταξύ των παππούδων/γιαγιάδων και των εγγονών τους
	OC078	Eleni Margioti Ελένη Μαργιώτη	Caregivers' opinion on current status of AD medication in Greece Η γνώμη των περιθαλπόντων για την τρέχουσα φαρμακευτική αγωγή της άνοιας Alzheimer στην Ελλάδα

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OC079	Martin Orrell	Occupational therapy and people with dementia in care homes Εργοθεραπεία και άτομα με άνοια σε οίκους περίθαλψης
OC080	Evgenia S Gavoroulou Ευγενία Γκαβοπούλου	Dental status in patients with moderate and severe dementia: correlations with mental and functional abilities Οδοντιατρική κατάσταση σε ασθενείς με μέτρια και σοβαρή άνοια : συσχετίσεις με νοητικές και λειτουργικές ικανότητες
OC081	Nathalie Texier	The French Alzheimer national plan and the calliope web service for patients with Alzheimer disease: towards a European extension Το Εθνικό γαλλικό σχέδιο για την Alzheimer και η υπηρεσία calliope για ασθενείς με Alzheimer : προς μια Ευρωπαϊκή επέκταση
OC083	Anne R Kelly	Jack - quality of life in dementia care Jack- ποιότητα ζωής στην περίθαλψη της άνοιας

Parallel Session – Mild cognitive impairment
Παράλληλη συνεδρία - Ήπια νοητική διαταραχή
Chairs: Pieter Jelle Visser, Vasileios Vagenas
Location: Olympia Hall A

14:00 - 15:30	OC084	Katja Werheid	Better not face the facts? increased awareness predicts reduced motivation for cognitive training in mild cognitive impairment Καλύτερα να μην αντιμετωπίζονται τα γεγονότα; η αυξημένη ενημέρωση προβλέπει μειωμένα κίνητρα για γνωστική εκπαίδευση στην Ήπια Νοητική διαταραχή
	OC085	Vasileios Konstantinidis Βασίλειος Κωνσταντινίδης	Effect of multi-component rehabilitation program on cognitive functions of MCI patients' group in a dementia day care center Το αποτέλεσμα ενός πολυπαραγοντικού προγράμματος αποκατάστασης νοητικών λειτουργιών σε μια ομάδα ασθενών με ήπια νοητική διαταραχή σε ένα κέντρο ημέρας
	OC086	Vasileios T Papaliagkas Βασίλειος Παπαλιάγκας	Prevalence of anticholinergic drugs in patients with mild cognitive impairment in Europe: Descripa study Επιπολασμός των αντιχολινεργικών φαρμάκων σε ασθενείς με ήπια νοητική διαταραχή στην Ευρώπη: η μελέτη Descripa
	OC087	Thekla Chatziadamidou Θέκλα Χατζηαδαμίδου	Olfactory deficits in healthy elderly and in type II diabetic patients with & without mild cognitive impairment (MCI) Οσφρητικό έλλειμμα σε υγιείς ηλικιωμένους και σε ασθενείς με διαβήτη τύπου II με ή άνευ ήπια νοητική διαταραχή
	OC088	Hanumanthachar Joshi	Cognition improving effects of a novel phytochemical formulation memorhis in animal models relevant to Alzheimer's disease Τα αποτελέσματα βελτίωσης της νόησης μιας νέας φυτοχημικής φόρμουλας σε πειραμοατόζωα σχετιζομενα με την Νόσο Alzheimer

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OC089	Wen-Chuin Hsu	Reduced diffusion anisotropy and functional connectivity in patients of amnesic mild cognitive impairment: a MRI study Μειωμένη ανισοτροπική διάχυση και λειτουργική διασύνδεση σε ασθενείς με Ήπια Νοητική Διαταραχή αμνησικού τύπου: μελέτη MRI
OC090	Ifeoma A Modebe	Subjective complaints of memory loss in older adults in south eastern Nigeria- a Nigeria 1066 report. Υποκειμενική έκφραση παραπόνων για απώλεια μνήμης σε μεγαλύτερους ενήλικες στην βορειοανατολική Νιγηρία- αναφορά 10/66 της Νιγηρίας
OC090B	Shubhangi K Pingle	Intervention of potential biomarkers of occupational health diseases in miners Παρέμβαση δυνητικών βιολογικών δεικτών στα επαγγελματικά νοσήματα των μεταλλορύχων

Parallel Session – Greek Parallel session Interscientific co-operation in supporting life-long education for the care of aged persons who suffer from dementia in Nursing Homes for the elderly

Παράλληλη συνεδρία – Διεπιστημονική συνεργασία για αλληλέγγυα δια βίου εκπαίδευση στη Φροντίδα των ηλικιωμένων με άνοια σε Μονάδες Φροντίδας Ηλικιωμένων στην Ελλάδα

Chairs: Kaligeri-Vithoulka Popi, Gatos Konstantinos,
Location: Grand Ballroom 2

14:00 - 15:30	Gatos Konstantinos Γάτος Κωνσταντίνος	"Gatos clinic test" clinic tool about evaluation of patients in the final stage of dementia "Κλινική δοκιμασία gatos" κλινικό εργαλείο για την αξιολόγηση των ασθενών στο τελικό στάδιο της άνοιας
	Karachaliou Fotini Καραχάλιου Φωτεινή	The effect of influenza-like illness at the final stage of dementia Το αποτέλεσμα μιας ασθένειας τύπου γρίπης στα τελικά στάδια της άνοιας
	Kalogirou Vasiliki Καλογήρου Βασιλική	End-stage dementia: proper medical management improves expectancy and quality of life Άνοια τελευταίου σταδίου: η κατάλληλη ιατρική διαχείριση βελτιώνει το προσδοκώμενο και την ποιότητα ζωής
	Kaligeri-Vithoulka Popi. Καλιγέρη – Βυθούλκα Πόπη	Dynamic-liberal education for inter-scientific fellowship in all phases of staying of the aged person in Nursing Homes for the Elderly. Δυναμική - απελευθερωτική εκπαίδευση για διεπιστημονική συμπόρευση σε όλες τις φάσεις της παραμονής του ηλικιωμένου στη Μονάδα Φροντίδας Ηλικιωμένων
	Voudiklaris John Βουδικλάρης Γιάννης	Combinative Knowledge and clinical practice with occupational-physical therapy. Συνδυαστική γνώση και κλινική πρακτική με εργοθεραπεία και φυσιοθεραπεία.
	Gaitanou Viktoria Γαϊτάνου Βικτωρία	Instructive communicative trigger with grand-father and grand-mother. Παιδαγωγικό επικοινωνιακό έναυσμα με παππού-γιαγιά.

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Gaitanou Viktoria Γαϊτάνου Βικτωρία	Creation of relationship which forms awareness and life-style for small children. Δημιουργία σχέσης που διαμορφώνει συνειδήσεις και τρόπο ζωής για τα μικρά παιδιά.
Sarelli-Tabaki Mersina Σαρέλλη-Ταμπάκη Μερσίνα	The aged persons of the Nursing Home for the Elderly, an open embrace for the young persons with disfunctional or non-existent families. Οι ηλικιωμένοι της Μονάδας Φροντίδας Ηλικιωμένων Ανοιχτή αγκαλιά για τους νέους με δυσλειτουργικές ή ανύπαρκτες οικογένειες

Parallel Session – Ethical issues

Παράλληλη συνεδρία - Ηθικά ζητήματα

Chair: Kostas Petsanis, Dimitrios Priftis

Location: Kallipatira

14:00 - 15:30	OC091	Vanessa Lawrence	Improving end of life care for people with dementia: building on the experiences of family members and care professionals Βελτιώνοντας την περίθαλψη κατά τα τελευταία στάδια της ζωής ατόμων με άνοια: οικοδομώντας πάνω στις εμπειρίες μελών οικογένειας και επαγγελματιών περίθαλψης
	OC092	Kathryn Cunningham	Dementia and palliative care - a community organisations role in supporting end of life Άνοια και ανακουφιστική περίθαλψη – ο ρόλος των σωματίων της κοινότητας στην υποστήριξη των τελευταίων σταδίων ζωής
	OC093	Lilia Mendoza	Ethical issues Ηθικά ζητήματα
	OC094	Kees Blankman	Self appointed representatives for persons with ad in Europe Αυτοδιορισμένοι αντιπρόσωποι για άτομα με ad στην Ευρώπη
	OC097	Federico Palermi	Rights of people with dementia in nursing homes: a French national survey Τα δικαιώματα των ατόμων με άνοια σε θεραπευτήρια : μια γαλλική εθνική έρευνα
	OC097B	Luiza Spiru	Nature & nurture dimensions of Alzheimer's prevention Κληρονομικότητα και ανατροφή ως διαστάσεις της πρόληψης της Νόσου Alzheimer

ADI Workshop - Making dementia a global health priority

Ημερίδα ADI - Μετατρέποντας την άνοια σε μια παγκόσμια προτεραιότητα υγείας

Chair: Jim Jackson

Location: Ilida

This workshop will contain an interactive session, with participants setting goals, developing targets and creating an advocacy checklist.

14:00 - 15:30	WS5	Michael J Splaine	Making the difference through advocacy Κάνοντας την διαφορά μέσω της υπεράσπισης
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Friday 12 March 2010

	WS6	Frank J Schaper	Through the looking glass ... inventing a new organisational future Μέσα από τον καθρέφτη... επινοώντας ένα νέο οργανωσιακό μέλλον
	WS7	Debbie Benczkowski	Rising tides: the impact of dementia in Canada 2008 – 2038 Πλυμμηρίδα : Ο αντίκτυπος της άνοιας στον Καναδά 2008-2038
	WS8	Vassiliki Siapera Βασιλική Σιαπέρα	The Greek National Strategic Plan Το Ελληνικό Εθνικό Στρατηγικό Σχέδιο
15:30 - 16:00		Tea, coffee, exhibition & posters Τσάι, καφές ,έκθεση και posters	
Parallel Session - Non pharmacological interventions 3 Παράλληλη συνεδρία - Μη φαρμακολογικές παρεμβάσεις 3 Chairs: Fotini Kounti, Barry Reisberg Location: Olympia Hall C			
16:00 - 17:30	OC102	Frans Waldorff	Multifaceted psycho-social intervention for patients with mild alzheimer's disease and their primary caregivers (daisy study): a rater-blinded, randomized controlled trial with 36 months follow-up Πολυδιάστατη ψυχοκοινωνική παρέμβαση σε ασθενείς με ήπια ΝΑ και στους κύριους περιθάλποντες τους (μελέτη daisy) : Τυφλή ως προς τον εκτιμητή, τυχαιοποιημένη ελεγχόμενη μελέτη με παρακολούθηση 36 μηνών
	OC098	Timothy Kwok	The effects of cognitive training in older adults: a randomized controlled trial Τα αποτελέσματα γνωστικής εκπαίδευσης σε μεγαλύτερους ενήλικες : Τυχαιοποιημένη Ελεγχόμενη Μελέτη
	OC099	Nomiki Karpathiou	Workshop: use of multimedia in reminiscence program of a day care center Ημερίδα : χρήση πολυμέσων σε ένα πρόγραμμα αναμνήσεων σε ένα κέντρο ημέρας
	OC100	Fotini Kounti Φωτεινή Κουντή	Cognitive motion therapy: a non pharmacological cognitive training intervention in patients with mild cognitive impairment (MCI) Γνωστική κινητική θεραπεία : μια μη φαρμακολογική γνωστική εκπαιδευτική παρέμβαση σε ασθενείς με Ήπια Νοητική Διαταραχή
	OC101	Juanita Hoe	Development of the maintenance cognitive stimulation therapy manual Ανάπτυξη του εγχειριδίου θεραπείας διατήρησης της νοητικής διέγερσης
	OC103	Eleni Poptsi Ελένη Πόππη	Non pharmacological therapy of guided mental imagery for patients with mild cognitive impairment (MCI) Μη φαρμακολογική θεραπεία καθοδηγούμενης νοερής απεικόνισης σε ασθενείς με Ήπια Νοητική Διαταραχή
	OC104	Fotini Kounti Φωτεινή Κουντή	Comparison of seven different cognitive training programs in MCI patients Σύγκριση επτά διαφορετικών εκπαιδευτικών νοητικών προγραμμάτων σε ασθενείς με Ήπια Νοητική Διαταραχή

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Friday 12 March 2010

OC105	Nancy B Emerson Lombardo	Memory preservation nutrition intervention in assisted living and long term care: clinical practice report Διατροφική παρέμβαση διατήρησης μνήμης στην υποστηριζόμενη διαβίωση και την μακρόχρονη περίθαλψη: αναφορά κλινικής πρακτικής
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Parallel Session – Supporting and educating carers 2

Παράλληλη συνεδρία - Υποστηρίζοντας και εκπαιδεύοντας τους περιθάλποντες 2

Chairs: Karagiozi Kostantina, Maria Egezarova

Location: Olympia Hall B

16:00 - 17:30	OC112	Hefziba Lifshitz	Mediation between staff and adults with intellectual disability with Alzheimer disease as a means of enhancing their daily functioning Μεσολάβηση ανάμεσα στο προσωπικό και ενήλικους με νοητική αναπηρία και Νόσο Alzheimer ως μέσο ενίσχυσης της καθημερινής τους λειτουργίας
	OC106	Lizanle De Jager	An evaluation report of a training course for caregivers of people challenged with dementia Αναφορά αξιολόγησης ενός εκπαιδευτικού προγράμματος για περιθάλποντες ατόμων με άνοια
	OC107	Kazuko T Hiyoshi	BPSPD of patient related to burden of family caregivers in Japan Τα συμπεριφορικά και ψυχολογικά συμπτώματα άνοιας (BPSPD) των ασθενών σε σχέση με την επιβάρυνση των περιθαλπόντων, στην Ιαπωνία
	OC108	Vasiliki Orgeta	Assessing psychological distress in caregivers of people with dementia: beyond the single severity score Αξιολογώντας το ψυχολογικό στρες σε περιθάλποντες ατόμων με άνοια: πέρα από μία κλίμακα βαρύτητας
	OC109	Marion Villez	Preserving intergenerational and family ties, in spite of dementia Διατηρώντας τους οικογενειακούς δεσμούς και τους δεσμούς μεταξύ των γενεών παρά την άνοια
	OC110	Shaheen Ahmad	Who volunteers to be a peer supporter for family carers of people with dementia?: findings from the shield-csp pilot Ποιος δηλώνει εθελοντικά υποστηρικτής των περιθαλπόντων ατόμων με άνοια ; Ευρήματα από το πιλοτικό πρόγραμμα shield-csp
	OC111	Sanda Samitca	Reconciling work and care for a parent suffering from Alzheimer's disease in Portugal Διευθετώντας την εργασία και την περίθαλψη για έναν γονέα που υποφέρει από την Νόσο Alzheimer, στην Πορτογαλία
	OC113	Teresa B.K. Tsien	Strengths-based approach to understanding family caregiving for people with dementia: an interpretative phenomenological analysis Μια προσέγγιση βασισμένη στις δυνάμεις για την κατανόηση της περίθαλψης από την οικογένεια ατόμων με άνοια: μια μεταφραστική φαινομενολογική ανάλυση

Programme

Friday 12 March 2010

Parallel Session – Prevention & public health

Παράλληλη συνεδρία - Πρόληψη και δημόσια υγεία

Chairs: Vasilis Vagenas, Marc Wortmann

Location: Olympia Hall A

16:00 - 17:30	OC115	Mary A M Rogers	Poor vision and treatment of visual disorders affect the risk of late-life dementia Η κακή όραση και η θεραπεία οπτικών διαταραχών επηρεάζουν τον κίνδυνο άνοιας σε μεγάλη ηλικία
	OC116	Eleni Margioti Ελένη Μαργιώτη	Workshop: memory groups for healthy elderly; structure, implementation and preliminary results. Εργαστήριο: ομάδες μνήμης για υγιείς ηλικιωμένους: δομή, εφαρμογή και προκαταρκτικά αποτελέσματα.
	OC117	Sirpa Granö	Prevention, an essential factor in the work of the Alzheimer society of Finland Η πρόληψη, ένας σημαντικός παράγοντας στην εργασία της εταιρείας Alzheimer της Φινλανδίας
	OC118	Paraskevi Sakka Παρασκευή Σακκά	Cognitive performance screening project in a population of urban dwelling elderly people. Πρόγραμμα ελέγχου νοητικής απόδοσης σε έναν πληθυσμό ηλικιωμένων κατοίκων αστικής περιοχής.
	OC119	Nienke van Wezel	Improving multicultural dementia care in a western society Βελτιώνοντας την πολυπολιτισμική περίθαλψη της άνοιας σε μια δυτική κοινωνία
	OC120	Sandeep Sandhu	Is case management effective for home support for people with dementia: a systematic review Είναι η διαχείριση περιστατικού αποτελεσματική για την κατ' οίκον υποστήριξη σε άτομα με άνοια; Συστηματική ανασκόπηση
	OC121	Hein PJ van Hout	Unmet needs in residential homes, comparing persons with and without dementia Ανάγκες που δεν ικανοποιούνται σε αστικούς οικισμούς, συγκρίνοντας άτομα με και χωρίς άνοια
	OC122	Julie Meerveld	National programme integrated dementia care Εθνικό πρόγραμμα ολοκληρωμένης περίθαλψης άνοιας

Programme

Friday 12 March 2010

Parallel Session – Greek Parallel session: Alzheimer's Disease spectrum issues in low and middle-low income municipalities in Attica Greece

Ελληνική παράλληλη συνεδρία – Προβλήματα σε σχέση με την ΝΑ σε Δήμους με άτομα με χαμηλό ή μέσο προς χαμηλό εισόδημα στον Νομό Αττικής στην Ελλάδα

Chairs: Nikolaos Degleris, Antonios Politis

Location: Grand Ballroom 2

16:00 - 17:30	OC122B	Nikolaos E. Degleris	Cognitive Deficits in Alzheimers' spectrum disorders
		Νικόλαος Ε. Δέγλερης	Νοητικές Διαταραχές σε όλο το φάσμα της εξέλιξης της ΝΑ
	OC090C	Andreas Solias	The annotated MMSE median score by Age and Educational Level (The Ilion – Byron – Heliopolis Municipality Hellenic Study)
		Ανδρέας Σόλιας	Πρότυπη Στάθμιση του MMSE με βάση την επεξεργασία των υποσυνόλων των διαμέσων ηλικίας και εκπαίδευσης. (ψυχοεπιδημιολογική μελέτη στους Δήμους Ιλίου, Βύρωνα, Ηλιούπολης).
OC090C	Antonios Politis	Behavioral problems in dementia	
	Αντώνιος Πολίτης	Συμπεριφορικά προβλήματα στην άνοια	
	OC090C	Anna Papadopoulou	Hellenic on-line society of Alzheimer's
		Άννα Παπαδοπούλου	Ελληνική Κοινωνία για την ΝΑ στο διαδίκτυο

Parallel Session – Genetics and new technology in dementia

Παράλληλη συνεδρία – Γενετική και νέες τεχνολογίες στην άνοια

Chair: Petra Proitsi, Panagiotis Bamidis

Location: Kallipatira

16:00 - 17:30	OC123	Mina Ohadi	The novel human caveolin 1 gene upstream purine complex and late-onset Alzheimer's disease.
			Το νέο ανθρώπινο γονίδιο συμπλέγματος caveolin 1 upstream purine και η νόσος Alzheimer όψιμης έναρξης
	OC124	Ramesh Kandimalla	Genetic and protein biomarkers for the detection of Alzheimer's disease
			Γενετικοί και πρωτεϊνικοί βιολογικοί δείκτες για την διάγνωση της ΝΑ
	OC124B	Petra Proitsi	Genetics, epigenetics and genomics of depression in Alzheimer's Disease (AD).
			Γενετική Επιγενετική και Γονιδιωματική της κατάθλιψης στην ΝΑ
	OC125	Panagiotis Bamidis	Elderly Care Support and ICT Innovations: the paradigm of the LLM Project
			Υποστηρικτική φροντίδα των ηλικιωμένων και πρωτοβουλίες ICT: Το παράδειγμα του προγράμματος LLM
	OC126	Christos Frantzidis	The role of emotion in elderly trials from a neuroscience perspective
			Ο ρόλος του συναισθήματος στις μελέτες των ηλικιωμένων στα πλαίσια των νευροεπιστημών
	OC126B	MA Franco-Martin	Usability of a cognitive rehabilitation software in centers working with dementia patients.
			Η χρησιμότητα ενός ηλεκτρονικού προγράμματος αποκατάστασης σε κέντρα ασθενών με άνοια
	OC126C	MA Franco-Martin	Acceptability and satisfaction of cognitive training software (Gradior) vs. traditional psycho stimulation intervention.
			Προσβασιμότητα και ικανοποίηση ενός γνωστικού εκπαιδευτικού προγράμματος (Gradior) σε σύγκριση με ένα παραδοσιακό πρόγραμμα νοητικής ενεργοποίησης

Programme

Friday 12 March 2010

OC126D	Filia Makedon	ZPLAY: An Intelligent Human Computer Interface System for AD Assessment and Intervention ZPLAY: Έξυπνο Ανθρώπινο Ηλεκτρονικό Σύστημα για την εκτίμηση και αποκατάσταση ασθενών με άνοια
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ADI Workshop - Involving people with dementia in Alzheimer associations

Ημερίδα ADI - Εμπλέκοντας τα άτομα με άνοια σε συλλόγους Alzheimer

Chairs: Carolyn Popham, Vassiliki Pattakou

Location: Ilida

16:00 - 17:30	WS9	Lynda Hogg and Maureen Thom	The voice of people with dementia: a personal odyssey Η φωνή των ατόμων με άνοια : μια προσωπική Οδύσσεια
	WS10	Sherry Dupuis	Mobilizing authentic partnerships with persons living with memory loss Κινητοποιώντας αυθεντικές συνεργασίες με άτομα τα οποία ζουν με την απώλεια μνήμης
	WS11	Marin Sewell	The voice of people with dementia Η φωνή των ανθρώπων με άνοια
	WS12	Ryu Yoshino and Yoko Mizutani	Creating participation and relation for people with dementia in Japan Δημιουργώντας συμμετοχή και σχέση για τα άτομα με άνοια στην Ιαπωνία
	WS13	Peter Ashley and Suzanne Wightmann	Life History "Portrait of a life" Ιστορία Ζωής «Πορτραίτο μια ζωής»

Greek Evening Symposium Evening Symposium – Current therapeutic challenges in Alzheimer's Disease and Mild Cognitive Impairment

Απογευματινό συμπόσιο - Σύγχρονη θεραπευτική προσέλαση της νόσου Alzheimer και της Ήπιας Νοητικής Διαταραχής: κοινό πεδίο δράσης για Νευρολογία και Εσωτερική Παθολογία

This session is made possible by IASIS

Chair: Magda Tsolaki, Nicholas Katsilambros

Location: Olympia Hall A

18:00 - 19:00	George Georgiadis Γεώργιος Γεωργιάδης	Overview of Alzheimer's Disease as a major cause of morbidity in the primary and secondary care setting Ανασκόπηση της νόσου Alzheimer ως μείζον αίτιο νοσηρότητας στην πρωτοβάθμια και δευτεροβάθμια περίθαλψη
	Konstantinos Vadikolias Κωνσταντίνος Βαδικόλιας	Overview of Vascular Dementia and Mild Cognitive Impairment: epidemiology, diagnosis, prognostic biomarkers, therapeutic strategies Ανασκόπηση της Ήπιας Νοητικής Διαταραχής και της Αγγειακής Άνοιας: επιδημιολογία, διάγνωση, προγνωστικοί βιοδείκτες, θεραπευτική προσέλαση
	Magda Tsolaki Μάγδα Τσολάκη	Current therapeutic challenges and future prospects in Alzheimer's Disease and Mild Cognitive Impairment Σύγχρονες θεραπευτικές προκλήσεις και μελλοντικές προοπτικές στη νόσο Alzheimer και την Ήπια Νοητική Διαταραχή

Programme

Evening Symposium – “Medicine in view of the latest economic downturn”

Απογευματινό συμπόσιο - Η ιατρική υπό το φως της πρόσφατης οικονομικής ύφεσης

This session is made possible by Specifar

Chair: Magda Tsolaki

Location: Olympia Hall A

19:00 - 20:30	Athanasakis Kostas	The Economics of Healthcare: is there a role for generics?
	Αθανασάκης Κώστας	Τα οικονομικά της υγείας: υπάρχει ρόλος για τα γενόσημα?
	Magda Tsolaki	Greek experience from generic medication in clinical praxis
	Μάγδα Τσολάκη	Η ελληνική εμπειρία των γενόσημων φαρμάκων στην κλινική πράξη
	Lutz Frolich	A European experience on the use of generic medication in psychiatry
		Η ευρωπαϊκή εμπειρία των γενόσημων στην Ψυχιατρική
	Macheras Panos	In vivo evaluation of generics focus in clopidogrel
	Μαχαίρας Πάνος	Ιn vivo αξιολόγηση γενόσημων φαρμάκων: έμφαση στην κλοπιδογρέλη

Saturday 13 March 2010

07:15	Registration opens
	Έναρξη εγγραφών

Special Session – IASSID Symposium on dementia factors and intellectual disabilities

Ειδική συνεδρία – IASSID Συμπόσιο σχετικά με τους παράγοντες άνοιας και τις διανοητικές αναπηρίες

Chair: Angela Hassiotis, John A. Tsiouris

Location: Ilida Room

07:30 - 09:00	OC127	Antonia MW Coppus	Early age at menopause is associated with increased risk of dementia and mortality in women with down syndrome
			Εμμηνόπαυση σε μικρή ηλικία συσχετίζεται με αυξημένο κίνδυνο άνοιας και θνησιμότητα σε γυναίκες με σύνδρομο Down
	OC128	John A. Tsiouris	Factors affecting onset of dementia and longevity among adults with down syndrome
		Ιωάννης Τσιουρής	Παράγοντες που επηρεάζουν την έναρξη της άνοιας και την μακροβιότητα σε ενηλίκους με σύνδρομο Down
	OC129	Matthew P. Janicki	Role of Alzheimer's organizations with respect to aiding families of people with down syndrome
			Ο ρόλος των οργανώσεων Alzheimer σε σχέση με την βοήθεια σε οικογένειες ατόμων με σύνδρομο Down

Programme

Saturday 13 March 2010

	OC130	Frode K Larsen	Nationwide development programme on ageing in people with intellectual disabilities – to promote research and education on dementia: The Norwegian model Εθνικό αναπτυξιακό πρόγραμμα για την γήρανση σε άτομα με νοητικές αναπηρίες – προωθώντας την έρευνα και την εκπαίδευση στην άνοια: Το Νορβηγικό μοντέλο
	OC131	Angela Hassiotis	Dementia, service use, and expenditure in intellectual disabilities: results from an epidemiological study Άνοια, χρήση υπηρεσιών και δαπάνες στις Νοητικές αναπηρίες: αποτελέσματα από μια επιδημιολογική μελέτη
	OC132	Roy I. Brown	Family quality of life outcomes when aging and dementia care are factors for people with intellectual disabilities and their families Αποτελέσματα οικογενειακής ποιότητας ζωής όταν η γήρανση και η περίθαλψη της άνοιας αποτελούν παράγοντες για τα άτομα με διανοητική αναπηρία και τις οικογένειες τους
Parallel Session – Non pharmacological interventions 4 Παράλληλη συνεδρία - Μη φαρμακολογικές παρεμβάσεις 4 Chair: Sabine Jansen, Maria Karagiannidou Location: Olympia Hall C			
09:00 - 10:30	OC133	Sebastian Voigt-Radloff	WHEDA study: effectiveness of occupational therapy at home for older people with dementia and their caregivers – preliminary results of a pragmatic randomised controlled trial evaluating a Dutch programme in seven German centres Μελέτη WHEDA : αποτελεσματικότητα της κατ'οίκον εργοθεραπείας για ηλικιωμένα άτομα με άνοια και τους περιθάλποντές τους – προκαταρκτικά αποτελέσματα μιας πραγματολογικής τυχαιοποιημένης ελεγχόμενης δοκιμής αξιολόγησης ενός ολλανδικού προγράμματος σε 7 γερμανικά κέντρα
	OC134	Marco Blom	Effectiveness of an e-mental health intervention for family caregivers of people with dementia Αποτελεσματικότητα μιας ηλεκτρονικής παρέμβασης ψυχικής υγείας για περιθάλποντες απόμων με άνοια
	OC135	Tim Wallace	Outcomes of using a wrist worn GPS location device Αποτελέσματα της χρησιμοποίησης ενός μιας συσκευής GPS που φοριέται στον καρπό
	OC136	Nefeli Markou Νεφέλη Μάρκου	Effectiveness of two different combinations of cognitive intervention in patients with mild cognitive impairment (MCI) Αποτελεσματικότητα 2 διαφορετικών συνδυασμών γνωστικών παρεμβάσεων σε ασθενείς με Ήπια Νοητική Διαταραχή

Programme

Saturday 13 March 2010

OC137	Maud Graff	The evaluation of the Dutch community occupational therapy intervention for older people with dementia and caregivers Η αξιολόγηση της παρέμβασης εργοθεραπείας της δανικής κοινότητας σε άτομα με άνοια και περιθάλποντες
OC137A	Sanna Aavaluoma	Psychosocial support and family psychotherapy in treatment of Alzheimer's disease Ψυχοκοινωνική υποστήριξη και οικογενειακή ψυχοθεραπεία
OC138	Christina C Kadi Χριστίνα Κάδη	Cognitive empowerment programs for healthy elderly in the prefecture of Dodecanese Προγράμματα νοητικής ενδυνάμωσης σε υγιείς ηλικιωμένους στην νομαρχία Δωδεκανήσου
OC139	Alexia Kyrioti Αλεξία Κυπριώτη	Neuropsychiatric interventions in third age in Dodecanese Νευροψυχιατρικές παρεμβάσεις στην Τρίτη ηλικία στα Δωδεκάνησα

Parallel Session – Quality of life in dementia 3 Παράλληλη συνεδρία - Ποιότητα ζωής στην άνοια 3

Chair: Glenn Rees, Virginia M Bell
Location: Olympia Hall B

09:00 - 10:30	OC140	Andrew Papadopoulos Ανδρέας Παπαδόπουλος	Implications of the eco-systemic model of well-being upon services and interventions to people with dementia and their families Επιπτώσεις του οικοσυστημικού μοντέλου ευζωίας σε υπηρεσίες και παρεμβάσεις που προσφέρονται σε άτομα με άνοια και στις οικογένειές τους
	OC141	Johannes Gräske	Measuring quality of life in dementia care Μετρώντας την ποιότητα ζωής στην περίθαλψη της άνοιας
	OC142	Suvosree Bhattacharya	Generic and disease specific measures of health related quality of life in patients with mild ad. Γενικές και ειδικές μετρήσεις ασθένειας της σχετιζόμενης με την υγεία ποιότητας ζωής σε ασθενείς με ήπια ΝΑ
	OC143	Hannah R Wilkinson	Autobiographical memory, quality of life and psychosocial intervention in dementia care Αυτοβιογραφική μνήμη, ποιότητα ζωής και ψυχοκοινωνικές παρεμβάσεις στην περίθαλψη άνοιας
	OC144	Victoria A Cowap	Supporting lost carers Υποστηρίζοντας τους χαμένους περιθάλποντες
	OC145	Emmelyne Vasse	Quality indicators for psychosocial intervention in Europe Ποιοτικοί δείκτες για ψυχοκοινωνικές παρεμβάσεις στην Ευρώπη
	OC146	Cathie Borrie	The long hello of Alzheimer's Ο μακρύς αποχαιρετισμός της Νόσου Alzheimer
	OC147	Virginia M Bell	Creating spiritual connectedness Δημιουργώντας πνευματική διασύνδεση

Saturday 13 March 2010

Parallel Session– Aetiology and pathology in dementias

Αιτιολογία και νευροπαθολογία στις άνοιες

Chair: Yasmin Raashid, Thanasis Salifoglou

Location: Olympia Hall A

09:00 - 10:30	OC148	Alice Skoumalova	Oxidative stress in blood in Alzheimer disease Οξειδωτικό στρες στο αίμα στην Νόσο Alzheimer
	OC148B	Athanasios Salifoglou Αθανάσιος Σαλίφογλου	In search of molecular etiopathological factors in neurodegenerative processes. Metallotoxin effects on NMDA and VDCC channels in hippocampal cells Ψάχνοντας μοριακούς αιτιοπαθολογικούς παράγοντες στα νευροεκφυλιστικά νοσήματα. Επιδράσεις των μεταλλοτοξινών σε κανάλια N-μεθυλο D-ασπαρτικού οξέως (NMDA) και τασεοελεγχόμενων διαύλων ασβεστίου (VDCC) σε κύτταρα του ιππόκαμπου
	OC149	Leungwing Chu	Bioavailable testosterone decreases the risk of Alzheimer's disease in non-demented Chinese older men: a one-year cohort study Η βιοδιαθέσιμη τεστοστερόνη μειώνει τον κίνδυνο της Νόσου Alzheimer σε μη ανοϊκούς κινέζους ηλικιωμένους άντρες: μελέτη ενός χρόνου
	OC150	Bruno A Bergmans	Neurons generated from app/aplp1/aplp2 triple knockout embryonic stem cells behave normally in vivo: no evidence for a cell autonomous role of app in neuronal differentiation Οι νευρώνες που παράγονται από app/aplp1/aplp2 εμβρυϊκά βλαστικά κύτταρα συμπεριφέρονται φυσιολογικά in vivo: δεν υπάρχει απόδειξη για αυτόνομο ρόλο κυττάρου app σε νευρωνική διαφοροποίηση
	OC151	Riwa Nakamoto	Increased incidence of visual hallucination in dementia patients complicated with diabetes mellitus Αυξημένη συχνότητα οπτικών παραισθήσεων σε ανοϊκούς ασθενείς που χαρακτηρίζονται από επιπλοκές σακχαρώδη διαβήτη.
	OC152	Marina Kotsani Μαρίνα Κοτσάνη	Selected vascular indices may reveal possible dementia and cardiovascular disease co-existence in the elderly Επιλεγμένοι αγγειακοί δείκτες μπορεί να αποκαλύψουν πιθανή συνύπαρξη άνοιας και καρδιαγγειακής ασθένειας σε ηλικιωμένους
	OC153	Luiza Spiru	Conversion of mild cognitive impairment to Alzheimer disease in a group of elderly Romanian patients Εξέλιξη της Ήπιης Νοητικής Διαταραχής σε Νόσο Alzheimer σε μια ομάδα ηλικιωμένων ρουμάνων ασθενών
	OC153B	A Aybad	Care of Alzheimer's patients in the Middle East Περίθαψη των ατόμων με άνοια στην Μέση Ανατολή
CO153C	Anogianakis Georgios Ανωγειαννάκης Γεώργιος	Use of telemedicine for management of patients with Alzheimer's Disease Η χρήση της τηλεϊατρικής για την διαχείριση ατόμων με Νόσο Alzheimer	

Programme

Saturday 13 March 2010

Parallel Session – Activities of Greek branches of Alzheimer's Federation, all over Greece.

Ελληνική παράλληλη συνεδρία – Δραστηριότητες των Παραρτημάτων της Πανελληνίας Ομοσπονδίας Νόσου Alzheimer

Chairs: Magda Tsolaki, Ioannis Metalinos, Kostantinos Dimas, Vasilios Vagenas, Kortsidaki Ioanna

Location: Grand Ballroom 2

09:00 - 10:30	Kortsidaki Ioanna Κορτσιδάκη Ιωάννα	Services of the association of Alzheimer's disease, Heraklio Δραστηριότητες Εταιρείας Νόσου Alzheimer & Συναφών Διαταραχών Ηρακλείου
	Pattakou Vasiliki Παττακού Βασιλική	Presentation of Alzheimer's association activities in Rethymno Παρουσίαση δραστηριοτήτων της Εταιρείας Alzheimer στο Ρέθυμνο
	Georgios Maris Γεώργιος Μάρης	Alzheimer and Chios Νόσος Alzheimer και Χίος
	Oikonomidis Dimitrios Οικονομίδης Δημήτριος	Services of the association of Alzheimer's disease, Middle Macedonia Δραστηριότητες της εταιρείας Alzheimer Κεντρικής Μακεδονίας
	Siagga Konstantina Σιάγγα Κωνσταντίνα	Activities of the Panakeia association Δραστηριότητες της Εταιρείας «Πανάκεια»
	Aggelidou Evagelia Αγγελίδου Ευαγγελία	Presentation of the activities of the newly established association, Chalkida Παρουσίαση της νεοσυσταθείσας εταιρείας Alzheimer Χαλκίδας
	Eleni Kampourou-Nifli Ελένη Καμπούρου – Νιφλή	Greek Association of Alzheimer' Disease, Larisa : An innovative action by the volunteers Ελληνική Εταιρεία Νόσου Alzheimer Λάρισας : Μια καινοτόμος δράση από τους εθελοντές
	Maria Papadopoulou Μαρία Παπαδοπούλου	Activities in Thessaloniki Δραστηριότητες στη Θεσσαλονίκη
	Antigoni Diakou Αντιγόνη Διάκου	Experiences in Cyprus Εμπειρίες στην Κύπρο

Parallel Session – Training of professional carers

Παράλληλη συνεδρία - Εκπαίδευση επαγγελματιών περιθαλπόντων

Chair: Peng Chye Ang; Ioannis Papatrantafillou, Fotini Kounti

Location: Kallipatira

09:00 - 10:30	OC154	Marie D Alford	Visual stories - training health professionals with the voices of people living with dementia Οπτικές ιστορίες- εκπαιδεύοντας τους επαγγελματίες υγείας με της φωνές ανθρώπων που ζουν με την άνοια
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Saturday 13 March 2010

OC155	Joshua Kua	Knowledge and beliefs about symptoms, treatment and outcome of dementia of eldercare agencies staff in Singapore Γνώση και απόψεις σχετικά με τα συμπτώματα την θεραπεία και τα αποτελέσματα της άνοιας στο προσωπικό οίκων ευγηρίας στην Σιγκαπούρη
OC156	Aura E Tovar	Caregivers in the third world: the academic profile of certified caregiver students in the third world, according to the IDIS experience Οι περιθάλποντες στον τρίτο κόσμο : το ακαδημαϊκό προφίλ των πιστοποιημένων φροντιστών φοιτητών στον τρίτο κόσμο, σύμφωνα με την εμπειρία IDIS
OC158	David P Harvey	Breaking knowledge translation and exchange barriers with the Alzheimer knowledge exchange Σπάζοντας τα όρια στην μετάφραση και μεταφορά της γνώσης με την ανταλλαγή γνώσης για την Νόσο Alzheimer
OC159	Susan D Gilster	Preparing future health care professionals in a specialized Alzheimer's facility Προετοιμάζοντας μελλοντικούς επαγγελματίες υγείας σε μια ειδικευμένη μονάδα Alzheimer
OC160	Wen-Yun Y Cheng	Application of the KAP model to predict nurses' job satisfaction and caregiving stress: a national study of dementia education program Εφαρμογή του μοντέλου KAP για την πρόβλεψη της εργασιακής ικανοποίησης των νοσοκόμων και του στρες της περίθαλψης : μια εθνική μελέτη ενός εκπαιδευτικού προγράμματος άνοιας
OC161	Kevin Charras	Fitting professional caring competencies and tools to individual preferences and characteristics of people with late stage dementia in special care units. Ταιριάζοντας τις επαγγελματικές ικανότητες περίθαλψης και τα εργαλεία με τις ατομικές προτιμήσεις και τα χαρακτηριστικά ατόμων με άνοια τελευταίου σταδίου σε ειδικές μονάδες περίθαλψης.

ADI Workshop - Fundraising for a sustainable future in difficult times

Ημερίδα ADI - Εξεύρεση πόρων στους δύσκολους οικονομικά καιρούς

Chair: Marc Wortmann

Location: Ilida

09:00 -
10:00

Jim Jackson	Introductions – no money, no mission; beware of the fairy godmother!
Johan Vos	The Alzheimer's New Zealand National Appeal Week
Li-Yu Tang	An Asian perspective
Birgitta Martensson	More than clocks and chocolate – the Swiss experience
Diane Mansour	Organising a successful Fundraising Dinner
Discussion and questions	
Developing a fundraising checklist – how to do it	

Programme

Saturday 13 March 2010

10:30 - Tea, coffee, posters & exhibition
11:00 Τσαι, καφές, posters & έκθεση

Plenary session – Improving care and treatment

Ολομέλεια - Βελτίωση περίθαλψης και θεραπείας

Chairs: Nori Graham

Location: Olympia Hall

11:30	Rose-Marie Dröes	New approaches to home care Νέες προσεγγίσεις στην κατ' οίκον περίθαλψη
12:00	Magda Tsolaki Μάγδα Τσολάκη	Longitudinal benefit of non pharmacological interventions Μακροχρόνιες ωφέλειες μη φαρμακολογικών παρεμβάσεων
12:30	Sadao Katayama	Therapeutic treatment and care for patients with dementia and their family in Japan Θεραπευτική αντιμετώπιση και φροντίδα ασθενών με άνοια και των οικογενειών τους στην Ιαπωνία

Closing Ceremony

Τελετή λήξης

Chairs: Marc Wortmann, Magda Tsolaki

Location: Olympia Hall

13:00	Marc Wortmann	Closing remarks
13:10	Magda Tsolaki Μάγδα Τσολάκη	Another Unique Experience Άλλη μια Μοναδική Εμπειρία
13:20	Kelly Duffin	Introduction to Toronto 2011
13:30		Close and end of meeting

Abstracts - Plenary speakers

PL 1

Sam Gandy

The era of gene discovery and mouse models in Alzheimer's research has given way to a period of enormous growth in translational research in diagnosis and treatment. While no new effective medications have been approved in nearly a decade, there is reason to be optimistic that that will change within the next five years. This "five year window" has oft been applied to this situation in the 25 years since the discovery of the first Alzheimer's gene was discovered, but the current generation of medications show exceptional promise. Two such medications are known as Bapineuzumab and Dimebon, and other drugs, known as gamma secretase inhibitors, are moving ahead rapidly. New diagnostics are also on the horizon, as are a whole host of new drug targets. PIB, short for "Pittsburgh Compound B", has emerged as the first means of seeing inside the brain and watching amyloid plaques accumulate during life. Yet, a newly recognized type of amyloid clump, known as the oligomer, has begun to supplant the plaque as the focus of amyloid research.

Dr Gandy, Chairman Emeritus of the National Medical and Scientific Advisory Council of the US Alzheimer's Association now, after having chaired or vice-chaired the Council for 9 years, will review the most promising developments in translational research in Alzheimer's disease, emphasizing those points that have the greatest potential for entering clinical practice within the next few years. Join Dr Gandy for a peek into the promise of the future and for a "de-mystification" of all the newest Alzheimer's research jargon.

PL 3

Pieter Jelle Visser

Mild cognitive impairment (MCI) refers to cognitive impairment that is not severe enough to meet the criteria of dementia. Alzheimer's disease is one of the causes of MCI. Progress has been made in the identification of subjects with Alzheimer's disease among subjects with MCI. Markers in cerebrospinal fluid, PET imaging, neuroimaging, or a combination of clinical and cognitive markers can provide an estimate of the risk that a subject with MCI have Alzheimer's disease. These advancements give opportunities for early treatment of subjects with Alzheimer's disease. Still, also subjects at high risk for Alzheimer's disease according to these markers may remain cognitively stable for many years. The aim of the this presentation is to provide an overview of markers for Alzheimer's disease in subjects with MCI and to discuss how these markers may be used in the clinical evaluation of subjects with MCI and in clinical research.

PL 2

Frank Jessen

The field of neuroimaging in Alzheimer's Disease (AD) has drastically evolved over the last two decades. It has contributed substantially to both diagnosing AD and understanding the pathological progression of the disease. In the field of magnetic resonance (MR) highly sophisticated strategies for structural data analysis have been created that enable investigator independent early disease recognition and tracking. In addition new MR application allow assessments of white matter integrity (diffusion tensor imaging, DTI), biochemical brain tissue composition (MR-spectroscopy), brain function at rest and during cognitive task (resting state and functional MRI) and contrast media free perfusion measures (arterial spin labelling, ASL). All of these techniques provide information on different aspects of brain function and are currently applied in to improve diagnosis and the understanding of pathophysiological processes.

The other field of major advances in neuroimaging of AD is positron emission tomography (PET). The well established fluorodeoxyglucose (F)18-PET is a very sensitive indicator for early synaptic dysfunction. The novel tracers for amyloid deposition, such as Pittsburgh Compound B (PIB-PET), visualize the pathological hallmark of AD. Both are highly valuable markers for early disease recognition. Applied in combination, in longitudinal studies, these two markers have provided improved insight into the temporal dynamics of AD.

The presentation will cover novel aspects of recent advances in both, MRI and PET in AD.

PL 4

Bengt Winblad

Ongoing clinical trials in Alzheimer disease

Alzheimer disease (AD) is the most common cause of dementia in advanced age. Currently available medications improve AD symptoms, and development of disease-modifying drugs is a very active area of research, which includes cholinergic, anti-amyloid compounds, drugs targeting tau-protein or mitochondria, neurotrophins and other therapeutic approaches.

The amyloid cascade hypothesis dominates current drug development strategies, but whether A β is more pathognomonic than pathogenetic is not yet clear, and so is the therapeutic role of A β removal.

Identification of effective disease-modifying drugs will benefit from understanding the interplay between mechanisms causing neurodegeneration in AD. Combined therapy could me a more effective strategy to halt AD progression. Solving methodological problems in clinical trials on AD - including use of standardized diagnostic criteria able to identify homogeneous group of patients, appropriate treatment duration and measures of disease-modifying effects - will help finding a cure for AD.

The lecture will summarize the main findings for new, and less new drugs with novel therapeutic use in AD, focusing mainly on compounds in the human testing phase.

PL 5

Paraskevi Sakka

The Greek Association of Alzheimer's Disease and Related Disorders is a nonprofit organization founded in 1995 in Thessaloniki. In 1996 it became a member of the Alzheimer Disease International and in 1997 a member of Alzheimer Europe. It has organized five Pan-Hellenic Interdisciplinary Conferences on Alzheimer's Disease. It runs 3 Day Care Centers for dementia patients. It provides programs and services for caregivers and health professionals aiming at promoting education and research covering all aspects of dementia.

The Athens Association of Alzheimer's Disease and Related Disorders was founded in 2002 by dementia patients, caregivers and doctors interested in dementia. It runs 2 Day Care Centers for dementia patients. Its activities also include Home Care programs for patients, information and prevention programs for healthy elderly, counseling for families, seminars and congresses for health professionals and publishing of leaflets and books posted free to anyone interested.

In 2007, together with 20 Associations from major cities around Greece the Greek Alzheimer's Federation was founded.

On February 2009, Athens Alzheimer's Association launched the "Greek Alzheimer's Initiative", a signature - collection campaign considered to be the first step towards a national action plan against Alzheimer's disease. We managed to secure more than 12,000 signatures which were presented to the Greek Minister of Health by people with dementia on Alzheimer's Day, 21st of September 2009.

Abstracts - Plenary speakers

PL 6

Jean Georges

In his presentation, Jean Georges of Alzheimer Europe will present the campaign of Alzheimer Europe to make dementia a European and national priority. In particular, he will present the Paris Declaration which was adopted by the member organisations of Alzheimer Europe in Paris in 2006 and how the organisation used the declaration to lobby policy makers on a European and national level.

He will give an overview of some of the promising outcomes of this campaign, including the development of national dementia or Alzheimer's strategies in France, Norway and the United Kingdom and the European Alzheimer's initiative developed by the European Commission.

PL 8

Esme Moniz-Cook

There are a number of emerging evidence based psychosocial interventions in dementia care but practitioners often find it difficult to know which of these will work for who and in what circumstances. This paper will:

- define psychosocial intervention (PSI) in dementia care
- review some of the psychosocial interventions that are known to be of help across the dementia trajectory, including updating ongoing applied dementia care research in the UK;
- describe the conceptual development of a stepped care framework for psychosocial interventions in dementia and the first stages of its validation using a study of 766 people with dementia referred to specialist dementia services in an NHS Trust over a 6 month period; and
- propose methods of assessing for, coordinating and evaluating psychosocial interventions in dementia across primary secondary and tertiary care.

PL 7

Pekka Lane

IMPORTANCE OF PLANNING – THE EUROPEAN PERSPECTIVE

P. Laine*¹

¹Alzheimer Europe, Alzheimer Society of Finland, Helsinki, Finland

Objectives and Study: Financial crises of Alzheimer Europe in the late 1990's and the need for collaboration on the reimbursement issue created a situation on the national level to identify the means to solve the emerging problems. On the national level in some of the European countries the need to be an interest organisation had become imminent and the same need led to the presentation of the need on the European level.

Methods: If you want to pursue the interest of the patient and caregiver you had to recognise the needs on the national level. On the basis of that analysis, you can create a strategy and action plan. In the late 90's-the way to solve the financial crises was to create a plan, which you could sell to sponsors. Necessary for proceeding and developing the planning process was to deepen the knowledge by joint projects, creating networks, disseminating the results and being founding member of the European Patients' Forum.

Results: Our approach led to recognition of our activity by the European Commission and their financial support to the "Eurocode – European Collaboration on dementia" project. We have also tried to position ADI in our planning and our thinking was presented to the chairman of ADI during the Alzheimer Europe conference in Paris in 2006.

Conclusions: If you want to pursue the interest of the patient and caregiver you had to recognise the needs on the national level. On the basis of that analysis, you can create a strategy and action plan. Our approach led to recognition of our activity by the European Commission and their financial support to the "Eurocode – European Collaboration on dementia" project. We have also tried to position ADI in our planning and our thinking was presented to the chairman of ADI during the Alzheimer Europe conference in Paris in 2006.

PL 9

Bob Woods

Psychological therapies have been used with people with dementia for at least 50 years, aiming to improve or maintain cognition, functional abilities, quality of life and adjustment and to reduce distress, anxiety, depression and behavioural difficulties. In recent years, some interventions have been subject to more rigorous evaluation, and there are already some encouraging findings, for example in relation to cognitive stimulation and behavioural approaches. Effect sizes comparable with those associated with pharmacological therapies have been reported, with less adverse effects. However, it is important to continue to ask 'what works for whom'. No approach will be appropriate for, or effective with, the whole range of individuals who experience a dementia. Interventions need to be tailored and targeted to the individual in his / her unique circumstances and context. The drive for 'evidence-based practice' must not be allowed to stifle creativity in the development and application of psychological interventions that can maintain social relationships and quality of life.

Abstracts - Plenary speakers

PL 10

Barry Reisberg

THE PREVENTION WORKING GROUP OF ALZHEIMER'S DISEASE INTERNATIONAL (ADI): CURRENT POSSIBILITIES FOR THE PREVENTION OF ALZHEIMER'S DISEASE 24. Invited Speaker ONLY

B. Reisberg^{*1}

¹Aging and Dementia Research Center, NYU Langone Medical Center, New York, United States

Objectives and Study: The ADI Prevention Working Group (PWG) was founded in December, 2008. The PWG is comprised of 55 ADI Medical and Scientific Advisory Panel (MSAP) members (>50% of the MSAP membership). The goals are to improve knowledge with respect to the origins of AD, and simultaneously, to develop treatments for AD prevention.

Methods: There is increasing evidence from diverse studies that AD pathogenic processes may impact brain functioning, and cognition, in young adults (Reiman, et al., PNAS, 2004; Snowdon, et al., Ann NY Acad Sci, 2000) and even in children (Bloss, et al., Biol Psychiatry, 2008), and infants (Wright, et al., Pediatr Res, 2003). Even human embryonic developmental effects of AD related pathogenic events have been reported (Zetterberg, et al., Neurosci Lett, 2002). Similarly, key elements of AD neuropathology such as neurofibrillary changes become evident in a majority of subjects by age 55 (Braak and Braak, 1997).

Results: Clinical correlates of these processes are also manifest years and decades prior to the beginning of dementia. A mild cognitive impairment (MCI) stage (Reisberg, et al., Drug Dev Res, 1988; Flicker, et al., Neurology, 1991; Petersen, et al., Arch Neurol, 1999; Winblad, et al., J Intern Med, 2004) lasting about 7 years (Reisberg, Geriatrics, 1986; Kluger, et al., J Geriatr Psychiatry Neurol, 1999) prior to the advent of AD in dementia, is now widely recognized. A prior subjective cognitive impairment (SCI) stage is noted in 25 to 55% of persons over age 65 (Jonker, et al., Int J Geriatr Psychiatry, 2000) and appears to last 15 years prior to the MCI of AD (Reisberg and Gauthier, Int Psychogeriatr, 2008). Physiologic markers of this SCI stage, such as decrements in cerebral metabolism (Mosconi, et al., Biol Psychiatry, 2008), are being identified which, together with other findings, permit the development of AD treatment studies decades prior to the advent of manifest dementia.

Conclusions: The ADI PWG seeks to exploit these and related findings towards the development of clearly effective AD prevention approaches.

PL 11

Paul Francis

BRAIN DONATION - THE EXPERIENCE OF BRAINS FOR DEMENTIA RESEARCH

P. T. Francis^{*1}

¹Wolfson Centre for Age-Related Diseases, King's College London, London, United Kingdom

Objectives and Study: The majority of scientific advances in our understanding of Alzheimer's disease (AD) have resulted from study of post-mortem human tissue at some stage. There is now a lack of material suitable for the new techniques and in particular from people without dementia. Brains for dementia research is a new £2.3M initiative by UK Alzheimer Society and Alzheimer Research Trust to address this problem and help discover new treatments and eventually find a cure.

Methods: Four existing brain banks in London, Manchester, Oxford and Newcastle have joined the BDR network and we have established recruitment centres in these cities plus Cardiff to consent and assess people over 65 with and without dementia with standard tools. The co-ordinating centre and the brain banks have been working together to develop standard operating procedures for brain collection and processing. Results: Publicity within the Alzheimer Society and Alzheimer Research Trust have resulted in over 350 new enquires about brain donation with the majority of these from people without dementia.

Conclusions: A shortage of suitable brains is resulting in major delays in the search for a cure or treatments for dementia as it limits the opportunity for high quality research. The need for effective treatments has never been greater – in less than 20 years nearly a million people will be living with dementia. Since the start of our project in May 2008 a sound infrastructure has been established and we are beginning to see public awareness of the need for brain donation increase. Brains generously pledged for donation in advance will provide the very best resource for scientists as they will be able to carry out regular assessments of the donor prior to the donation. Brains from people without dementia are particularly important as they help us work out the differences between healthy older people and people with dementia.

Abstracts - Plenary speakers

PL 12

Angela Clayton-Turner

A qualitative discourse exploring a range of issues affecting those who have been diagnosed with dementia, their families and those who might choose to donate their healthy brain for comparison purposes.

PL 13

Rose- Marie Dröes

In Europe alone 3.8 million older persons suffer from dementia and with the ageing of the population this number is forecasted to be twice as high by 2050. It is expected that at least 70% of the people with dementia will reside in their own homes due to the growing shortage of long term care facilities. This will generate a great pressure on the family of people with dementia as well as on professional carers providing home care. To address these societal problems new approaches to home care are being developed, varying from family support network meetings right after diagnosis and combined support programmes for people with dementia and their carers, to assistive technology such as, telecare and smart homes. Attempts to increase the effectiveness of home care by changing from service-directed care approaches into need and demand-directed care approaches are made as well. And finally, initiatives are undertaken to develop regional chains of care and welfare services that provide care and support tailored to the needs and wishes of individuals in different stages of the disease and in different circumstances. In this lecture an overview is provided of new directions and approaches in the care for community dwelling people with dementia and their carers.

PL 14

Sadao Katayama

Dementia makes people forgetful unsoundly such as negligence of personal appearance or memory loss of even an appointment with a friend so that they come to spend every day in anxiety and finally lose happiness of their life. In order to keep their well being or a smile in their face, it is essential to be diagnosed at early stage and to notify them and their family of not only the disease itself but also a way or guidance how to maintain quality of life for themselves. Besides arranging quality treatment and care system supporting people with dementia and their family, the party concerned so called Family Associations have been organized nationwide in which family in suffering support and help each other.

In Japan, Family Associations have been tackling to coordinate medical care, welfare service and government so that all of concerned can jointly set a future of well being for people with dementia and their family.

Abstracts - Special speakers

SS1 FOOD, DIET AND BRAIN HEALTHY EATING

N. B. Emerson Lombardo
Neurology, Boston Univ. School of Medicine, Boston, MA United States
Edith Nourse Rogers Veterans Administration Medical Center, Bedford, MA

The public has become increasingly aware of research suggesting that food and nutrition can make a difference in their risk of developing Alzheimer's disease, vascular dementia and other forms of cognitive decline..

Recent epidemiological studies suggest that comprehensive diets, such as the Mediterranean diet [1] or the DASH [2] anti-hypertensive diet, can do more than single foods or nutrients, in protecting the brain. However, for practical reasons, these studies are looking at established diets rather than analyzing all available evidence to suggest key elements of a brain healthy nutritional strategy. Using this evidence, a Memory Preservation Nutrition(MPN) [3,4] program was designed emphasizing strategies applicable to any culture's cuisine.

This presentation summarizes some key concepts explaining why nutrition can be important for promoting brain health, lays out the key strategies of a brain healthy nutrition program, and suggests steps involved in implementing changes in nutrition programs. Changing dietary practices includes assessment of current practices and preferences, and the programs need evaluation for feasibility, acceptability, and effectiveness.

As the evidence mounts, whole food nutritional interventions to promote brain health will become mainstream treatment options, for individuals as well as in group settings. Future effectiveness and efficacy studies of whole foods and combination nutrient interventions for brain health are needed..

References:

1. Scarmeas, N. *et al.* JAMA. 2009; 302: 627-637.
2. Wengreen, H.J., *et al.* Neurology Today 2009; 9(18): 20
3. Emerson Lombardo, N.B. *et al.* Research and Practice in Alzheimer's Disease and Cognitive Decline 2006; 9: 138-59.
4. Emerson Lombardo N.B. *et al.* J Nutri Health & Aging 2006; 10: 211.

SS3A European experience on the use of generic medication in psychiatry

Prof. Dr. Lutz Frölich

Leiter, Abteilung für Gerontopsychiatrie
Zentralinstitut für Seelische Gesundheit
Medizinische Fakultät Mannheim, Universität Heidelberg

In the era of the ageing population in most European countries and the rise in health care costs associated with this, generic medicine allows patients to get access to safe, effective, high-quality medicine at 20%-80% of the price of branded originator medicines. In this way, generics support the sustainability of health care provision and contribute to controlling pharmaceutical expenditure. In psychiatry, innovative medicines against depression and psychosis, developed in recent years, have become generic by now and this has broadened their availability to the patients. Especially for diseases with high prevalence, e.g. depression and dementia, the use of generic medication improves the medical care for the general population. In addition, governmental agencies like NICE or the German IQWiG use generic medicines to establish standards of cost/benefit ratios as a reference point to compare originator medication. This competition from generic medicines also forces originator companies to develop more innovative medicines and to reduce price on off-patent originator medicines thus generating additional savings to patients. Savings on the pharmaceutical budget, in turn, enable governments to reimburse newer, more expensive medicines. Thus, generic medication not only improves the medical care on a population level, but also drives the development of medical innovations, by this contributing to the development of medicine.

SS1 THE SCIENCE OF NUTRITION IN ALZHEIMER'S DISEASE

Frank HM Pistor¹, Patrick JGH Kamphuis²

¹ Nutricia Advanced Medical Nutrition, Schiphol, The Netherlands
² Danone Research, Centre for Specialised Nutrition, Wageningen, The Netherlands

There is a rapidly increasing body of epidemiological evidence linking nutrition and diet to the incidence and risk of Alzheimer disease. The specific nutritional deficiencies in Alzheimer's patients include omega-3 fatty acids, several B-vitamins and antioxidants such as vitamins E and C.

Recent mechanistic studies in *in vitro* cell systems and animal models also support the idea that nutritional components are able to counteract specific aspects of the neurodegenerative and pathological processes in the brain in Alzheimer's disease. More specifically, it has been shown that several nutritional components can effectively stimulate membrane formation and synapse formation as well as improve behaviour and cerebrovascular health.

The suggested synergy between nutritional components to improve neuronal plasticity and function is supported by epidemiological studies as well as experimental studies in animal models. The ability of nutritional compositions to stimulate synapse formation and effectively reduce Alzheimer disease neuropathology in these preclinical models provides a solid basis to predict potential to modify the disease process, especially during the early phases of Alzheimer disease.

Abstracts - Oral presentations

PL4 A EUROPEAN EXPERIENCE ON THE USE OF GENERIC MEDICATION IN PSYCHIATRY

Lutz Frölich

Head, Department of Geriatric Psychiatry, Central Institute of Mental Health Medical Faculty Mannheim, University of Heidelberg

In the era of the ageing population in most European countries and the rise in health care costs associated with this, generic medicine allows patients to get access to safe, effective, high-quality medicine at 20%-80% of the price of branded originator medicines. In this way, generics support the sustainability of health care provision and contribute to controlling pharmaceutical expenditure. In psychiatry, innovative medicines against depression and psychosis, developed in recent years, have become generic by now and this has broadened their availability to the patients. Especially for diseases with high prevalence, e.g. depression and dementia, the use of generic medication improves the medical care for the general population. In addition, governmental agencies like NICE or the German IQWiG use generic medicines to establish standards of cost/benefit ratios as a reference point to compare originator medication. This competition from generic medicines also forces originator companies to develop more innovative medicines and to reduce price on off-patent originator medicines thus generating additional savings to patients. Savings on the pharmaceutical budget, in turn, enable governments to reimburse newer, more expensive medicines. Thus, generic medication not only improves the medical care on a population level, but also drives the development of medical innovations, by this contributing to the development of medicine.

OC002 WELL-BEING OF PEOPLE WITH DEMENTIA IN SMALL HOUSE UNITS

19. Quality of life in demetia

G. Strunk-Richter^{*1}, C. Sowinski¹

¹Care of the Elderly, Kuratorium Deutsche Altershilfe, Köln, Germany

Objectives and Study: The project "Evaluation of potentials in the care of people with dementia in small house units by using benchmarking methods", financed by the German Federal Ministry of Health, aims to develop care quality with temporary processes of benchmarking. Therefore, a group of 18 small house units - specialised to support people with dementia - is organized by the Kuratorium Deutsche Altershilfe (KDA) and the Konkret Consult Ruhr (KCR). The project lasts from May 2008 until February 2010.

Methods: Seven methods are being used:

- questioning of staff and care-givers
- dementia care mapping (DCM)
- profile of well-being
- analysis of the structure of the small house units
- analysis of the structure of the clients, living in
- small house units
- profile of professional qualifications of the staff
- analysis of the concepts of the small house units

The quality results of the dementia care mapping in small house units are compared with DCM results obtained in nursing homes for the elderly by means of case studies.

Results: There is a significant difference between the quality of well-being in small house units and nursing homes for the elderly. In case studies you find that the group WIB-Score (well-ill-being) between traditional nursing homes and small house units is 0,7 to 1,2 but the well-being in small house units is between 1,4 and 2,2. The individual WIB-Score is between 0,4 and 1,5 and between 1,1 and 2,7 in small house units.

Conclusions: The structure of small house units (manageability, face-to-face-interaction), the consequent appliance of the person-centered approach of Tom Kitwood (the originator of DCM) and the assistance to independence leads to a better quality of life for people with dementia.

OC001 QUALITY OF LIFE AND HEALTH OUTCOMES IN RESIDENTS OF SHARED HOUSING ARRANGEMENTS IN BERLIN: RESULTS OF THE DEWEGE-STUDY

19. Quality of life in demetia

K. Wolf-Ostermann^{*1}, T. Fischer², A. Worch¹, J. Nordheim², J. Gräseke¹, I. Wulff², S. Meyer¹
¹Alice Salomon University of Applied Sciences, ²Institut für Medizinische Soziologie, Charité Universitätsmedizin Berlin, Berlin, Germany

Objectives and Study: Shared Housing Arrangements (SHA) are a specific German kind of small-scale living facility for older, care-dependent persons, predominantly suffering from dementia. Situated predominantly in large apartments in mostly urban settings, these arrangements are being served by community care services and are completely disconnected from traditional residential facilities. It is claimed that these arrangements contribute to better quality of life and health outcomes in residents, compared to traditional residential care. Nevertheless, research to back this claim is widely lacking.

Methods: Using a longitudinal design, new residents of small-scale living arrangements suffering from dementia (MMSE < 24) were surveyed for one year. They were assessed at the time of moving in as well as six and twelve months later. Quality of life was measured using the Qualidem tool. Measures for physical and psychological health out-comes include ADL functioning, BPSD, additional social factors and Mini Mental State Examination (MMSE) for cognition. Data from the SHA was compared with data collected in the same way in residential Special Care Units for persons with dementia. In addition, using a cross-sectional questionnaire design, all Shared-Housing Arrangements in Berlin were surveyed concerning service structures and resident characteristics.

Results: Residents which were recruited into the longitudinal study are on average 81.5 years old. Persons moving into SHA tend to have better cognitive function than those moving into SCU. In both types of facilities quality of life reached only moderate levels at base line. No difference was observed between SHA and SCU. Need-driven behaviours were frequent in both groups as were impairments in physical functioning. Psychotropic drugs were slightly more often prescribed for residents in nursing homes. Further results of the longitudinal analysis will be presented.

Conclusions: In this study quality of life and other aspects are compared between residents of Shared-Housing Arrangements and residential Special Care Units. Data indicate that both types of facility attract a slightly different population. Further analysis will indicate whether the SHA concept succeeds at improving the quality of life of dementia patients who at baseline only show moderate levels. The study results will add some clarification as to whether or not claims of improvement of quality of life in SHA are viable.

OC003 SMALL-SCALE LIVING FOR PEOPLE WITH DEMENTIA: IMPLICATIONS FOR RESIDENTS, FAMILY AND PROFESSIONAL CAREGIVERS IN THE NETHERLANDS

H. Verbeek^{*1}, E. van Rossum¹, S. M. G. Zwakhalen¹, G. I. J. M. Kempen¹, J. P. H. Hamers¹

¹School for Public Health and Primary Care dep of Health Care and Nursing Science, Maastricht University, Maastricht, Netherlands

Objectives and Study: In dementia care, traditional large-scale nursing homes are transformed into or replaced by small-scale and homelike facilities. These facilities offer a stimulating environment, in which residents are encouraged to participate in household activities. Insight into their characteristics and experiences is, however, relatively unknown. Additionally, information regarding quality of life and residents' characteristics is scarce. This study explores characteristics and experiences with small-scale living and traditional nursing home wards in the Netherlands.

Methods: A survey was conducted to investigate facilities' characteristics. In-depth interviews (n=45) were conducted with the executive board and management of nursing homes, staff and family to explore their experiences with small-scale living, especially focusing on issues regarding quality of life. Additionally, a cross-sectional study was performed to investigate residents' characteristics, including 28 small-scale living houses and 21 traditional nursing homes wards.

Results: Results indicate that most projects consist of a clustering of homes, both in the community and near a large nursing home, and have a home-for life principle. All participants report positive experiences regarding personal contact, a home for life principle and homelike atmosphere, particularly regarding quality of life. Nursing staff welcomes the broadening of tasks. Management of nursing homes expresses doubt regarding the costs, availability of family and professional caregivers. Residents' characteristics significantly differed in some areas: residents in small-scale living had a higher cognitive and functional status compared with residents in regular nursing home wards.

Conclusions: Although positive experience are reported, there remains uncertainty regarding the development of small-scale living for older people with dementia. Longitudinal research is needed to investigate effects and feasibility.

Abstracts - Oral presentations

OC005 THE RELATIONSHIP OF AD8 AND COGNITIVE PERFORMANCE IN GREEK CYPRIOT ADULTS: A PRELIMINARY STUDY

02. Ageing and dementia

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Objectives and Study: This study is part of the first systematic research program exploring neuropsychological-neurocognitive performance and quality of life issues in the elderly Greek-Cypriots. The primary objective was to investigate neurocognitive abilities in relationship with AD8, a brief sensitive test screening for mild dementia. The hypothesis was that high scores of AD8 will relate to low performance on tests of cognitive functioning.

Methods: Subjects: Participants were 84 Greek-Cypriot men and women, between 55 to 85 years ($x = 69.4$, $sd = 6.5$) with average education 9.5 years ($sd = 3.9$) and average MMSE 27.2 ($sd = 1.8$).

Procedures: All participants were screened for global cognitive and memory decline prior to participating in the project. A battery of standardized clinical neuropsychological tests to assess neurocognitive abilities was administered. Family members completed the AD 8 which consists of 8 questions relating to cognitive functioning and possible noted change across time.

Results: Statistical analyses revealed a negative relationship ($a = .01$) between levels of cognitive performance and age. In addition, the analyses identified significant relationships between years of education and cognitive abilities. Participants in the higher education groups (13 years and above) scored significantly higher ($a = .05$) on cognitive tests than individuals with lower education levels. The presence of decline on the AD8 was negatively related to performance on other cognitive tests such as the MMSE and the HVL. Finally, higher education was significantly related to fewer symptoms reported on AD8.

Conclusions: The above findings provide evidence for the position that education may operate as a protective factor to cognitive decline associated with normal aging. In addition, this preliminary study supports the use of the AD 8 as an additional screening measure in order to identify patients who may be at risk for mild cognitive impairment.

OC007 SOCIABLE: A SURFACE COMPUTING PLATFORM EMPOWERING MORE EFFECTIVE COGNITIVE TRAINING INTERVENTIONS FOR HEALTHY ELDERLY AND DEMENTED PATIENTS

02. Ageing and dementia

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Objectives and Study: In this presentation, we introduce a novel cognitive training paradigm, which exploits leading edge ICT (Information and Communication Technologies), notably in the area of surface computing. This paradigm combines the, ever important, human care and support factor with innovative ICT enabled services offered by care centers and expert operators in order to:

- Enable healthy and demented elderly to access a motivating play-online (but also offline) environment based on mixed-reality interfaces technologies and play-related therapeutic tools with a view to preventing the evolution of dementia. The environment includes various pleasant cognitive training-gaming activities targeting memory, language, attention etc which range from individualized cognitive training and team play to networked games involving multiple-age users.
- Facilitate medical experts in structuring cognitive training programs and sessions.
- Provide automated ICT tools for collecting statistical data regarding the assessment of the cognitive status patients with mild dementia. This involves the provision of information about the patients' mood, preferences and cognitive performance, as well as context-related information. Such information will be collected, maintained and presented in a systematic way so as to support medical experts in tracking their patients' cognitive performance and defining appropriate interventions.

Methods: The presented approach is thoroughly investigated in the SOCIABLE project, which is funded by the European Commission in the scope of its FP7 research program (Contract No: 238891). The project involves 11 partners, including several hospitals and care centers from Greece, Italy, Norway and Spain. The proposed approach will be therefore be piloted with over 350 users across the four European countries mentioned above.

Results: Preliminary results are very promising, yet remain to be confirmed.

Conclusions: The SOCIABLE surface computing platform is a novel cognitive training paradigm which is based on leading edge ICT and has the potential to empower more effective cognitive training interventions for healthy elderly and demented patients.

OC006 THE NEEDS, SOCIAL NETWORKS AND QUALITY OF LIFE OF PEOPLE WITH DEMENTIA LIVING AT HOME

02. Ageing and dementia

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Objectives and Study: There is lack of evidence about the unmet needs of people with dementia living at home. The main aim of this study was to identify the needs, social networks and quality of life of people with dementia living at home.

Methods: 152 persons with dementia were interviewed about their needs, cognitive status, and quality of life; and 128 informal carers were interviewed about the people with dementia's needs, quality of life, social networks, behavioural and psychological symptoms, functional status, and services used. Carers were also interviewed about their own symptoms of depression, anxiety, burden, and satisfaction. One-third of the sample was living alone and the rest was living with others.

Results: The most frequent unmet needs were daytime activities (77, 50.7%), company (60, 39.5%), psychological distress (47, 30.9%), eyesight/hearing (33, 22.0%), and accidental self-harm (23, 15.1%). Higher behavioural and psychological symptoms, low-community involvement social networks, having a younger carer and higher carer anxiety were found to be predictors of higher unmet needs. A model of the relationship among the variables was proposed and tested. According to the final model, social networks and behavioural and psychological symptoms have an indirect effect on self-rated quality of life through unmet needs.

Conclusions: The management of people with dementia living at home should consider: an interdisciplinary and coordinated system which includes environmental, physical, social and psychological areas and also interventions aiming to reduce unmet needs through the treatment of behavioural and psychological symptoms and the involvement of people with dementia in the community. By doing this, people with dementia's quality of life will be ultimately improved.

OC008 SERVICE USERS' INVOLVEMENT IN THE DEVELOPMENT OF A MAINTENANCE COGNITIVE STIMULATION THERAPY (CST) PROGRAMME: A COMPARISON OF THE VIEWS OF PEOPLE WITH DEMENTIA, STAFF AND FAMILY CAREGIVERS.

02. Ageing and dementia

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Objectives and Study: The objective of the study was to identify improvements for the draft maintenance Cognitive Stimulation Therapy (MCST) programme, by involving people with dementia (PWD), staff members and family caregivers (FCG).

Methods: A consultation process with focus groups were used to stimulate discussion, generate ideas to be explored and to gain insight (Bowling, 1997). Purposive sampling was used, in order for us to have a representative dataset for rich qualitative analysis. The study consisted of three focus groups for each demographic: PWD, staff members and FCG. The groups took the format of a semi-structured interview schedule that allowed for cueing people but with open ended questions. One researcher led the focus group and a second researcher took substantive and methodological field notes before and after the groups as recommended by Burgess (1984). The groups were also recorded and transcribed. A DVD on previously run sessions was shown and conversation was generated from the notion of 'use it or lose it' and what activities are perceived as mentally stimulating.

Results: Nineteen themes were presented to the three different groups. They were then rated by perceived successfulness for people with dementia. Inductive thematic analysis was used to transcribe the results and a coding manual was devised and applied to the remaining transcripts. Overall successfulness was perceived as maintaining a person centred approach, accepting characteristics of all group members, small group sizes and the use of both reminiscence and multi-sensory prompts. New and old themes were reviewed. A split between perceived successfulness was identified between the FCG, staff members and PWD. PWD expressed an interest in using money and current affairs, whereas FCG and staff members disliked these themes.

Conclusions: PWD felt it was important to keep the brain active and support NICE guidelines (NICE-SCIE, 2006), that all people with mild to moderate dementia should be 'given the opportunity to participate in a structured cognitive stimulation programme'. Positive agreement was found among fourteen themes and suggestions were made for the remaining five themes. These results will be used to revise the maintenance CST manual and be tested through a randomised controlled trial.

Abstracts - Oral presentations

OC009 PROGNOSTIC FACTORS FOR WEIGHT LOSS OVER A ONE YEAR PERIOD IN PATIENTS RECENTLY DIAGNOSED WITH MILD ALZHEIMER'S DISEASE 02. Ageing and dementia

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Objectives and Study: The aim of the study was, with a prospective design, to identify prognostic factors for weight loss in patients recently diagnosed with mild AD, with special emphasis on the patients' social participation and living arrangements.

Methods: The data used in this study was part of the Danish Alzheimer Intervention study (DAISY). The sub-population used in this study was enrolled from April 2004 to July 2005; among living patients with a clinical diagnosis of probable AD or mixed AD, established or confirmed within the past 12 months; age \geq 50 years; MMSE score \geq 20; informed consent; and alive and agreeing to participate at 1 year follow-up. In total, 268 patients were included. Predictors of weight loss at 1 year follow-up was assessed by a logistic regression analysis. Inspired by Wallace et al (1995), we used a cutoff of 4% in 1 year for defining weight loss.

Results: The mean age at inclusion was 76.1 (range 54-92). 66 patients (24.6%) lost more than 4% of body weight during the first 12 months of the study. The logistic regression showed that an increase of one baseline body mass index (BMI) point significantly increases the odds of weight loss by 9%. Furthermore, the results suggested that for men, living alone was a risk factor for losing weight (living alone OR=2.4 vs. living with someone OR=1.0), while for women there was actually a higher risk associated with living with somebody (living alone OR=1.9 vs. living with someone OR=2.7).

Conclusions: The risk of losing weight seems to increase with baseline BMI. Furthermore, the patients' gender and living status also influenced the risk of losing weight, modified by each other. These results suggest that certain social factors do have an importance in regard to weight loss. Since weight loss is a predictor of mortality in AD patients, clinicians should be aware of these prognostic social indicators, in order to prevent or halt a potential negative development.

OC011 ALZHEIMER'S DISEASE: THE CHALLENGES OF MANAGING MULTI-MORBIDITY 02. Ageing and dementia

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Objectives and Study: The management of Alzheimer's Disease along with other long term conditions, including cerebro- and cardiovascular disease, depression, diabetes, arthritis, and cancer creates particular challenges for health care systems, practitioners, caregivers, and individuals with Alzheimer's Disease. This presentation has three principal objectives: (1) To examine the evidence-base for clinical co-management of Alzheimer's Disease alongside other long term conditions; (2) to identify methodological challenges in studying multi-morbidity; and (3) to outline how health care systems and practitioners may respond when facing multi-morbidity.

Methods: Data from national surveys in England (e.g. English Longitudinal Study of Ageing, Waves 1-3) are used to examine multi-morbidity at the population level. A structured literature review involving five data sources (MEDLINE, EMBASE, CINAHL, PSYCINFO and COCHRANE) limited to English (years 2000-2009) with focus on 'depression', 'cerebro- and cardiovascular disease', 'diabetes', 'arthritis' and 'cancer' explores clinical management issues when additional long-term conditions are present.

Results: At present insufficient data is available to determine multi-morbidity of Alzheimer's Disease due to a variety of conceptual, sampling and methodological challenges. The current evidence base for the management of co-morbidity reported in the scientific literature is scarce. Information is primarily available for depression but little in terms of co-management. Few reports go beyond describing the problems of multi-morbidity and address comprehensive management strategies. Practical implications for the health care organisation and clinical management will be discussed.

Conclusions: A single focus on Alzheimer's Disease is disguising the fact that many older adults face substantial multi-morbidity. We need better population and individual-level data to develop an evidence base for the socio-political, clinical, and self management of multiple health conditions and their impact on individuals' health and well-being. This information is crucial for resource planning as well as for providing families and care providers with adequate support.

OC010 RISK FACTORS OF RAPID COGNITIVE DECLINE (RCD) OF DEMENTIA IN A PROSPECTIVE STUDY: 3 YEARS FOLLOW-UP 02. Ageing and dementia

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Objectives and Study: Dementia is characterized by marked interindividual differences in the rate of cognitive decline. This variability probably implicates different factors including ageing - associated and -non associated factors. Previous studies found out that extrapyramidal and psychotic symptoms, cardio-vascular risk factors and denutrition were associated with RCD. Thus, the aim of this study was to assess risk factors of RCD in dementia of the elderly.

Methods: We used the database of Limoges, (France), from the Observatory of rapid cognitive decline, from June 1st 2006 to May 31st 2009. In the population-based survey of patients suffering from dementia, RCD was defined by the loss of at least 3 points in 6 months or 4 points in 12 months in Mini Mental State Examination (Greco version, MMSE). Multivariate analysis was used.

Results: Of 392 included patients, 244 (62.2%) suffered from Alzheimer's disease, 93 (23.7%) from mixed dementia, 12 (3.1%) from dementia with Lewy bodies, 9 (2.3%) from Parkinson's disease related dementia, 6 (1.5%) from progressive primary aphasia, 6 (1.5%) from subcortical dementia, 5 (1.3%) from frontotemporal dementia and 17 dementias (4.3%) had unknown etiology. The mean age of dementia diagnosis was 81.1 ± 9.9 years and 63.1% were women. 122 patients (31.1%) showed RCD. The factors significantly associated with RCD were: denutrition (OR, 2.3 [IC95%, 1.2 - 4.4]; $p=0.0133$), psychotic symptoms (OR, 1.9 [IC95%, 1.1 - 3.3]; $p=0.0227$) and depression (OR, 1.7 [IC95%, 1.1 - 2.7]; $p=0.0243$).

Conclusions: Denutrition, psychotic symptoms and depression were significantly associated with a rapid cognitive decline. These factors seem to be different from younger adult demented patients and may suggest specific evolutive factors with ageing.

OC012 DEMENTIA KNOWLEDGE AMONG HEALTH WORKERS AND OTHER ADULTS IN A SLOVENIAN AREA

Z. Felc¹

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Objectives and Study: Early recognition of dementia symptoms promotes adequate help-seeking and increases early identification and treatment of dementia. The aim of this study was to determine how much Slovenian health workers and other adults know about symptoms of dementia, and if they want more information about dementia.

Methods: A questionnaire consisting of 12 questions was sent to Slovenian e-mail users. During May and August 2009 we managed to obtain 120 questionnaires filled-out by 60 health workers (mean age = 40.00, SD = 11.77, range 22-67), and 60 other adults (mean age = 44.27, SD = 16.20, range 23-83; $t = 1.651$; $p > 0.05$)

Results: Health workers reported consistently more dementia symptoms than other adults (5.15 v. 3.00, $p < 0.001$). Although participants' knowledge about dementia symptoms overall was fair, less than 5% reported a gradual loss of skills needed to carry out daily activities to be symptom of the disease. Additional information about dementia want 77% of health workers and 75% of other adults, 100% of participants recognized the role of associations for the help at dementia as very important.

Conclusions: In spite of small sample, this study demonstrated that efforts to increase knowledge about dementia symptoms should be expanded, with special attention to a gradual loss of skills needed to carry out daily activities. Improved recognition of dementia symptoms will promote adequate help-seeking behaviors and will increase early identification and treatment of dementia.

Abstracts - Oral presentations

OC012B FREQUENCY AND CAUSES OF EARLY-ONSET DEMENTIA IN A TERTIARY REFERRAL CENTER IN ATHENS

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Objective: To investigate the frequency and causes of early-onset dementia (EOD) in consecutive patients in a highly specialized dementia referral center, focusing on unusual cases, particularly with early and/or rapid onset, in Athens, Greece.

Methods: Patients referred for dementia diagnosis according to specific referral criteria during a 3 years period. We examined the distribution of patients diagnosis and differences in sex, education, dementia severity, cognitive function, and the duration of disease (from onset to referral) between the EOD (<65 y) and the lateonset dementia (LOD) groups.

Results: From a total of 260 consecutive demented patients, there were 114 EOD patients or 44% of all demented patients. No significant differences were observed between the EOD and LOD groups in cognitive or behavioral measures. However, the duration from onset to consultation was significantly longer in the EOD group. Also, in the EOD group, the rates of patients with Alzheimer disease and Parkinson disease dementia were relatively low and the rate of patients with frontotemporal lobar degeneration was relatively high and the proportion of secondary dementias was high.

Conclusions: We conclude that EOD patients are more likely to be seen in specialized settings. The underlying diseases are considerably different in EOD compared with LOD. Secondary causes are often found in patients with EOD. Patients with EOD had an unexpectedly longer time-to-diagnosis than patients with LOD. This argues for a need of better education about the clinical presentation of dementia in the young and middle aged.

OC014 A CHANGING MELODY: TRIGGERING PERSONAL AND SOCIAL TRANSFORMATION IN DEMENTIA CARE

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Objectives and Study: Partnership approaches in healthcare that recognize and embrace the unique knowledge-bases of all involved in care, including persons with illness or disability, their family members, and professionals, are critical to meeting the needs of individuals and their families. Nonetheless, partnership approaches in dementia care that actively include persons with dementia in decision-making have been slow to develop, largely due to the misunderstanding and stigma associated with dementia. For the past seven years, the Murray Alzheimer Research and Education Program at the University of Waterloo has brought together persons with early stage dementia, family partners in care and professionals in the development and implementation of *A Changing Melody* (ACM) – a learning and sharing forum designed specifically by and for persons with early stage dementia and their families. This presentation presents the findings from a systematic evaluation conducted to examine the impact of this type of forum on changing images, understandings, and actions of forum participants.

Methods: Using constructivist grounded theory methodology (Charmaz, 2006), a range of data collection strategies were employed over the seven years, including: pre- and post-forum evaluation forms: active interviews with person with dementia (30), family members (24), and professionals (20) who attended the forum; participant observations at all forums; and documentation of the planning process.

Results: The findings suggest that ACM has a profound impact on not only persons with dementia but their care partners, triggering personal and social transformation. More specifically, ACM is *creating a new face of dementia* through *gaining new knowledge and insights, connecting and identifying with others, triggering new awakenings and hope, enabling and empowering persons, and producing strong dementia advocates.*

Conclusions: Negative images and misunderstandings can have significant impacts on the quality of life of persons with dementia and influence the care approaches of family members and professionals. ACM forums have important implications not only at the personal level in better preparing those facing dementia for the journey, but also have broader social implications for breaking the silence and reducing the stigma associated with dementia, ensuring the highest quality of life for those experiencing it.

OC013 A CREATIVE CARE APPROACH TO THE ELDERLY WITH COGNITIVE IMPAIRMENT IN A GROUP HOME IN JAPAN

14. New approaches to home care

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Objectives and Study: Group Home (GH), recently developed in Japan and characterized by all single rooms and group-care in a community, is a special nursing home for the elderly with cognitive impairment. Daily life care, including meal supply, giving a bath and assistance of bodily wastes, is provided to 5-9 elder tenants in a house unit.

Methods: The effects of a creative care on 36 tenants in GH (32 females and 4 males, 83.8±8.7 in age) was analyzed retrospectively. The caregivers assist the tenants to walk to toilet as possible as they can, to eat food by themselves even taking a long time, and to join in walking outside in order to keep their activity of daily life. They encourage the tenants to make a chance daily for playing, dancing or singing together in order to enhance their social contact and promote the tenants to join in cooking, washing and cleaning in order to keep meaningful occupation and stimulation. They give a bath everyday in order to keep the tenants' lives without discomfort.

Results: The mini-mental state examination (MMSE) score of the 36 tenants was 6.7±5.8. Physical Activity of Daily Living (ADL) was assessed by I (independent), A (assistance-required), D (dependent) scoring on 8 items (bathing, dressing, personal grooming, toileting, continence, transferring, walking and eating). The median values for numbers of items of score-I -A and-D in each tenant were 0, 3 and 3, respectively. The numbers of death, evacuation to hospital, and deterioration in cognitive function (>3 score in MMSE) in the last 1 year were 0, 3, and 1, respectively. ADL became worse (>2 items) in the 6 tenants, in contrast improved (> 2 items) in the other 6 tenants.

Conclusions: This study suggests beneficial effects of the creative care on GH tenants.

OC015 THE USE OF GLOBAL POSITIONING SYSTEM (GPS) AMONG PEOPLE WITH DEMENTIA AND THEIR FAMILY CAREGIVERS

14. New approaches to home care

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Objectives and Study: Many people with dementia get lost at some point in their illness, and a few percent get lost repeatedly. Getting lost may lead to dangerous situations for the person with dementia, may be a burden for the caregiver, and may eventually result in nursing home placement. GPS has been suggested as a way of allowing people to remain independent for longer.

Methods: A pilot-study on the use of GPS technology by older adults with dementia and their family caregivers has been carried out. The following research questions have been addressed: Is this system feasible and acceptable for the target-group? Is a change found on the experienced quality of life of the participant with dementia, the extend of worrying while the person with dementia is outside without supervision and the experienced care burden of the informal caregiver after using the GPS technology three months?

Results: People with dementia included in the study are living at home with a family caregiver (N=34). Results of the pilot study will be presented.

Conclusions: Conclusions and recommendations for whom and how to use GPS will be discussed.

Abstracts - Oral presentations

OC016 IT&C APPLICATIONS IN THE MULTI-FACTORIAL ATTEMPT OF PHYSICALLY AND/OR COGNITIVELY DISABLED ELDERLY AT HOME

14. New approaches to home care

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Objectives and Study: The International Plan of Action on Ageing (Madrid 2002) includes the development of supportive environments for the elderly as a priority direction. One of the most important actions in this respect is the development of Assistive Technology (AT). Our presentation deals with the notion and implications of this new, promising technology in the provision of support and protection for cognitively disabled elderly at home.

Methods: An overview of the main notions, specific ontologies is performed, technologies, products and services dealing with AT, as well as the main obstacles that prevent elderly people from benefiting from information society achievements is performed. The list of the most important European projects in the field is commented as gauges of the European Model of AT development for elderly at home.

Results: We present our partnership outcomes in the SHARE-it and Key4Care STREP Projects, co-funded in the EU's FP6, examples of the struggle with the above, challenging matters. Our presentation also point out some main topics such as the remarkable heterogeneity of functional profiles in elderly or disabled people, often combining cognitive and physical impairments, the improvement of the tools of their evaluation and monitoring, the definition of their needs and impairment profiles, useful for the elaboration of innovative forms of agent-based artifacts that will enhance the autonomy of the target user group in their daily life.

Conclusions: The development of AT and Ami is one of the most suitable answers to global aging and its medical and economical challenges. AT and Ami impact lies on the creation of smart devices able to help cognitive and/or motor impaired people to be self-dependent enough, to autonomously live in the community, to stay at home as long as possible with a maximum safety and comfort, and to delay their institutionalization.

OC017 RAPIDLY PROGRESSIVE DEMENTIA CAUSES FOUND IN A GREEK TERTIARY REFERRAL CENTER, IN ATHENS

Sokratis G. Papageorgiou, MD, Theodoros Kontaxis, MD, Anastasios Bonakis, MD, Georgios Karahalios, MD, Nikolaos Kalfakis, MD, and Demetrios Vassilopoulos, MD, PhD

Dementia is generally considered as rapidly progressive [rapidly progressive dementia (RPD)], in cases with overt cognitive impairment, established within months. Data about the relative frequency of underlying diseases in cases of RPD are few and extremely variable, depending on the clinical setting. We examined the relative frequency of the underlying causes of RPD, in a university tertiary referral center, in Athens. A series of consecutive patients presenting with RPD in a 3-year period was included. All patients received a comprehensive clinical, imaging, and laboratory evaluation. Of a total of 279 patients hospitalized for dementia diagnosis, 68 patients had RPD (37 males and 31 females). Mean age at onset \pm SD was 65.5 \pm 10.0. The most common cause of RPD was secondary dementias, accounting for 18 cases (26.5%). Alzheimer disease and frontotemporal dementia were almost equally represented, accounting for 12 (17.6%) and 11 (16.2%) cases, respectively. Vascular dementia, Creutzfeldt-Jakob disease, and various neurodegenerative diseases accounted for 9 cases each (13.2%). In a tertiary referral center, secondary dementias represented the most frequent cause of cases presenting with RPD. As a substantial number of these cases are potentially treatable, our finding reconfirms and underscores the importance of an exhaustive evaluation in any case presenting with RPD.

OC019 DEMENTIA CARE AND KNOWLEDGE TRANSLATION

19. Quality of life in demetia

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Objectives and Study: Alzheimer's Australia is establishing a National Quality Dementia Care Network to improve the quality of dementia care through knowledge transfer and collaboration.

Methods: The Network will achieve this through the rapid dissemination and uptake of research evidence via the various mechanisms of knowledge transfer. This is to be achieved through better collaboration between dementia care researchers, consumers and service providers. The Network will not commission new research projects, but rather facilitate the translation of current and future research into education and training initiatives, guidelines, policy recommendations and procedures for best practice dementia care. Examples of dementia care issues where current research outcomes have not been taken up include pain management strategies, how to minimise the use of medical restraint and developments in palliative care. The proposal will be unique in involving consumers in all aspects of knowledge transfer, from identifying priorities through to approving and monitoring projects and advising on dissemination strategies.

Results: Alzheimer's Australia has taken the initiative in the development of this proposal because of a recognition that the quality of dementia care in Australia will only improve if there is greater collaboration between consumers and those with a stake in research, service delivery, training and clinical experience, underpinned by the understanding and contribution of people with dementia and their families.

Conclusions: Alzheimer's Australia believes it is positioned to drive this initiative with the three Dementia Collaborative Research Centres, because it has built good relationships with the Centres and is positioned at the local level to collaborate with a range of partners dependant on the priorities set for knowledge transfer. The Network is planned to start later in 2010

OC020 EXPLORING EXPERIENCES OF EVERYDAY ACTIVITY AND SOCIAL INTERACTION IN EARLY DEMENTIA AND THEIR SIGNIFICANCE FOR SENSE OF SELF AND WELL-BEING

19. Quality of life in demetia

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Objectives and Study: It is generally accepted that older adults who engage in activity tend to experience improved health and well-being. However, the extent to which this kind of involvement plays a similar role in the lives of people with dementia is less well understood. In particular, how people with dementia themselves view the importance of activity has not been explored to any great extent. The purpose of this study was to investigate how people with a recent diagnosis of dementia perceive their everyday activities and social interactions, focusing especially on the relationship between this involvement and their sense of self and well-being.

Methods: This was a naturalistic study using interpretive ethnographic methods. 10 participants were recruited within six months of receiving a diagnosis. They were interviewed and observed in their home and neighbourhood environments over a period of several months. Several family members were also interviewed, and a sub-set of participants were seen again a year later for a follow-up interview. Field notes and transcribed interviews were analysed using established methods of interpretation.

Results: The emerging thematic structure demonstrates the important place of activity and social interaction in the everyday lives of people with early dementia, while revealing a certain tension between activities that have persisted and those that are changing. Moreover, findings demonstrate a close relationship with concepts of personhood and quality of life, illustrating the role of activity in shaping how people understand and feel about themselves, particularly in the context of family and community life.

Conclusions: This study illustrates how involvement in everyday activity and social interaction contributes to supporting personhood and quality of life for people with early dementia. Findings suggest directions for further research and development of community-based supports.

Abstracts - Oral presentations

OC021 THE EXPERIENCES OF RADIOPHARMACEUTICALS FOR ALZHEIMER'S DISEASE IN TAIWAN

05. Diagnosis and treatment - role of GPs

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Objectives and Study: Alzheimer's disease (AD) is one of the epidemic neurodegenerative disorder-affecting millions of elders. Numbers of dystrophic neuritis has correlated with severity of dementia been associated with fibrillar A-beta; (beta-amyloid). As senile plaques (SPs) and neurofibrillary tangles (NFTs) are hallmarks in AD, histological dye analogs biomarker for mapping A-beta; like [18F]FDDNP and [123I]IMPY, showed the superiority characteristics.

Methods: A new synthesis protocol of [18F]FDDNP and [123I]IMPY were apply on auto-synthesizer. In vitro, In vivo and Ex vivo study were used transgenic mice (Tg2576) for the assay. In vitro and competition autoradiography study was used Tg2576 and human brain section soaked with pure radiopharmaceuticals and together with radio-free compound in adjacent brain section. In In vivo and Ex vivo study, take those mice (post-injected for 30min) for microPET or microSPECT and then scarified the mice and take its brain for sagittal section for imaging.

Results: High quality of [18F]FDDNP and [123I]IMPY (Radiochemical purity >95%, by radio-HPLC) were synthesized by auto-synthesizer. In vitro assay, whatever in Tg2576 or human brain, A-beta; rich regions showed high retention ratio. In In vivo imaging, dynamic microPET or microSPECT showed that Tg2576 brain section/reference (cerebellum) ratio larger than control mice. In Ex vivo study, hippocampus and frontal cortex region (A-beta; rich sites) Tg2576 had better retention than control mice.

Conclusions: In the report, we modified the synthesize protocol ([18F]FDDNP and [123I]IMPY) on auto-synthesizer instrument and estimate in In vitro, Ex vivo and In vivo assay by transgenic mice (Tg2576). Now, success synthesis and superiority result in higher quality product for tracing beta-amyloid plaques in AD research. In Taiwan, [18F]FDDNP and [123I]IMPY had complete the document of chemical property and toxicology. In future plans, we will to exploitative the preclinical platform for early diagnosis on AD patients.

OC023 IMPROVING GENERAL PRACTICE DIAGNOSIS OF DEMENTIA

05. Diagnosis and treatment - role of GPs

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Objectives and Study: Screening for cognitive impairment by primary care physicians (PCPs, general practitioners, GPs), while controversial, has been recommended as routine for targeted populations such as patients aged 75 years or more as a way of redressing the low rate of dementia diagnoses by GPs. Yet adoption of cognitive screening by GPs is insignificant compared to routine testing for hypertension or cancer. Reasons given by GPs include therapeutic nihilism, uncertainty about management strategies, lack of familiarity with screening tools and lack of time. In response to the latter, many cognitive screening instruments, which are quick, efficient and have good psychometric properties, have been developed; three have been recommended the Mini-cog, Memory Impairment Scale and GPCOG.

Methods: We have developed an interactive website, www.gpcog.com.au, designed for rapid screening for dementia in primary care. Testing is available in several languages, including Greek, Italian, Spanish, German, French, Russian, Polish and Chinese. Links to guidelines on investigation and management of dementia from different countries are also provided in several languages. Clinicians accessing the website are encouraged to complete a survey on usefulness of test and website.

Results: The GPCOG is a fast (<4') and efficient (=> MMSE) method of screening for cognitive impairment. Results from individual patients can be saved and printed. Promulgation of website commenced in mid-2009 and survey feedback is positive.

Conclusions: We conclude that screening for cognitive impairment in people at risk of dementia can improve diagnostic accuracy which may be enhanced by delivery using internet technology.

OC022 VALIDATION OF A NOVEL BLOOD TEST FOR THE EARLY DETECTION OF ALZHEIMER'S DISEASE - CHALLENGES WITH AN 'IMPERFECT GOLD STANDARD'

05. Diagnosis and treatment - role of GPs

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Objectives and Study: Early and accurate detection of Alzheimer's disease (AD) is critical for implementing active management strategies which may delay the onset of the more debilitating symptoms of AD. Our objective was to develop a blood test (ADtect®) that can be used to aid the early diagnosis of AD.

Methods: Our unique approach detects the presence of disease by measuring the pattern of specific gene expression changes in peripheral blood. This is a novel diagnostic approach as it measures the systemic effects of the disease. The test requires a 2.5 mL venous blood sample collected in an FDA approved PAXgene tube, which stabilizes and preserves the RNA. The RNA is then extracted and cDNA prepared before application to a low density array (ADtect®). The performance of all the 96 gene assays in the real-time RT-PCR analysis is evaluated by an algorithm that results in a test score indicating the presence or absence of AD.

Results: In a multicenter study of N=248 subjects the test is able to discriminate AD subjects from cognitively healthy controls with a 73% overall agreement with the clinical diagnosis. The test performance is confirmed in an independent validation study, and shows similar good performance in mild (MMSE 20-27) and moderate AD cases.

Conclusions: We have developed a blood test (ADtect®) that can be used to aid the early diagnosis of AD. Our current findings show that ADtect® is a reliable and diagnostically relevant biomarker for the early detection of AD. Assuming a clinical accuracy of 80% in a validation study, a biomarker with 90% "true" accuracy can be expected to give an observed accuracy of 70-75%. The ADtect® blood test is particularly valuable as an aid in the diagnosis of mild AD cases with minor cognitive decline which are clinically the most difficult cases to diagnose.

OC024 INTRANASAL DELIVERY OF INSULIN FOR THE RESTORETION OF MEMORY SIGNALLING IN ALZHEIMER DISEASE

08. Future treatments in Alzheimer's disease

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Objectives and Study: Alzheimer's disease (AD) is characterized by marked atrophy of the cerebral cortex. The objective of present research is to determine the therapeutic potential of nano carriers for delivering insulin into the brain, employing a non-invasive approach (intranasal delivery). In this line, the present work conceives the formulation, optimization, encapsulation and in vitro release profile of Insulin from Plain PLGA and PEGylated PLGA nanoparticle.

Methods: PEG-PLGA copolymer has been synthesized and characterized by IR, NMR, and Mass spectroscopy. Plain PLGA and PEGylated-PLGA nanoparticles were formulated by double emulsification method. The size of optimized Plain and PEGylated nanoparticles were found to be 130±1.28 and 286±3.24; nm, respectively.

Results: To best of our knowledge, this is first ever work that reports the optimization of nanoparticle formulation taking three types of surfactant (Poly vinyl alcohol; PVA, Tween-20 and Tween-80) as one of formulation variables, along with stirring rate and entrapment efficiency. Outcomes suggested Tween-80 to be the best surfactant for nanoparticle formulation, wherein the parent PLGA systems showed an entrapment of 37.78±2.91%, as opposed to 31.18±3.38% and 28.45±2.97% with Tween-20 and PVA, respectively. PEGylation of systems resulted in further enhancement in entrapment efficiencies, which showed 59.78±2.97, 44.97±3.74 and 29.78±3.78; %, entrapment with Tween-80, Tween-20 and PVA, respectively.

Conclusions: From the in vitro data it has been concluded that PEGylated PLGA nanoparticles prepared by using tween-80 have shown better percentage entrapment and prolonged release, thus improving stability of the drug.

Abstracts - Oral presentations

OC025 CRYSTAL STRUCTURES OF JNK-INTERACTING PROTEIN 1 AND KINESIN-1 LIGHT CHAIN SUBUNIT: INSIGHTS INTO MOLECULAR INTERACTIONS WITH AMYLOID PRECURSOR PROTEIN

08. Future treatments in Alzheimer's disease

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Objectives and Study: Our objective is to advance molecularly targeted therapy for Alzheimer's disease (AD) by developing inhibitory peptides that specifically disrupt the binding of Thr668-phosphorylated amyloid precursor protein (APP) to the JNK-interacting protein 1 (JIP1) and the binding of this complex to an axonal transport motor protein kinesin-1. Phosphorylation of APP at Thr668 plays an important role in regulating APP transport as well as APP processing. APP can be phosphorylated at Thr668 by a number of protein kinases including c-jun N-terminal kinase (JNK). APP phosphorylation at Thr668 by JNK is increased by the association of APP with an adaptor/scaffolding molecule, JIP1. The phosphoThr668-APP/JIP1/JNK complex is known to be co-transported by kinesin-1 to axon ends, and defects in kinesin-1-dependent axonal transport (i.e., the obstruction of axonal flow) increase APP processing to Aβ, probably because the phosphoThr668-APP of the complex is exposed to beta- and gamma-secretases that are independently transported to the axon end.

Methods: x-ray crystallography

Results: We crystallographically show the binding site of JIP1 for the APP peptide and the binding site of kinesin-1 light chain subunit (KLC1) for the JIP1 peptide, providing a basis for the development of inhibitory peptides that interfere with the formation of the Thr668-phosphoAPP•JIP1•KLC1 complex.

Conclusions: These inhibitory peptides may be crucial for the prevention of AD pathogenesis by decreasing APP[Thr668] phosphorylation and kinesin-1-dependent axonal transport to prevent Aβ production.

OC026 KETONE BODIES AS A THERAPEUTIC FOR ALZHEIMER'S DISEASE

08. Future treatments in Alzheimer's disease

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Objectives and Study: The rationale and results for the use of ketone bodies as a therapy for Alzheimer's disease (AD) is reviewed. An early feature of AD is region specific declines in cerebral glucose metabolism. One therapeutic approach is to supplement the brain's normal glucose supply with ketone bodies.

Methods: An oral ketogenic compound, AC-1202, was tested in subjects with mild to moderate AD in two clinical studies to examine the cognitive effects of induced ketosis. Acute administration of AC-1202 was tested in 20 AD participants in a blinded, randomized, crossover study. Chronic administration of AC-1202 was tested in 152 AD subjects in a US-based, 90-day, randomized, double-blind, placebo-controlled, parallel-group study. In both studies, subjects were on a normal diet, most were taking approved AD medications, and results were stratified by APOE4 carriage status.

Results: In both acute and chronic dosing, AC-1202 significantly induced ketosis 2 hours after administration. After acute dosing, non-E4 carriers demonstrated a significant difference in the ADAS-Cog test compared to E4 carriers (p=0.039). After chronic dosing, non-E4 carriers demonstrated a significant difference between AC-1202 and Placebo in mean change from Baseline in ADAS-Cog score on Day 45 (4.77 point difference, p=0.0005) and Day 90 (3.36 point difference, p=0.0148). In the dosage compliant population, non-E4 carriers receiving AC-1202 differed in ADAS-Cog from Placebo by 6.26 points at Day 45 (p=0.0011) and 5.33 points at Day 90 (p=0.0063). In addition, significant correlations between serum ketone bodies and cognitive performance were found in both studies.

Conclusions: AC-1202 rapidly elevated serum ketone bodies in AD patients and resulted in significant differences in ADAS-Cog scores compared to the Placebo. Effects were most notable in APOE4(-) subjects who were dosage compliant.

OC027 ACCURACY OF DEATH CERTIFICATION OF DEMENTIA IN A COMMUNITY SAMPLE OF OLDER PEOPLE

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Objectives and Study: To describe the accuracy of death certification for dementia with a view to evaluating the reliability of the use of certificates for surveillance for detecting incidents of causes of dementia in older people

Methods: MRC-CFAS is a longitudinal population-based cohort study with follow-up for mortality. It includes six centres in England and Wales. The participants aged 65 and over living in the community were recruited via a lists held by general practitioner and interviewed with a schedule. They have been followed for up to 16 years with re-interview at various times. In this analysis, we used study diagnosis and mention of dementia on death certificate as main outcomes, estimated sensitivity, specificity and Cohen's κ to measure agreement and logistic regression to predict mention of dementia on the death certificate from age, sex, place of residence, place of death, time from the last interview to death.

Results: Accuracy of death certificate diagnosis of dementia was poor with sensitivity 0.24 (95% confidence interval 0.22 to 0.26). Mention of dementia on the death certificate was more likely if respondents had been living in an institution at the time of the death.

Conclusions: We conclude that the use of routine death certificate information for surveillance for rare causes of dementia, in older people cannot be supported.

OC027B DIFFICULTIES IN DETECTING BEHAVIORAL SYMPTOMS OF FRONTOTEMPORAL LOBAR DEGENERATION ACROSS CULTURES

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Cross-cultural studies of neurodegenerative disorders are especially important when the disease in question is difficult to diagnose, particularly if symptoms of the illness include behavioral disturbances that may be interpreted differently in different cultures. One such disease is frontotemporal lobar degeneration (FTLD), an early-age-of-onset dementia that disproportionately affects social behavior. We report the demographic and neuropsychologic characteristics of more than 300 patients diagnosed with FTLD in the United States, Greece, and Turkey. We find that patients with the frontal variant of frontotemporal dementia (FTD) are diagnosed at an earlier age and report earlier symptom onset in the United States than in Greece or Turkey. Furthermore, neuropsychologic measures indicate that at diagnosis, FTD patients in the United States are less impaired than patients in Greece and Turkey. Patients with FTD in Greece and Turkey are diagnosed later in the disease, presumably because their behavioural symptoms are not easily detected by the medical system in these countries. Our study underscores the need to create culturally appropriate indices of the behavioral symptoms of FTLD, so that patients may be diagnosed and treated at an earlier stage.

Abstracts - Oral presentations

OC030 SUSTAINING AND DEVELOPING SERVICES FOR PEOPLE WITH DEMENTIA IN KERALA, INDIA

11. Multidisciplinary approach of dementia

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Objectives and Study: In Kerala, South India, a range of information and support services for people with dementia have been provided since 1992 through the work of the Alzheimer's and Related Disorders Society of India (ARDSI) and their collaborators. Despite there being little funding available for these enterprises the services have persisted and evolved. The approaches, techniques and work undertaken by members of the ARDSI to achieve this will be presented in the first part of this paper. When services were first established ideas and models of care were designed using examples from other countries, particularly English speaking countries such as the UK, USA and Australia. The models of care were not developed specifically within the local cultural context. The second part of this paper explores how services have evolved over the past eight years and whether they have changed to more closely reflect the local culture.

Methods: The research presented in this paper draws on data collected by the author in Kerala in 2001 and 2009. A qualitative approach was taken and data collected from observation work in services for people with dementia in Kerala and from one to one in-depth interviews with care staff and key actors within the ARDSI.

Results: (Results not currently known - will be available at the time of the conference, research taking place in October 2009)

Conclusions: (Conclusions not currently known - will be available at the time of the conference, research taking place in October 2009)

OC031 A RAPID SITUATION ASSESSMENT (RSA) OF THE NEEDS OF ELDERLY PEOPLE (65+) CARE-GIVERS IN URBAN COMMUNITY INFORMAL (SLUM) SETTINGS IN NAIROBI, KENYA

11. Multidisciplinary approach of dementia

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Objectives and Study: Little is known about the epidemiological and phenomenological patterns of neuro-psychological and medical disorders of the elderly in Kenya. There are therefore no public policy or practice guidelines for the care of the elderly in Kenya. There is the need to generate the evidence to guide appropriate policy and practice guidelines.

The objective of the study was therefore to determine the medical and psychological needs of the elderly in urban informal settlement (slum) community in Nairobi, Kenya

Methods:

This was a cross-sectional descriptive study

The study recruited 290 elderly participants living in Kangemi, an informal settlement (slum) in Nairobi, the capital city of Kenya. The data was enumerated qualitatively using Focus Group Discussions and quantitatively using a socio-demographic questionnaire; needs of the caregivers using Module 1 (<http://www.alz.co.uk/intranet/1066/>), and Beck's depressive Inventory.

Results: Majority was females 74.5% and 45.5% were widowed; 27.8% were living alone; 26.6% with daughters, 14.5% with their sons, 9.0% with their spouse and the remaining 22.7% were living with other relatives. Dementia was found in 14.8% and 13.1% had depression (4.8% mild, 5.9% moderate and 2.8% severe symptoms). Chronic physical illnesses identified included hypertension (11.3%), epilepsy (6.2%), diabetes (3.4%) and tuberculosis (2.8%).

Conclusions: Social isolation was common. Dementia, depression and other physical conditions were common in this cohort. The 14.8% prevalence of dementia is higher than that reported in Western Europe 7.3%, South Asia (5.7%), Latin America (8.50%) and East Asia (4.98%).

While more research is need, there is need for appropriate polices and practice guidelines to screen the elderly for psychological and physical disorders and for appropriate social support and initiate appropriate management

OC032 LIVING ALONE WITH DEMENTIA

11. Multidisciplinary approach of dementia

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Objectives and Study: The number of people with dementia is increasing worldwide because people are getting older. Also the number of people living alone increases in Germany as well as in other countries. In Germany already 60 % of people over 80 are living in single households. Support facilities are in many cases not available or not useful for people with dementia who live alone.

Methods: The German Alzheimer Association (Deutsche Alzheimer Gesellschaft) therefore in 2007 started the project "People with dementia living alone – education in the municipality". The project is financially supported by the ministry of family, senior citizens, women and youth.

Results: The project includes different working steps: First of all interviews with people with dementia to get more knowledge about their wishes and needs. In a second step education materials for different target groups (policemen, firemen, bank employees, salespersons, people in the neighbourhood) were developed and tested to inform people in municipalities and make them more sensitive for people with dementia. At last a manual for municipalities is in work. The project will be finished in spring 2010.

Conclusions: The presentation will show results of the interviews, give an overview about the different educational materials and their implementation and a perspective of the manual.

Abstracts - Oral presentations

OC033 DEMENTIA CARE ADVISERS: AN EVALUATION OF THE WORCESTERSHIRE EXPERIENCE

11. Multidisciplinary approach of dementia

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Objectives and Study: A key objective of the National Dementia Strategy for England is the development of specific early intervention and diagnostic services for people affected by dementia and their families. A component of this service is the provision of a dementia adviser role to facilitate access to appropriate care, support and advice. This new role was identified in direct response to repeated concerns expressed by families for someone they can approach for ongoing support and advice throughout the journey of dementia. Initial development and generation of demonstrator projects, and the piloting and evaluation of models of service provision are occurring, prior to widespread implementation. Worcestershire is one of the demonstrator sites for this new role. It is anticipated that these posts will be employed by the Alzheimer's Society and based within the early intervention service. They will ensure that those affected by dementia are assisted to understand the diagnosis and its implications and enabled to access the care and support that they need through their journey. It is expected that providing timely care and support from health and social care services will facilitate the effective use of resources. Objectives for the service include establishing a single identifiable information contact and providing relevant quality information tailored to individual need to people with dementia and their families.

Methods: The evaluation of the above service will assess its impact in relation to expected outcomes and lessons learnt about barriers and facilitators to implementation. This will include quantitative data collected on an ongoing basis and qualitative data including interviews, focus groups and consultative meetings with key stakeholders.

Results: Initial findings from the evaluation of the service will be presented.

Conclusions: This service represents an important step forward in the provision of continuity of support for people affected by dementia, evaluation is essential in ensuring that such services are effective in meeting need.

OC035 COGNITIVE FUNCTION OF ELDERLY PEOPLE IN AN OPEN PROTECTION FRAME—CORRELATION OF FINDINGS WITH THE RESULTS ON PEOPLE'S EFFICIENCY

11. Multidisciplinary approach of dementia

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Objectives and Study: The ultimate purpose of the present research paper is the delineation of the factors contributing to the differentiation of the concepts about memory loss and the deterioration of cognitive functions as well as the dwindling of this phenomenon through exercise of the mnemonic system of people of the Third Age within (and out of) an open protection frame. More specifically in this research:

Methods: • The method of symptomatic samples was employed in order to specify the samples for our research.

• The sample of our research consists of 300 people aged 65 and above. For the collection of data we used questionnaires (M.M.S.E), the GDS-15 scale, the neuropsychological evaluation "clock", the IADL (4) scale and the AMTS (5) scale.

Results: The systematic research from our part, has shown that memory does not have to deteriorate with the years passing. In the contrary, it tends to lose part of its original strength if it is left idle, that is without exercise. The systematic use of mnemonic exercises within an open protection framework in a Third Age target group has proved to boost memory. More specifically it has been proved that in this way, memory status can be preserved to a satisfactory level just by employing a few short, weekly exercises (combined with the necessary medical treatment, of course). Moreover, the findings as to the big percentage of loss in efficiency, the important loss of cognitive abilities and the symptomatology pointing to depression all lead to the conclusion that cognitive deficiency and emotional distress are to be blamed to a large extent for the appearance of senile disturbances in older people.

Conclusions: The research also noted the necessity of the total redraft of the proposal against the social disqualification of the third age through the function of an open protection framework

OC034

PATIENT-CENTERED DEMENTIA GROUP HOME:

11. Multidisciplinary approach of dementia

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Objectives and Study: Currently, the dementia patients have occupied more than 5% of the elders in Taiwan. The emerging incidences that came from the dementia patients are increasing and will continuously dominate the entire hospital setting in the near future. Harmed with the memory loss, thinking problem, and bizarre behaviors, dementia patients' families and themselves suffer from a variety of pains and social problems, including finance, care burden, time spend, social perspectives. Taichung Hospital initiated a new care model of Patient-Centered Group Home for dementia patients in March, 2008 and aimed to make these patients feel like at home, and receive professional medical care.

Methods: Patient-centered Group Home consists of the following components: 1. Tailor-made hardware, Patient-centered group home design, where nine people in a small unit with equipments such as living room, restaurant, multi-functional sensor room and hidden nurse station, ensuring to help patients bridge the perception gap between hospital and home. 2. Integrated team of Patient-centered group home will cooperate in a team work that have family physicians, neuro doctors, psychiatrics, rehabilitation doctors, nurses, nurse aids, social workers, pharmacists, and dietitians, making the integrated care plans possible in regard to short, mediate, long term medical, psychological, social aspects, for the Dementia patients. 3. Integrated care plan: Our residents had their own care plan, so we followed the results every 3 months.

Measurements: At the beginning, Standard evaluation form (Clinical Dementia Rating score,CDR) was measured for Dementia patients and then, Geriatric depression score and satisfaction questionnaire were given every 6 months for monitoring the change of their situations and perceptions.

Results: Our Integrated team plan for every resident is 100%. CDR results showed that 88% dementia patients are mild to moderate and 12% are severe type. Based on GDS (Geriatrics Depression Score), there is two-third with normal situation and 33% in mild depression field. Eighty-three percent of residents satisfied with our group home.

Conclusions: The results revealed that group home care model is good for mild to moderate dementia patients associated with maintaining their origin life model, keeping their function, dignity and privacy. Since the group home care is a new care model in Taiwan, it is hopeful that this model provides a rough direction for its exploration.

Disclosure of Interest: None declared

Presentation method: Oral or Poster presentation

The abstract version above is only for information, please note that your or our email software might have corrupted some characters in the sending or receiving. In this case, please refer to the online version of the abstract.

OC037 MY SELF, MY LOVED ONE AND OUR GROUP – SUPPORT GROUPS FOR PEOPLE IN THE EARLY STAGES OF AD

15. Non-pharmacological interventions

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Objectives and Study: The creation and outcome of a network of 18 support groups in Israel for people in the early stages of AD and their caregivers.

Methods: The support groups were piloted in 2003, as a respond to the special need of people in the early stages of AD.

A multidisciplinary professional team was trained and groups set up nationwide. Groups are affiliated with memory clinics, social services, and the Alzheimer association's hotline. After identifying a suitable dyad an intake takes place. Average group consists of six dyads (person with AD and caregiver). With 96 families participating families in eight different locations. The aim is to provide a safe place for both dyad partners to explore their emotions about the illness and to learn coping strategies, reduce anxieties and acquire better communication skills to express their needs. Many strategies are used, including reminiscence, narrative work and group singing. Memory exercises, relaxation techniques and coping strategies are featured and the participants are given chance to offer and receive advice from one and another. A thematic analysis was conducted on the transcripts of the meetings, and correlated with the summaries of the group leader reports.

Results: The main themes that emerged reflected the need to accept the illness and not deny it. A theme of optimism and a wish to lead a meaningful life emerged. Many expressed a feeling of intimacy and support which was a non-verbal experience that the participants had.

Conclusions:

The groups are highly beneficial to participants who report a change in the way they experience the illness. Professionals report difficulties in the initial recruitment state to the group. As a result, more structured groups are being developed to help provide this service to a wider population and make it more accessible.

Abstracts - Oral presentations

OC038 CASE STUDY: DIETARY INTERVENTION USING COCONUT OIL TO PRODUCE MILD KETOSIS IN A 58 YO APOE4+ MALE WITH EARLY ONSET ALZHEIMER'S DISEASE

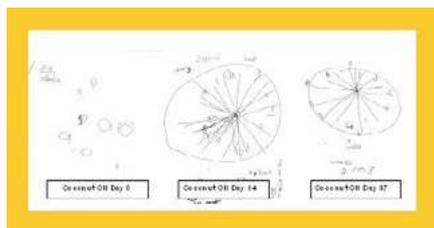
M. T. Newport¹

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Objectives and Study: To determine if mild ketosis from ingestion of medium chain fatty acids (MCFA) in coconut oil will improve effects of Alzheimer's disease.

Methods: An APOE4+ 58 year old caucasian male with probable early onset Alzheimer's disease received coconut oil 35 ml daily with breakfast. On day 35, dosing was increased to twice per day and on Day 54 to three times per day. MMSEs were administered on Day 0, four hours after Day 1 dose and on day 65. On Days 0, 14 and 37 the Clock Test was repeated. On day 52, plasma ketones acetoacetate and beta-hydroxybutyrate levels were measured before and at several intervals following 35 ml of coconut oil at two meals.

Results: On Day 0, SJN scored 14/30 on MMSE. Four hours after Day 1 dose of coconut oil, MMSE increased to 18/30 and on Day 65, 20/30. Accompanying image shows clock drawings on Days 0, 14 and 37. Day 52 levels of acetoacetate/beta-hydroxybutyrate (mM) peaked at 0.14/0.03335 grams 180' after 35 gram dose coconut oil at breakfast and increased to 0.217/0.135 180' after dinner dose. By Day 90 SJN reported resolution of visual disturbance that interfered with reading, and author/caregiver noted normalization of gait, near resolution of facial and intention tremor, improvements in interaction, conversation, sense of humor, memory of recent events, task completion, renewed interest in exercise and learning, and expression of hope for the future.



Conclusions: Previous studies using 20 gm of MCT oil have shown improved cognition in persons with AD. Similar improvement may occur using equivalent amount of MCFA as coconut oil, more widely available to world populations.

OC040 EARLY REFERRAL FOR SUPPORT OF DEMENTIA CAREGIVERS: EVALUATION OF THE FIRST LINK DEMONSTRATION PROJECT

15. Non-pharmacological interventions

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Objectives and Study: First Link(TM) is an innovative program involving collaborations between primary care providers, Alzheimer Societies, and other health professionals that aims to support persons with Alzheimer's and related diseases (ARD) by linking them and their family members with support services earlier in the disease course. It was expected that by linking people with supports and services earlier in the disease, caregivers' ability to cope would increase and feelings of burden would decrease. An evaluation of First Link has been conducted in the Canadian provinces of Ontario (4 sites) and Saskatchewan (2 sites). The goals of the evaluation were to:

1. examine the utilization of First Link among family physicians, specialists and other providers;
2. assess the impact of First Link on caregivers: a) knowledge and understanding of ARD; b) understanding of community resources; c) coping and level of burden; and
3. describe the implementation of First Link (e.g., facilitators and barriers to implementation, suggestions for improvement and sustainability).

Methods: The study involved a mixed method, prospective cohort design. Data sources included: a) First Link referrals and client contacts, b) surveys of caregivers, and c) interviews and focus groups with key stakeholders, persons with dementia, and caregivers.

Results: During the two years of the program, 4263 individuals have been referred to the Alzheimer Society with 47% of these referrals coming through First Link. Among the First Link referrals, the majority have come from physicians (73%). Most of the First Link referrals accepted Alzheimer Society involvement; 12% declined and 20% of those referred did not have a diagnosis of ARD. In terms of caregiver impacts, the caregiver survey data revealed that almost 60% of caregivers reported an increase in knowledge of ARD and community resources between the initial and follow-up surveys. Almost 40% reported that they were more confident in their ability to manage the caregiving role.

Conclusions: The First Link program has been well received by physicians, and positive impacts have been reported by caregivers. Strategies for improvement and sustainability will be discussed.

OC039 EFFECTIVENESS OF A STRESS MANAGEMENT PROGRAM FOR GREEK CAREGIVERS OF PATIENTS ATTENDING A DEMENTIA DAY CARE CENTER: A PILOT STUDY

15. Non-pharmacological interventions

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Objectives and Study: Within the last 20 years non-pharmacological interventions for dementia patients have become an unequivocal part of the therapeutic approach. A considerable amount of literature confirms the beneficial effects of these interventions for the dementia sufferers as well as for their caregivers. Cognitive behavioural group therapy programmes have a very promising role. These programmes markedly contribute to the reduction of caregivers' stress and strain in everyday life. Caregivers experiencing feelings of frustration and guilt are at an increased risk of depression. They also have physical illnesses (hypertension, gastrointestinal disorders, arthritis) and increased mortality. Disturbances in the sympathetic nervous system may mediate these conditions. Stress management interventions based on cognitive theory and therapy give positive outcomes among caregivers.

study aims to evaluate the effectiveness of a stress management program based on cognitive behavioural therapy in caregivers of patients with dementia.

Methods: 12 caregivers of demented patients aged 41 to 73 years participated for 6 months in a stress management program. The program was conducted on a fortnight basis at the Dementia Day Care Center of Athens Association of Alzheimer's Disease. It was structured according to cognitive behaviour theory. Subjects received training in cognitive behaviour model, psychoeducation on anxiety and stress, relaxation, assertiveness skills, anger management, breathing retraining, problem - solving skills. Stress and anxiety inventories (BAI, BDI, Cohen PSS, COPE) were administered pre and post - intervention. The statistical package for the social science (SPSS, version 13) was used to analyze data collected

Results: comparison of stress and anxiety inventories, pre and post - intervention was made. At the end of the intervention, there was a statistically significant improvement in BDI ($Z=-2.38$, $p=.017$) and PSS scores ($Z=-2.29$, $p=.022$)

Conclusions: Stress management program based on Cognitive Behaviour Theory appears to be beneficial for caregivers of dementia patients in this pilot study. Perhaps, such programs assist caregivers with everyday hassles. Carer organisations and/ or Dementia Day Care Centers could use these kind of intervention in designing support programs for caregivers.

OC041 CORTICAL PLASTICITY AND ALZHEIMER'S DISEASE: A STUDY WITH EVOKED POTENTIALS

15. Non-pharmacological interventions

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Objectives and Study: the present study was aimed at investigating the efficiency of a cognitive training in modulating learning processes and the underlying cortical re-organization in patients with mild to moderate Alzheimer's disease (AD).

Methods: twelve AD patients were selected on the basis of a geriatric visit, the assessment with traditional test for the diagnosis of dementia (e.g. MMSE) and the neuro-radiologic documentation (CT). Patients entered a five-week cognitive training, 2 hours/day, 4 days/week, in which they were administered exercises to stimulate the main cognitive functions. All patients performed two computer tasks which stressed visual-spatial recognition, attention, and working memory. In the experimental task (Colour), repeated every day during the training session, patients had to memorize the colour of a single square and, after a 2-second inter-trial interval, they had to recognize it among four coloured squares (Go/No-Go paradigm). In the control, not trained task (Motor), a fixation cross was followed by a yellow or blue square: patients had to respond by pressing the button corresponding to the colour of the square. Neuropsychological, behavioural (Response Times [RTs] and Error rates [ERs]) and electrophysiological (ERPs) data were compared before and after training.

Results: the neuropsychological assessment pre- and post-training did not show statistical differences, notwithstanding a qualitative improvement of patients' performance in some tests. After the training, analyses showed faster RTs in both tasks, and a significant decrease of ERs (more than 50%) in the Colour task [$p < 0.05$]. Three contiguous time intervals have been selected after the onset of the first stimulus for ERPs analyses: from 1.5 to 2 s (late phase of the initial Contingent Negative Variation, CNV); from 2 to 2.5 s (early phase of the terminal CNV) and from 2.5 to 3 s (corresponding to the last 500 ms of the terminal CNV). Analyses revealed that, before the training, the two tasks elicited a bilateral pattern of activation in the same brain regions. After the training, the Colour task showed greater levels of cortical negativity/activation in the left anterior hemisphere [$p < 0.05$], whereas the Motor task revealed a bilateral activation distributed to both anterior and posterior regions.

Conclusions: results suggest that, during the training, AD patients developed new cognitive strategies able to activate their undamaged neural networks. Thus, an intensive, cognitive training modulated AD patients' learning skills and contributed to induce a plastic re-organization of the residual cortical regions.

Abstracts - Oral presentations

OC042 SPACED-RETRIEVAL: A MEMORY INTERVENTION FOR IMPROVING EATING PERFORMANCE OF RESIDENTS WITH DEMENTIA

15. Non-pharmacological interventions

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Objectives and Study: Dementia led to progressive loss of learning behaviors, including self-eating ability (Volicer et al., 1989). Compared with Parkinson's disease and cerebrovascular disease, dementia was obviously related eating difficulty (Athlin et al., 1989). Spaced-retrieval relied on intact procedural memory of patients with dementia to compensate memory problems and help them carry out daily tasks (Vance & Farr, 2007). Therefore, the study was to explore the effects of spaced-retrieval on daily eating performance of residents with dementia.

Methods: A one-group pretest-posttest design was used. Thirty-two residents with dementia were chosen from one special care unit in north Taiwan. The subjects received an eight-week spaced-retrieval training program. It consisted of eight learning messages about eating procedures and feeding behaviors for three 30-40 minute sessions per week. Spaced retrieval used immediate, 1, 2, 4, 8, 16, 32 minutes time interval trials to train subjects. Between time interval trials, Montessori-based activities were used to maintain interests of the subjects.

Results: After an eight-week intervention, the Edinburgh Feeding Evaluation in Dementia (EdFED) scores, meal consumptions, body weights, and Mini-Nutritional Assessment (MNA) scores in posttest were significantly improved more than that in pretest. These data indicated that residents who received spaced-retrieval promoted eating ability and the amount of a meal consumed, and then increased body weights and nutritional status. Besides, depressive status of the subjects measured by Cornell Scale for Depression in Dementia (CSDD) was significantly reduced.

Conclusions: Spaced-retrieval resulted in positive effects in eating performance, nutrition, and emotions of residents with dementia. Using blind, experimental design to increase validity was recommended.

OC044 PRACTICE OF ATTENTION AND PARAMETERS OF EXECUTIVE FUNCTION FOR PATIENTS WITH MILD COGNITIVE IMPAIRMENT (MCI)

15. Non-pharmacological interventions

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Objectives and Study: Aim of this study was the improvement of cognitive and functional performance of patients with MCI, through practice of attention and parameters of executive function with paper and pencil tasks.

Methods: The study included 46 women and 28 men with MMSE=27.59 (1.47), age=68.06 (7.23), and education=8.78 (3.63), classified in one experimental and one control group matched in age (p=0.34), gender (p=0.61), education (p=0.13), MMSE (p=0.12), and cholinesterase inhibitors (p=0.55). The experimental group attended 20 weekly sessions for a period of 6 months targeting the enhancement of visual attention, verbal learning, working memory, shifting of visual spatial attention, switching of attention, delayed verbal recall and dual task. Controls did not attend any non pharmacological therapy during the same period. Participants were assessed at baseline and at the end of the therapy.

Results: At baseline, there were not differences between groups, in cognitive and functional performance. At the end of the therapy, differences were noticed between groups in favor of the experimental group, in general cognitive ability (p=0.02), attention (p<0.00), ADL (p=0.02), visual perception (p=0.00), and executive function (p<0.00). Within group analysis showed improvement in the experimental group in ADL (p=0.02), executive function (p<0.00), attention (p<0.01), visual memory (p=0.04), naming (p=0.01), and visual perception (p=0.01). Controls maintained stable cognitive and functional performance.

Conclusions: The experimental patients had a significant benefit from the cognitive training of attention and parameters of executive function, and the cognitive improvement was generalized in ADL.

OC043 ELECTRONIC GUIDANCE AND AWARENESS SERVICES FOR COMMUNITY-DWELLING PEOPLE WITH DEMENTIA AND THEIR CARERS

15. Non-pharmacological interventions

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Objectives and Study: In the coming decades alternative ways are needed to support the growing number of persons with dementia in the community. The European COGKNOW project developed an integrated, cognitive prosthetic to support community-dwelling persons with mild dementia in their daily lives in the areas of memory, social contact, daily activities and safety. This prosthetic, the so-called COGKNOW Day Navigator (CDN), consists of a touch screen, a mobile device, sensors and actuators. The CDN prototype will be further developed in the European AAL ROSETTA project, which aims to create a modular ICT system that helps people in different stages of dementia to retain their autonomy and quality of life and that also supports their informal carers.

Methods: The COGKNOW project applied a user-driven method in the development process, which consisted of iterative cycles of one year in which field tests were executed at test sites across Europe (Amsterdam, Belfast, Luleå). In the successive cycles 16, 14 and 12 persons with dementia and their carers participated to collect data on user-friendliness, usefulness and the impact on daily life, by means of interviews, observations, logging and diaries. In ROSETTA, the integrated guidance and awareness system will be tested in a randomized clinical trial of one year with 30 users in three countries (the Netherlands, Belgium, Germany). The evaluation focuses on user-friendliness, usefulness and the impact of the system in the daily life of the person with dementia and their informal carers.

Results: The summative evaluation of COGKNOW showed that persons with dementia and their carers valued the CDN as user-friendly and useful. Conclusions on the impact of the system in daily life were limited, due to technical instability of the prototype tested and an insufficient duration for testing. In reply to the recommendations of the COGKNOW project, the ROSETTA project will make stronger efforts in pre-testing and integration of the different components of the system. A randomized clinical trial with a longer test period is also planned.

Conclusions: The COGKNOW Day Navigator is a user-friendly and potentially useful tool for providing support to community-dwelling people with mild dementia. The new integrated guidance and awareness system ROSETTA may help people in different stages of the disease to remain in their own home for a longer period with an enhanced autonomy and quality of life.

OC045 THE DEMENTIA RESOURCE GUIDE PROJECT

21. Supporting and educating caregivers

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Objectives and Study: In recognition of the growing impact of dementia, the Australian Government Department of Health and Ageing (DoHA) engaged the National Ageing Research Institute (NARI) to develop the Dementia Resource Guide (the Guide) in 2007 aimed at improving the care and quality of life of people with dementia.

The study:

The Guide was developed for people with dementia, their families and carers, including staff and volunteers across community, residential, and health care. The Guide provides links to resources on 51 topics. In 2009 DoHA engaged NARI to update the Guide to include recently available /updated resources.

Methods: Phase 1 involved an evaluation of existing resources and identification of new resources. Phase 2 involved evaluation of the uptake and dissemination of the Guide via several surveys (including residential aged care agencies, community care agencies and other users). Phase 3 involved updating the Guide and providing advice on maintaining currency.

Results: Phase 1- 104 resources (27.7%) of existing resources required updating; 306 new resources were found, of which 252 were evaluated and 111 included.

Phase 2-

45,315 visits were made to the Guide website from June 08-February 09 (average 165 visits per day). Most users found the Guide useful, easy to read and there was sufficient information/topics covered. They found out about the Guide via: seminars, conferences, network meetings, forums, newsletters.

Phase 3-

Recommendations included strategies for:
•Ongoing promotion of the Guide
•Improving usability (e.g. providing key word searches)
•Providing the option for a feedback survey for users to complete
•Ways of regularly updating the website content and links.

Conclusions: Phase 1-

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Recommendations included strategies for:
•Ongoing promotion of the Guide
•Improving usability (e.g. providing key word searches)
•Providing the option for a feedback survey for users to complete
•Ways of regularly updating the website content and links.

Abstracts - Oral presentations

OC046 DOES A CAREGIVER HAS A FUTURE?

21. Supporting and educating caregivers

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Objectives and Study: To what extent does the high level of stress accompanying the task of caring for a patient with dementia affect the caregiver's well-being and perspective on the future? It has been shown that a positive outlook on the future and long-term goal setting has a motivational effect which enhances a person's psychological well-being during trying circumstances. Preoccupation with the present is associated with emotional distress and feelings of hopelessness. The objective of this study was to determine the interplay between caregivers' time perspective and psychological well-being.

Methods: The self-administered SELE-instrument, consisting of incomplete sentences, was completed by 40 participants, comprising of 4 subgroups; participants who either cared for or did not care for a spouse with dementia who was still alive or who had already passed away.

Results: The relatively low focus of the respondents on the past dispels the myth of the elderly being overly reminiscent and focused on the past. Caregivers displayed strong negative feelings about the present as well as the future. They seem to be trapped in the present and are restricted to plan beyond what lies in the immediate future. Caregivers whose spouses had passed away also seem to encounter serious problems to regain a grip on the future and are faced with an existential vacuum. This severely compromises their quality of life and well-being.

Conclusions: The results emphasize the importance of support for the caregiver to empower him or her to nurture interests and maintain a positive future perspective.

OC048 CAREGIVER EDUCATION: SUPPORTING THE FAMILY CAREGIVER THROUGH FLEXIBLE SPONSORED TRAINING

21. Supporting and educating caregivers

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Objectives and Study: Objectives: To evaluate a unique caregiver education program designed to provide support for family caregivers during the care giving period as well as provide an opportunity for a career choice or advancement when care giving ceases. This program was a collaboration between a private educational institution offering certified nursing assistant (CNA) training and an Area Agency on Aging (AAA) Caregiver Support program in El Paso Texas.

Methods: Methods: We conducted a review of the program after 12 months to determine predictors of successful completion of the training and uncover barriers to enrollment and completion of the program.

Results: Results: A total of 12 students successfully completed the program in the first 12 months. Support for students included full scholarships, including books and supplies, and respite care for the 12 family caregivers who were accepted to the 6-week CNA program. The population of El Paso is 84% Hispanic, primarily Spanish-speaking, with less than a 9th grade education, thus, the requirement of the high school equivalency (the GED) exam was waived for these trainees.

Conclusions: Conclusion: With support, trainees were successful. All 12 trainees successfully passed the state-sponsored CNA licensing examination; one is currently enrolled in a nursing program. Students who had 70% literacy in English and had the GED were more successful; however, all eventually obtained the GED during the training. Cost per participant was \$2,833 (\$34007.04 for all). Individual trainee commitment, as well as support from the school and the AAA, helped one woman who brought her husband (he has Alzheimer's disease) to class with her for three days while respite was being arranged. Face-to-face meetings and regular email encouragement supported trainees through the many difficulties they encountered during the 6-week training period.

OC047 AUSTRALIAN QUALITY SUPPORT GROUPS PROJECT

21. Supporting and educating caregivers

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Objectives and Study: The Australian Quality Support Groups Project is the first comprehensive investigation of support groups for carers of people with dementia in Australia. It investigates quality in a carer support group and determines best practice guidelines that can be applied to a range of groups.

Methods: With ethics approval and collaboration with Macquarie University, Alzheimer's Australia NSW collected data from 350 non-identified participants of support groups. A triangulated method of data collection was employed using questionnaires, focus groups and telephone interviews. Analysis was undertaken using SPSS.

Results: 159 support groups were located. Membership was varied in age and ethnicity but mostly female (75%) and spousal (72%) carers. Findings indicated a quality support group led by a skilled leader relieves carer isolation and provides effective information about care, dementia and related services. Significant evidence for mutual aid amongst members is identified which breaks down barriers between members and forms connections via the commonality of dementia care. The profound impact of grief and loss on the lives of carers is evident with five dimensions of grief and loss identified. These dimensions influence carer stress levels and can be relieved by participation in a support group.

Conclusions: The research findings enabled the formulation of best practice guidelines to assist leaders and group members to develop and maintain quality outcomes. A quality support group provides carers with positive social, emotional and educational outcomes to enable them to manage their situation as well as the grief and loss they experience as dementia carers. These groups are a cost-effective, worthwhile initiative to enhance the carer's health and wellbeing and in turn, the life of the person with dementia. Worldwide social policy encourages ageing in place for all individuals and to that end a quality support group gives carers the necessary support and empowerment required to enable a person with dementia to stay at home longer.

OC050 "LEARNING FROM EXPERIENCE": CARING FOR PEOPLE WITH DEMENTIA

21. Supporting and educating caregivers

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Objectives and Study: Introduction

The provision of health-care in the United Kingdom has altered, with a shift in policy from institutional to community-based care over three decades. It is far more likely that a cared-for person living at home for longer will be cared for and have their immediate needs met by a lay carer, rather than a healthcare professional.

Aim

This study explored learning experiences of carers who caring for people with dementia over time.

Methods: A longitudinal grounded theory approach was applied. In-depth interviews were conducted at the beginning, at six months and at eighteen months. A constant comparative analysis of digital recording and transcribed interviews was used. Six spouses of people with dementia were recruited.

Results: Learning from the experience of caring was the explanation of caring. Learning from experience presents a personal and individual reflection from carers who were able to review their previous understanding and practical skills. Not only had this but they all managed to build on such reflections and handle the problems they faced in light of their new knowledge and abilities. Learning is a process which requires a developmental progression from carers' recognition of an issue and findings ways of circumnavigating it.

Conclusions: Learning from other's experience provides an example of dealing with certain things or situations for carers but there is still a potentially unhelpful risk in applying it to practice as the effective strategy may differ from person to person in different circumstances. On the other hand, importantly, learning about one's self offers a uniquely useful approach to a deep understanding and realization about one's situation.

Abstracts - Oral presentations

OC051 PROMOTION OF HIGH IDEAL VOLUNTEERISM

21. Supporting and educating caregivers

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Objectives and Study: Promotion of High Ideal Volunteerism – Through a collection of empirical wisdom attained through firm practice.

Methods: The approach to enable volunteerism by ARDSI through volunteers in the context of serving the people affected with Alzheimer's and related disorders, took a logical journey of trying different strategies, consolidation of successful ones and institutionalization through internalization and these include:

- > Identification and nurturing people with key traits, which is of paramount importance, such as possessing
 - resolve to serve others
 - proactive sense to meaningfully contribute to the society and dedicate time
 - knowledge of the problem and have interest and belief in what they do
 - draw pleasure in contributing.
- > Categorization of volunteers and identifying their present carrying capacities and optimizing them through training and capacity building
- > Ensuring support mechanisms
- > Recognition of efforts through awards in public forums
- > Maintaining a rhythm and sustaining innovations
- > Optimizing potential resources and adding new volunteers through the above process

Results: There have been difficulties, limitations and learning galore at the trial stage leading us to condense our experiences to other stages as education for future practice. Today the efforts of ARDSI stands tall and has a band of 25 trained volunteers, who have been providing support to the patient's families by visiting them regularly enabled through a dedicated helpline, enhancing capacities of family members and their care givers, training of external care givers towards professionalism etc., on Alzheimer's care. They contribute in promoting awareness to identify possible deficiencies earlier, respecting the rights of families and carers, enable access to right health and social care etc. The affected patients and their families reached by ARDSI volunteers in Delhi accounts to nearly 500 cases and the family members have appreciated the meaningful contributions by volunteers. More so, the old age homes in Delhi are adept and empowered to handle Alzheimer's patients with due capacity enhancement and knowledge enabled by the ARDSI volunteers.

Conclusions: The essence of high ideals of volunteerism in India backs to historic days and has come as a legacy to its people. Their self-belief in doing things, self-less, of utility to the society on a proactive basis has been incomparable. Keeping to its tradition, the author treaded a path leading by example and had worthy people to follow; now this is no more a ritual, but a practice full of collective empirical wisdom as a full-fledged movement. This is a platform to share the success story to create a boom of volunteerism among the needy as the people suffering from the disease of Alzheimer's needs it badly beyond the medical care available in hospitals.

OC053 THE ITALIAN VERSION OF THE CARER'S NEEDS ASSESSMENT FOR DEMENTIA (CNAD): PSYCHOMETRIC PROPERTIES AND INFLUENCE OF PATIENTS/CARER CHARACTERISTICS ON ANSWER' PROFILES.

21. Supporting and educating caregivers

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²Department of Psychiatry, Medical University of Vienna, Vienna, Austria, ³Department of Psychology, University of Bologna, Bologna, ⁴Department of Psychology, University of Parma, Parma, ⁵Department of Medicine and Geriatrics, Ass. GP. Vecchi, Modena, Italy

Objectives and Study: For purpose of service planning for dementia, an instrument was developed to assess 18 pre-defined areas in which determine the relevance of caregiver's needs and whether they are met. From the original german version, an Italian version was developed. The 1st step of the ongoing study aimed to verify whether the Italian version maintain the psychometric characteristics of the original one. The 2nd step aimed to detect which patient and/or of the carer' characteristics influence answers profiles

Methods: Two professionals were engaged as independent raters to detect both inter-rater and test-retest reliability on a sample of 15 interviews, for content validity 15 "experts" (geriatrics, psychiatrics, psychologists, carers, social workers) has been required to rate the relevance of each problem area and intervention on a four point scale. To address the 2nd question, a geriatric team evaluated a series of dementia patients with diagnoses dating over 1 year; both cognitive performance and behavioural profiles has been collected. A different team with the Zarit Burden Scale, the General Health Questionnaire, SCL-90 and Self-Competence Questionnaire, evaluated the principal caregiver of each patient. Till now, a sample of 30 Ss has been examined.

Results: The original psychometrics characteristic are preserved in the Italian version. Significant association were found between total score of Zarit Scale and number of problems and unmet needs.

Conclusions: The validation of the Italian version of CNAD will allow comparative study on services for dementia

OC052 COMBINED INTERVENTIONS IN DEMENTIA FOR PATIENTS AND CAREGIVERS.

RESULTS OF AIDMA: A FRENCH CONTROLLED STUDY

21. Supporting and educating caregivers

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Objectives and Study: In dementia management, results of combined pharmacologic and psychosocial interventions are limited. The aim of this study was to determine whether a Psycho-Educational Program (PEP) for family caregivers in conjunction with pharmacotherapy for patients with mild-to-moderate Alzheimer's disease (AD), could improve outcomes in patients and/or families. We performed a randomized controlled trial.

Methods: A total of 167 dyads "patient-caregiver" (n= 334) were recruited through 15 memory clinics, and randomized in two parallel groups. In the intervention group caregivers participated in the PEP involving 12 two-hour weekly sessions over three months. In the control group caregivers did not follow the PEP. All patients were receiving pharmacotherapy. Dyads were assessed at baseline, 3-month, 6-month follow-up. Evaluation criteria for patients included: ADAS-Cog, DAD, NPI. Caregivers were assessed using: Zarit scale, Sense of Competence Questionnaire, MADRS, VAS.

Results: Both groups were comparable at baseline on all criteria. At 3 and 6 months, patients showed stabilization of their condition in both groups. Concerning caregivers, in the intervention-group differences were observed on VAS measures of disease understanding at 3 months (p=0.007) and 6 months (p=0.0001), and on VAS measures of coping strategies at 6 months (p=0.02). In the control group depressive symptoms increased (p=0.02) whereas scores remained unchanged in the intervention group.

Conclusions: The AIDMA study confirms that combined therapies have a larger impact in dementia management than pharmacotherapy alone. Regarding families the PEP had significant benefits. Regarding patients, results suggest that those whose caregivers have a better understanding of the disease and better coping strategies could have a lower risk of decline and institutionalization.

OC054 PHOSPHATIDYL SERINE CONTAINING OMEGA-3 FATTY ACIDS MAY IMPROVE MEMORY ABILITIES IN NON-DEMENTED ELDERLY WITH MEMORY COMPLAINTS: A DOUBLE BLIND PLACEBO-CONTROLLED TRIAL

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Background: Phosphatidylserine (PS) may have beneficial effects on cognitive functions. We evaluated the efficacy of a novel preparation of PS containing ω-3 long-chain polyunsaturated fatty acids attached to its backbone (PS-DHA) in non-demented elderly with memory complaints.

Methods: 157 participants were randomized to receive either PS-DHA or placebo for 15 weeks. Cognitive performance was evaluated at baseline and endpoint by Rey Auditory Verbal Learning Test and at week 7 and 15 by Clinicians' Global Impression of Change scale.

Results: 131 participants completed the study although nine were excluded from the efficacy analysis due to protocol violation. At endpoint, verbal immediate recall was significantly improved in the PS-DHA group compared to the placebo group. **Conclusions:** The results indicate that PS-DHA may improve short term (working) memory in non-demented elderly with memory complaints.

Abstracts - Oral presentations

OC055 THE EFFECT OF ANIRACETAM, EITHER AS MONOTHERAPY OR COMBINED WITH CHOLINESTERASE INHIBITORS, ON NEUROPSYCHOLOGICAL FINDINGS OF PATIENTS WITH DEMENTIA IN DIFFERENT STAGES. (DATA FROM THE GREEK AMNESIA STUDY: ANIRACETAM MONOTHERAPY COMPARED WITH CHOLINESTERASE)

23. Up to date on drug treatments

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Objectives and Study: The aim of this study was to evaluate the efficacy of aniracetam, either as monotherapy or in combination with cholinesterase inhibitors (ChIs), in terms of cognitive, functional and behavioural parameters, in patients with dementia.

Methods: In our prospective, multi-centre, open-label study, we enrolled a total of 252 patients (mean age 71±8 years, 89 male) with cognitive disorders of variable severity (25 patients with MCI, 192 with Alzheimer's disease and 35 with other forms of dementia). Our study population comprised 4 groups: the no treatment group (n=75), the aniracetam monotherapy group (n=47), the ChIs monotherapy group (n=68) and the group of combination treatment (n=62). Patients were examined with validated neuropsychological tests at baseline, and after 3, 6 and 12 months.

Results: Patients without treatment demonstrated a significant decline in cognitive performance at 12 months of follow-up (p=0.004). In patients treated with aniracetam, all studied parameters were adequately maintained at 6 and 12 months, while emotional state was significantly improved at 3 months (p=0.03). In patients treated with ChIs, we observed a statistically significant deterioration of cognitive status at 12 months (p=0.01). The combination treatment group exhibited a substantial amelioration of emotional profile at 3 months (p=0.04), but there was a significant worsening of mental and functional parameters at 12 months (p=0.04, p=0.05 respectively). The comparison between aniracetam and ChIs monotherapy in patients with moderate dementia (MMSE:15-25) revealed a significantly better cognitive performance in the aniracetam group at 6 months of treatment (MMSE= 23.4±3.1 vs. 18.7±4.2, p=0.005). When comparing aniracetam monotherapy with combination treatment in moderate dementia, aniracetam performed better in cognitive and functional scales at 6 months (p=0.002 and p=0.05), while the mood of patients treated with aniracetam was significantly enhanced at 12 months (p=0.03).

Conclusions: Our findings indicate that aniracetam (an AMPA potentiator with glutamatergic activity and neuroprotective potential) is a promising option for patients with moderate cognitive deficit. In our study, aniracetam monotherapy preserved all neuropsychological parameters for at least 12 months, and seemed to exert a favorable effect on emotional stability of demented patients.

OC057 WILL TRANSLATIONAL RESEARCH HELP FIND A CURE FOR ALZHEIMER'S DISEASE?

08. Future treatments in Alzheimer's disease

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Objectives and Study: Translational research seeks to accelerate the journey from laboratory research to the implementation of new treatments. This is a response to the increasing cost of drug development and the relatively low number of innovative new drug treatments which have been approved recently. Although there is increasing Alzheimer's research, it is not known how quickly it will result in the development of effective treatments. This study examines the potential of translational research to help find a cure for Alzheimer's disease.

Methods: 1. A descriptive model of translational research is proposed.
2. A literature search of Alzheimer's research published in 2009 is used to identify the main areas of current research activity.
3. Current research activity will be compared with the translational research model which has been developed.

Results: 1. The main areas of current research activity will be contrasted with the results from a preliminary study in 2007.
2. The main avenues of current published research will be described.
3. The comparison of the translational research model with current research activity will be analysed to identify gaps and weaknesses in current research programmes.

Conclusions: 1. The results will be used to consider if there is evidence of translational research influencing current research and whether it is likely help find a cure for Alzheimer's disease.

OC056 PREDICTION OF TREATMENT RESPONSE TO RIVASTIGMINE IN PARKINSON'S DISEASE DEMENTIA

23. Up to date on drug treatments

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Objectives and Study: Rivastigmine has been found to be effective for the treatment of Parkinson's Disease Dementia (PDD). Compared to Alzheimer's Dementia, PDD is characterized by a stronger cholinergic deficit. On a clinical level, cholinergic deficit may be reflected by disturbances of attention, by an impairment of short-term memory, by the presence of visual hallucinations and by increased EEG theta activity. Clinical indicators of cholinergic deficit and EEG theta activity may allow a prediction of treatment response to rivastigmine in PDD.

Methods: Within the RIVAPARK study, we examine the relationships between various indicators of cholinergic deficit and treatment response to rivastigmine in 150 outpatients with PDD. Attention, short-term memory and quantitative EEG are assessed before treatment initiation and after two weeks of rivastigmine treatment. Treatment response is evaluated after six and twelve months of rivastigmine treatment.

Results: So far, the data of 32 patients (19 men, 13 women) at ages between 61 and 83 years, with MMS scores from 15 to 27, have been evaluated. After two weeks of rivastigmine treatment, performance in the attentional task (Alterskonzentrationstest, AKT) and in verbal short-term memory were significantly improved, EEG theta power had decreased.

Conclusions: This preliminary analysis shows that short-term cholinergic treatment with rivastigmine in Alzheimer patients leads to a decrease in EEG theta power and to improvements in parameters of attention and short-term memory. Thus, these parameters may be suited for a prediction of treatment response.

OC058 ANTICHOLINERGIC DRUGS IN ELDERLY PEOPLE: STUDY OF AN ALZHEIMER'S DAY CENTRE

23. Up to date on drug treatments

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Objectives and Study: Anticholinergic drugs are believed that can worsen cognition in elderly people, especially those that have already cognitive problems. The aim of this study is to investigate the activity of anticholinergic drugs in elderly people and to seek correlations with their performance in neuropsychometric tests.

Methods: 96 elderly people (28 males, 68 females; mean age±SD 72.92±8.42; mean years of education 8.94±4.66) were examined in an Alzheimer's Day centre. A complete neuropsychometric evaluation was performed in most of them, including the tests MMSE, MOCA, FRSSD, FUCAS, GDS, NPI. According to the Anticholinergic Cognitive Burden (ACB) scale, the anticholinergic drugs were divided according to their properties: Drugs with possible anticholinergic effects were given a score of 1, whereas drugs with established anticholinergic effects were given a score of 2 or 3. It is believed that anticholinergic drugs have a significant effect on cognition when total ACB score is 3 and over.

Results: A high level of anticholinergic burden was found. The mean (±SD) total ACB score was 1.9±1.3 and ACB score was 3 and over in 26 subjects (27.08% of the total patients) and 2 in 13 subjects (13.54%). Moreover, no significant correlation was observed (p<0.05) between ACB score and the score of the elderly in all the neuropsychometric tests performed.

Conclusions: According to the results of our study, there is a considerable percentage of elderly people that receive anticholinergic medication in a dosage that can lead to cognitive problems. Therefore it seems that the prescription of the drugs must be given with more caution, and drugs 'over the counter' should be avoided. However, there does not seem to be any correlation between anticholinergic activity and cognition as it is assessed by the performance of the patients in the neuropsychometric tests.

Abstracts - Oral presentations

OC059 THE CYCLIN DEPENDENT KINASE 5 INHIBITOR (CIP) REDUCES A β 1-42 AND P25/CDK5-MEDIATED TAU HYPERPHOSPHORYLATION AND APOPTOSIS IN NEURONS

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Objectives and Study: The extracellular aggregation of amyloid β peptides and the intracellular hyperphosphorylation of tau and neurofilament proteins at specific epitopes are pathological hallmarks of neurodegenerative diseases such as Alzheimer's disease (AD) and Amyotrophic Lateral Sclerosis (ALS). Cdk5 is a member of the Cdk family of serine/threonine kinases, most of which are key regulators of the cell cycle. Unlike mitotic Cdk5, Cdk5 plays a critical role in brain development, neuronal migration, neurite outgrowth, axon patterning and neuronal survival but has no known role in the mitotic cell cycle. Cdk5 activity is regulated through association with its neuron-specific activators, p35 and p39.

Methods: The deregulation, the abnormally elevation activity of Cdk5 phosphorylates tau and neurofilament proteins at AD-specific phospho-epitopes when it associates with p25. P25 is a truncated activator, which is produced from the physiological Cdk5 activator, p35, upon exposure to amyloid β peptides (A β), calpain activation and other neuronal insults.

Results: We have found that the Cdk5 Inhibitory Peptide (CIP), a 125-residue derived from p35, have a much higher affinity for Cdk5 than does p25. CIP effectively and specifically inhibit the activity of Cdk5 in vitro and in situ. We show that neuronal infections with Cdk5 inhibitory peptide CIP, selectively inhibits p25/Cdk5 activity and suppresses the aberrant tau and neurofilament phosphorylation in cortical neurons. Furthermore, A β -induced apoptosis of these cortical neurons is also reduced by co-infection with CIP. Most importantly, our results showed that CIP inhibition is highly specific: it inhibits the neurotoxic effects produced by p25/Cdk5 complex but did not alter the 'normal' role of p35/Cdk5 complex, which is essential for brain development and survival.

Conclusions: Accordingly, we suggest that utilization of the CIP or smaller molecules with similar inhibitory properties, could lead to useful agents to ameliorate some of the neuronal pathology produced by p25/Cdk5. This raises the intriguing possibility that such agents might be therapeutic for AD and other neurodegenerative diseases, which exhibit abnormal phosphorylation of neuronal cytoskeletal proteins by p25/Cdk5

OC059B

Alzheimer's Disease -New Treatments and Diagnosis.

Giovanni Frisoni

Better understanding the pathophysiology of the neurodegenerative cascade in Alzheimer's Disease has led to the development of drugs aimed to delay the progression of neurodegeneration. Such drugs may be the more helpful the earlier they are prescribed in the disease course. Early diagnosis thus becomes a cornerstone of this scenario. A proposal for new diagnostic criteria has recently developed positing that AD might be diagnosed at the mild cognitive impairment, pre-dementia, stage with imaging and biological markers. The application of these criteria in a memory clinic will be described as well as amyloid imaging data showing that positivity identifies MCI and healthy persons at increased risk of developing AD in the following years.

EFFICACY OF A MEDICAL FOOD (SOUVENAIID®) IN MILD ALZHEIMER'S DISEASE: A RANDOMIZED CONTROLLED TRIAL

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Ten years of research into the role of nutrients in Alzheimer's disease (AD) have resulted in the development of a new medical food, Souvenaid®, containing a combination of nutrients (Fortasyn™ Connect) designed to improve cognitive function.

The effect of Souvenaid® on memory and cognitive performance was recently investigated in a randomised double-blind, 12 week study in 212 drug naive mild AD patients. Primary outcome measures were a delayed verbal memory task (Wechsler Memory Scale-revised) and the 13-item modified ADAS-Cog. No significant baseline differences were detected, and there was no decline in modified ADAS-Cog and verbal memory in the control group. In the intervention group, however, a significant benefit was found on the delayed verbal memory task. Although unadjusted analyses showed no significant effect on ADAS-Cog, baseline ADAS-Cog score was a predictor for the intervention effect, i.e. patients with a higher baseline score showed a greater effect of Souvenaid®. This proof-of-concept study showed that Souvenaid® given for 12 weeks improves memory in patients with mild AD.

To confirm and further strengthen the results, two additional trials started in 2009. A 24-week study in drug naive mild AD patients, and a 24-week study in mild-moderate AD patients using AD medication. Results of both clinical studies are to be expected late 2010.

OC062 QUALITY OF LIFE, YEARS OF EDUCATION AND NEUROPSYCHOLOGICAL PERFORMANCE IN OLDER ADULTS

13. Neuropsychology and dementia

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Objectives and Study: This study is part of the first systematic research program exploring neuropsychological-neurocognitive performance and quality of life issues in the elderly Greek-Cypriots. The primary objective was to investigate verbal learning, working memory, and executive functioning abilities and quality of life issues in Greek-Cypriots over the age of 60.

Methods: Participants Ninety male/female Greek-Cypriot adults between 55-85 years ($x = 69.4$, $sd = 6.5$) and average education 9.5 years ($sd = 3.9$) with average MMSE scores 27.2 ($sd = 1.8$) and from various socioeconomic backgrounds participated in the project. Procedures. All participants were screened for global cognitive and memory decline prior to participating in the project. A battery of standardized clinical neuropsychological tests to assess neurocognitive abilities and the WHO Quality of Life (WHOQOL-BREF) questionnaire were administered.

Results: Statistical analyses revealed significant relationships ($p < .01$) between years of education, quality of life, and cognitive abilities. Specifically, years of education correlated significantly with physical health. In addition, physical health was significantly correlated with psychological health and speed of processing abilities. Both physical and psychological health were correlated with strong naming abilities, while psychological health was also positively correlated to social relationships and environmental support.

Conclusions: Results indicate that certain aspects of quality of life relate to cognitive performance. In addition, higher education relates to perceptions of physical health in adults over 60.

Abstracts - Oral presentations

OC063 EFFICACY OF CHOLINESTERASE INHIBITORS ON NEUROPSYCHIATRIC SYMPTOMS OF DEMENTIA- A MALAYSIAN EXPERIENCE.

13. Neuropsychology and dementia

M. Kaur¹, N. Z. Zainal², E. Ebenezer³¹Psychological Medicine Unit, University Malaya Medical Centre, ²Department of Psychological Medicine, University Malaya, Kuala Lumpur, ³Department of Psychiatry, Perak Medical College, Ipoh, Perak, Malaysia**Objectives and Study:** To determine the efficacy of Cholinesterase Inhibitors in the treatment of neuropsychiatric symptoms in patients with Dementia.**Methods:** Patients newly diagnosed with mild to moderate Dementia attending the Memory Clinic treated with any of three cholinesterase inhibitors (AChEIs), Donepezil, Rivastigmine and Galantamine, were recruited. Similar patients who were not on treatment with cholinesterase inhibitors were selected as controls. All patients were rated by their care giver at baseline, 12 weeks and 24 weeks on Neuropsychiatric Inventory Questionnaire (NPI-Q) for severity of symptoms and distress given to the care giver.**Results:** A total of 100 patients commenced on AChEIs and 50 controls were recruited. After 24 weeks on AChEIs, the treated group showed significant improvement in NPI-Q severity scores compared to control group (mean change -3.6 vs 1.7 points. $p < 0.001$), and in NPI-Q care giver distress scores (- 5.8 vs 3.1 points. $p < 0.001$). Sixty one percent of patients on AChEIs had a 30% reduction in total NPI score from baseline. All neuropsychiatric symptoms showed improvement with treatment with AChEIs, along with reduction in care giver distress level.**Conclusions:** AChEIs had significant efficacy in treating neuropsychiatric symptoms in patients of mild to moderate dementia.

OC065 CHALLENGES IN CLINICAL INTERVIEWING AND COGNITIVE ASSESSMENT IN A RURAL SOUTH AFRICAN COMMUNITY.

13. Neuropsychology and dementia

R. Van der Poel¹¹UNIBS, University of the Free State, BLOEMFONTEIN, South Africa**Objectives and Study:** The study aimed at identifying the challenges associated with clinical interviewing and cognitive assessment as part of dementia research in a rural South African community.**Methods:** 14 Healthcare workers (registered nurses) were interviewed during the pilot phase (N=230) of a cross sectional whole population survey on the prevalence of dementia in a rural Sesotho speaking community in South Africa. They responded to a structured questionnaire which elicited responses pertaining to i) interviewing time ii) communication difficulties iii) translated text iv) colloquialisms v) local culture and custom vi) interviewer burden vii) burden on interviewee.**Results:** 1. Clinical interviewing time is significantly more than the estimated time proposed in the research protocol.
2. Observing local custom adds to interviewer burden.
3. Low levels of participant (patient) literacy add to interviewer burden.
4. Translated clinical constructs and medical / psychiatric terminology are problematic in terms of descriptive range and incur additional burden on participants.
5. Cognitive assessments (i.e. memory assessments) may yield a higher percentage of false negatives due to interviewing time and burden on both the interviewer and interviewee.
6. Interview structure is difficult to maintain within the context of local ethnic customs and social graces.**Conclusions:** Clinical interviewing and cognitive assessment as part of dementia research in a rural Sesotho speaking community in South Africa is challenging and requires a sound knowledge of local customs and colloquialisms. Challenges are best met through interviewer skills that include proficiency in English and the local language, tolerance for lengthy and cumbersome interviewee responses and tolerance for interviewee demands outside the scope of the research protocol. Thorough interviewer training is a prerequisite for the effective handling of cognitive, medical and psychiatric constructs during interviews and assessments.

OC064 THE OVERLEARNED PAST KNOWLEDGE IN NON DEMENTED, MCI AND DEMENTED PARTICIPANTS AS A FACTOR OF DIFFERENTIAL DIAGNOSIS

13. Neuropsychology and dementia

E. Tsantali¹, D. Economidis¹, S. Rigopoulou²¹2nd Dept. Internal Medicine, Geriatric Unit., Hippocraton hospital, Aristotle University of Thessaloniki, ²Neurologic Clinic, Panagia hospital, Thessaloniki, Greece**Objectives and Study:** The literature refers that Alzheimer's disease patients have severe difficulties to learn new information and to connect the new one with the old information. However, there is well preserved the old learned information in most of the cases. The aim of our study was to investigate if the overlearned past knowledge which assessed through a delayed memory task can discriminate non demented elderly, mild cognitive impairment (MCI) and Alzheimer's disease patients (AD).**Methods:** Our sample was 96 non demented, MCI and AD outpatients recruited from the Memory clinic of the Geriatric Clinic of Hippocraton hospital and the Neurologic clinic of Panagia hospital in Thessaloniki in Greece. The diagnosis was set by an expert interscientific team using clinical, laboratory, neuropsychological and neuroimaging data. The participants were 68.4(SD=11.0) years old and they had 9.2(SD=3.9) years of typical education. The mean of the MMSE for the non demented, MCI and AD participants was 28.7/30 (SD=1.5), 26.5/30(SD=2.3) and 22.3/30(SD=3.4) respectively. Though the mean of the Overlearned past knowledge task was 5.4/6, 3.9/6 and 1.4/6 respectively.**Results:** There was strong correlation between MMSE and the Overlearned past knowledge task $r = .706$, $p = .01$. The one way ANOVA showed statistically significant differences between groups according to the Overlearned past knowledge task ($F(2, 95) = 59.2$, $p = .000$). Tukey analysis also performed that there is statistically significant difference ($p = .000$) between non demented elderly and AD participants, non demented elderly and MCI ($p = .000$), and AD and MCI patients ($p = .000$) too. The discriminant analysis correctly classified 83.3% of the original grouped cases, 81% for the AD patients and 84.6.2% for the MCI ones. Though 15.6% of the MCI participants classified wrong as AD.**Conclusions:** Our conclusion is that the overlearned past knowledge is starting to declined faintly from MCI and impaired more during the first stages of AD.

OC066 NEUROPSYCHOLOGICAL MEASURES IN DIFFERENTIATING BETWEEN MILD COGNITIVE IMPAIRMENT (MCI) AND ALZHEIMER'S DISEASE (AD)

13. Neuropsychology and dementia

T. Christodoulou¹, M. Tsolaki²¹Day Centre of Greek Association of Alzheimer's disease and relative disorders, ²3rd Department of Neurology Aristotle University, Greek Association for Alzheimer's disease and relative disorders, Thessaloniki, Greece**Objectives and Study:** The aim was to find measures that differentiate between MCI and AD using tasks which assess cognitive domains which show impairments early in the disease process.**Methods:** The sample consisted of (MCI=28) and (AD=25) patients with mean age=71.0 and 75.8 respectively. Their Mini Mental State Examination (MMSE) mean scores were 26.5 (sd. 2.2) and 22.1 (sd. 3.9) respectively. 31 patients were female and 22 were male and their mean educational level was 6.9 (4.0) for AD and 8.8 (4.3) for MCI. All participants underwent neuropsychological and clinical assessment consisting of verbal fluency (Controlled Oral Word Association), initiation and inhibition control (Hayling Sentence Completion task), the Geriatric Depression Scale and the Functional Rating Scale for symptoms of dementia.**Results:** We present preliminary results of tests that were applied in the Greek population for the first time. The AD group generated significantly fewer words compared to MCI but did not differ in perseverations or intrusions. Similar results were found in the initiation time only for sensible completion in the as AD was slower. The AD group also failed to suppress relatively logical responses leading to increased amounts of errors compared to the MCI but no difference was found for initiation time in the inhibition portion.**Conclusions:** The overall sensitivity of the initiation and inhibition task in addition to the verbal fluency task will be briefly presented and its use in differentiating among MCI and AD patients. Cut off scores for both tasks were also calculated in order to facilitate the clinical diagnosis of the two disorders. The effect of level of symptoms, overall cognitive function and clinical correlates is also examined for both groups in terms of performance in the neuropsychological measures.

Abstracts - Oral presentations

OC067 VALIDATION STUDY OF PANDA QUESTIONNAIRE IN GREEK POPULATION 13. Neuropsychology and dementia

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Objectives and Study: The aim of this work is to validate in greek population the PANDA Questionnaire for the assessment of mild cognitive deficits and dementia. So, there is need for time-economic, reliable and sensitive screening tools for cognitive dysfunction. The PANDA (Parkinson Neuropsychometric Dementia Assessment) is a short instrument for the assessment of cognitive abilities in patients with PD.

Methods: The study included two groups. The first group consisted of 20 patients with PD, who were outpatients in the Movement Disorder Clinic and the Memory Clinic of the Neurological Clinics of two public health general hospitals and a university hospital. The second group consisted of 20 healthy controls. The two groups were matched for age and education. Patients with PD and healthy controls (in order to ensure normal cognitive status) were evaluated with MMSE, Clock Test, IADL (Instrumental Activities of Daily Living). Years of PD were taken into consideration. In two groups, PANDA Questionnaire was also administered. All subjects were evaluated by an experienced clinical neuropsychologist.

Results: PD patients performed statistically significantly worse than controls in all PANDA subtests, except the first subtest of immediate recall, where the two groups did not differ. PANDA is very well correlated with all neuropsychological tests. Males performed better than females in immediate recall and verbal fluency (this result should be treated with caution due to small sample size). In the others subtests no gender differences were observed. Years of illness and age affected in a statistical significant way the PANDA performance. Healthy controls were intact cognitively with all instruments.

Conclusions: Greek version of PANDA can be an effective tool. PANDA has a good correlation with all tests used in this study and differentiates well PD patients from controls. Small sample size is a limitation of the study. In order to complete the validation study, we need a bigger sample.

OC067D: PROMOTION OF HEALTH AND EDUCATION: THE ROLE OF SCHOOL TO CRISIS MANAGEMENT AND TO THE POSSIBLE PREVENTION OF ALZHEIMER DISEASE (PRESENTATION OF THE EDUCATIONAL PACKAGE « SOUND MIND & HEALTHY BODY»)

Evanthia Stefanatou

The educational package «Sound Mind & Healthy Body» was made on the frame of the educational programs for the treatment and the promotion of health from the person in charge of Primary's education Health Treatment of the prefecture of Heraklion as to contribute:

- To management of crisis that develops in the family frame when the relative of a child is taken ill by the Alzheimer disease.
- In the development of a frame that will relate to the prevention of Alzheimer disease.

The more specific aims of pursue of the educational package are:

- ✓ The strengthening of family relations and the refinement of the harmonious coexistence between childhood and the third age.
- ✓ The refinement of empathy, of the respect and the understanding of the needs of individuals of the third age.
- ✓ The development of a frame that will provide the possibility to students to develop positions and attitudes in relation to the conscious promotion of their physical and mental health.
- ✓ The formation of children's positive attitude in relation to volunteerism through the knowledge of the actions of the voluntary company of the Alzheimer disease of Heraklion prefecture.

The present educational package includes:

- ❖ A sensitization fairytale relating to the Alzheimer disease and the acknowledgement of the voluntary actions of the Alzheimer disease company «SOLIDARITY» of the prefecture of Heraklion. Through the fairytale the creative frame of contact between the children and the taken ill is proposed.
- ❖ An informative notebook which: Informs the children of the function of the brain, proposes a prevention frame in relation to the disease, develops ways of emotion management and creative ways of contact with individuals of the third age as well.
- ❖ An instructive poster-of sensitization with reference to the behaviour of children in their relation to individuals that have been taken ill by the Alzheimer disease.

The aimed result is the positive approach of the Life Cycle in which we can all coexist as long as we respect the needs not only of the individuals that need our help but ours as well because then we will be able to turn crisis into the possibility of adoption of healthy attitudes and behaviours.

OC067B ALZHEIMER'S DISEASE (AD), FRONTOTEMPORAL DEMENTIA (FTD) AND HEALTHY ELDERLY ASSESSMENT USING MEASURES OF EXECUTIVE FUNCTION AND GENERAL COGNITIVE FUNCTION

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Objectives and Study: Individual differences with respect to tests of mental abilities range in complexity from simple reaction time to abstract reasoning. The concept of 'general intelligence' or Spearman's g is common to every type of cognitive performance and is the crucial factor in most tests' practical validity. Genetic and environmental influences have an impact on g with shared environmental influences predominating early in life, but dissipating near zero by adulthood. Dysfunction results in a range of impairments immediately reminiscent of this concept. The theory links g to neural processes involved in the speed and efficiency of information processing. The most representative test is the Raven's progressive matrices (RPM). The aim of the study is to use this measure to differentiate among AD, FTD and healthy elderly.

Methods: The sample consisted of 30 subjects in each group. All participants underwent the same assessment which consisted of the RPM, the Short- Global Dementia Assessment covering a wide range of cognitive functions including orientation, memory, visuospatial abilities, comprehension, encoding, recall, reproduction, verbal fluency in addition to perception. Mini Mental State Examination (MMSE) assessed overall level of function and the Geriatric Depression Scale the level of symptoms.

Results: We hypothesized that AD will underperform in tests assessing memory, verbal fluency and orientation whereas FTD will show widespread impairments in executive function. Both dementia groups will have deficits in their general intelligence as measured by the RPM compared to controls and show lower scores.

Conclusions: Based on our hypothesis the RPM is able to differentiate among the three groups with the two dementias showing greater deficits. Overall sensitivity and cut off scores will also be presented.

OC067E: AN EFFECTIVE GREEK HEALTH CARE DELIVERY MODEL FOR FAMILIES WITH A PATIENT SUFFERING FROM DEMENTIA BASED ON THE EXPERIENCE GAINED FROM RURAL CRETE

Christos Lionis

Professor of General Practice and Primary Health Care (elect), School of Medicine, University of Crete

Although Integrated Primary Care and General Practice/Family Medicine have received prompt attention in the current literature in regards to the management of cognitive and mood disorders, unfortunately in the community it remains a neglected issue in the Greek health policy agenda. This presentation attempts to report an effective Greek health care delivery model for families with a patient suffering from dementia based on the experience gained from rural Crete.

Abstracts - Oral presentations

OC068 THE EFFICACY OF SPACED RETRIEVAL AND MONTESSORI METHODS IN MANAGING EATING DIFFICULTIES FOR RESIDENTS WITH DEMENTIA

15. Non-pharmacological interventions

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Objectives and Study: To construct a training protocol for spaced retrieval and to investigate the effectiveness of spaced retrieval and Montessori-based activities in decreasing eating difficulty in older residents with dementia

Methods: A single evaluator, blind, randomized control trial (two treatments and one control) was used. Three special care units for residents with dementia in long-term care facilities in Taiwan were the sites for the study. Eighty-five institutionalized residents with dementia participated in the study, with 82 subjects completing the 8-week study. To avoid any confounding of subjects, the three institutions were randomized into three groups: spaced retrieval, Montessori-based activities and a control group. The intervention includes three 30-40 minute sessions per week, for eight weeks.

Results: After receiving the intervention, mean differences in the EdFED#2, the variables fed by caregivers, physical assistance, verbal assistance, self eating time and MNA among the three groups were significantly different. Further analysis showed the mean differences in physical assistance and verbal assistance in the spaced retrieval group were significantly lower than in the Montessori-based activities and control groups, while the mean difference in the MNA was significantly higher than the Montessori-based activities and control group. Mean differences in self eating time in the Montessori-based activities group was significantly higher than in the control group.

Conclusions: This study confirms the efficacy of spaced retrieval and Montessori-based

OC069 APPLICATION EFFECTS OF WALKING PROGRAM FOR COGNITIVELY IMPAIRED ELDERS IN TAIWAN LONG-TERM CARE FACILITY

15. Non-pharmacological interventions

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Objectives and Study: Very few empirically based programs for prescribing interventions have been developed for elderly people suffered from dementia in Taiwan long-term care facilities (LTCFs), though activities of daily living (ADL) are part of basic human needs. The aim of this quasi-experimental study was to evaluate the impact of a walking program with endless loop on cognitively-impaired elders' physical, psychological, and cognitive functions.

Methods: The purposive sample was eight dementia elders, aged 67-82 ($\chi=77$), from a LTCF in southern Taiwan. The length of stay in nursing home ranged from 0.25 to 7.5 years ($\chi=1.5$). Based on the Progressively Lowered Stress Threshold (Hall & Buckwalter, 1987), the program had run during the most available hours for Sundowning Syndromes (4:30-5:30 pm) for eight weeks, 30 minutes per session, three sessions per week.

Results: (1) The Barthel Index increased from 10.70 to 61.0 ($p=0.007$); (2) The Geriatric Depression Scale decreased from 6.86 to 3.00 ($p=0.014$), 71% changed into good mood; (3) The Mini-Mental Status Examination and Clinical Dementia Rating improved however insignificantly ($\chi=7.71 \rightarrow 13.86$, $1.93 \rightarrow 1.21$; $p=0.062$, 0.067); and (4) Ryden Agitation Scale improved (physically: $\chi=2.01 \rightarrow 0.92$; verbally: $\chi=0.59 \rightarrow 0.52$).

Conclusions: The data support positive effects for the program. Large sample sizes and individually tailored programs would be strongly recommended for future studies.

OC071 PRACTICE OF LINGUISTIC SKILLS: COGNITIVE TRAINING INTERVENTION IN PATIENTS WITH MILD COGNITIVE IMPAIRMENT

15. Non-pharmacological interventions

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Objectives and Study: Linguistic deficits are often observed in patients with Mild Cognitive Impairment (MCI) concerning naming, verbal fluency, word finding, speed of verbalization, and comprehension of oral and written speech. The aim of this study was to examine the effectiveness of a cognitive training intervention enhancing linguistic skills of MCI patients.

Methods: The study included 24 women and 7 men, age 69.41 (5.60), education 9.85 (4.02), and MMSE 27.93 (1.61) classified in one experimental and one control group. The groups were matched in gender ($p=0.47$), age ($p=0.33$), education ($p=0.18$), MMSE ($p=0.20$), and medication-cholinesterase inhibitors ($p=0.64$). The experimental group participated in 20 weekly therapeutic sessions for a period of 6 months. Linguistic skills were practiced via written and oral tasks, while the control group did not participate in any type of non pharmacological intervention and was on waiting list. The neuropsychological assessment was performed at baseline and at the end of intervention.

Results: At baseline, there were no differences between groups in cognitive and functional performance. At the end of the intervention were found differences in favour of the experimental group in attention ($p=0.00$), visual perception ($p=0.03$), and verbal fluency ($p=0.01$). The within group analysis for the control group has shown deterioration in attention ($p=0.00$). For the experimental group it was observed improvement in attention ($p=0.01$), verbal fluency ($p=0.00$) and visual memory ($p=0.00$).

Conclusions: The cognitive training improved the targeted linguistic skills of the experimental patients and the improvement was noticed also in other cognitive areas.

OC072 COGNITIVE TRAINING PROGRAMME THROUGH MUSICAL STIMULI: A NON PHARMACOLOGICAL COGNITIVE TRAINING INTERVENTION IN PATIENTS WITH MILD DEMENTIA

15. Non-pharmacological interventions

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Objectives and Study: The project investigated the effectiveness of cognitive training through musical stimuli. The intervention aimed at the stabilization of cognitive and functional performance of patients with mild Dementia.

Methods: The study included 25 women and 6 men with age=75.13 (4.83), education =7.74 (3.75) and MMSE=23.20 (3.12) in two groups: one experimental and one control group matched in age ($p=0.49$), gender ($p=0.32$), education ($p=0.25$), MMSE ($p=0.09$) and cholinesterase inhibitors ($p=0.18$). The experimental group attended 20 weekly sessions for a period of six months with music stimuli as crucial component in exercises of attention, memory, dual task and language. Controls did not attend any non pharmacological therapy during the same period and were on waiting list. Participants were assessed with the same psychometric battery at baseline and at the end of the therapy.

Results: At baseline the experimental and the control group were matched in cognitive abilities assessed in the study. At the end of the therapy there were not found differences between groups. Within subjects analysis showed that ADL was improved for the experimental group ($p=0.00$), while it remained stable for the control group.

Conclusions: Cognitive training with musical stimuli was beneficial in the experimental patients, because their cognitive performance remained stable and the performance in ADL was improved.

Abstracts - Oral presentations

OC073 «ORIENTATION IN CURRENT EVENTS»: A COGNITIVE STIMULATION AND TRAINING INTERVENTION FOR PATIENTS WITH MCI

15. Non-pharmacological interventions

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Objectives and Study: The cognitive stimulation and training intervention could reduce or inhibit the cognitive impairment in MCI patients. The intervention aimed to enhance cognitive abilities in MCI patients through orientation in current events.

Methods: Forty one participants, men and women, 55-80 years old, neuropsychiatric symptoms free, diagnosed with MCI, were classified in one experimental and one control group, matched in age (p=0.07), education (p=0.08), gender (p=0.32) and drugs (p=0.37). The experimental group attended 24 weekly sessions in a period of 6 months, while the control group did not (waiting list). Cognitive intervention included discussion of every day issues, orientation techniques and visual-auditory stimulation. Neuropsychological assessment was performed at baseline and at the end of the intervention.

Results: At baseline, between groups comparison yielded differences in attention (p=0.018) and visual memory (p=0.016). At the end of the intervention there were differences between groups in favor of the experimental group in verbal fluency (p=0.007). Within group analyses for the experimental group has shown improvement in naming (p=0.013), verbal fluency (p=0.021), visual memory (p=0.007) and learning ability (p=0.031). Controls have retained stable cognitive performance.

Conclusions: Orientation in current events, improved cognitive performance in patients with MCI.

OC074 NUTRITIONAL SUPPLEMENT COMBINATION THERAPY IMPROVES COGNITION IN 3XTG AD MICE WILL BE TESTED IN COGNITIVELY NORMAL ADULTS.

15. Non-pharmacological interventions

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Objectives and Study: Animal model and epidemiological studies suggest that some diets can slow cognitive decline in early AD. Using brain health related evidence, an interdisciplinary team led by Dr. Emerson Lombardo designed a whole foods Memory Preservation Nutrition (MPN) program emphasizing synergistic contributions of increasing Omega-3s, foods with anti-oxidant, anti-inflammatory properties, and which attenuate insulin resistance. This led to poly-nutrient interventions for clinical research on AD, using available nutritional supplements.

Methods: Dr. Jon Valla's team administered Memory Preservation Nutrition Supplement Program (MPNSP) supplements incorporated into standard mouse chow to triply-transgenic mice known to develop features of AD with age. MPNSP: a phyto-nutrient powder comprised of 100% organic freeze-dried fruits and vegetables, spices, grains and probiotics; an amalgam of herbs and spices chosen for their reported anti-inflammatory properties; and cod liver oil. Mice (N=56) were fed either supplemented or standard chow beginning at an average age of 38 weeks in age- and sex-matched cohorts in a full 2x2 design (genotype x diet). After approx 4 months of supplementation, mice were cognitively tested on a delayed match to position (DMP), a 30-minute DMP delay challenge, as well as spatial reference memory Morris maze.

Results: Were gender dependent. The supplemented diet enhanced learning of the DMP task in male TG mice only. The female TG mice were the only group to be impaired by the 30-minute delay on the DMP task, and the diet prevented this impairment. The diet had no effect on learning in WT mice.

Sample size was insufficient on some tests.

Conclusions: Polynutrient supplementation may counter functional consequences of AD-related brain changes. Studies are underway to deduce the effects of MPNSP on glucose uptake, mitochondrial function, amyloid and tau pathology, inflammatory markers.

Boston University is conducting a feasibility, safety, biomarker study in cognitively normal adults, with a similar polynutrient therapy, Nutritional Supplement Combination Therapy, looking at similar biological parameters. Fish oil is cod liver oil and DHA- enhanced fish oil. 2000 IU of vit.D3 was added.

OC075 COMPUTER BASED COGNITIVE TRAINING FOR PATIENTS WITH MILD COGNITIVE IMPAIRMENT (MCI)

15. Non-pharmacological interventions

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Objectives and Study: Brain activation through computer training of attention and executive function could stimulate brain plasticity in patients with Mild Cognitive Impairment (MCI). Aim: The study aimed to investigate the effectiveness of a computer based training on visual spatial abilities, visual attention, executive function and visual memory, in MCI patients.

Methods: The participants were 59 MCI patients, age 68.08 (7.25), education 9.17 (3.93), and MMSE 27.73 (1.35), classified in one experimental (N=30) and one control group (N=29). The groups were matched in age (p=0.60), education (p=0.06), drugs (0.51) and gender (p=0.52). The experimental group attended 20 weekly sessions in a period of 6 months, including tasks of visual attention, visual spatial abilities, visual memory, and executive function. The control group did not participate in any type of intervention and was in a waiting list. Neuropsychological assessment was performed at baseline and at the end of the training.

Results: At baseline, there were no differences between groups in cognitive abilities. At the end of the training, between groups comparison yielded differences in favor of the experimental group in attention (p<=0.00), verbal fluency (p=0.00), visual memory (p=0.01), verbal memory (p=0.00) and learning through feedback (p=0.00). Within group analysis of the experimental group's performance has shown improvement in attention (p=0.00) and daily function (p=0.00). Controls have shown an improvement in perseverant responses and cognitive flexibility (p<=0.00) and naming (p=0.02), and deterioration in abilities of attention (p<=0.00).

Conclusions: Computer cognitive training helped the experimental group to improve attention abilities and verbal memory. The improvement was noticed also in ADL.

OC076 FORMS OF AGEING, NEEDS AND DEPENDENCY: PUBLIC POLICIES AND THE INFORMAL SECTOR.

19. Quality of life in demetia

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Objectives and Study: There is a great discussion regarding to ageing population in Europe, their needs, their rights and their dependency. Furthermore there is an issue about public policies and informal sector of care in the Alzheimer's patients field in Greece.

Methods: Semi structured interviews were taken from thirty families, caregivers and patients, and health professionals; doctors, psychologists, social workers.

Results: The Social Security for the third age in our country is mainly characterized by the important role that the family still continues playing. Most of the patients with Alzheimer's disease in Greece stay at home--mostly because of lack of qualified, easy-available care centers but also for emotional reasons. An informal care is usually provided by patients' close relatives. The caregivers are children or spouses of patients. The care takes them seven days a week and most of the caregivers have no possibility of rest. They all-caregivers and professionals of health agree that many things need to be done by the state in order elderly and people suffering from Alzheimer's disease can have more help. They all believe that it is needed to be constructed elder's homes with specialized personnel that could treat their patients better so they will feel safe to take their patient there. They mostly ask for short term elder's homes in order to rest for a while. They all ask for more money; better pensions and provision of financial aids to all demented people. They also ask for better and more convenient provision of services from the insurances. They ask for free help at home provided by the state even for a few hours a day or sometimes in a week. And what they all ask is for better information; they want to be informed by their insurance for everything they can get and not having to search in order to find something.

Conclusions: It is easily understood that the basic effort for the elderly should be the maintenance of their good quality of life, the guarantee of autonomy and their self-sufficiency, as their protection in case of illness. The growth of services and structures for elderly becomes henceforth imperative. In the developed countries exist beds that correspond in the 10% of number of old people, that is the percentage of old people that needs protected stay or benefit of nursing services. That is to say our country would be supposed to have roughly 150.000 protected beds. Unfortunately however we have not developed relative structures yet.

Abstracts - Oral presentations

OC077 MANAGING TOGETHER AN EXPLORATION OF THE FAMILY EXPERIENCE OF MANAGING THE IMPACT OF DEMENTIA UPON THE RELATIONSHIP BETWEEN GRANDPARENTS AND THEIR GRANDCHILDREN

19. Quality of life in demetia

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Objectives and Study: Although evidence points to the fact that whole families are affected by dementia, the majority of research in this area has focused upon the person with dementia or the primary caregiver. Minimal research has considered the impact on the wider family, even though relationships are a significant factor influencing the wellbeing of people with dementia and the person primarily involved in caregiving. The impact of dementia upon grandparent and grandchild relationships has received limited attention, in spite of research evidence indicating the value of grandparent grandchild relationships to wellbeing. This study sought to achieve an in-depth understanding of the impact of dementia upon the relationship between grandparents with dementia and their younger grandchildren and to develop meaningful practical outcomes from the research which may benefit families.

Methods: This 3 year ethnographic study was jointly funded by the James Martin Foundation and the Alzheimer's Society. 54 in-depth interviews and 18 hours of participant observation were achieved with 7, three generational families, including the person with dementia, their spouse, their adult children and their younger grandchildren aged 12 or below. Analysis occurred using NVivo and was informed by Narrative Theory.

Results: Analysis revealed that families valued the role of grandparent and the relationship between grandparent and grandchildren and made significant efforts to maintain the relationship. Specific challenges occurred as a consequence of the progression of the illness, the nature of the dementia experienced, the individual characteristics of family members and the family relationships. Strategies identified by family members to support the relationship included vigilance, facilitation and risk management.

Conclusions: Results reinforce the value of taking a family oriented approach to dementia and to supporting the family to develop and maintain strategies for managing relationships between grandparents and grandchildren. Information sheets concerning the strategies to support the relationship have been developed and disseminated.

OC079 OCCUPATIONAL THERAPY AND PEOPLE WITH DEMENTIA IN CARE HOMES

19. Quality of life in demetia

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Objectives and Study: Lack of activity within care homes decreases quality of life. Staff often lack knowledge and skills to provide meaningful activity at an appropriate level for residents with dementia. The objectives of this study was to assess if occupational therapy intervention for people with dementia in care homes improves quality of life.

Methods: This was a matched pair design cluster randomised controlled trial. Eight care homes (n = 104 residents) received the intervention, and eight (n = 106) continued usual care. The intervention comprised: environmental assessment; education sessions and individual coaching for staff who used the PAL Checklist to assess and provide meaningful activities with two residents each. Primary outcome was quality of life. Measures were completed at baseline, 4, and 12 weeks post intervention. Assessors were blinded to allocation and intervention content. Data from 159 residents at final follow-up were analysed by intention to treat.

Results: Quality of life, cognition, dependency declined; challenging behaviour increased; and symptoms of depression and anxiety reduced significantly in both groups. Multi level modelling, adjusted for baseline, found no significant differences between groups on the primary outcome (quality of life) or other outcome measures.

Conclusions: Adherence to the intervention programme varied, so not all residents received enhanced activity provision. Homes with strong management commitment reported better quality of life for their residents. Future studies should consider alternative implementation and programme fidelity strategies, and more sensitive outcome measures to fully capture the potential impact of occupational therapy interventions.

OC078 CAREGIVERS' OPINION ON CURRENT STATUS OF AD MEDICATION IN GREECE

19. Quality of life in demetia

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Objectives and Study: From January to July 2009, the Athens Association of Alzheimer's Disease and Related Disorders conducted a survey among caregivers of patients with Alzheimer's disease (AD) who attended its Day Care Centers. The aim was to record caregivers' stance towards caring and their opinion on current status of AD treatment in Greece.

Methods: Interviews with caregivers were performed by clinical psychologists as part of social history taking. A 4 or 5-point Likert-like scale was used to record opinions impossible to express with a 'yes' or 'no' answer.

Results: 300 caregivers participated, mainly women over 45 years old of middle/upper level of education, living in the same house with the patient and having a first-degree relationship with him. 85% of the caregivers reported that caring for an AD patient has increasing negative psychological implications as the disease progresses. Main reported feelings were (in order of frequency): sorrow, frustration and anger. Nevertheless, more than 80% of caregivers did not wish admittance the patients to be admitted in a nursing home. All patients were under pharmacological treatment receiving on average 4 medication per day. They had been on AD medication for 3.45 years on average and since diagnosis they had tried 1-2 different drugs. The medication was characterized as at least 'somehow inconvenient' by 63% of the caregivers. Caregivers of patients with severe disease reported more difficulties in ensuring medication compliance and adherence to dosage schedule, mainly due to patient refusal to cooperate.

Conclusions: As expected, negative feelings are strongly related to caring for a person with dementia, especially as the disease progresses. Caregivers experience difficulties with AD medication and seem to be rather skeptical about its effectiveness. Interestingly, the vast majority of caregivers were unwilling to place patients in a nursing home. There is an urgent need to recognize the significant practical and emotional burden of caregivers and support the development of respite services in Greece.

OC080 DENTAL STATUS IN PATIENTS WITH MODERATE AND SEVERE DEMENTIA: CORRELATIONS WITH MENTAL AND FUNCTIONAL ABILITIES

19. Quality of life in demetia

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Objectives and Study: Dementia is a syndrome causing cognitive, behavioral and functional decline in activities of daily living, like eating, walking, bathing etc. Dental care in demented patients is difficult. Patients and caregivers often neglect activities such as brushing of the teeth or taking care of oral hygiene and particularly in the severe stages, demented patients resist any attempt for dental procedures and interventions.

Methods: The present study aims at recording the dental and oral status of demented patients in the moderate and severe stages and exploring any correlations with mental and functional abilities. In 81 patients, we examined dental status, caries lesions, oral and periodontal problems, use of dentures and need for mashed food and explored correlations with mental and functional capacity, using suitable psychometric scales (MMSE, FRSSD, SIRS).

Results: Approximately 55% of the patients were edentulous, 37% needed mashed food and 46.9% wore dentures. Oral, periodontal and caries problems were documented in 59.3%, 86.1%, 69.4% respectively, with a mean number of decayed teeth of 3.2. Severely demented patients wore dentures less often and had more decayed teeth. As MMSE scores lowered indicating worsening of the dementia stage, patients more often needed mashed food.

Conclusions: In conclusion, oral, periodontal and caries problems are very prevalent in patients with dementia and correlate with their mental and functional status. As the dementia process progresses, along with the mental, behavioural and functional decline, patients tend to exhibit more oral and dental problems needing dental management. A full and suitable dental assessment and management is of great importance in order to improve quality of life in both patients and their caregivers.

Abstracts - Oral presentations

OC081 THE FRENCH ALZHEIMER NATIONAL PLAN AND THE CALLIOPE WEB SERVICE FOR PATIENTS WITH ALZHEIMER DISEASE: TOWARDS A EUROPEAN EXTENSION

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Objectives and Study: The French national plan against Alzheimer disease was launched on February 1st 2008. The main outputs are 44 topics carried out, concerning clinical research, support to families and healthcare organisation. This plan has received high level political from President Sarkozy. Similar plans are being developed across Europe to prepare for the emerging health and social care challenges presented by dementia. One of the orientations of the plan is to collect data from memory centers in order to have national epidemiologic data and to have data of activities of the specialized centres.

Methods: This measure will contribute to adapt the offer of specialized care memory centers through the regional plans of care organization and to estimate the quality of their functioning. Information from all the memory centers will be captured by an electronic database. For that purpose, Calliope, a web service developed by Kappa Santé was chosen.

Results: This web service is used by 183 specialized memory centers to follow patients, with some clinical, diagnostic,therapeutics and cognitive evaluation data. 81 879 patients are in the data base with 183 952 consultations. A data set has been elaborated specifically for the plan. This data set will be the minimum requirement of information for patients with Alzheimer's disease and will be launched in October 2009.

Conclusions: The next step will be a European collaboration around the Calliope web service, in order to get some common european epidemiologic data on Alzheimer's disease.

OC083 JACK - QUALITY OF LIFE IN DEMENTIA CARE

19. Quality of life in demetia

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Objectives and Study: JACK
A STORY ABOUT QUALITY OF LIFE IN DEMENTIA CARE

Many facilities provide good quality of care for people living with dementia but how many actually provide good quality of life?

Jack's story is about achieving a good quality of life for people living with dementia. It is about tapping into their world and valuing what makes them smile, and what makes them want to interact. It is about finding the things that touch their souls and awaken the sparkle in their eyes. It is about respect, and about ensuring that the last years of their lives are filled with whatever it takes to bring joy and make each day special, valuable and satisfying.

Jack is 87 years old. He has dementia and lives in a nursing home. Jack was labeled as being 'aggressive'. Staff were wary around him, and avoided him if possible. Jack was particularly challenging at night.

I first came into contact with Jack while co-coordinating a Sensory Research Project, while he was still labeled as 'aggressive'. Jack was chosen to participate in the research project. This experience was to change Jack's life.

Jack responded amazingly well to the Sensory environment. Many doors for interacting with Jack were opened as he delighted at the sensory equipment, and particularly the baby doll.

Two 'therapy dolls' were introduced into the dementia unit. These became Jack's 'babies', children for whom he was responsible for caring. Staff now have a way to communicate with Jack, and by using the dolls they are able to easily relate to Jack and they help Jack to settle and sleep peacefully at night. Jacks quality of life has improved greatly.

Good care is about making a difference to someone's life. Who better to illustrate quality of life for people living with dementia, but Jack himself? This is Jack's story.

Methods: This abstract outlines the content of a DVD made in 2007 to tell Jack's story.

Results: The DVD is used throughout Australia in training organisations and institutions. It is a tool for educating people who will provide care for people living with dementia

Conclusions: This Jack DVD is a story worth telling and can challenge care practises.

OC084 BETTER NOT FACE THE FACTS? INCREASED AWARENESS PREDICTS REDUCED MOTIVATION FOR COGNITIVE TRAINING IN MILD COGNITIVE IMPAIRMENT

04. Cognitive reserve hypothesis

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Objectives and Study: This study investigated the relationship between awareness of memory deficits and motivation for cognitive therapy in patients with Mild Cognitive Impairment, compared to cognitively unimpaired elder adults.

Methods: Awareness was in 32 patients and 72 age-matched control participants measured by the Memory Failures Questionnaire (MFQ), a self-report measure of everyday memory failures containing five subscales: frequency and perceived severity of everyday memory failures, use of external memory aids, retrospective memory ability, and auto-referential comparison of actual and former memory. Motivation for cognitive training was measured by a self-developed questionnaire whose answers were combined to a single score through linear combination. To obtain a pure measure of therapy motivation, indices of education, depression, and cognitive ability were for both groups residualized from the motivation score by linear regression analyses. The resulting residual served as dependent variable in final linear regressions with the five MFQ subscales as predictors.

Results: Regression analysis revealed that in MCI patients, increased motivation for cognitive training went along with lower frequency of memory failures, and more frequent use of external memory aids. This pattern differed from the control group, in which therapy motivation was best predicted by higher levels of retrospective memory, and lower self-perceived autoreferential memory ability.

Conclusions: Our findings challenge the view that greater awareness in MCI increases motivation for cognitive training. They might indicate avoidant coping with the threat of dementia diagnosis when mild cognitive deficits are emerging. This point should be considered when designing and implementing interventions for MCI patients.

OC085 EFFECT OF MULTI-COMPONENT REHABILITATION PROGRAM ON COGNITIVE FUNCTIONS OF MCI PATIENTS' GROUP IN A DEMENTIA DAY CARE CENTER

10. Mild cognitive impairment

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Objectives and Study: The Dementia Day Care Center of the Athens Association of Alzheimer's Disease and Related Disorders provides a wide range of activities to people with dementia and their families. An intervention program specifically intended for patients with Mild Cognitive Impairment (MCI) and including cognitive and physical training was implemented last year. The present study evaluates the results of this intervention and compares them with a random control group of MCI patients from our Memory Clinic.

Methods: 24 MCI patients aged 70(± 7) years participated in a three-hour program delivered twice a week for 8 months and were compared with a control group of 20 MCI patients aged 67(± 8) years. Demographics were recorded for both groups. Patients' cognitive performance was measured before and after the intervention (Mini Mental State Examination, Montreal Cognitive Assessment, Clock Drawing Test, Verbal Fluency, BNT-15, Simplified Rey Figure) before and after the intervention. The statistical package for the social science (SPSS, version 13) was used to analyze data collected.

Results: The group of MCI patients who attended the training sessions showed significant improvement at the end of the eight month period in verbal and non-verbal episodic memory, executive functions and language skills. In contrast, the control group showed no significant improvement at the reassessment of their cognitive abilities.

Conclusions: As expected and according to literature, MCI patients in this study benefited from the intervention program in comparison with the control group. Cognitive training and physical exercise seem to be the non pharmacological therapy of choice for MCI patients. MCI patients must be informed about the benefits they gain participating in a multi-component training program.

Abstracts - Oral presentations

OC086 PREVALENCE OF ANTICHOLINERGIC DRUGS IN PATIENTS WITH MILD COGNITIVE IMPAIRMENT IN EUROPE: DESCRIPA STUDY.

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Objectives and Study: The aim of DESCRIPA study is to reach an evidence-based European consensus and develop clinical criteria on the identification of subjects with prodromal Alzheimer's disease (AD). Anticholinergic drugs are believed that can worsen cognition in elderly people, especially those that have already cognitive problems. The aim of this study is to investigate the prevalence of anticholinergic drugs in patients with mild cognitive impairment (MCI) in Europe.

Methods: 880 patients (375 males, 505 females; mean age±SD 70.34±7.8; mean±SD years of education 10.37±4.22) with mild cognitive complaints, who were recruited from 20 European centers, were studied. Exclusion criteria were age below 55 and obvious causes of cognitive impairments. A complete history was taken in all patients, demographic data was collected and several factors were studied, including type and dosage of medication taken. According to the Anticholinergic Cognitive Burden (ACB) scale the anticholinergic drugs were divided according to their properties: Drugs with possible anticholinergic effects were given a score of 1, whereas drugs with established anticholinergic effects were given a score of 2 or 3.

Results: The MCI patients that participated in this program took totally 2674 drugs of which 224 (8.38%) were anticholinergics. On average each patient was taking 3 drugs. The vast majority of the anticholinergic drugs taken were those with score 1 (80% of the anticholinergic drugs).

Conclusions: According to the results of our study, there is a considerable percentage of patients with cognitive impairment that receive anticholinergic medication. However, most MCI patients receive drugs with possible and not established and known anticholinergic effects. Therefore it seems that physicians in Europe carefully consider prescription of anticholinergic drugs in elderly people with cognitive impairment.

OC088 COGNITION IMPROVING EFFECTS OF A NOVEL PHYTOCHEMICAL FORMULATION MEMORHIS IN ANIMAL MODELS RELEVANT TO ALZHEIMER'S DISEASE 10. Mild cognitive impairment

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Objectives and Study: There has been a steady rise in the number of patients suffering from Alzheimer's disease (AD) all over the world. It is the most common form of onset of adult dementia and attention deficit disorders. Newer drugs are continually introduced into the market with little efficacy. Hence it is worthwhile to explore the utility of traditional medicines in treatment of cognitive disorders. The Indian system of medicine, Ayurveda has been in practice since 5000 years. We investigated the cerebro-protective and memory improving potentials of phytochemicals based formulation MEMORHIS.

Methods: β-amyloid, scopolamine, ibotenic acid, CO₂ and aging induced amnesia, KCN and Carotid artery ligation-induced hypoxia were the experimental models. Basal forebrain lesion induced decrease in cerebral Ach and ChAT activity were assessed, Concentrations of Norepinephrine, Epinephrine, Dopamine, 5-HT in cerebral cortex, cerebellum, hypothalamus, hippocampus, and corpus striatum were measured by HPLC analysis. Neuromorphology, contents of MDA, NO, activities of SOA and CAT were also measured which indicated that MEMORHIS protected the mice from stress, amnesia and neurodegeneration.

Results: MEMORHIS inhibited KCN and Carotid artery ligation induced hypoxia, reversed amnesia and neurodegeneration and produced normalizing action on discrete regions of brain and controlled alterations in neurotransmitter levels due to neurodegeneration. They also decreased ChAT activity in the parietal cortex and inhibited decrease in Ach levels in both parietal and frontal cortex in amnesic rats.

Conclusions: MEMORHIS can be of enormous use in the treatment of dementia of Alzheimer's type and other neurodegenerative disorders

OC087 OLFACTORY DEFICITS IN HEALTHY ELDERLY AND IN TYPE II DIABETIC PATIENTS WITH & WITHOUT MILD COGNITIVE IMPAIRMENT (MCI).

10. Mild cognitive impairment

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Objectives and Study: Studies of olfactory tasks have consistently shown olfactory identification deficits in patients with Alzheimer's disease in relation to control subjects. In addition there is growing evidence relating diabetes mellitus with dementia. However there is limited information on olfactory identification test performance in patients with MCI defined broadly as fitting into the category between being "normal" and having "dementia." Objective: To investigate the presence of olfactory deficits in elderly normal subjects and in Type II diabetic patients with and without MCI

Methods: A cross-sectional study of smell identification in 60 Type II diabetic elderly patients, 30 with and 30 without MCI and 30 control subjects. The study was conducted at an academic Geriatric Unit. Smell was studied using a kit of Sniffin' Sticks™ a test of nasal chemosensory function that is based on pen-like odor dispensing devices. Previous work established its test-retest reliability and validity. The cognitive status of subjects studied was assessed using a battery of validated dementia screening tools.

Results: The score of smell identification was significantly lower in diabetic patients with MCI to both the control subjects (p < 0.021) and the diabetics without MCI (p < 0.033). By use of univariate and multivariate analyses, this difference could not be explained by individual factors such as age, sex, tobacco or alcohol consumption but was related to diabetes.

Conclusions: Our results suggest that smell recognition is impaired in patients with diabetes mellitus but more seriously in diabetic patients with MCI suggesting a possible relation between diabetes and dementia.

OC089 REDUCED DIFFUSION ANISOTROPY AND FUNCTIONAL CONNECTIVITY IN PATIENTS OF AMNESTIC MILD COGNITIVE IMPAIRMENT: A MRI STUDY 10. Mild cognitive impairment

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Objectives and Study: To assess the brain connectivity and microenvironmental changes in patients of amnesic Mild Cognitive Impairment (aMCI) using resting fMRI and diffusion tensor imaging (DTI)

Methods: 16 patients of aMCI (aged 67.6±8.4 years) and 14 normal controls (aged 63.1±5.7 years) were included. The diagnosis was made based on the criteria of the National Institute of Neurological and Communicative Disorders and Stroke and the Alzheimer's Disease and Related Disorders Association of Diagnostic. All subjects were prompted to remain wakefully rest. Resting fMRI was performed using a single-shot T2*-weighted EPI sequence with whole brain coverage and the imaging parameters: TR/TE = 2500/35 ms, pixel size of isotropic 3mm and 144 measurements in approximately 6 minutes. DTI was measured using a spin-echo EPI sequence and the parameters were: TR/TE=7300/87 ms and b-value = 1000 s/mm² in 64 directions and an in-plane resolution of 1.5 mm. The acquisition time was approximately 8 minutes. The diffusion tensor reconstruction, tract based spatial statistics and the independent component analysis (ICA) in resting state fMRI were all preformed by using FSL following the prescribed procedure.

Results: When compared to normal volunteers, decreased Fractional Anisotropy was noticed in regions nearby the entorhinal, middle temporal, parahippocampal, and superior temporal cortex, suggesting a loss of white matter integrity. The default mode network showed a reduction of functional connectivity in both cingulate and hippocampus.

Conclusions: The study suggested a loss of coherence in neuro-network in patients of aMCI, which could be detected by the reduced regional activities in the default mode network and the decreased Fractional Anisotropy in the surrounding white matter. Functional imaging of human brain such as resting state fMRI and DTI therefore has the potential to detect the subtle functional changes in neurodegenerative diseases such as Alzheimer's Disease.

Abstracts - Oral presentations

OC090 SUBJECTIVE COMPLAINTS OF MEMORY LOSS IN OLDER ADULTS IN SOUTH EASTERN NIGERIA- A NIGERIA 1066 REPORT.

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Objectives and Study:

Objectives and study. Studies of cognitive disorders and dementia in Africa are still very scanty. Sometimes subjective complaints of memory loss may be a prelude of cognitive impairment. Subjective complaints of memory loss are sometimes exaggerated when compared to actual performance on memory tests. The study describes subjective complaints of memory loss in older adults.

Methods: Methods. Data were obtained from older adults who make use of a village/ community social centre in rural Nigeria. The GHQ 12 and Katz index of independence in activities of daily living were used to measure psychological distress and impairment of functioning respectively. Self reported /subjective memory assessment was obtained

Results: Results. 162 older persons (63.6% males), mean age 71.6 ±6.9 years, 47.5% widowed, 8.6% living alone and 59.3% without any formal education were studied. About 17% of the subjects had psychological distress, 44% reported some difficulty with at least one ADL, and 95% reported more than one physical symptom. Nearly 47% of the subjects complained of memory loss. Impaired activities of daily living (OR 2.02, 95% C.I. 1.1-3.8, χ^2 4.7, $p=$.003), Self Rated Health (OR 4.4, 95% C.I. 1.7-11.8, χ^2 10.04, $p=$.002), and having more than four health conditions (OR 3.0, 95% C.I. 1.4-6.3, χ^2 8.7, $p=$.003) were all associated with subjective complaints of memory loss. Remaining married and having formal education were associated with less likelihood of subjective memory loss (OR 0.7, 95% C.I. 0.5-0.9, χ^2 7.0, $P=$.004; OR 0.7, 95% C.I. 0.5-0.9, χ^2 8.24, $P=$.004) respectively.

Conclusions: Conclusion. Many community dwelling older adults complain of memory loss. This may be associated with other health and mental conditions.

OC090C HELLENIC ONLINE SOCIETY FOR DEMENTIA – ALZHEIMER'S

Anna Papadopoulou

DEKAA is a volunteer, non-profit initiative from people sensitising in dementia. It is an online society that provides various information concerning dementia and Alzheimer's to carers of people with memory problems. The society provides an online forum allowing carer to carer discussions, communication and support from people dealing with similar situations. It does not provide professional advice.

DEKAA's forum offers the capability of accessing information and contact during hours that services and professionals are not available.

DEKAA is one more effort to comfort the carer.

OC091 IMPROVING END OF LIFE CARE FOR PEOPLE WITH DEMENTIA: BUILDING ON THE EXPERIENCES OF FAMILY MEMBERS AND CARE PROFESSIONALS

06. Easeful death

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Objectives and Study: The aim of this study was to investigate the perceived content of good end of life care for people with dementia across care settings and the barriers and facilitators to its provision.

Methods: In-depth interviews explored the experiences and beliefs of bereaved carers of people with dementia who passed away at home, in a care home, on a continuing care ward, or in a general hospital. Care professionals were interviewed across the care settings.

Results: Interviews were conducted with 28 bereaved carers and 23 care professionals. Equal emphasis was placed on meeting basic nursing needs and palliative care needs. Providing support with eating, drinking and toileting was discussed alongside managing bedsores and pain, having the confidence to withdraw active treatment and avoid unnecessary hospitalisations. Families prioritised a "warm" environment and praised care professionals who interacted with their relatives and provided individualised care. Professionals highlighted the risk of becoming entirely "task focussed" noting the importance, yet difficulty, of empathising with the person with dementia in the final stages of the illness. Planning emerged as pivotal to achieving a "good death", which was defined as peaceful, in the presence of people who care and in a familiar environment. However, advance care planning was typically considered to be a peripheral issue.

Conclusions: Meeting basic and palliative care needs, attending to the individual, making treatment decisions and preparing for death necessitated a high level of expertise, confidence and skill. Palliative care experts and specialist guidelines provided valuable instruction and support. However, the findings indicate that good end of life care can be delivered in the majority of settings and that good nursing care underlies its provision. Greater efforts are needed to avoiding unnecessary hospitalisation, as significant difficulties arose in this setting.

OC090B INTERVENTION OF POTENTIAL BIOMARKERS OF OCCUPATIONAL HEALTH DISEASES IN MINERS

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Objectives and Study: Al exposure can cause neurological (Alzheimer's disease), bone and lung disorders (pulmonary fibrosis), it also responsible for development of anaemia, glucose intolerance, cholestasis and cardiac arrest. Some patients on long-term hemodialysis develop speech disorders, dementia or convulsion. This syndrome is associated with increased concentration of aluminum in serum, brain, muscle, and bone. Al exposure disturbs the function of hypothalamus-pituitary axis as well as endocrine glands. This study can evaluate specific diagnostic biomarkers for aluminium exposed miners.

Methods: A systematic study was conducted and the relevant literature was identified by using primarily occupational health websites on biomarkers for silicosis. Data of 100 papers were scrutinized meticulously on the basis of physiological and biochemical changes in the Aluminium exposed miners.

Results: Biomarkers are conceptually quite interesting, but many more studies are necessary to assess their significance precisely. The reviewers attempted to classify each biomarker in terms of its appropriateness as a biomarker of exposure, effect or susceptibility.

Conclusions: The literature on Aluminium-specific biomarkers is fairly extensive, but no definitive conclusions that can be put into practice have been reached. This study concluded that neopterin and Heme oxygenase –1 are important specific biomarker for early diagnosis of the miners.

OC092 DEMENTIA AND PALLIATIVE CARE - A COMMUNITY ORGANISATIONS ROLE IN SUPPORTING END OF LIFE

06. Easeful death

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Objectives and Study: The Palliative Key Worker Model is intended to support family members and/or carers in what can be termed the 'final stages' of dementia. 'Final stages' can be indicated by a significant change in a person with dementia where the changes to cognition are severe, a person may be bed bound, unable to move independently and they are fully incapacitated an totally reliant on carers. Good palliative care for a person with dementia during this time requires informed choices from family members or carers. This can include the person with dementia being involved in their care through their Advance Directive documentation. Where this is not achievable families and carers need to be supported through decision making processes which for many involve medical issues they have not previously encountered, as well as legal, emotional, cultural and familial issues.

Methods: Through a key worker model, the family/carers will have access to one on one support during the terminal phase of dementia. This support will be to assist them in navigating the sometimes complex pathways between care and enabling the person with dementia to die with dignity. This role will support families/carers to play an integral role in decision making with informed knowledge and aims to provide a flexible program of support to meet individual needs in a changing environment.

Results: The key worker will work with families to integrate psychological and spiritual aspects of care either within a home or residential care environment. This model will empower family members and carers to be confident in decision making but also allow them with specialised one on one support during the decision making process enabling professional carers to attend to the needs of the person with dementia whilst the key worker provides the support so often lacking. Family members and carers are in partnership with the person with dementia assisting them in the final stages to achieve what is termed 'a good death', where pain is monitored and the person with dementia is given full dignity and respect.

Conclusions: An issue arises for family members and carers when they feel unsure about questioning practices during the final stages – especially where the degeneration of the disease process leaves the person with dementia unable to communicate effectively and the family member or carers feels more isolated. Communication and access to support for the families and carers at their own pace, within their own environment and based upon their individual need is an integral part of the key worker model.

Abstracts - Oral presentations

OC093 ETHICAL ISSUES

07. Ethical issues

L. Mendoza¹¹Education, Asociacion Guerrerense Alzheimer, Mexico, Mexico**Objectives and Study:** ETHICAL ISSUES

In recent years an increasing number of younger people in early stages have been diagnosed with dementia, mainly in English speaking countries. They look just like you or me. They have exactly the same human rights as everybody else, with a myriad of ethical and legal issues. It no longer a matter between us and them, but of everybody's concern.

People with dementia have established their own NGO's (Non Governmental Organizations) to express their voices, needs and fight for their human rights –examples of these are Scottish Dementia Working Group (SDWG) and DASNI (Dementia Advisory Support Network International). And why not? To teach us about Alzheimer or other types of dementia from the inside out.

We need to break up the stigma that dementia is only a disease of late stages. As everything else, it has an onset, a beginning. Few "lucky" people go to the "right" physician for a diagnosis that takes a long time and cost a lot of money, with the right to know what is wrong with them.

Ethical issues have to do with the economic development of a certain society (country), the legal organization, with attitudes, values, social standards, cultural and religious patterns, common sense and everybody concerns.

But also with concepts like dignity, respect, autonomy, independence, confidentiality, privacy, quality of life and death.

Almost every time there is a need to choose between (a) or (b) situations one is confronted with an ethical issue. Examples: giving up the job, handling money, changing residence, driving, knowing or not diagnosis and technological advances, etc.

It reflects in society and government, family, physicians and researchers, pharmaceutical industry, staff and institutions. And most of all, we can no longer neglect the people with dementia.

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Methods: Interviews and questionnaires
bibliographical review**Results:** People with dementia own ngo's organizations**Conclusions:** WE can no longer neglect the people with dementia

OC097 RIGHTS OF PEOPLE WITH DEMENTIA IN NURSING HOMES: A FRENCH NATIONAL SURVEY

07. Ethical issues

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Objectives and Study: Since 2002, French legislation has reinforced, within nursing homes, several ethical principles and universal values, such as respect of dignity, privacy and intimacy, right to be informed, freedom of choice, informed consent, non-discrimination, right to be protected, freedom of movement.

Fondation Mèderic Alzheimer produces regular national surveys to observe field practices concerning care of people with dementia in France. In 2009, a survey focusing on the respect of the rights of people with dementia has been conducted in 5 690 nursing homes, collecting quantitative information about residents' rights and obstacles encountered by care professionals.

Methods: A 4-part declarative questionnaire (admission, daily life, legal protection and end-of-life issues) was sent to nursing home directors. 2 662 questionnaires (47%) were returned and analysed.

Results: Results of our survey show that before admission, 48% of nursing homes declare delivering adapted information to people with dementia, using simplified explanation or individual interviews. About 75% of nursing homes state that admission may be denied to people with dementia, mostly because of a risk of deambulation or escape that cannot be managed by staff. 88% of respondents declare that they implemented measures limiting residents' freedom of movement (using electronic door codes or geolocalisation systems). Concerning respect of privacy, individual rhythm and life routines (wake-up, bedtime) are the most frequent ethical issues for care teams (70%). Concerning the respect of intimacy, 60% of respondents care homes declare limiting personal belongings and furniture, 70% do not allow pets and 79% to smoke in private spaces. Concerning citizens' rights, 54% of cares home facilitate voting procedures. Measures concerning legal protection are implemented for 35% of people with dementia in care homes. Legal representatives are mostly non-profit associations (40%).

Conclusions: The data of this national survey will enable a quantitative insight in the ethical debate about implementing the rights of people with dementia in nursing homes and the ways to fill the gap between the legal context and the specific issues linked to dementia.

OC094 SELF APPOINTED REPRESENTATIVES FOR PERSONS WITH AD IN EUROPE

07. Ethical issues

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Objectives and Study: The study concerned the need for a European Recommendation on continuing powers of attorney and was aimed at formulating a text for such a recommendation. The Council of Europe initiated and facilitated the study. The underlying notion was that as far as possible for situations in which an adult becomes incapable and is in need of representation, preference should be given to self made arrangements for future periods of incapacity rather than fall back on measures ordered by the court. From a point of respecting human rights and enhancing self determination a suitable and easy accessible possibility to appoint and maybe instruct a representative for a future period of incapacity might be most needed and relevant for adults in the early stage of AD.

Methods: A Working Party of experts on family law from several European countries was set up to investigate the existence and the main features of regulations in domestic legislation regarding continuing powers of attorney. Based on a report made up by professor Danielsen from Denmark the Working Party discussed and formulated a number of leading principles that are both urging and assisting domestic legislators in creating a legal possibility for citizens to make arrangements for future incapacity.

Results: At the moment only in a few countries in Europe the legislation contains a possibility of continuing powers of attorney. The civil codes of Germany and Austria already for a number of years contain provisions regarding a so called Vorsorgevollmacht, France recently introduced the Mandat de protection future, which entered into into force in January 2009 and Norway is on his way of implementing a tailor made legal tool in its domestic legislation.

The Working Party after studying the relevant existing legal instruments in Europe and in other parts of the world, especially Canada and Australia, and after discussing the pros and cons of several textproposals came up with a set of principles and an explanatory report in order to get the proposed text for the Recommendation approved by the relevant steering committees and eventually adopted by the committee of ministers to member states of the Council of Europe.

Conclusions: The availability of a solid and high-quality set of principles urging and facilitating states to adjust and modernise their legislation is of great relevance for persons suffering from AD in Europe. While still capable they can make arrangements for a future period of incapacity in their lives. Countries that do not yet have a provision in their legislation specifically aimed at offering this opportunity to their citizens, should be encouraged to implement such a tailor made legal instrument. At the same time associations of AD and other stakeholders should be made aware of the availability of this legal instrument to serve as a tool to make arrangements for future periods of incapacity.

OC097B NATURE & NURTURE DIMENSIONS OF ALZHEIMER'S PREVENTION

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Objectives and Study: Most of the causes of neurodegeneration – an umbrella term for the progressive loss of structure or function of nervous cells, equally involve physiological alterations outside the central nervous system, especially under the environmental impact. The presentation overviews the latest insights regarding certain fundamental questions such as: how genes and the environment influence each other, brain structure, and behavior? What about their impact in normal brain aging, as well as on the possible shift to neurodegenerative dementia of Alzheimer's type (AD)?

Methods: A wide bibliographical study allowing a synopsis of the cut-edge insights in the debate about nature and nurture facts in AD is paralleled by the presentation of two, original research paradigms. Certain preliminary outcomes issued from their putting into practice (genomic/epigenomic and metabolomic studies) in our clinical units are also presented.

Results: The causal aspects of pathological brain aging are overviewed, focusing on the genetic potential to develop AD, possibly activated by certain environmental factors. Some results obtained in pilot attempts of the two original, holistic research paradigms tailored on informational biology ('omic' attempts) are presented, dealing with the environmental (nutritional, gender and education level) and inner (genomic/epigenetic/methylomic) aspects and their relationship with Mild Cognitive Impairment to Alzheimer's disease conversion.

Conclusions: The main actual requirement should be the holistic attempt of AD, critical in the context of the global population aging, in order to approach a possible conclusion about nature or nurture interplay in AD, and the elaboration of means to manage them both.

Abstracts - Oral presentations

OC098 THE EFFECTS OF COGNITIVE TRAINING IN OLDER ADULTS: A RANDOMIZED CONTROLLED TRIAL

15. Non-pharmacological interventions

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Objectives and Study: This study examined the effectiveness of a cognitive training protocol to older adults in Hong Kong.

Methods: The study was conducted between September 2008 and June 2009. 223 older adults with memory complaints were recruited from 6 different community centers. Participants were randomly assigned into either the intervention group or the control group, and underwent a 12-week program, 1.5 hours each session, conducted by a trained occupational therapist. The intervention group received training in attention and concentration (e.g. visual search), mnemonic strategies (e.g. categorization, visualization, association and organization), and reasoning skills (e.g. global identification, subtask analyses and activity scheduling). The control group received psycho-education lectures on topics such as mood disorders, heart diseases and stroke. Participants were evaluated before and after the 12-week program by the Chinese Auditory Verbal Learning Test (CAVLT), the Chinese Dementia Rating Scale (CDRS) and the Stroop Color Word Test - Chinese Translated Victoria version (VST).

Results: 207 older adults completed the intervention program and the post-test assessment. ANCOVA analysis showed that, after adjusting for the baseline differences and education level, the intervention group had higher conceptualization sub-score of the CDRS (M=30.6) than the control group (M=29) after the 12-week program, $F(1, 203)=10.1, p=.002$. No other significant differences were found.

Conclusions: Conceptualization skill is one of basic skills required in problem solving and performing daily activities. This study suggested that older adults can improve their conceptualization skills through cognitive training.

OC099 WORKSHOP: USE OF MULTIMEDIA IN REMINISCENCE PROGRAM OF A DAY CARE CENTER

15. Non-pharmacological interventions

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Objectives and Study: There is evidence to suggest that psychosocial interventions can significantly improve the quality of life of people with dementia and their families (Woods et al, 2009). The reminiscence program is a psychosocial intervention that is based on remembering past events. There are many different tools that people can use in reminiscence process to ease the remembering. The present workshop proposes an alternative way of reminiscence with the use of Information and Communication technologies (ICT).

Methods: During the workshop, the structure and implementation of reminiscence program using multimedia for dementia patients will be presented. 15 dementia patients over 65 years old participated in this program, which consisted of 24 weekly 1hr sessions and was conducted by trained health professionals. The participants developed their personal WebPages, with photo and video library and personal information about their past lives. They had the opportunity to choose all the graphics and materials.

Results: During this process the participants were highly involved and enthusiastic. Caregivers contributed in this project by helping their patients to gather additional information and material. At the end of the program, an event took place in order the patients to present their WebPages to patients' families.

Conclusions: This study suggests an alternative tool in reminiscence program. The use of multimedia in reminiscence appears to motivate the dementia patients and their families. Positive interaction was established between patients and their social environment. Psychosocial interventions need to take into account the ICT as useful tools.

OC100 COGNITIVE MOTION THERAPY: A NON PHARMACOLOGICAL COGNITIVE TRAINING INTERVENTION IN PATIENTS WITH MILD COGNITIVE IMPAIRMENT (MCI)

15. Non-pharmacological interventions

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Objectives and Study: Kinetic and cognitive development are closely related. An intervention comprising cognitive training through kinetic exercises could improve cognitive and functional performance of patients with MCI. The study investigated the effectiveness of Cognitive Motion Therapy, as a non pharmacological therapeutic method, on the cognitive and functional performance of patients with MCI.

Methods: The study included 46 women and 12 men, MMSE=27.66 (1.74), age=69.41 (7.10), education=8.59 (4.33), classified in experimental and control groups matched in age ($p=0.10$), gender ($p=0.61$), education ($p=0.08$), MMSE ($p=0.08$), and cholinesterase inhibitors ($p=0.24$). The experimental group attended 20 sessions including kinetic exercises targeting attention, memory, dual task, language and visual-spatial abilities. Controls did not attend any non pharmacological therapy during the same period. Participants were assessed at baseline and at the end of the therapy.

Results: At baseline, there were not differences between groups in cognitive abilities. At the end of the therapy, differences were observed in favor of the experimental group, in general cognitive performance ($p=0.04$), attention ($p=0.00$), ADL ($p=0.00$), visual perception ($p=0.01$) and verbal fluency ($p=0.01$). Within group analysis the experimental group showed improvement in ADL ($p=0.00$), general cognitive performance ($p=0.02$), executive function ($p=0.00$), attention ($p=0.00$), verbal memory ($p=0.00$), verbal fluency ($p=0.00$) and visual perception ($p=0.00$). Cognitive and functional performance of the control group remained stable.

Conclusions: The experimental patients had a significant benefit from the Cognitive Motion Therapy and the cognitive improvement had a significant effect on ADL.

OC101 DEVELOPMENT OF THE MAINTENANCE COGNITIVE STIMULATION THERAPY MANUAL

15. Non-pharmacological interventions

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Objectives and Study: Objectives

The Maintenance Cognitive Stimulation Therapy (MCST) manual was developed as part of the Support at Home – Interventions to Enhance Life in Dementia (SHIELD) research programme. The aim was to create an evidence-based maintenance group therapy programme for people with dementia.

Methods: Methods

A consensus approach using a modified Delphi process was used to develop the MCST manual. This included using the preliminary findings of a feasibility study into MCST and data extracted from the updated Cochrane review on cognitive stimulation for people with dementia. Consultation was achieved with identified experts in the field, interested academics, clinicians and service users, through holding a consensus workshop and 9 focus groups.

Results: Results

The 24 sessions of MCST are focused on 'themes', with a primary emphasis on cognitive stimulation (reminiscence elements and multisensory stimulation). The programme contains key elements from the original CST programme i.e. group names, song, RO board and introductory exercises to provide continuity between sessions. The new themes included from the literature review were: useful tips and visual clips discussion. Three additional themes were added to the MCST programme: art discussion, golden expression cards and using objects.

Conclusions: Conclusion

This study follows Medical Research Council guidelines for Phase I or modelling to develop an evidence-based maintenance group therapy programme for people with dementia. The MCST manual comprises a programme of 24 sessions of maintenance CST, based on the theoretical concepts of RO / Cognitive Stimulation and grounded on the original CST programme. The MCST manual is currently being evaluated within a randomised controlled trial as part of the SHIELD research programme.

Abstracts - Oral presentations

OC102 MULTIFACETED PSYCHO-SOCIAL INTERVENTION FOR PATIENTS WITH MILD ALZHEIMER'S DISEASE AND THEIR PRIMARY CAREGIVERS (DAISY STUDY): A RATER-BLINDED, RANDOMIZED CONTROLLED TRIAL WITH 36 MONTHS FOLLOW-UP

15. Non-pharmacological interventions

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Objectives and Study: To evaluate the effectiveness of an individualised multifaceted intervention program (with individual and group counselling, teaching courses, written information materials, and telephone follow-up counselling) aimed to educate patients with recently diagnosed mild Alzheimer's disease (AD) mixed AD or dementia with Lewy Bodies (DLB) and their primary caregivers.

Methods: 330 patients with mild AD (n=239), mixed AD (n=82), or DLB (n=9) and their primary caregivers were recruited from secondary care dementia clinics and allocated to usual care (n=167) or to the multifaceted intervention program (n=163). The duration of the standardized intervention program was 6-12 months. Inclusion criteria were age ≥ 50 years, a recent diagnosis of AD (within the past 12 months), and a Mini Mental State Examination (MMSE) score ≥ 20 and having a primary caregiver who were willing to participate in the study. Patients living in nursing homes, and patient with significant co-morbidities were excluded.

The primary patient outcomes were: MMSE, proxy rated quality of life EuroQol visual analogue scale (EQ-VAS), and the primary caregiver outcomes were: EQ-VAS and Geriatric depression scale score (GDS-30). Trained raters interviewed patients and caregivers in their home. The raters were blinded for the group allocation of the patients. Statistical analyses were done on an intention to treat basis based on observed cases at 36 months evaluation.

Results: Mean patient age was 76, mean caregiver age was 66. At baseline the mean baseline MMSE was 24.1 and proxy rated EQ-VAS was 63.5. Mean caregiver EQ-VAS was 80 and mean GDS was 4.8. No baseline differences were detected. At total of 200 participants completed the 36 month follow-up visit. Mean MMSE at 36 months was 17.9. No significant differences between the two groups were found for any of the primary outcomes at 36 months.

Conclusions: This is the largest RCT to date to address the potential effectiveness on disease variables of a psycho-social intervention in patients with mild AD. No differences were detected on the primary outcomes between the intervention and control groups. Further research is warranted, in order to identify relevant outcomes and identify patients who will likely benefit from counselling.

OC104 COMPARISON OF SEVEN DIFFERENT COGNITIVE TRAINING PROGRAMS IN MCI PATIENTS

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Objectives and Study: The study compared the effectiveness of seven different cognitive training programs in MCI patients.

Methods: One hundred sixty four MCI patients were included, 52 men and 132 women, with age=68.88 (7.15), education=9.95 (4.39), and MMSE=27.63 (1.71). Participants randomly assigned to one of the seven programs: practice of attention (N= 39), mental imagery (N= 24), cognitive motion therapy (N= 27), cognitive training through musical stimuli (N= 18), H/Y training (N= 23), orientation in current events (N= 17), and practice of linguistic skills (N= 16), attended 20 weekly sessions for a period of 6 months. The groups were matched in age, gender, education, and MMSE.

Results: Paired comparison of the seven groups with Mann Whitney test has yielded significant differences of performance between them at the end of the interventions. Practice of attention was superior in visual perception (p=0.01) and ADL (p<0.01), computer training, was superior in naming (p=0.01), ADL (p<0.01), and executive function (p= 0.00), training with musical stimuli was superior in visual perception (p=0.01), cognitive motion therapy was superior in ADL (p<0.03), mental imagery was superior in visual perception (p=0.01).

Conclusions: Practice of attention, computer training and cognitive motion therapy were superior to the other programs, in respect to the improvement in ADL. Computer training appeared superior to all the other programs of the study because it enhanced a broader spectrum of cognitive abilities.

OC103 NON PHARMACOLOGICAL THERAPY OF GUIDED MENTAL IMAGERY FOR PATIENTS WITH MILD COGNITIVE IMPAIRMENT (MCI)

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Objectives and Study: Visuospatial deficits characterize one of the four early neuropsychological profiles of dementia. Consistent practice of mental imagery could improve visuospatial abilities. The study aimed to investigate the effectiveness of a non pharmacological therapy of Mental Imagery on visual spatial abilities, visual perception, and visual memory, in patients with Mild Cognitive Impairment (MCI).

Methods: The participants were 48 MCI patients with M.O (SD): 14.29 (7.41) in Beck's Depression Inventory. They were classified in one experimental and one control group, matched in age (p=0.16), education (p=0.10), gender (p=0.49), and emotional performance (p=0.49). The experimental group attended 24 sessions in a period of 6 months, while the control group did not (waiting list). Neuropsychological assessment was performed at baseline and at the end of the therapy.

Results: At baseline, there were no differences between groups in cognitive abilities. At the end of the therapy, comparison between groups yielded differences in favor of the experimental group in executive function of ADL (p=0.00), attention (p=0.01), visual perception (p=0.01), and general cognitive performance (p<0.00). Within group analyses of the experimental group's performance has shown improvement in attention (p=0.00), language (p=0.00), visual perception (p=0.00), visual memory (p=0.00), general cognitive performance (p<0.01), daily function (p=0.00), and finally in anxiety (p=0.02) and depression (p=0.00). On the contrary, the control group, showed improvement in attention (p=0.01) and deterioration in daily function (p=0.00).

Conclusions: Mental imagery therapeutic program, helped participants with MCI to improve their visual perception, and visual memory. The cognitive improvement was noticed also in the general cognitive, emotional, and functional performance.

OC105 MEMORY PRESERVATION NUTRITION INTERVENTION IN ASSISTED LIVING AND LONG TERM CARE: CLINICAL PRACTICE REPORT

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Objectives and Study: Animal model and epidemiological studies suggest that some diets, e.g. with features of the Mediterranean diet, can slow cognitive decline in early AD. Using brain health related evidence, an interdisciplinary team led by Dr. Emerson Lombardo designed a whole foods Memory Preservation Nutrition ref.1,2(MPN) program emphasizing synergistic contributions of increasing Omega-3s, foods with anti-oxidant, anti-inflammatory properties, and which attenuate insulin resistance and/or which reduce oxidation of LDL cholesterol. The objective is to implement this intervention model in real life settings, e.g. group meals served to residents of assisted living and other settings in order to reduce risk of, or slow, cognitive decline, and to assess the program's feasibility, acceptability, and effectiveness.

Methods: A real world clinical intervention which includes training and educational sessions with all facility staff (not just culinary), and with residents, their families, and referral sources. Program includes assessment of current practices (pantry, menus, recipes, dining presentation, culinary capabilities) and preferences; then consultation about how to change these practices, in doable steps and stages, to achieve a brain healthy, delicious, nutrition program, following the Memory Preservation Nutrition protocol, responsive to resident preferences and medical conditions, budgetary, marketing and other considerations.

Results: Preliminary results (after 9-18 months in various residences) suggest feasibility and good acceptance of this model nutritional program in assisted living communities, with changes accomplished in basic ingredients, menus and recipes as well as some dining practices. Emphasis on memory/AD special care units. Effectiveness studies were not done. Staff and referring providers appear eager to learn better nutrition for themselves, not just their clients, reflecting growing awareness in U.S. in how nutrition affects brain and body health.

Conclusions: Some of the Memory Preservation Nutrition program's nutrients recommended for cognitive aspects of brain health are also potent treatments for emotional and other aspects of brain and body health. As the evidence mounts, whole food nutritional interventions to promote brain health both for primary and secondary prevention will become mainstream treatment options, for individuals as well as in group settings. Future effectiveness and efficacy studies of whole foods interventions for brain health are needed.

Abstracts - Oral presentations

OC106 AN EVALUATION REPORT OF A TRAINING COURSE FOR CAREGIVERS OF PEOPLE CHALLENGED WITH DEMENTIA

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Objectives and Study: The purpose was to provide an evaluation report of a training course provided by Alzheimer's South Africa in dementia care giving. The training course was presented over a period of 6 days, and aimed at educating caregivers on various aspects of dementia in order to broaden their knowledge and increase their effectiveness as carers.

Methods: The evaluation process was qualitative in design. Information was obtained from a literature review of books, journal publications, and the training manual of the course along with various internet based sources. The evaluator attended the course to observe participants and to become familiarized with the course content. Data collection took place by means of pre- and post-evaluation procedures, including personal interviews, focus group discussions, self-administered questionnaires and evaluation sheets.

Results: Dementia is a phenomenon that is not easily understood by untrained caregivers; an aspect which complicates the caregiver's task. By educating these carers they experienced improved coping in the workplace and the quality of their caring increased. A more holistic understanding of dementia has the effect that the carers know what to expect and what to be cautious of. Valuable themes were identified and will serve to enrich future training.

Conclusions: The training course empowered caregivers and fostered feelings of self worth. An improvement in the quality of service delivery was also a notable effect of the training, enabling carers to act with more self-confidence. Training has proven to be very effective and beneficial for both the caregiver and the patient. The care facilities as well as the direct family members of those suffering from Alzheimer's disease or dementia also draw benefit from having personnel who are better trained.

OC107 BPSD OF PATIENT RELATED TO BURDEN OF FAMILY CAREGIVERS IN JAPAN

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Objectives and Study: The aim of this study is to elucidate the relation of BPSD (behavioral and psychological symptoms of dementia) to the burden of family caregivers of patients living at home in Japan.

Methods: 43 family caregivers (72% female, 28% male; mean age 61.2 [SD = 11.2]; patient mean age 84.1 [SD = 6.6]) completed questionnaires on their caregiving situations, including the Zarit Care Burden Scale-8 to measure the burden of family care, the Pines Burnout Scale, and the NPI (Neuropsychiatric Inventory) to measure the seriousness of BPSD. Their responses were analyzed using correlation coefficient of Pearson.

Results: 55.8% of family caregivers showed signs of burnout, related positively to their Zarit Care Burden scores. Our findings showed significant positive correlations between scores on the Zarit Care Burden Scale and agitation ($p < 0.05$), disinhibition ($p < 0.01$), and irritability ($p < 0.05$) of BPSD. However, burnout was not correlated with particular symptoms of BPSD.

Conclusions: This research clarifies how the degree of BPSD (severity of symptoms) influences caregiver burden and burnout. Caregiver burden correlates with particular symptoms of BPSD, but burnout does not correlate directly with total BPSD. Caregiver burden correlates with caregiver burnout. Agitation, disinhibition, and irritability of patients increased their family caregiver burdens; so BPSD of patients may affect burnout of caregivers by increasing their burdens. When patients show these behavioral and psychological symptoms of dementia, public support for caregivers may be required.

OC108 ASSESSING PSYCHOLOGICAL DISTRESS IN CAREGIVERS OF PEOPLE WITH DEMENTIA: BEYOND THE SINGLE SEVERITY SCORE

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Objectives and Study: A large body of research suggests that caring for a relative with dementia is a stressful experience, with established evidence of increased psychological morbidity in carers. The aim of the present study was to investigate the subcomponents of psychological distress in dementia caregivers and identify which patient and carer characteristics are associated with various aspects of psychological distress.

Methods: A sample of 189 carers, each caring for a relative with dementia completed the General Health Questionnaire (GHQ-28), and rated their current health status (European Quality of Life-5 Dimensions, EQ-5D). Patient characteristics were assessed with the Cornell Scale for Depression in Dementia (CSDD), the Rating of Anxiety in Dementia (RAID), and the Bristol Activities of Daily Living Scale (BADLS).

Results: Factor analysis of the GHQ resulted in four subscales: "anxiety and insomnia", "depression", "social dysfunction/loss of self-esteem", and "somatic symptoms". Current health status contributed to the explanation of GHQ total score and the three GHQ subscale scores with an explanatory power of 38% for total GHQ, 15% for "anxiety and insomnia", 11% for "depression", 17% for "social dysfunction/loss of self-esteem", and 30% for "somatic symptoms". In multiple regression analysis, current health state, the CSDD and BADLS score, explained 30% of the variance in "anxiety".

Conclusions: Current findings show that the GHQ provides the opportunity to differentiate between different patterns of psychological distress and that these are differentially associated with specific patient and carer characteristics. Results demonstrate that health parameters of the carer have a considerable predictive value in the experience of psychological distress. The present results can inform the design of interventions aimed at reducing levels of psychological distress for dementia caregivers.

OC109 PRESERVING INTERGENERATIONAL AND FAMILY TIES, IN SPITE OF DEMENTIA

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Objectives and Study: The role of family carers around people with dementia is recognized as essential, and as a key element for their quality of life. Support for carers has been developed, to help them to preserve their physical and psychological health and to continue their role of caregivers.

In addition to immediate carers, the whole family is concerned by Alzheimer's. Often, Alzheimer's and its symptoms isolate the person with dementia from her all relatives. So, it's necessary to find ways for encouraging the continuity of a family life, including several generations.

Methods: Our qualitative study includes :
- long term examination of sponsored initiatives after a call for projects "preserve intergenerational and family ties, in spite of dementia".
- Interviews of professionals and family members during study visits of the projects.
- Multidisciplinary focus groups.

Results: First, we note the variety of implemented initiatives : parties, family birthday lunch bringing together several generations with the elderly person having dementia. In care homes, gardens and playing grounds for children, or flat designed and dedicated to welcome more intimate family meetings. Colouring book to explain Alzheimer to younger, etc. Then we will present the main characteristics, difficulties, results and perspectives of such initiatives. As key findings, we can notice a better understanding and capacity to explain dementia, less fears to bring children into a care home. But, a long process is needed to increase the awareness of family members to enlarge the circle around the person with dementia.

Conclusions: More and more professionals take into account the family ties, considering all the generations and each family as a specific system. These systemic approaches produce a greater benefit for people with dementia and their carers, and show that life with dementia remains an ongoing family story, in the present and the future.

Abstracts - Oral presentations

OC110 WHO VOLUNTEERS TO BE A PEER SUPPORTER FOR FAMILY CARERS OF PEOPLE WITH DEMENTIA?: FINDINGS FROM THE SHIELD-CSP PILOT

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Objectives and Study: Voluntary organisations play a large part in providing support for family carers and people with dementia in the UK, and peer support is part of the National Dementia Strategy in England. The aim of the SHIELD Carer Supporter Programme is to evaluate the impact of one-to-one support for newer carers of people with dementia by more experienced peers. This paper describes the characteristics of peer support volunteers known as Carer Supporters (CSs).

Methods: Potential CSs were recruited through voluntary organisations and advertising. Inclusion criteria were that CS volunteers should: be former family carers of people with dementia or family carers supporting people with later stages of dementia; be willing to undertake screening checks; take part in orientation / training sessions; be able to commit to the role for up to 12 months. Demographic details and information on caregiving history were collected at registration. Psychological and social data were collected separately for those who completed the training.

Results: Only 1 in 2 of those expressing interest in being a carer supporter met the inclusion criteria. The volunteers completing the screening checks and orientation sessions were almost exclusively female, with the modal age range being 65 to 74 years. The volunteers' experience of caring had most commonly been for a spouse or parent with Alzheimer's disease, with smaller proportions having experienced caring for a relative with vascular dementia or 'dementia-not specified'.

Conclusions: Carer Support volunteers matched newer carers in terms of demographic characteristics with the exception of gender where males were underrepresented. Recruitment strategies to target male supporters are considered, as are strategies for identifying appropriate carer supporters for carers of relatives with a rarer dementia

OC113 STRENGTHS-BASED APPROACH TO UNDERSTANDING FAMILY CAREGIVING FOR PEOPLE WITH DEMENTIA: AN INTERPRETATIVE PHENOMENOLOGICAL ANALYSIS

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Objectives and Study: In recent years, qualitative studies investigating dementia caregiving process are on the rise. Given the complexity of caregiving process, the present study would like to provide a new piece of information in supplementing the existing findings on dementia caregiving. Simultaneously, the present study is pioneer in covering caregivers (CGs) in different roles within a Chinese context, which aimed at providing a cultural-specific finding on dementia caregiving.

Methods: Interview using strengths-based approach is proposed here to examine how CGs and their families take up the challenge of dementia caregiving and resolve conflicts along the way.

Results: Though CGs face unavoidable stresses and strain, with increasing knowledge and experience, many CGs are able to transform themselves from "being at loss; being angry" to "being in control; being calm." With certain morality or religious belief, some caregivers and their families are able to transform themselves from "need help" to "offer help", i.e., actively share their knowledge and experience through voluntary work and community participation.

Conclusions: By focusing on strengths in action reported by CGs through in-depth interviews, the study will help consolidate the empirical base on which more practical and effective interventions to enhance the well-being of both the care recipient and the caregivers in vivo can be devised.

or visual disorders may delay the diagnosis of dementia, particularly Alzheimer's disease.

OC112 NATIONWIDE DEVELOPMENT PROGRAMME ON AGEING IN PEOPLE WITH INTELLECTUAL DISABILITIES - TO PROMOTE RESEARCH AND EDUCATION ON DEMENTIA

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Objectives and Study: The life expectancy for people with Intellectual Disabilities (ID) has increased significantly over the past decades. The municipalities and specialised health services experience the consequences of these changes and an increased number of people with ID and dementia. In 2004 the Norwegian Centre for Dementia Research with financial support from the Ministry of Health and Care Services, started a three-year nationwide development programme about ageing in people with ID. Main target for this program (UJU) was to promote knowledge and competence about the ageing process for people with ID and how to make good care models/services in the municipalities. Dementia was one of the main diseases UJU was focused on.

Methods: To achieve these targets there was established a national knowledge centre with library, education programmes, research and professional networks. During the spring 2007 the programme was evaluated from MMI Synovate on commission from Norwegian Department of Health.

Results: UJU achieved to meet the main target for the development programme and was established as a permanent centre from 2008, financed through the Norwegian national budget. The new name for the centre is Intellectual Disabilities and Ageing which is one of three units in Ageing and Health, Norwegian Centre for Research, Education and Service Development.

Conclusions: The presentation will provide an overview of the evaluation of the development programme and demonstrate research and educational programmes that were accomplished.

OC115 POOR VISION AND TREATMENT OF VISUAL DISORDERS AFFECT THE RISK OF LATE-LIFE DEMENTIA

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Objectives and Study: Ocular abnormalities have been described in patients with dementia but the extent to which they contribute to cognitive impairment is not well defined. The purpose of the study was to assess whether poor vision affected the risk of developing dementia and whether treatment of visual disorders could modify this risk.

Methods: Using a retrospective cohort design, linked data from the nationally-representative Health and Retirement Study and Medicare files (1992 to 2005) were used to follow the experiences of 625 elderly participants who had normal cognition at baseline. The outcome was a diagnosis of dementia, cognitively impaired but no dementia (CIND), or normal cognition. Results were adjusted for age, gender, race, education, APOE 4 alleles, previous head injury, diabetes, hypertension, stroke and heart disease.

Results: Poor vision was associated with the development of dementia ($p=0.0048$); individuals with very good or excellent vision at baseline had a 63% reduced risk of dementia (95% CI: 20%, 82%) over a mean follow-up period of 8.5 years. Participants with poorer vision who did not visit an ophthalmologist had a 9.5-fold increased risk of Alzheimer's disease (95% CI: 2.3, 39.5) and a 5-fold increased risk of CIND (95% CI: 1.6, 15.9). Poorer vision without a previous eye procedure increased the risk of Alzheimer's disease 5-fold (95% CI: 1.5, 18.8). For Americans 90 years and older, 77.9% who maintained normal cognition had at least one previous eye procedure; this compared with 51.7% for those with Alzheimer's disease.

Conclusions: Poor vision is a risk factor for late-life dementia. The results suggest that treatment of visual disorders may delay the diagnosis of dementia, particularly Alzheimer's disease.

Abstracts - Oral presentations

OC116 WORKSHOP: MEMORY GROUPS FOR HEALTHY ELDERLY. STRUCTURE, IMPLEMENTATION AND PRELIMINARY RESULTS.

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Objectives and Study: The vast majority of older adults report memory decline, are concerned about dementia and are interested in learning techniques for enhancing memory functioning in their everyday lives. A memory education and intervention program was developed and administered to community-dwelling older adults aged 60+ attending Municipal Recreation Centers in Athens, Greece.

Methods: During this workshop, the structure and implementation of memory groups for healthy elderly will be presented through illustrative examples. Brief cognitive testing was conducted to screen out participants with possible memory impairment. Participants were also excluded if they had medical problems that could affect cognition. 85 participants were recruited. The program consisted of 12 weekly 1hr sessions and was conducted by trained psychologists (volunteers from the Athens Association of Alzheimer's Disease and Related Disorders) in 8 groups with 9-12 participants in each group.

Results: The goals of the intervention were fully met:
• general knowledge regarding memory, aging and dementia increased,
• self-reported day-to-day memory functioning significantly improved
No significant changes were observed in objective memory performance as measured by formal memory testing.

Conclusions: Overall, the findings of the study are very promising. The preliminary results suggest that elderly people can improve their knowledge on dementia, the way they perceive their memory performance and the strategies they can use through brief memory education and training. What remains to be explored is the long-term effectiveness of the gains obtained by the end of the program.

OC118 COGNITIVE PERFORMANCE SCREENING PROJECT IN A POPULATION OF URBAN DWELLING ELDERLY PEOPLE.

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Objectives and Study: Athens Association of Alzheimer's Disease and Related Disorders in collaboration with Athens Municipal Recreation Centers for the Elderly organized a project aiming to increase awareness about Alzheimer's disease and to promote prevention and early diagnosis of dementia. The project included on site presentations about memory and dementia followed by memory testing offered to those interested. The objective was to record and explore memory problems in a population of urban dwelling elderly people.

Methods: A group of neurologists and cognitive psychologists visited 20 Municipal Recreation Centers for the Elderly located in different areas of Athens Municipality and interviewed those interested in memory evaluation. Demographics were collected for each participant. Reason for taking the examination and specific memory dysfunction complaints were recorded. Cognitive tests performed were Mini Mental State Examination (MMSE), Clock Drawing Test (CDT) and Geriatric Depression Scale - short version (GDS).

Results: 314 people (283 women and 36 men), 60+ participated. The average age was 72,4 (±7,3) years and the average years of education 8,1 (±5,2). According to the Hollingshead Scale, 32% of the participants were housewives, 49% were technicians, skilled and unskilled manual employees and 19% had middle/upper level of education. Although 70.1% reported memory dysfunction as the reason for taking the examination, mean MMSE score was 26,7/30 (±3,4) and 83,3% of the participants scored 25 and over. Mean CDT score was 7,6/10 (±2,7). According to the GDS scores, 66% of the participants had no depression, 22% had mild depressive symptoms while 11% showed severe depression.

Conclusions: Memory complaints of the elderly participants in our project were not related to memory deficits confirmed by cognitive tests. The relatively high percentage of the MMSE scores below the cut off value of 25 points (16,7%) maybe explained by the fact that many of the participants had been already facing memory problems and were offered the opportunity to recognize it.

OC117 PREVENTION, AN ESSENTIAL FACTOR IN THE WORK OF THE ALZHEIMER SOCIETY OF FINLAND

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Objectives and Study: Health promotion and prevention has become as a cornerstone in social and health care politics in Finland. Increasing evidence from the scientific studies promises good primary, secondary and tertiary prevention visions for the dementing illnesses. Prevention and health promotion have been essential factors in the work of the Alzheimer Society of Finland since 2004 with the aim to prevent people from the dementing illnesses and to minimize the effects of the diseases both for the individuals and for the society.

The Alzheimer Society was established in 1988 to provide help and assistance for people with Alzheimer's disease and their caregivers. The society is a non-profit organization and it is mainly funded by the Finnish Slot Machine Association. The Society consists of a national office with 3 local branches and 44 local associations across the country with around 10 000 members altogether.

Methods: The Alzheimer Society of Finland has launched two primary prevention campaigns: Maintain Your Brain (2003-2005) and Life is Cool with a Fit Brain (2007-2009). In the secondary prevention area the Society is running a pilot project (2009) in cooperation with an occupational health care unit concentrating on the risk factors of dementia. In the tertiary prevention area the Society has launched two rehabilitation projects (2004-2009).

Results: A memory training course model for retired people and teaching material for young people developed. The Model of Rehabilitation Services created and taken to the practise in evaluative projects in local pilot communities and local associations.

Conclusions: The Alzheimer Society of Finland sees its role in the future very much as an mediator between the scientific world and the everyday practice in the prevention process. It will get the parties concerned to cooperate and bring all the information available to the best possible client-centered practices.

OC119 IMPROVING MULTICULTURAL DEMENTIACARE IN A WESTERN SOCIETY

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Objectives and Study: Dementia will increase among ethnic minority groups in the Netherlands over the coming years, and remains unknown and undiscussed by these groups. This means these people generally know little about the disease and possibilities for healthcare. Provision of information and prompt identification of dementia enables patients and family caregivers to initiate the correct treatment in order to deal with the disease properly. This research project has four objectives: 1) to make dementia a topic open to discussion among ethnic minority groups, 2) to increase knowledge about dementia and on the possibilities for healthcare, 3) to promote communication regarding dementia between ethnic minorities and professional care providers and 4) to promote quality of life for dementia patients from ethnic minority backgrounds, family caregivers and their communities through the promotion of medicated and non-medicated care.

Methods: The target-group-specific created toolkit 'Knowing about forgetting' (WOV) is used in a specially created infrastructure for health education. This education of WOVI is given by 18 consultants from ethnic minority backgrounds, who are trained by Alzheimer's Netherlands. These consultants organise specific information sessions on dementia and theme-based meetings for larger groups. The WOVI project reaches between 500-1000 family caregivers, senior citizens and other members of their communities. An action plan and evaluation of results is drawn up for each of the objectives. This project investigates the effectiveness and feasibility between 150 participants and 150 non-participants.

Results: The information strategy is expected to reach a large number of people from ethnic minority backgrounds. The strategy is 'successful' if the information sessions attract the aimed numbers of participants. During the period covered by the education programme (18 months), a total of 18 home-base meetings (minimum reach: 180 participants), 4 theme-based meetings (minimum reach: 200 participants) and 12 dementia meetings (minimum reach: 180 participants) will be held. Regarding the effectiveness of the education programme it is expected that people within the target group: 1) will discuss the issue of dementia more frequently, 2) will have improved their knowledge on the subject of dementia, 3) will discuss dementia issues with care providers and 4) will experience a reduced burden and higher quality of life.

Conclusions: The wide coverage of the target group in this project opens up possibilities for additional (new) research regarding experiences, wishes and needs in relation to dementia and dementia care. Results from this additional research will be converted into healthcare policy, more effectively unifying supply and demand in health care.

Abstracts - Oral presentations

OC120 IS CASE MANAGEMENT EFFECTIVE FOR HOME SUPPORT FOR PEOPLE WITH DEMENTIA: A SYSTEMATIC REVIEW

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Objectives and Study: To evaluate the effectiveness of case/care management approaches to home support for people with dementia from the point of view of the different people involved (patients, carers, and staff) compared with other forms of treatment including 'treatment as usual', standard community treatment and other non-case/care management interventions on delaying institutionalization, improving quality of life and/or reducing the number of hospitalizations.

Methods: Randomised controlled trials (RCTs) looking at case/care management approaches to home support for people with dementia were considered for this Cochrane review. A broad range of controlled comparison studies were screened, including controlled before and after studies and interrupted time series studies. As an adequate number of RCTs were found which could be included in the review, other experimental designs were excluded from the meta-analysis. The participants were people with dementia of any type, living in the community, and their carers. The primary outcomes include maintenance of community residence (avoidance of institutionalisation), numbers of hospital admissions, length of hospital stay and patient quality of life/well-being. The Specialized Register of the Cochrane Dementia and Cognitive Improvement Group (CDCIG) was used to conduct the electronic searches.

Results: The results of the review will be presented using the results of the meta analysis and also the sub group analyses, with details on the included/excluded studies, discussion on the potential risks of bias in included studies, and details on the potential effects of the interventions.

Conclusions: Case management is widely used internationally and acknowledged as good practice in dementia care. However, there is little evidence for its effectiveness. This discussion of this review will include the overall completeness and applicability of the evidence, the quality of the evidence according to the Cochrane guidelines, and the implications for practice and research.

OC122 NATIONAL PROGRAMME INTEGRATED DEMENTIA CARE

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Objectives and Study: Alzheimer Nederland initiated and participated in two national programmes to improve dementia care. The first is the National Dementia Programme, a 4-year programme (2005-2008). 'Alzheimer Nederland' coordinated with the Ministry of Public Health, Welfare and Sport and the Netherlands Institute for Care and Welfare (Vilans) a programme for regional providers of care, welfare and cure of dementia to improve dementia care from a clients perspective.

Methods: 'Alzheimer Nederland' collected the wishes and demands of families of patients in 160 focus groups and with the 'LDP-questionnaire' (N=1500 in 2007 and n=1547 in 2009).

Results: The results were impressive: 90% of the country participated with 206 improvement projects fitting the needs of patients and families. Providers of care, welfare and cure worked together with volunteers of the Alzheimer Nederland. Nevertheless more incentives were necessary to integrate help for people with dementia and their families from the beginning until the end of the dementia. Therefore in 2008 the second programme started: Purchasing integrated dementia care. New in this programme was the participation of ZN, the sector organisation representing the providers of healthcare insurance in the Netherlands. The goal is to provide and purchase integrated support including casemanagement. A purchase guide is developed (also in English) with a description of the 'ideal region' for people with dementia and families from the beginning until the end of the dementia, based on the clients' perspective. ZN made guidelines to finance the integrated care. Care providers who develop integrated dementia care, including casemanagement, receive extra budget. Again volunteers participate as patients' advocates being spokesmen for people with dementia and their families in the region. At the moment 80% of the country participates in purchasing integrated dementia care. Alzheimer Nederland organises the evaluation (focusgroups and questionnaire) of the programme from a clientperspective. In March 2010 first results will be presented. Do we see an improvement in quality of dementia care e.g. coordinaton, patientcentredness, timeliness, comprehensiveness.

Conclusions: Financial incentives are necessary to integrate help for people with dementia and their families from the beginning until the end of the dementia.

OC122B

ALZHEIMERS' SPECTRUM DISEASE ISSUES IN LOW AND MIDDLE-LOW INCOME MUNICIPALITIES IN ATTICA -GR.

Nikolaos E. Degleris, Antonios Politis & Andreas A. Solias.

COGNITIVE DEFICITS IN ALZHEIMERS' SPECTRUM DISORDERS

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EDUCATIONAL OBJECTIVES. At the conclusion of this presentation, the participant should be able to recognize the cognitive deficits across the progression of Alzheimers' disease stages, to demonstrate familiarity with the problematic of Mild Cognitive Impairment (MCI) clinical entity and understand the probable correlations between the clinical impact and the socio-demographic data.

SUMMARY. Alzheimer disease (AD) is a gradually progressive broad-spectrum degenerative disease often characterized by an early memory impairment followed by gradual loss of several cognitive functions and continuing personality degradation. All memory systems are affected to a greater or lesser extent depending mainly of the individuals' temperament. Over learned skills, habits and implicit expression of memory for perceptually encoded items may be relatively spared until the very late stages of the disease (Reisberg's Categories). Executive functions, praxis and visuospatial orientation are worsening as the memory impairment conducts the progression of the disease. There are reasons to believe that emotions are often relatively preserved and that emotional context may modify memory and other cognitive functions. The controversial impact of the Mild Cognitive Impairment (MCI) clinical entity is also discussed (Petersen vs Winblad criteria, Chinese Frontal Assessment Battery (CFAB) etc.). The recent analysis of the Iliou -Byron -Heliopolis Municipalities (IBHM) Hellenic Study revealed very surprising psychoneuroepidemiological findings such as the high percentage of individuals with mild to moderate cognitive deficits directing to minor consequences in activities of daily living (ADL). These deficits are underestimated by the family circle giving a result of delayed seeking clinical evaluation and treatment due to the social perceptions of normal ageing and the social stigma of the disease.

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OC123 THE NOVEL HUMAN CAVEOLIN 1 GENE UPSTREAM PURINE COMPLEX AND LATE-ONSET ALZHEIMER'S DISEASE.

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Objectives and Study: To investigate the novel human caveolin 1 (CAV1) gene upstream purine complex in late-onset Alzheimer's disease (AD). Aberrant expression of the CAV1 gene is associated with AD brain. We have recently reported a polymorphic purine stretch of GGAA and GAAA motifs located at between 1.8 and 1.5 kb flanking the CAV1 gene, with multiple binding sites for numerous transcription factors including the Ets and IRF families. This region has been conserved across several species including mouse, rhesus, chimpanzee and human.

Methods: In a case/control study design of 240 late-onset AD cases and 250 controls, we report extreme homozygote haplotypes at either end of the spectrum of allele lengths in the late-onset Alzheimer's disease (AD) cases versus the controls.

Results: The homozygosity rate for these haplotypes was estimated at 0.06 in the AD cases (P<0.0006, OR²/415.42, CI 2.1-118.2). The frequency of the extreme alleles in the heterozygous status was estimated at 0.15 in the AD group versus 0.05 in the controls (P<0.01, OR²/43.53 CI 1.17-9.61).

Conclusions: We propose that there is a window for the length of motifs and haplotypes in the controls.

Homozygosity for shorter and longer motifs and haplotypes was linked with AD in our study. For the first time our data highlight the human CAV1 gene upstream purine complex as a novel genomic predisposing factor in the etiopathophysiology of late-onset AD.

Abstracts - Oral presentations

OC124 GENETIC AND PROTEIN BIOMARKERS FOR THE DETECTION OF ALZHEIMER'S DISEASE

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Objectives and Study: The most promising strategy to detect AD in preclinical or presymptomatic stage need specific biomarkers. In this study we elucidated the relationship between Apo E genotype and CSF biomarkers A β 42 and Total tau in Alzheimer's Disease (AD) Patients, Non AD (NAD) patients, Neurological controls (NCs) and Healthy Controls (HCs).

Methods: In this study we included 30 HC, 30 AD patients, 40 NAD, and 46 NC from Nehru Hospital, PGIMER, Chandigarh, India after obtaining informed consent from all the subjects. Apo E Genotyping was done according to the Wenham PR et al, 1991. The levels of A β 42 and total tau were determined by ELISA kits Inogenetics, Belgium

Results: Our data of CSF A β 42 and tau levels in conjunction with ϵ 4 allele had shown specificity and sensitivity of 100% and 42.8% respectively for the detection of AD. A β 42 and Apo E ϵ 4 combination had shown specificity 80.8% and sensitivity 72.1%. The ϵ 4 allele distribution frequency was 40% and 2.5% in AD and NAD respectively, where as ϵ 4/4 genotype and ϵ 3/4 genotype distribution was 10% and 50% respectively. Our data has shown that ϵ 4 allele in combination with A β 42 to have better sensitivity and specificity in the diagnosis of AD. AD patients with at least one ϵ 4 allele had significantly lower CSF A β 42 levels than those without ϵ 4 allele ($P < 0.001$). There was a positive correlation of A β 42 with low MMSE scores.

Conclusions: Observation from our study suggest that decreased A β 42 and increased tau level in CSF along with Apo E ϵ 4 allele as risk factors for AD. Our study also shows ϵ 4 allele incidence to be a risk factor for AD

OC124B Genetics, epigenetics and genomics of depression in Alzheimer's Disease (AD).

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INTRODUCTION: Many patients with Alzheimer's disease (AD) have depressive symptoms with serious consequences for patients and caregivers. Interactions between stressful life events (SLE), the Val66Met polymorphism in the brain-derived neurotrophic factor (BDNF) gene and depression have been described in children and adults, but not in AD. BDNF regulates neuronal plasticity and may be compromised in aging and age-related neurodegenerative disorders making it a good candidate for depression in AD.

AIM: Our aim was to examine the relationships between polymorphic variation, transcriptomic variation and epigenetic modification in the BDNF gene and correlate them with SLE in AD patients with depression.

METHODS: The Val66Met polymorphism of the BDNF gene was genotyped for ~1000 probable AD patients including 40 autopsy confirmed AD brains (and 5 controls) from the UK with full behavioural data including the Cornell Scale for Depression. Demographic data was used to quantify SLE. Three CpG islands regions from the BDNF promoter were investigated, capturing more than 100 CpGs, using the Sequenom MassARRAY EpiTYPER platform and real-time PCR was used in order to quantify the expression of the BDNF promoter. DNA and RNA were extracted from 7 different brain regions (BA8, BA9, BA10, BA46, Entorhinal Cortex, Superior Temporal Gyrus and Occipital Cortex) of the 45 brains and methylation and expression analysis were performed on each area.

RESULTS: A significant association was identified between the number of SLE and depression ($p=0.01$) in the whole dataset but the Val66Met polymorphism was neither associated with depression nor interacted with SLE. Different levels of DNA methylation were observed across different types of tissues, especially between cortical regions and blood. A significant correlation was found between frontal-cortex BDNF promoter methylation and depression in AD after controlling for anti-depressant use ($p=0.003$, $R^2=43\%$ for BA8 and $p=0.024$, $R^2=22\%$ for BA9 respectively). No interactions were however found between polymorphic variation and epigenetic methylation. Expression analysis of the BDNF promoter will provide an indication on the effect of different methylation patterns on gene expression.

CONCLUSIONS: Investigation of the interaction of genetics, genomics, epigenetics and environment allow us to examine the possibility of detecting a peripheral biomarker for depression and life events in AD.

OC10125: ELDERLY CARE SUPPORT AND ICT INNOVATIONS: THE PARADIGM OF THE LLM PROJECT

Panagiotis Bamidis

In this paper, we review innovative information and communication technology (ICT) approaches in designing healthcare systems that promote independent living of the elderly population. Emphasis is placed on three aspects: first, the accelerating nature of emerging applications; secondly, elderly trial methodologies and strategies for measuring impact indicators; finally, emerging market concerns that govern any design alternatives. In the second part of the paper, emphasis is given on the elements composing the Long Lasting Memories (LLM) service currently under development in the LLM EU project.

OC0126: THE ROLE OF EMOTION IN ELDERLY TRIALS FROM A NEUROSCIENCE PERSPECTIVE

Christos Frantzidis, Panagiotis Bamidis, Ana Vivas, Magda Tzolaki, Costas Pappas

Several issues have to be tackled upon the provision of greater support - towards their independent living - to senior citizens. More specifically, the particular needs of elderly people form a lifestyle pattern which greatly differs from the daily activities of the young and middle-aged adults. Isolation from their surrounding environment is a common feeling among senior citizens. Their negative emotional mood is further enhanced by the experience of loneliness since they often miss their own relatives. In this paper we review approaches to study the emotional state of the elderly from a neuroscience perspectives, and propose selected protocols that be may of great value when measuring the impact of specific interventions.

OC126B: USABILITY OF A COGNITIVE REHABILITATION SOFTWARE IN CENTERS WORKING WITH DEMENTIA PATIENTS.

MA Franco-Martin; Y. Bueno-Aguado; J. Ferrer; J. Velasquez; T. Orihuela; T. Cid

Gradior program was implemented in 30 centers for treatment of dementia patients (most of them suffering Alzheimer disease). Professionals were trained about the functioning of the program and a research project was proposed in order to promote the use of the computers in the residential centers for elderly people. After one year was made an study about the difficulties and facilitators for develop programs for cognitive rehabilitation with Gradior. The program is well accepted but in many cases have not used because the organitacional activities didn't include times, sites and programs for cognitive training. So, the Gradior, as tool for cognitive training and rehabilitation, is only useful when professionals and leaders of the center are involved for developing interventios for increasing the quality of life and brain functions.

Abstracts - Oral presentations

OC0126C: ACCEPTABILITY AND SATISFACTION OF COGNITIVE TRAINING SOFTWARE (GRADIOR) VS. TRADITIONAL PSYCHO STIMULATION INTERVENTION.

MA. Franco-Martin; J. Porto; Y. Bueno-Aguado; A. Solís; J.L. Muñoz; Y. Miguel; C. Tobón.

It's made a clinical trial comparing between two different programs for cognitive training in dwelling elderly people in Zamora (Spain). People who refers memory complaints bus without cognitive impairment (after neuropsychological assessment) is randomly selected for one of the two intervention groups: traditional intervention involving 16 sessions of one hour (two for week) in which elderly people make in group several cognitive activities tailored by a neuropsychologist; and by the other hand, innovation intervention using a cognitive training software called Gradior. Gradior group received the same number or sessions and hours of cognitive training involving cognitive exercises made by computer. After the interventions is applied a questionnaire for score the satisfaction with every intervention and we compare the results. Conclusion: the computer is well accepted, even more than traditional interventions. Besides, computer intervention is cheaper than traditional. So, It's recommended to promote the computers for cognitive training in elderly people in order to prevent the Alzheimer.

OC127 EARLY AGE AT MENOPAUSE IS ASSOCIATED WITH INCREASED RISK OF DEMENTIA AND MORTALITY IN WOMEN WITH DOWN SYNDROME

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Objectives and Study: Whereas the general population shows a clear excess of women among the elderly, the population of elderly Down syndrome (DS) patients is characterized by an excess of men. The origin of the excess males in elderly patients with DS is not clear. We tested the hypothesis that an earlier age at menopause is associated with the age at onset as well as the risk of AD and mortality in elderly women with DS.

Methods: In a prospective longitudinal cohort study of dementia and mortality in persons with Down syndrome (DS), aged 45 years and older, 85 postmenopausal women were followed for a mean follow-up time of 4.3 years (range 0.0 to 7.4 years). The effect of age at menopause on age at diagnosis of dementia and survival was estimated using correlation analysis and Cox Proportional Hazard Model.

Results: We found a significant correlation between age at menopause and age at diagnosis of dementia ($p=0.52$; $p<0.001$), and between age at menopause and age at death ($p=0.49$; $p=0.01$). Early age at menopause is associated with a 1.8 fold increased risk of dementia: Hazard Ratio (HR): 1.82 (95%Confidence Interval (CI): 1.31-2.52) and with risk of death: HR: 2.05 (95%CI: 1.33-3.16).

Conclusions: Our study suggests that age at menopause in women with DS is a determinant of age at onset of dementia and mortality.

OC0126D: ZPLAY: AN INTELLIGENT HUMAN COMPUTER INTERFACE SYSTEM FOR AD ASSESSMENT AND INTERVENTION

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This paper describes an intelligent Human-Computer Interface (HCI) system, ZPLAY, to be used for assessment and treatment for Alzheimer's. The work uses game-based diagnosis and intervention for the early – prodromal and early – stages of the disease (rather than the moderate, late to end stages), as it associates game performance data with fNIR (functional near infrared) imaging classification to determine AD disease progression through noninvasive monitoring of functional brain activity. fNIR protocols for Alzheimer's test the prefrontal cortex, by placing the fNIR probes on the forehead, to measure the hemodynamic response to higher order cognitive functions such as doing anagrams. fNIR is an emerging neuroimaging technology, that studies the cortex in the clinic and under more realistic conditions. It uses near-infrared light to measure changes in the concentration of oxygenated and deoxygenated hemoglobin in the cortex and is limited to the outer cortex. It is less invasive, portable, and more affordable than other neuroimaging methods. It is also more robust to artifacts caused by movement and can be integrated with other technologies such as EEG. The project's team has been validating fNIR brain activation outcomes with parallel fMRI studies.

OC128 FACTORS AFFECTING ONSET OF DEMENTIA AND LONGEVITY AMONG ADULTS WITH DOWN SYNDROME

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Objectives and Study: To assess, in adults with Down syndrome (DS), (1) the effects of antidepressants on the age at dementia and longevity; (2) years of survival after late onset seizures; and (3) effect of mosaicism on onset of dementia and longevity.

Methods: The files of 357 adults with DS evaluated in a tertiary clinic over an 18 year period between 1990 and 2008 were reviewed. Ages ranged from 37 to 71 years (mean 52.1, SD 7.5); 198 (55.5%) were male. Seventeen cases (4.8%) were trisomy-21 mosaic. Of 309 cases with diagnostic information, 150 had a depression or anxiety disorder, of whom 95 received antidepressants over 3 months. Among 160 adults who developed dementia, mean age at first diagnosis was 53.5 years (SD 4.94). Late-onset seizures were present in 56 cases (35%). Longevity and age until dementia among treated vs. not treated cases, mosaic vs. non-mosaic cases, and those with and without late-onset seizures were compared using ANOVAs and Cox regressions.

Results: Average age at onset of dementia among those who received antidepressants was 52.3 years (S.D. 6.65) versus 51.4 years (S.D. 7.71) among those without antidepressants (ns). Maximum age (age at death or current age) among those on antidepressants was 54.8 years (S.D. 6.98) versus 52.7 years among others (S.D. 7.52; Fdf=295,1 = 5.74, $p<.02$). Mean survival after first late-onset seizure was 4.28 years (S.D. 3.86). Maximum age among 15 subjects with mosaicism for whom information was available was 57.8 years (S.D. 5.1) versus 53.4 years (S.D. 7.4) among 282 without mosaicism (Fdf=295,1 = 5.33, $p<.03$). Age at dementia onset (or current or last age) was 56.1 years (S.D. 6.35) among 17 subjects with mosaicism versus 52.1 years (S.D. 6.66) among others (Fdf=355,1 = 5.93, $p<.02$).

Conclusions: Authors found that (1) antidepressants did not delay dementia but did increase longevity in adults with DS; (2) mean survival after late onset seizures was longer than reported; and (3) greater ages were attained and onset of dementia was delayed among subjects with mosaicism.

Abstracts - Oral presentations

OC129 ROLE OF ALZHEIMER'S ORGANIZATIONS WITH RESPECT TO AIDING FAMILIES OF PEOPLE WITH DOWN SYNDROME

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Objectives and Study: Estimates are that of the 24 million adults projected to be affected by dementia worldwide, at least 225,000 are older adults with an intellectual disabilities (ID). Adults with Down syndrome (DS), a genetic condition and form of lifelong ID, represent about 10% of the typical population of any nation's adults with ID. Although in general adults with ID do not have an elevated risk of Alzheimer's disease (AD), adults with DS do present with a high risk for AD (with some 60+% of adults age 60 and older showing signs of behaviors associated with clinical dementia). With the progressive increase in longevity of people with Down syndrome, the presentation of dementia of the Alzheimer's type among people with DS has caused many national and local Alzheimer's organizations to be drawn into providing technical and clinical resources to families, NGOs, and adults with DS.

Methods: An international survey was undertaken of Alzheimer Disease International's (ADI) 77 national affiliates to see how ADI's affiliated organizations respond to people with ID and DS and their families.

Results: Of the respondents, about 2/3s noted that they considered aiding people with ID/DS as part of their mission, 2/3s said they have cooperative working agreements with national or local ID NGOs, and about half said they undertook cooperative endeavors with the NGOs and had developed and disseminated consumer materials related to ID and dementia. With respect to governmental supports the affiliates reported mixed results, with some finding public officials aiding in cooperative endeavors and others reporting disinterest and encountering systemic and attitudinal barriers.

Conclusions: Generally, the survey revealed a need for more education and involvement by governments in aiding people with ID/DS affected by dementia and a greater level of technical assistance to affiliates to manage requests for aid related to ID/DS and dementia, particularly those from families.

OC130 MEDIATION BETWEEN STAFF AND ADULTS WITH INTELLECTUAL DISABILITY WITH ALZHEIMER DISEASE AS A MEANS OF ENHANCING THEIR DAILY FUNCTIONING

02. Ageing and dementia

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Objectives and Study: This study explored a novel means of mediation between staff and elderly persons with an intellectual disability (ID) and affected by Alzheimer-type dementia (AD) in Israel, i.e. the MISC (Mediational Intervention for Sensitizing Caregivers) model. Applications of the MISC were tested for use in interactions between staff and adults with ID/AD. The objective was to help carers and direct staff relate to their dependents in a way that would enhance their cognitive, emotional, and behavioral functioning. It is based on the integration of person-centered, cognitive rehabilitation, and mediational approaches. Six mediational parameters can be applied during daily activity: meals and medication time, work sessions and leisure activities.

Methods: A case study method was employed using a 54-year old adult male with Down syndrome who exhibited early signs of Alzheimer type dementia according to the Dementia Questionnaire for Mentally Retarded (DMR). A tailored program was built based on the MISC mediational parameters and tested in an in vivo situation.

Results: Study outcomes showed that although the subject's memory difficulties remained, his functionality improved and his daily life became a little easier and less stressful. He was able to learn new strategies that compensated for his deterioration in short-term memory and disorientation in time and space. His score on the DMR decreased by four points.

Conclusions: The data demonstrated the efficacy of applications of the MISC to persons with ID/AD. Our results support the claim that not all gains that might result from training would have any clinically significant impact. The MISC employs a holistic approach relating to areas that are not covered in the DMR. Notwithstanding a drop in DMR scores, there was success in subjective functional improvement and quality of life enrichment, aspects not sensitive to the DMR.

OC131 DEMENTIA, SERVICE USE, AND EXPENDITURE IN INTELLECTUAL DISABILITIES: RESULTS FROM AN EPIDEMIOLOGICAL STUDY

02. Ageing and dementia

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Objectives and Study: the cost of caring for people with intellectual disability (ID) accounts for a large proportion of care budgets and may increase as the ID population ages. There have been no published studies of costs of care of a representative sample of older people with ID in the UK. Thus, we studied the service use and costs for older people with ID, including accommodation, health care and personal care, and explored the influence of socio-demographic and illness-related determinants.

Methods: Comprehensive data were collected on a representative sample of older adults with ID aged 60 and older (n = 212), including accommodation charges, receipt of all health and social care, and time spent caring by family and other carers, in addition to information about physical and mental illness, medication usage, and disability status. All participants were assessed for dementia and sensory impairment.

Results: The average weekly cost per older person with ID was £789 [€899] or £41,028 per year [€46,748]. Accommodation accounted for 74% and daytime activities and health care for most of the remainder. Overall costs were highest for those living in congregate settings. Those in more independent settings had the highest cost for non-accommodation elements. Sex, ID severity, hearing impairment, physical disorder, and mental illness had significant independent relationships with costs. Mental illness was associated with the largest additional weekly cost (£202 or €230).

Conclusions: Older adults with ID consume up to 5% of the total personal care budget in England although comprising about 0.15 – 0.25% of this population. Mental illness and physical disorders in older adults with ID are significant determinants of over-all costs, and appropriate interventions, if implemented, may prove cost-effective in the longer-term.

OC132 PSYCHOSOCIAL SUPPORT AND FAMILY PSYCHOTHERAPY IN TREATMENT OF ALZHEIMER'S DISEASE

15. Non-pharmacological interventions

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Objectives and Study: Alzheimer's disease gives the family a sad view to future. It's natural, that the family tries not to think about it, and try to keep living as if the illness didn't exist. Many questions and confusion arises in the minds of the family members, they would like to talk about it, but without professional help it's too painful. The silence leads to tensions between the family members. The family care givers have a heavy task to decide for the treatment on the behalf of their loved. The issues that stayed unspoken, live in the minds of the family members. The demented person may act them out as verbalization is not possible anymore.

In Helsinki Alzheimer-association we have developed psychosocial support and family psychotherapeutic models since 2000 to help families with Alzheimer's disease. There have been 127 family members attending the groups and therapy sessions. The projects have been regional and national.

Methods: We have combined methods of psychodrama-, couple- family- and group psychotherapy.

Results: Reaching the young patients is challenging. Most families experienced that they would have needed psychosocial support earlier they got. They also feel sad for not speaking out all important issues when it still was possible also for the demented family member. Even short interventions helped the family to take important issues up.

Conclusions: Serious illness brings up the whole course of life with its delight, grief and unfinished issues. The process of adaptation challenges the whole family to face its vulnerability, needs, helplessness, loss and death. Therefore the families need psychotherapeutic setting to face their changing reality and to remain hope in the future of the family even with the presence of approaching Death.

Abstracts - Oral presentations

OC133 WHEDA STUDY: EFFECTIVENESS OF OCCUPATIONAL THERAPY AT HOME FOR OLDER PEOPLE WITH DEMENTIA AND THEIR CAREGIVERS – PRELIMINARY RESULTS OF A PRAGMATIC RANDOMISED CONTROLLED TRIAL EVALUATING A DUTCH PROGRAMME IN SEVEN GERMAN CENTRES

15. Non-pharmacological interventions

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Objectives and Study: A Dutch mono-centre randomised controlled trial has shown that occupational therapy improves daily functioning in dementia. The present study compared effects of the Dutch community occupational therapy programme with a community occupational therapy consultation on daily functioning in older people with dementia and their primary caregivers in a German multi-centre context.

Methods: Design and setting: A multi-centre single blind randomised controlled trial design was used in seven health care centres. Patients were 1:1 randomised to treatment or control group. Assessors were blind to group assignment and performed measurements on both groups at baseline and at post-treatment assessment in week 6 after baseline. Participants: Community dwelling older people aged 65 years or older with mild or moderate dementia and their primary caregivers. Interventions: The experimental intervention consisted of a community occupational therapy programme including 10 therapy sessions at home. The control intervention consisted of one community occupational therapy consultation based on information material of the Alzheimer Society. Providers of both interventions were occupational therapists experienced in treatment of cognitively impaired older people and trained in both programmes. Outcome: The primary outcome was patients' daily functioning assessed with the performance scale of the Interview for Deterioration in Daily Living Activities in Dementia; and video tapes of daily activities rated by external raters blind to group assignment using the Perceive, Recall, Plan and Perform System of Task Analysis. Secondary outcomes were patients' and caregivers' quality of life, mood, satisfaction with treatment and resource utilisation; the caregiver's sense of competence; and the incidence of long-term institutionalisation. Process evaluation was performed by questionnaires and focus group discussion.

Results: We recruited a sample of 141 patient-caregiver-dyads, carried out 66 control and 67 experimental interventions. Post-treatment assessment was applied to 132 dyads. The process evaluation revealed significant variations in five dimensions (interventionists' preconditions, patients' characteristics and adherence, caregivers' characteristics and adherence).

Conclusions: Preliminary results on post-treatment assessment of the primary outcome and conclusion will be presented.

OC135 OUTCOMES OF USING A WRIST WORN GPS LOCATION DEVICE

15. Non-pharmacological interventions

T. Wallace¹

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Objectives and Study: Global Positioning System (GPS) technologies have improved substantially over the last few years with continuing miniaturisation making novel form factors for GPS location devices available. Alzheimer's Australia South Australia (AASA) has received increasing requests for GPS location technology to be available from both people diagnosed with dementia and their carers. AASA undertook qualitative research into the outcomes of using a wrist worn GPS location device for people with dementia at risk of becoming lost due to wandering type behaviours. The research was investigating acceptability and usability of the GPS device; impact of the use of the GPS device on the quality of life of the person with dementia; and the impact of the GPS device on caregiver burden.

Methods: Ten participants with dementia who were independently mobile with a recent history of wandering behaviours and their carers (legal guardians) were recruited to the research project for a period of three months. Measures of quality of life and caregiver burden were recorded at baseline and one month intervals during the project period. Participants were interviewed to gain feedback on their experiences during the trial.

Results: Analysis of data collected during the project indicates a variable response to wrist worn GPS location devices. Whilst the intention of this type of technology is to improve quality of life and reduce caregiver burden, for some participants issues related to reliability, usability and stigma from the use of the device has a paradoxical outcome.

Conclusions: Wrist worn GPS location devices are a potentially useful tool for reducing the stress experienced by carers of people with dementia who are at risk of becoming lost. As the remaining technological issues are addressed, legal, ethical and social issues will need to be addressed.

OC134 EFFECTIVENESS OF AN E-MENTAL HEALTH INTERVENTION FOR FAMILY CAREGIVERS OF PEOPLE WITH DEMENTIA

15. Non-pharmacological interventions

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Objectives and Study: In November 2008, an innovative eMental Health intervention for family caregivers of people with dementia, called 'Mastery over Dementia', was launched in the Netherlands. The intervention is built on principles of psycho-education, cognitive behavioral therapy, problem solving behavior, relaxation therapy and assertiveness training. Interactive feedback is given by a coach. Themes covered in the course are: coping with behavioral problems, arranging help from others, time for yourself, thinking and feeling, non-helping thoughts, helping thoughts, assertiveness and communicating problems. In May 2009, we started a randomized control trial (RCT) to measure the effectiveness of the eMental Health intervention. The experimental group (N=75) received 'Mastery over Dementia', the control group received a minimal intervention consisting of a series of information bulletins sent by e-mail. Participants in both groups were followed during approximately 5 to 6 months. Caregivers in the experimental group had additional follow-ups at 3 and 6 months after finishing the intervention. Effectiveness of Mastery over Dementia has been determined on psychological well-being, feelings of burden and perceived health.

Methods: Randomized control study; caregivers in the experimental condition took part in the eMental Health intervention 'Mastery over Dementia' which consists of eight lessons and a booster session (follow-up). Each lesson consists of information, practice rehearsal and some homework. Participants are in contact with a coach (a professional counselor) who gives feedback. On average caregivers took one lesson every two weeks. After the course people were invited to take part in a special forum. Caregivers in the control condition receive an information bulletin by e-mail. There is no contact with the coach. Statistical analysis will be performed on the basis of intention to treat.

Results: In September 2009, 80 caregivers were enrolled in the study. We expect to collect data for another 70 caregivers until March 2010. At the conference data on the short term effectiveness of the intervention will be presented.

Conclusions: In a pilot-project, 15 caregivers took part in the eMental Health intervention. They were highly satisfied and evaluated the intervention positively. First findings show that caregivers are highly motivated to take part in the study.

OC136 EFFECTIVENESS OF TWO DIFFERENT COMBINATIONS OF COGNITIVE INTERVENTION IN PATIENTS WITH MILD COGNITIVE IMPAIRMENT (MCI)

15. Non-pharmacological interventions

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Objectives and Study: The study aimed to compare the effectiveness of two combinations of cognitive intervention in patients with MCI.

Methods: The study included 20 patients (11 women, 9 men) with MMSE= 27.6 (1.98), age= 72.50 (7.47) and education= 8.40 (3.57), classified in two experimental groups. Group A attended practice of memory and Reality Orientation (N=8) and group B attended the same programs plus physical exercise (N=5). There was also a control group (N=7) without cognitive intervention during the same period. The experimental groups attended 20 weekly sessions for a period of 6 months targeting the enhancement of verbal, visual memory and visual perception. Neuropsychological assessment was performed at baseline and at the end of the intervention.

Results: At baseline, there were not differences between groups, in cognitive and functional performance. At the end of the intervention, in favor of the experimental groups, differences were noticed between the control and the group A, in attention (p=0.00) and between controls and the group B in visual perception (p=0.03). There were no differences between the experimental groups. Within group analysis has shown that the experimental groups remained stable in daily function, executive function, attention, visual memory. The experimental group B improved in visual perception (p=0.03). The control group deteriorated in attention (p=0.08), verbal memory (p=0.01) and visual perception (p=0.03).

Conclusions: The combination of memory practice, R.O., and physical exercise has provided a benefit in visual perception that was not present in the combined intervention without the physical exercise.

Abstracts - Oral presentations

OC137 THE EVALUATION OF THE DUTCH COMMUNITY OCCUPATIONAL THERAPY INTERVENTION FOR OLDER PEOPLE WITH DEMENTIA AND CAREGIVERS 15. Non-pharmacological interventions

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Objectives and Study: Community occupational Therapy (OT) for older people with dementia and their caregivers is a multi-component psychosocial intervention that has proven to be very effective and cost-effective. Different phases of the Continuum of Increasing Evidence have been used to reach evidence based occupational therapy intervention in dementia. Methods and outcomes will be presented.

Methods: the "Continuum of Increasing Evidence" of the MRC framework, eligible for evaluation of complex multi-component interventions, was used. This model contains of different research phases: 1) a theoretical; 2) a modelling; 3) a randomised controlled trial; 4) an exploratory trial; 5) an implementation phase.

Results: In the theoretical phase our occupational therapy guideline was developed on extended literature review, practical experience and consensus rounds. In the modeling phase, qualitative case study analyses were performed and defined possible successful components of this OT intervention. In the exploratory trial phase, a pilot study was carried out and determined good feasibility of the intervention and research design based on these successful components. Positive changes were found after OT intervention (n=13 patients and caregivers). Based on these outcomes, the randomized controlled trial design was developed (n= 135 patients and caregivers) and high effectiveness and cost-effectiveness of this OT intervention was found. In the implementation phase, a pilot implementation study determined barriers and facilitators for implementation. The design of the recent implementation study was developed on these outcomes on OT and organizational level, which is now tested in a RCT (n=45 institutes; 90 OT's; 180 patients and caregivers).

Conclusions: The highly effective and cost-effective outcomes of our studies confirm the importance to follow all phases of the continuum of increasing evidence.

OC138 COGNITIVE EMPOWERMENT PROGRAMS ON HEALTHY ELDERLY IN THE PREFECTURE OF DODECANESE

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Objectives and Study: Cognitive empowerment programs are specifically structured mental exercise programs that are performed either in groups or individually and applied in combination with medication. The purpose of the program is to enhance the cognitive functions of patients through a series of specific exercises and methods. The programs are often applied proactively, i.e. in healthy population in order to maintain good memory function and learning techniques in everyday life.

Methods: On the island of Rhodes, mental reinforcement programs were implemented in the 1st 'Open Care Centre' of the Municipality of Rhodes. Specifically, two groups of 10 and 8 people aged 60-75 years were created, whose members were examined, before the beginning of the applied program, through the following psychometric tests:
1) The Mini Mental State Examination Test, about the diagnosis of cognitive function,
2) The Clock Test about diagnosis of cognitive function,
3) The Geriatric Depression Scale (GDS) to detect depression indicators,
4) A short demographic questionnaire and functional elements
Twenty-two, one-hour weekly meetings took place, during which the completion of crisis, immediate and delayed recall exercises were applied. After 22 meetings, all the participants to the programme were further assessed through the same tests.

Results: The comparison of the results showed:
1) Stabilization or improvement in cognitive function in 15 people
2) A reduction of cognitive function in 3 people
3) Emotional state improvement in 10 subjects.

Conclusions: The results also clearly show the immediate need of preventive, cognitive empowerment programs, aiming to the constant, cognitive exercise, socialization as well as emotional support of elderly people.

OC139 NEUROPSYCHIATRIC INTERVENTIONS IN THIRD AGE IN DODECANESE

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Objectives and Study: During the last three years, when "Panacea", as a Children's and Adults' Mental Health Community Development Services Federation, started its activities, it became more than obvious the fact of the inadequate presence of services and need covering for third aged people in Dodecanese.

More specifically, for the time being, the services that take action for people in third age are the following:

- the 'Help at Home' programme,
- two "Day Care Centers" and two "Open Protection Centers" for aged people in Rhodes and in Kalymnos island,
- one "Friendship Club" in Kos island,
- two "Geriatric Houses" in Rhodes and Kalymnos island as well as
- one "Healing, Physical and Social Rehabilitation Center" in Rhodes.

In smaller islands of the Dodecanese Complex, the only programme under function is the "Help at Home" one, which, in several occasions, sub functions, due to lack of employees and support by relative local services. Nevertheless, the main concern of "Panacea" and of the inhabitants has focused on the absolute absence of preventive and therapeutic services for patients suffering from Dementia and their caregivers.

Concerning the population of Dodecanese, which is approximately two hundred thousands, the absence of such services is considered to be completely unacceptable.

Methods: Willing to cover the mentioned need, "Panacea" started taking actions in the Dementia field by establishing- in year 2005- the "Consultant Center" for patients suffering from Dementia and in October 2008, the "Memory Center" and the "Therapeutic and creative Occupational Center" for Dementia Patients. Since January 2009, when the union of all these services took place, the "Day Center for Dementia Patients, Arsinoi" started functioning till today.

Results: The "Arsinoi" center provides -without any fees- diagnostic, therapeutic, and creative occupational services for Dementia Patients and support services for their caregivers and their families.

Conclusions: In future time, we aim to the creation of a service net between Rhodes, Kos and Kalymnos, to the stable collaboration with smaller islands, as well as to the creation of a Psychogeriatric Structure in Rhodes, for the best possible quality services towards third aged people.

OC140 IMPLICATIONS OF THE ECO-SYSTEMIC MODEL OF WELL-BEING UPON SERVICES AND INTERVENTIONS TO PEOPLE WITH DEMENTIA AND THEIR FAMILIES 19. Quality of life in demetia

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Objectives and Study: To examine the implications for service delivery and psychosocial interventions of the recently developed Ecosystemic Model of Well-being in older people (Papadopoulos, Biggs and Tinker, 2009) upon people with Dementia and their families.

Methods: Presentation of the research programme on well-being undertaken at King's College London and development of the well-being model.

Results: To identify the implications of the model within the aims and objectives of current UK policy for people with dementia and their families.

Conclusions: To identify recommendations to the provision of services to this population

Abstracts - Oral presentations

OC141 MEASURING QUALITY OF LIFE IN DEMENTIA CARE

19. Quality of life in demetia

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Objectives and Study: In Germany Shared Housing Arrangements (SHA) - a specific kind of small-scale living facility for older, care-dependent persons often suffering from dementia - have increasingly become an alternative to traditional residential facilities. As to date no cure for dementia is available, one of the primary goals in caring for people with dementia is the improvement of Quality of Life (QoL). The aim of our study is to give a review on dementia-specific QoL-assessments designed especially for use in dementia care under particular consideration of applicability in the framework of SHA.

Methods: To identify QoL-assessments a systematic search of literature was performed including databases like Pubmed and Cinahl without a time limitation. Search terms included "dementia", "Alzheimer's Disease", "instrument" and "Quality of Life" in English and German. Publications were analysed regarding the instruments used to measure QoL with regard to different settings, time to collect data / complete the questionnaire and severity of dementia.

Results: Dementia-specific QoL instruments as well as generic QoL instruments were identified. Three different methods are employed to assess dementia-specific QoL in institutional or community settings: Direct interviews with residents (e.g. Quality of Life for Dementia), proxy ratings by care staff (e.g. The Quality of Life - Alzheimer's Disease) and observation of residents by trained observers (e.g. QUALID). Approaches used depend on dementia severity. Domains include independence, self-esteem, social relations among others. Most instruments show good to excellent interrater reliability and internal consistency. No instrument was developed especially for the use in the context of small-scale living facilities.

Conclusions: In the last ten years twelve QoL-instruments were developed and used in dementia care, so the need for QoL-assessments is evident. Available instruments for assessing QoL in dementia care are highly specific for setting and severity of dementia, which impedes assessments across settings and along the continuum of care. An instrument adapted to small-scale living arrangements should be developed to account for the specific conditions of the setting

OC143 AUTOBIOGRAPHICAL MEMORY, QUALITY OF LIFE AND PSYCHOSOCIAL INTERVENTION IN DEMENTIA CARE

19. Quality of life in demetia

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Objectives and Study: Autobiographical memory or 'recollection' of the past is commonly retained and personally relevant pleasant memories may have a positive effect on quality of life. We explored the relationship between autobiographical memory and quality of life (QoL) in people with dementia.

Methods: 124 community dwelling people with dementia completed the Autobiographical Memory Interview (AMI) and the self assessed Quality of Life in Alzheimer's disease (QoL-AD) measure.

Results: No direct relationship was noted between the AMI and QoL-AD but stepwise regression modelling suggested that personally meaningful (i.e. semantic) autobiographical memories were associated with reduced likelihood of difficulties in mood and everyday living activity in people with dementia as well as stress and burden in the family carer. Where the quality of the relationship between the person and their family carer was perceived as 'warm' (rather than 'critical' or conflict-laden), high levels of QoL on the relationship sub-scales of the QoL-AD were seen.

Conclusions: Path analysis suggested that personally relevant semantic autobiographical memory on the AMI predicts a warm relationship between the person and their family carer as well as good QoL for personal relationships on relevant QoL- AD subscales. The implications of these findings for the targeting of reminiscence therapies to maintain quality of life in dementia care is discussed.

OC142 GENERIC AND DISEASE SPECIFIC MEASURES OF HEALTH RELATED QUALITY OF LIFE IN PATIENTS WITH MILD AD.

19. Quality of life in demetia

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Objectives and Study: Quality of life (QoL) is now being recognized as an important outcome variable in clinical trials of AD. Therefore, there is a growing need to investigate the associative pattern of QoL with standard outcome variables on cognitive performance, activities of daily living, and behavioural and psychological symptoms in AD. The present study investigated the associative pattern of a generic and a disease specific QoL scale with important clinical variables in AD.

Methods: The study was based on baseline data from 321 home living patients with mild AD who participated in the Danish Alzheimers Intervention Study (DAISY) together with their primary caregivers. The patients and the caregivers separately completed the generic Euro-QoL-5D (EQ-5D) and Euro-QoL visual analogue scale (EQ-VAS) and the disease specific Quality of life in Alzheimers disease scale (QoL-AD), rating the quality of life of the patient. Apart from these, Cornell depression scale, Alzheimer Disease Cooperative Study activities of daily living scale (ADCS-ADL), Neuropsychiatric Inventory (NPI-Q), and Mini-Mental State Examination (MMSE) were also administered. Pearson correlations were conducted to analyse the correlation among the two QoL scales as well as their associative pattern with the clinical variables.

Results: The mean age was 76 (+/-7.1) and the mean MMSE was (24.0 +/- 2.5). The patient rated as well as the caregiver rated versions of the two QoL scales were significantly correlated with each other (p<0.001). The caregiver rated EQ-5D and QoL-AD had significant correlation with Cornell, ADCS-ADL, and NPI-Q scores. For the patient rated QoL measures significant correlations were observed with Cornell and NPI-Q scores, but not with ADCS-ADL. MMSE was not significantly correlated with either of the QoL scales.

Conclusions: The generic and the AD specific quality of life scales correlated well with each other and showed a similar pattern of correlation with the clinical variables. This indicates that using a simple generic instrument as the EQ-VAS may reflect the same trends and pattern of association as more specific scales like QoL-AD.

OC144 SUPPORTING LOST CARERS

19. Quality of life in demetia

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Objectives and Study: Last year Norfolk Care Homes Service was fortunate in winning a bid from the Mental Health Foundation to provide funding for a two year project to develop a positive model of relative's involvement and support to residents with dementia who live in care homes. Although the project has only been running since February 2009, we have been able to successfully engage relatives in the sessions run to date. Indeed the project enables family and friends to continue to play a key role in the life of their relative 'because' and not in 'spite' of being in residential care.

Methods: Despite the best efforts of staff, sadly it is not unusual for the relatives of residents admitted into residential care to feel they have lost their caring role and to experience a great sense of grief especially if the relative had previously looked after their loved one at home for a long period of time. To quote one relative - 'After 50 years, you need help and something to fill the void'. Feedback from relatives thus far is very enthusiastic about both the content and social aspect of the sessions and they have reminded us of the value of having opportunities to share their stories and feelings with each other. Indeed relatives are saying to us - 'just give us more.' Additionally through the project, care staff have been able to obtain a better understanding of the residents they care for. All people are unique, but how do you find out about a person if they are in the advanced stages of dementia? One way is by engaging relatives and friends who are keepers of important information about the resident who has dementia.

Results: The project is designed to focus on the needs of 'lost carers' whose relatives live in residential care whilst at the same time delivering real benefits in terms of:

- Supporting relatives continued positive involvement
- Designing individual appropriate activities for residents
- The ability of utilising expert inputs and opportunities from other external agencies
- The improved understanding by employees of individual residents

Conclusions: Already relatives have seen the benefits of sharing experiences and feelings, learning more about the conditions around dementia and appreciating that they are not alone and that they can maintain a very positive role with their loved ones and with other residents. As one of the participating establishment managers has said - 'We need to engage the person' relatives/friends from the beginning; they are the most important people to the resident. Most people would desperately like to be able to continue to care for their relative at home, and feel terrible guilt when they can't. A lot of people do not understand dementia'

Abstracts - Oral presentations

OC145 QUALITY INDICATORS FOR PSYCHOSOCIAL INTERVENTION IN EUROPE

19. Quality of life in dementia

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Objectives and Study: The quality of psychosocial care for persons with dementia and their families can be improved and made more comparable between countries by the use of quality indicators for psychosocial interventions. The aim of this study is to test the feasibility of quality indicators for psychosocial interventions developed in the Eurocode project.

Methods: The feasibility of the potential set of 15 quality indicators for psychosocial interventions was investigated in a pilot-study by studying the care registered in patient files. Therefore a data extraction form has been made. Patient files of the following settings were used to gather the data: memory clinic, day care center, nursing home, home care service. The results on feasibility were discussed in a meeting of European dementia care experts.

Results: Quality indicator data were extracted for 45 persons with dementia and their carers from 6 European countries. Availability of the data was high in patient files in most settings and countries. The highest availability was shown on the indicator: Number of people with dementia with registration of personal and social needs in care plan and/or medical record. There was a remarkable difference in the use of the quality indicator on discussing the diagnosis with the patient. Not all of the 15 quality indicators were applicable to all settings. Feedback of the professionals who extracted the data will be used to improve formulation and thereby the feasibility of the set of quality indicators.

Conclusions: The results of this pilot-study show that it is feasible to implement the set of quality indicators for psychosocial care in dementia in different European countries. It should be noted that the pilot-study included patient files from dementia care services that were more than average interested in psychosocial interventions.

The set of indicators can be used to compare quality of psychosocial care between European countries and between dementia services within countries.

OC147 CREATING SPIRITUAL CONNECTEDNESS

20. Spirituality and dementia

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Objectives and Study: Creating Spiritual Connectedness

The authors have closely worked with participants in a dementia specific day center for 25 years and during that time have become very aware of the spiritual needs of persons with dementia. Persons with dementia retain their spiritual selves, being touched by the arts, music, religious beliefs and traditions, nature, helping others, and relationships with others. Family and professional carers must, the author's argue, help create a time and space for persons with dementia for "spiritual connectedness."

The goal of this presentation is to define spirituality, to discuss the spiritual needs of persons with dementia, and describe how those needs can be met.

Methods: The authors have:

Designed activities for persons with dementia for both group and one-on-one that touch the spirit; Used reminiscence and life story work to meet spiritual needs; Interviewed 28 persons with early stage dementia to learn more about their spiritual needs; Developed a Best Friends philosophy which describes the importance of relationships – a key element of spirituality.

Results: A series of recommendations for family and professional carers on how to create spiritual or sacred space. Recommendations for persons with dementia on how to support a spiritual life with declining cognition.

Conclusions: Because cognition declines in persons with dementia they may even be more receptive to spirituality than the rest of us.

The authors conclude that carers can design activities to support spiritual needs and that these activities are meaningful and successful.

When we take the time to reflect on spirituality, take time to be in the present, the very thing that nourishes the person with dementia will nourish us as well.

OC146 THE LONG HELLO OF ALZHEIMER'S

19. Quality of life in dementia

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Objectives and Study: After completion of the presentation, audience participants will be able to:

1. Review the limitations of traditional, stereotypic viewpoints of Alzheimer's.
2. Identify examples of the positive aspects of the Alzheimer's disease experience from the lived experience of an adult child care partner.
3. Discuss the possibilities available in relationships with those living with Alzheimer's disease when invited to express altered and emerging narratives without limitation or censorship.

Methods: This presentation uses extensive documentation, both written and recorded, of a daughter's conversations with her mother, during the mother's seven-year experience with Alzheimer's disease. Based upon lived experiential knowledge, this presentation illustrates how witness-bearing and empathic listening can lead into an unconventional dance, transforming a seemingly despairing experience of loss and grief into one which reveals a meaning and beauty not often highlighted in the literature and experience of dementia. Strategies for creating and implementing an honourable hello are illustrated.

Results: The mother's recorded voice weaves throughout the presentation with insight, humour, and astonishing poetic sensibility, and it is through her voice, against a background that includes suffering and despair, that new and beautiful insights into the poetic and eccentric realities of dementia emerge.

Conclusions: When the landscape of the changing mind is embraced in a long "hello" - the limiting, negative and pervasive stereotypes commonly associated with dementia are challenged, serving as proof that love, loyalty, openness, presence, and listening can provide a canvas for the magical and limitless potential of the Alzheimer's mind. These powerful insights were gained through the use of writing, and by engaging directly with the experience.

OC148 OXIDATIVE STRESS IN BLOOD IN ALZHEIMER DISEASE

01. Aetiology, pathogenesis, clinical features and differences in all types of dementia

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Objectives and Study: Oxidative stress represents an important pathological feature in Alzheimer disease (AD). The generation of free radicals in AD brain increases. Once formed, reactive oxygen species can initiate lipid peroxidation resulting in the formation of many toxic substances such as malonaldehyde or 4-hydroxynonenal. These substances can diffuse from the primary site and attack erythrocytes in the bloodstream. Therefore we studied oxidative stress in erythrocytes. The erythrocyte membrane is particularly susceptible to free radicals since it is rich in polyunsaturated fatty acids. Free radicals initiate the lipid peroxidation process in the erythrocyte membrane leading to the production of peroxidation products, lipofuscin like pigments (LFP). The fluorescence characteristics of these pigments differ in various pathologies and can be used as biomarkers. We have previously shown that erythrocytes of model dogs with AD accumulate specific LFP. Here we analyze LFP in erythrocytes of AD patients.

Methods: We characterized LFP in erythrocytes of AD patients (n=44) and age-matched controls (n=16) by means of tridimensional fluorescence spectroscopy. As LFP represent a mixture of various substances, we separated them by HPLC with a fluorescence detector.

Results: The excitation and the emission maxima of LFP in erythrocytes were found at 350/440 nm (excitation/emission). We found a significant increase in LFP in AD patients compared to controls (to 140%, P<0,01). HPLC analysis revealed different composition of LFP in AD patients and controls.

Conclusions: In summary, oxidative stress is present in erythrocytes in AD. Furthermore, the composition of LFP in AD patients differs from controls. This could be important for diagnostic purposes.

Abstracts - Oral presentations

OC148B In search of molecular etiopathological factors in neurodegenerative processes. Metalloprotein effects on NMDA and VDCC channels in hippocampal cells

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Abstract

Objectives and Study

Over the past two decades, metalloproteins (iron, copper, aluminum) have been implicated in the initiation and progress of neurodegenerative processes. Albeit ill-understood, these neurotoxins have been linked to numerous pathological disorders and associated with the onset of neurological diseases such as Alzheimer Disease.^{1,2} Their targets - ensuring transport and absorption by the hippocampal cells - include N-methyl D-aspartic acid (NMDA) and Voltage-Dependent Calcium Channels (VDCC), stimulating receptors on neurocellular membranes linked to Ca(II) homeostasis and playing an important role in memory.^{3,4} These targets were the subject of the current investigation, seeking to understand the molecular interactions with structure specific soluble aluminum a) being bound to low molecular mass hydroxycarboxylic acids involved in cellular processes, and b) underlying the neurotoxic effects on hippocampal cells and the repercussions in neurodegeneration in Alzheimer's disease.

Methods

In an effort to comprehend the transport of this neurotoxic metal ion from the environment to the human metabolic machinery, ultimately ending in the brains of Alzheimer patients, exhaustive synthetic and physicochemical work were employed in acute toxicity studies, using Ca(II) imaging techniques, on primary rat hippocampal cell cultures.

Results

The well-defined aluminum forms interact with the NMDA and VDCC channels in variable modes dictated by the nature of the metal ion and their solution properties. The Ca(II) response varies in the two channels and depends heavily on their structure, composition and biochemical function. Short and long term exposure of the cells to aluminum defines their susceptibility to apoptosis and necrosis as evidenced by Ca(II) homeostatic variations at both the neuronal and glial cell level.

Conclusions

The results unravel the diverse reactivity of neurotoxic aluminum as that is formulated by the nature of bound ligands in aqueous media, the arisen speciation thermodynamics, and portray the effects brought on by its variably structured complex formation. The interaction of the well-defined forms of aluminum with NMDA and VDCC cellular structures denote the salient features of both reactants and describe the key factors (size, hydrophilicity, hydrophobicity, charge distribution, local structure, chemical reactivity) affecting Ca(II) homeostasis and render neuronal and glial hippocampal cells variably susceptible to degenerative processes.

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OC150 NEURONS GENERATED FROM APP/APLP1/APLP2 TRIPLE KNOCKOUT EMBRYONIC STEM CELLS BEHAVE NORMALLY IN VIVO: NO EVIDENCE FOR A CELL AUTONOMOUS ROLE OF APP IN NEURONAL DIFFERENTIATION.

01. Aetiology, pathogenesis, clinical features and differences in all types of dementia

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Objectives and Study: The processing of the amyloid precursor protein (APP) has been quite well characterized. Through the amyloidogenic pathway it can give rise to beta-amyloid peptide which can aggregate into senile plaques, a pathological hallmark of Alzheimer's disease. However, the normal function of APP still remains unclear. To address this matter, we generated APP/APLP1/APLP2 triple knockout (tKO) embryonic stem (ES) cells in which all APP family members are deleted allowing us to study the function of APP in neurons differentiated from ES cells. Our previous in vitro studies in differentiated APP/APLP1/APLP2 tKO neurons found no evidence for a key role of APP in different aspects of neuronal differentiation. Therefore we generated chimeric mice to be able to study neuronal differentiation in APP tKO cells in vivo.

Methods: We used morula aggregation to make chimeric mice with WT morulas and GFP-expressing APP/APLP1/APLP2 tKO ES cells. For the characterization of the chimeric mice, we used immunofluorescence against different neuronal proteins.

Results: In vivo the APP tKO cells could differentiate into neurons, as evidenced by Map2 expression. We found no evidence for a migration phenotype in our chimeric mice. The APP tKO cells were present all over the brain, evenly distributed over the different cortical layers. We observed no overmigrating cells, in contrast to the cobblestone lissencephaly phenotype previously observed in full APP tKO mice. We did not observe undermigration either, in contrast to previous evidence from an acute in utero APP siRNA knockdown model. Also the hippocampal cytoarchitecture was well preserved. The APP tKO neurons were able to extend long neurites in vivo. They were also able to form synapses as evidenced by synaptophysin- and vGLUT2-positive punctae along their neurites.

Conclusions: To try to unravel the function of APP we generated chimeric mice with GFP-containing APP/APLP1/APLP2 triple KO ES cells in the brain. Our results indicate that despite the absence of APP these neurons derived from tKO ES cells can differentiate, establish neuronal polarity, extend neurites and form synaptic contacts. Further work will be needed to clarify the function of APP in neurons.

OC149 BIOAVAILABLE TESTOSTERONE DECREASES THE RISK OF ALZHEIMER'S DISEASE IN NON-DEMENTED CHINESE OLDER MEN: A ONE-YEAR COHORT STUDY

01. Aetiology, pathogenesis, clinical features and differences in all types of dementia

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Objectives and Study: Objective: There was limited data on testosterone and Alzheimer's disease in Chinese elderly populations.

The objective of this study was to investigate the protective effects of serum total (TT) and bioavailable testosterone (BT) levels on the subsequent risks of Alzheimer's disease in non-demented Chinese older men.

Methods: Methods: This was a one-year prospective cohort study of ambulatory community-living Chinese elderly men without dementia at baseline. Morning blood samples for serum total testosterone (TT) and bioavailable testosterone levels were collected from all subjects for subsequent assays. The primary outcome was conversion to Alzheimer's disease (AD) at one-year follow-up. AD was diagnosed in accordance to the NINCDS-ADRDA criteria.

Results: Results: 83% of the baseline subjects (n=153) had full one-year follow-up. Their mean age was 72.7 years. 6.5% (n=10) developed dementia (i.e. converters) all having Alzheimer's disease (AD). 93.5% (n=143) did not develop dementia (i.e. non-converters). Multivariate logistic regression analyses for independent predictors of AD showed that the baseline serum BT level, systolic blood pressure (SBP) and ApoE ε4 genotype were independent predictors after adjustment for age, education, body weight, BMI, fasting plasma glucose level, serum HDL-C and SHBG levels. The baseline serum BT level was an independent protective factor for AD, and the adjusted relative risk (RR) of BT was 0.22 (95% CI of 0.07 to 0.69). Baseline SBP and ApoE ε4 genotype were independent risk factors, with RRs of 1.04 and 5.04 respectively.

Conclusions: Conclusion: Bioavailable testosterone is a strong protective factor against future AD development in Chinese elderly men.

OC151 INCREASED INCIDENCE OF VISUAL HALLUCINATION IN DEMENTIA PATIENTS COMPLICATED WITH DIABETES MELLITUS

01. Aetiology, pathogenesis, clinical features and differences in all types of dementia

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Objectives and Study: Diabetes mellitus is known not only to cause neuropathy and retinopathy but also to increase the risk of dementia. However, diabetic complications have not been determined to contribute to the development of psychotic symptom in dementia patients, and the current study was designed to evaluate the incidences of psychotic symptom of visual hallucination in dementia patients complicated with diabetes mellitus.

Methods: 231 dementia patients attending Matsubara Hospital between January 2007 and March 2009 were enrolled in this study, with an age range of 69-93 years and with < 20 points of Hasegawa Dementia Screening Scale. 128 of these individuals were diagnosed with Alzheimer-type, 35 with vascular dementia, 11 with mixed dementia, and 11 with Lewy body disease. Diagnosis of diabetes mellitus was based on fasting blood glucose (FBG; > 126 mg/dl) and hemoglobin A1c (HbA1c; > 6.5 %).

Results: 41 patients were diagnosed with diabetes mellitus. 36 patients displayed symptoms of visual hallucination. 17 patients were complicated with both diabetes mellitus and visual hallucination. Considering that the prevalence of visual hallucination was 19 / 190 in patients without diabetes, it was remarkably high (17 / 41) in patients with diabetes.

Conclusions: Dementia patients with diabetes mellitus are inclined to associate with psychotic symptom of visual hallucination. In thinking that 40% of diabetic patients have retinopathy, they may misunderstand what they see through their damaged eyes when their cognitive functions are impeded. Furthermore, diabetic patients often complicate peripheral neuropathy which can invade oculomotor nerve and cause double vision, which may occur visual hallucination in dementia. Hyperglycemia may also harm central nerve system directly and cause visual hallucination.

Abstracts - Oral presentations

OC152 SELECTED VASCULAR INDICES MAY REVEAL POSSIBLE DEMENTIA AND CARDIOVASCULAR DISEASE COEXISTENCE IN THE ELDERLY

01. Aetiology, pathogenesis, clinical features and differences in all types of dementia

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Objectives and Study: Both dementia and cardiovascular disease (CVD) are conditions of high prevalence in the old age. Growing evidence suggests that cardiovascular disease risk factors can be found in either group of patients with dementia of vascular and Alzheimer's type. Objectives: To investigate the degree of co-existence of dementia and CVD's risk factors, as well as indications of established clinical or subclinical CVD, in subjects aged 65 years and over. Design: A case-control study was conducted at the outpatient clinic of an academic Geriatric Unit, in Thessaloniki Greece. The subjects were 85 demented patients and 109 non-demented controls.

Methods: A battery of neuropsychological screening tests for detecting dementia, special questionnaires, history and clinical examination and selected laboratory tests and screening tools for cardiovascular morbidity were used. Statistical processing was performed by SPSS 16.0 for windows. Multiple logistic regression analysis provided us with the odds ratio, displaying the possibility of existence of each of the studied parameters in relation to dementia.

Results: A higher possibility of dementia was found in relation to peripheral vascular disease, abnormal ankle-brachial index, carotid artery disease, white matter lesions in brain computerized tomography, raised levels of homocysteine and history of vascular operation. Lower possibility of dementia was found in relation to raised body mass index.

Conclusions: The study provided evidence that selected cardiovascular indices may discriminate patients who have greater possibility to also suffer from dementia and so require an additional thorough specific examination.

OC0153B CARE OF ALZHEIMER'S PATIENTS IN THE MIDDLE EAST

A Abyad

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Middle Eastern countries have certain cultural, social and economic characteristics in common with similar aspiration. The percentage of elderly in the Middle East is expected to increase with improvement of the health care delivery in the area. The region, like other developing countries, needs to define the policies and programs that will reduce the burden of aging populations on the society and its economy. There is a need to ensure the availability of comprehensive health services for the elderly. A rising geriatric population, with increasingly unmet health care needs, strongly suggest the necessity for a better educational preparation of those health professionals actually or potentially serving them. The absence of sufficient numbers of trained geriatricians and gerontologists, among health professionals, seriously undermines the ability of the country's health care system to adequately assess, treat, and rehabilitate the growing aging population. This shortage leads to inappropriate care, higher costs, and poorer patient outcomes.

As the population age the number of Alzheimer's patients will increase as well. Specialised services for Alzheimer's disease in the region are scarce. Usually Alzheimer patients are treated on the same floor of long term stay. There is lack of adequate services for Alzheimer's patient in the region.

Current available services will be reported and at the same time future recommendation will be made

OC153 CONVERSION OF MILD COGNITIVE IMPAIRMENT TO ALZHEIMER DISEASE IN A GROUP OF ELDERLY ROMANIAN PATIENTS

01. Aetiology, pathogenesis, clinical features and differences in all types of dementia

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Objectives and Study: Alzheimer Disease (AD) as well as other dementia have a complex etiopathology in which neurobiological, cognitive, anthropometrical and social risk factors are interfering with a specific genetic vulnerability. According to different authors, the rate of annual conversion of Mild Cognitive Impairment (MCI) to AD could vary between 6-25%. This study belongs to DESCRIPA project and represents its first descriptive attempt in the East-European area. Its goal was to evaluate the predictors of MCI's conversion to AD in Romanian patients.

Methods: Sixty patients were diagnosed with MCI in our Memory Clinic using clinical criteria, psychometric, imaging and laboratory tests. The neuro-psychological evaluation was performed by screening tests such as MMSE, clock test, ADL, IADL, as well as tests focusing on several, specific cognitive domains: memory, language, executive function/problem solving, praxis/visuo-construction, and attention/concentration (Grober Buschcke, Rey figure, Verbal Fluency). Data processing included t-test for independent samples, partial correlations, and a logistic regression model (PASW). P-value less than 0.05 was considered significant.

Results: Statistically significant differences between the MCI group that do not progressed to dementia and the MCI group that did it were found with respect to MMSE (p<0.01), Clock test (p<0.01), IADL (p<0.01) and verbal fluency (p<0.05).

Conclusions: The best predictors of MCI to AD progression detected by us to the Romanian patients under study were verbal fluency and age (p<0.05). Larger prospective studies are necessary in order to confirm their role as markers for this conversion.

OC0153C USE OF TELEMEDICINE FOR MANAGEMENT OF PATIENTS WITH ALZHEIMER'S DISEASE

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Current management of Alzheimer's Disease (AD) incorporates the early prevention, diagnosis and treatment of AD. Today, the use of telecommunications for health care has substantially increased. Therefore, prevention, diagnosis and treatment of AD, are potential targets of telemedicine services, which aim at the best assessment of AD patients and the reduction of caregiver burden. The results of studies performed on the use of telemedicine for AD showed that it is as accurate as face to face examination and also the patients were keen and willing to try the use of new technologies. The use of 'smart homes' with the integration of technology and services through home networking, provide AD patients a better quality of living and can help them lead safe and independent lives.

Moreover telemedicine might serve in the education not only of doctors and other health professionals (such as psychologists and nurses), but also of the caregivers or even the patients themselves, on various aspects of AD.

To conclude, telemedicine can be used in a broad sense for the diagnosis and treatment of AD, it reduces time and distance in health care provision and it can serve as a future, easy and accurate, way for the assessment of AD patients

Abstracts - Oral presentations

OC154 VISUAL STORIES - TRAINING HEALTH PROFESSIONALS WITH THE VOICES OF PEOPLE LIVING WITH DEMENTIA

22. Training of professional caregivers

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Objectives and Study: During the placement of Adelaide University 5th year medical students at Alzheimer's Australia South Australia as part of their compulsory learning activities, student feedback found that students had many questions about dementia and would like the opportunity to speak with a person with dementia or their carer. A similar concept was also expressed by Nursing students. Whilst this opportunity was explored by the South Australia and Northern Territory Dementia Training Study Centre (SA & NT DTSC), it was concluded that the opportunity for a student to speak with a person with dementia or their carer would not be a practical nor sustainable possibility for the placement program, nor was it always appropriate.

Methods: In order to be able to address some of the student's questions, the SA & NT DTSC identified the opportunity to develop a visual resource which utilises the lived experience of people living with dementia, their family and friends. This visual resource will be used in the education of health professionals to assist their understanding of the needs of a person with dementia and their carers. After viewing the DVD and working through the handbook the health professional should be able to:
Articulate the prevalence of dementia and the importance of its impact on contemporary practice
Understand the different types of dementia
Understand a range of issues to be considered when meeting a person with dementia and/or their carer
Recognise how the quality of health professionals' relationships can support people with dementia and their carers to enjoy an improved quality of life

Results: The film makers were granted access to people's homes, their families and friends as well as archives of family photographs and memories. Some of the images and words which people have chosen to describe their experiences may be uncomfortable to view or hear however we believe that the truth for the individual can be reflected in the resource and may assist health professionals to connect with the stories on an emotional level – enhancing their practice.

Conclusions: This is an innovative and unique resource (unlike any currently available in Australia) that presents the un-scripted experiences of people with dementia and their carers in a way that imparts an understanding of the uniqueness of the needs of people with dementia and their carers, in a positive way, and that is presented by the person with dementia and their carer.

OC156 CAREGIVERS IN THE THIRD WORLD: THE ACADEMIC PROFILE OF CERTIFIED CAREGIVER STUDENTS IN THE THIRD WORLD, ACCORDING TO THE IDIS EXPERIENCE

22. Training of professional caregivers

A. E. Tovar¹¹Human Resources, Institute of Human Resources for People with Disabilities- IDIS-, Caracas, Venezuela

Objectives and Study: This paper examines conclusions reached in the Institute of Human Resources for People with Disabilities (IDIS) concerning how to select the right kind of students to enroll a free caregiver training programs. The purpose is to succeed sponsored studies with those persons who finally will work as domestic certified caregivers next to an Alzheimer's disease patient and not of those who solely do the training but later on do not carry out the profession of a domestic caregiver.

Methods: The IDIS caregiver training programs are offered massively and for free. Since 2006, we have held the program 6 times. The requirement to be accepted includes a certificate of studies plus an interview.

Results: So far out of 3.000 people interviewed, IDIS selected and sponsored 1.200. 75% of the selected students finished the program successfully. Those who finally started working next to an Alzheimer patient, were mainly persons who did not complete Highschool and were living in a low income district.

Conclusions: Alzheimer patients in the first stages of the disease (with no further health complications) need caregivers with responsibility and basic, holistic - not necessarily sophisticated - knowledge. The main purpose is to provide a solid affordable service for families of adult patients who do not have the economical resources to hire a registered nurse. Even though we would prefer to select students with higher academic levels, the ideal caregiver in the third world, according to our experience, is a person with low academic level (who entered Highschool but did not finish), low income (with the necessity to have a job), but at the same time with the capacity to intellectually follow and complete all requirements of the caregiver training program.

OC155 KNOWLEDGE AND BELIEFS ABOUT SYMPTOMS, TREATMENT AND OUTCOME OF DEMENTIA OF ELDERCARE AGENCIES STAFF IN SINGAPORE

22. Training of professional caregivers

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Objectives and Study: It aims to understand the literacy of dementia amongst staff of eldercare agencies to enable more targeted training and earlier detection of dementia.

Methods: 149 staff from 13 eldercare agencies answered the questionnaire. It comprised 15 MCQs (symptoms), 10 MCQs (risk factors), Likert scale 1 to 10 to assess beliefs about the helpfulness of i) treatment modalities (medications, psychosocial interventions, 'alternative' treatments), ii) care providers (informal, doctors, non-doctors). They also rated outcome if patient refused/ received treatment. Association between total dementia score and age, gender, education, socioeconomic class, working experience, training, source of knowledge, having friends/relatives with dementia & self-perceived understanding of dementia was assessed using linear regression analysis with SPSS version 15.

Results: Mean age: 40.6 (SD=12.1). The majority were female (82.6%), Chinese (83.2%), had post-secondary education (73.6%), had experience working with elderly (69.4%, average 5.5 years), no formal training in dementia (84.3%) & commonest knowledge on dementia were talks (47.7%) & media (42.3%).

For symptoms, average number of correct answers was 9.4/15 (62.7%). Memory problems (81.2%) & confusion (85.9%) were better recognized than loss of initiative (59.1%) and language problems (62.4%). For risk factors, the average number of correct answers was only 3.8/10 (38.0%). Only 'having friends/relatives with dementia' (p<0.006) & 'knowledge on dementia from courses/talks' (p<0.035) were statistically associated with better total dementia score.

More endorsed psychosocial interventions (e.g. physically & mentally stimulating activities, 74.9%) than medications (e.g. antipsychotics, 20.9%) or alternative treatment (e.g. ginkgo, 36.4%). Specialists (e.g. psychiatrist, 70.7%) & family (64.9%) were deemed more helpful than GP (43.9%) & non-doctors (e.g. TCM, 28.8%). With treatment, 77.4% less participants believed 'patient will not improve/ become worse', & 58.6% believed 'patient will recover fully but problems would probably re-occur'.

OC158 BREAKING KNOWLEDGE TRANSLATION AND EXCHANGE BARRIERS WITH THE ALZHEIMER KNOWLEDGE EXCHANGE

22. Training of professional caregivers

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Objectives and Study: A major challenge for both paid and non-paid care partners of individuals with dementia is timely access to relevant research-based information, best care practices, and to the services, resources and supports provided by various government and community agencies and organizations. Engaging these care providers in knowledge translation and exchange (KTE), through networks, can facilitate the flow and use of meaningful information, to support evidence-informed decision making and better care for people with dementia.

In Ontario, the Alzheimer Knowledge Exchange (AKE) promotes and supports a knowledge translation and exchange (KTE) interface amongst researchers, educators, care partners (paid and non-paid), policy makers and stakeholder organizations. The AKE connects all sectors, settings, and disciplines, in order to support the learning needs of people seeking practice change.

Methods: The Knowledge Transfer Cycle (Sullivan et al., 2004) which illustrates the 5 non-linear phases of knowledge transfer was used within the context of the PARIHS framework (Kitson et al., 2008) which suggests that successful knowledge transfer is a result of the interplay between three key factors: evidence, context and facilitation. This evidence provided the theoretical foundation for successful KTE interventions.

Results: Since adopting these theoretical foundations to inform the KTE strategies of the AKE in 2008, AKE membership has more than doubled (from 1153 members in April 1, 2008 to 2358 members by March 31, 2009), the number of people engaging with the online resource tools has increased by approximately 400%, and knowledge exchange opportunities have more than doubled (from approximately 139 events in 2008 to 400 in 2009).

Conclusions: Valuable lessons have been learned by the AKE, captured through both summative and formative evaluation, about developing and nurturing communities of practice, the role of the knowledge broker and information specialist, stimulating practice change and engaging researchers, caregivers and policy makers.

Abstracts - Oral presentations

OC159 PREPARING FUTURE HEALTH CARE PROFESSIONALS IN A SPECIALIZED ALZHEIMER'S FACILITY

22. Training of professional caregivers

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Objectives and Study: Thirty five million people have Alzheimer's disease worldwide, and projections of numbers affected for the future are staggering. Currently, there is little formal Alzheimer's disease training for health care professionals to prepare them for independent practice that will include the care of individuals and families facing dementia. A facility exclusively for persons with Alzheimer's disease has afforded a unique teaching opportunity. The merging of academia and the service sector is a positive experience, promoting Alzheimer's competency through more effective educational programs improving patient care and providing a forum for the exchange of information between students and staff.

Methods: Physicians, pharmacists, nurses and students in a variety of health related fields experience the effects of this disease on individuals and families, and learn to best manage their care by participating in weekly interdisciplinary rounds in a dedicated Alzheimer's continuum of care. University affiliations and agreements were developed and students are assigned a facility preceptor. Students complete pre-surveys regarding expectations and objectives. Following their experience, post-surveys consist of how well their objectives were met, strengths, and weaknesses of the experience. Students' comments and other data are analyzed to determine additional needs and how to enhance the educational experience.

Results: Over the past 23 years, over 3,000 students from a variety of fields such as medicine, nursing, pharmacy, administration, gerontology, social work, geropsychiatry, etc., have participated in this program, generating more effective educational programs and clinical experiences. Benefits for staff, students, families and residents were explored and a determination of the student experiences were examined by comments made on evaluations. Comments include, "Overall, this may be the strongest aspect of our geriatric rotation," "Rounding was a really good learning experience – knowledge that you don't get from textbooks," "Having the pharmacy students as well as the nursing students present gave us a different perspective," and, "It was an eye opening experience."

Conclusions: Comments on student evaluations reinforce that even students with extensive training are not fully in touch with the impact of Alzheimer's disease and dementia on the individual or their family without first-hand experience. This opportunity helps future health professionals understand the true impact of this disease. Reportedly students are more sensitive, and while aware they cannot at this time change the course of the disease process, know there is much that can be done to improve the quality of life for the individual and family. They also recognize the impact that a consistent, trained and supported staff make to enhance care and quality.

OC161 FITTING PROFESSIONAL CARING COMPETENCIES AND TOOLS TO INDIVIDUAL PREFERENCES AND CHARACTERISTICS OF PEOPLE WITH LATE STAGE DEMENTIA IN SPECIAL CARE UNITS.

22. Training of professional caregivers

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Objectives and Study: There is a general consensus around the fact that behavioural symptoms can be moderated by care and that knowledge concerning behavioural symptoms is not necessarily sufficient and accompanied by corresponding changes in practices. As a matter of fact staffs in nursing homes are often uncensured and have limited training. Thus there is a need of follow-up of to maintain knowledge and practice changes. In this communication we will present a training program that was partly designed to fit and understand interior design adaptations that are made in special care units (SCU) and partly designed to help accompany people with dementia by using a panel of psycho-social tools in order to fit best individual characteristics and preferences.

Methods: The training program was implemented with the staff members of 4 SCUs. The staff members benefited of 12 consecutive training sessions and one follow-up session 6 weeks after the last training session. Reports describing elements that have been taught in the training session, themes of concern of the staff members, atmosphere during the training session, implication of the trainees and organisational issues were transmitted to the experimenters at the end of each training session. A burnout inventory was administered to the staff before and after the training sessions.

Results: Results will be discussed in terms of assiduity, leadership, motivation, adhesion and resistances to the training program, staff-resident relationships, engagement, and frustrations.

Conclusions: We will conclude this presentation on the global issues concerning the training program and the benefits of developing tools to help professional carers of people with dementia to fit their practice to the residents they take care of.

OC160 APPLICATION OF THE KAP MODEL TO PREDICT NURSES' JOB SATISFACTION AND CAREGIVING STRESS: A NATIONAL STUDY OF DEMENTIA EDUCATION PROGRAM

22. Training of professional caregivers

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Objectives and Study: This study examined the applicability of a 9-hour dementia education program to evaluate nurses' learning effects, which were tested using a quasi-experimental design. Participants were examined by using the Dementia Knowledge, Attitude, and Perceived Self Efficacy Questionnaires, Job Satisfaction & Caregiving Stress Scale.

Methods: National conferences were applied with purposeful sampling techniques to select registered nurses who were working at Long Term Care Facilities in Eastern and Western Taiwan. An anonymous, self-administered questionnaire based on the theory of Golden Triangulation of Knowledge, Attitude, and Perceived Self Efficacy was distributed to 322 nurses. A total of 300 nurses who had returned the questionnaires were used for the analyses.

Results: Structural Equation Modeling (SEM) to test the KAP (you may write other terms) model indicated that knowledge $B = -.03$, attitudes ($B = .15$ & $-.21$), and perceived self efficacy ($B = .37$ & $.17$) were significantly direct effects on nurses' outcomes (job satisfaction & caregiving stress). The hypothesized model test indicated exact fit, $X^2(31, N=300) = 43.75, p = 0.064, GFI = .974, RMSEA = .036$. The KAP model constructs accounted for 54% of the variance in nurses' learning outcomes.

Conclusions: The KAP appears to be an appropriate theoretical model capable of predicting nurses' outcomes of job satisfaction and caregiving stress. Recognizing the related demographic factors for the KAP model with practical utility to develop more effective strategies for the dementia education program to improve quality of dementia care.

OC067C: EVERYTHING IS A MATTER OF EDUCATION

Among our interventions - not related to medication - towards patients and their families, was the Society's launching of a new activity connected to school education, which aimed at familiarizing and sensitizing children about Alzheimer's.

Discussions with School Boards of Parents on the disease were the first step towards this direction and their consequent approval led, the following year, to the application of a pilot program to primary and high schools.

The aims of the programs were:

- To power family ties, focusing on symbiosis between children and the elderly.
- To stress that quality of life at present reduces the progress of the disease in the long term.
- To urge children to focus on strengthening family ties, on controlling anger and stress, on caring about and helping other people.
- To sympathize with the problems of the elderly.

As a result, the material of the above pilot program was adopted by the Greek Ministry of Education, Educational Institute, and is strongly suggested as supportive to interactive programs of health education at schools.

Abstracts - Oral presentations

WS2 KONFETTI IM KOPF - A PHOTOGRAPHIC AWARENESS CAMPAIGN

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Objectives and Study: "Konfetti im Kopf" („confetti in your head") is a multi-faceted campaign on dementia. It started in Berlin in October 2009 and will travel to other cities. The heart of Konfetti will be a large-scale open air exhibition displaying pictures from my long-term photo project on dementia.

It was my intention to reach the general public, clearing out prejudices about dementia and helping to plant new pictures in heads and hearts of people. During the pre-phase of the campaign 18 professional organisations dealing with age care could be activated to contribute their know-how and manpower.

Methods: Patron of the campaign is former Federal President of Germany, Prof. Dr. Roman Herzog. Klaus Wowereit, mayor of Berlin, also became a Konfetti-mentor, together with celebrities like actors, athletes, authors and singers.

The exceptional campaign was present all over Berlin, especially in the Central Station on big banners, posters, bill-boards and screens. At an information desk people could learn about dementia and were encouraged to visit the open-air exhibition. The Website provides in-depth details about the campaign. Every day visitors were involved in a supporting program with readings, plays, films, concerts, workshops, lectures and dance.

Results: The campaign „Konfetti im Kopf" was successful in bringing together many different professional organisations concerned with dementia care and using the synergistic effect for this important issue. Several German cities expressed their strong interest in continuing „Konfetti im Kopf" in 2010.

Conclusions: Dementia is a socially relevant issue, usually communicated in dreary colours. „Konfetti im Kopf" uses a constructive and colourful approach to handle this subject. Thus the campaign manages to show new perspectives and to encourage people to look into the subject more closely.

WS4: MY MOTHER'S SECOND LIFE.....

Dario Garau Setzu¹
¹voluntary caregiver and tutor of my mother, Selargius, Cagliari, Italy

Objectives and Study: My mother's second life. My mother, 81 years old, has suffered for almost 10 years from Vascular Dementia (and prob. AD).

Methods: After an initial period of standard pharmacological therapy (about two months of neuroleptics, antidepressives and sedatives), during which my mother was very rundown, incredibly confused, very restless, no more able to eat by herself, to walk, etc...and she was given a diagnosis of a few months of life (!), I thought to change strategy, to stop gradually (in a few weeks) the pharmacological therapy (with very insignificant exceptions), and I began to analyse, catalogue, reproduce in a maniacal way her behavior, her new words and signs language and every single action of her. I converted, transformed everything (our behavior, the language's form, the gesticulation, etc..... as well as the apartment, the lighting, the position of the objects..... and her surrounding world on the whole) according to her aptitudes and new personality. I built a kind of theatre-therapy: a paradoxical theater setting of every action, gesture, conversation of her and our everyday life, above all for the solution of her frequent delirium and violence episodes. I have at home one or more actresses-assistants from Ukraine. It has been important for my mother a sort of piano improvisation therapy too (I am a musician). She is and feels free and feels totally at her ease, still today, despite another strong ictus (April 2008) which caused new complications (a Parkinsonism, she is now only hardly able to speak and walk); and we once more transformed our theatre-therapy according to her new stadium.....

Results: Till April 2008 my mother was getting incredibly better in every aspect: cognitive, mental, physical, for the sense of direction, the articulation of language, the understanding; she shows, seems – at present still, despite her current poor state of health, that presumably, obviously, will progressively get worse - to have learning ability (like a child!). And still, she always feels at her ease and protected,.....and goes on with her creative language and (for our logic but not for hers!) abstruse activities with our collaboration, etc, etc.....

Conclusions: My mother's neurologists and I are conscious that her case, our theatre-therapy and its results are impressive and amazing. This experience highlights among other things that many Senile Dementia Patients have or, better, find their own efficacious, rich and (partially) logical (new) life organization, that we have to respect and facilitate. I am ready to present the case of my mother to you in Thessaloniki (in my bad English! I can speak better several other languages), if possible with the backing of a DVD, for example to screen silently during my oral presentation.

The most important thing that I'd like to communicate is that I consider my mother's disease a PROJECT (one of the most interesting projects of my life), and not a misfortune: a totally different perspective of the problem.....

WS3 ART THERAPY FOR PEOPLE WITH DEMENTIA - CASE REPORT

15. Non-pharmacological interventions

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Objectives and Study: To see if art therapy, as a non-pharmacological intervention, can be beneficial in person with dementia (PWD).

Methods: We are presenting a case report of a person with Alzheimer's disease (AD) who was involved in art therapy while attending the Day care centre for PWD.

Results: Alzheimer Disease Societies Croatia (ADSC) which is located in Zagreb, the capital of Croatia, has been running the Counselling centre from its foundation in 1999. We have monthly meetings for families of PWD and all others interested. The career (wife) and Mr. Zvonko, who was diagnosed with Alzheimer's dementia of moderate stage, came one day to the Counselling centre. He was already on standard pharmacological treatment with anticholinergics but behavioural disturbances were present. After his individual and family status were evaluated, he was advised to attend the Day care centre in a Nursing home for older and incapable people "Medvescak", in Zagreb. This Day care centre, which has the longest experience with rehabilitation of PWD in Croatia, is located in the centre of the town, and the transportation for PWD is provided. They are equipped with occupational therapists who are providing a person-centered rehabilitation. They have agreed that for Mr. Zvonko, who was a technician, art therapy may be appropriate. Although he has never painted pictures before developing AD, everybody, including his wife, was surprised with his talent and creativity. While painting the pictures he was calm and satisfied and his behaviour in the Day care centre, also at home, became much more adequate.

Conclusions: Art therapy, as an add-on non-pharmacological intervention, can be beneficial for behavioural disturbances in PWD who are taking anticholinergics.

Abstracts - Oral presentations

WS5 MAKING THE DIFFERENCE THROUGH ADVOCACY

M. J. Splaine¹

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Objectives and Study: Participants will be able to name five essential components of an advocacy activity and use a planning grid for same.

Methods: Lecture, discussion, case examples, handouts

Results: What makes the difference in winning and losing policy issues? The broad answer is a well planned and executed strategy, but this session will specifically break down the five core elements of strategy (setting goals, reviewing organizational considerations, identifying constituents and allies, developing targets and creating winning tactics) using examples of both successes and failures from recent advocacy campaigns across the world.

Conclusions: Inspiration and capacity to replicate advocacy activities in home countries/communities

WS6 THROUGH THE LOOKING GLASS ... INVENTING A NEW ORGANISATIONAL FUTURE

21. Supporting and educating caregivers

F. J. Schaper¹

¹CEO, Alzheimer's Australia WA Ltd, Subiaco, Australia

Objectives and Study: Not applicable

Methods: Not applicable

Results: Not applicable

Conclusions: Disease-specific peak organisations are often cast in a traditional mould that revolves around creating public awareness, advocacy, lobbying government and providing a voice for its constituents. Some organisations take on a service provision role often in the belief that generic services don't have the necessary expertise or insight required to provide appropriate support or develop responsive service models. Those more adventurous may even encourage research and be directly involved in providing suitable research participants and funding. Is it possible to redefine such an important yet convention role? How can organisations reinvent themselves in order to increase their impact, be more responsive to the future demands of their consumers/ constituents, ensure that best practice services are provided to all those that need them, and that credibility is enhanced? This presentation will tell of Alzheimer's Australia WA's journey in redefining itself to be better positioned strategically to influence government policy and academic programs, creating a practical focus on applied research, while developing strong national and international ties. Secondly, the presentation will challenge participants in re-thinking the roles of disease-specific peak organisations, how they can create a new environment by working collaboratively with industry to build/ strengthen the capacity of others to meet the growing needs of their constituents. Alzheimer's Australia WA is currently in the process of moving its entire operation onto a local university campus. This unique collaboration between the university and Alzheimer's Australia WA has given a new meaning to "best practice" dementia care and facilitate the emergence of interdisciplinary practices across a range of university faculties and industry partners. This "capacity building" role of Alzheimer's Australia WA will enable the organisation to work effectively with service providers to improve dementia care practices and create practical and appropriate care models that reflect the needs of those that live with dementia.

WS7 RISING TIDES: THE IMPACT OF DEMENTIA IN CANADA 2008 - 2038

D. P. Harvey¹, D. Benczkowski², P. Wilkinson³

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Objectives and Study: While other countries have recognized the current and impending impacts of dementia on their societies, Canada has just begun to do so. In 2008, the Alzheimer Society of Canada initiated a project to spur policymakers to action. The study projected the cost to society and to individuals, of Alzheimer's Disease and related dementias, for each of the next 30 years, and analyzed the reduction in economic burden of four evidence-based scenarios which demonstrated how the projected burden could be changed.

Methods: 1. Using its Life at Risk® evaluation framework, RiskAnalytics developed a base case estimate of health and economic impacts of dementia in Canada over the next 30 years (assuming no policy or treatment interventions).
2. Dementia subject experts identified "what if" scenarios to explore where evidence-based interventions could have a significant impact on the base case.
3. "What if" scenarios were applied to the base case to quantify the impacts of prioritized interventions on the economic burden of dementia in Canada.

Results: 1. The cumulative total economic burden is expected to reach \$872 billion (2008 dollars) over the 30-year simulation period.
2. Four interventions could significantly reduce the economic burden of dementias:
o Increasing physical activity: \$52 billion
o Delaying the onset of dementia: \$219 billion
o Supporting caregivers: \$63 billion
o Providing a System Navigator to clients and families: \$114 billion

Conclusions: The study concludes that the time to act is now, and suggests that a Pan Canadian response is needed. This should include:
· Investment in dementia research, particularly prevention and early intervention research
· Recognition of the important role of caregivers
· Fostering integrated models of care
· Strengthening Canada's dementia workforce.

WS9: THE VOICE OF PEOPLE WITH DEMENTIA

Lynda Hogg, and Maureen Thom

Alzheimer's Scotland

Lynda Hogg, who has a diagnosis of Alzheimer's disease, will take the audience through her own personal odyssey. She will show how she has chosen to not just sit back and lament her losses but to get involved in positive activities, including:

- taking part in the Scottish Dementia Working Group
- joining Alzheimer Scotland's Council
- being an active member of various reference and advisory groups
- giving presentations to a wide range of audiences in Scotland, the UK and beyond
- volunteering at a day club for older people with dementia; and much more.

Lynda is passionate about the importance to people with dementia, their families and friends of appropriate and timely information. This led to her getting involved with Alzheimer Scotland's multidisciplinary Information Guidelines Working Group which is developing practical information guidelines and tools to help health and social care staff in Scotland provide a better service at any stage of the journey through dementia. Lynda and Maureen will describe the work of the Information Guidelines Working Group and its outputs so far.

Abstracts - Oral presentations

WS11 THE VOICE OF PEOPLE WITH DEMENTIA

19. Quality of life in demetia

M. Sewell¹

¹Scottish Dementia Working Group, Alzheimer Scotland, Glasgow, United Kingdom

Objectives and Study: As far as we are aware, the Scottish Dementia Working Group remains the only national campaigning group of people with dementia in the world.

Why is this?

How can we help other countries develop their own groups?

What has the SDWG achieved?

How do members benefit from being part of the group?

Methods: The presentation will take the audience through a journey which begins with the early stages of how and why the SDWG was set up. We will look at some of the practicalities of how the group runs and how it is sustained. We will offer practical suggestions for how other countries may seek to establish their own campaigning groups of people with dementia. We will talk about the wide range of campaigning and awareness-raising activities that group members have been involved with. These include:

Results: • campaigning on medical issues and respite care, amongst other things

- meeting with government ministers and other politicians
- submitting views to a wide range of organisations
- producing two DVDs and work in underway on a new training DVD
- membership of the Scottish Government's Dementia Forum and Mental Health Collaborative Dementia Reference Group
- speaking at conferences in Scotland and abroad
- contributing to the professional training of student social workers, doctors and nurses

Conclusions: We will conclude with a review of our current work, including perhaps the pinnacle of our achievements to date, in working with the Scottish Government on the development of the new Dementia Strategy. Members are participating on equal terms with professionals, in recognition of the real value the contribution of people with dementia can make and the unique perspective they can bring

WS13: LIFE HISTORY – “PORTRAIT OF A LIFE”

Peter J S Ashley, Suzanne Wightman

It has become a well established fact that stimulating people with dementia to become involved in intellectually challenging pursuits can be highly beneficial to their wellbeing and therefore that of their carers. The beneficial effects can, in some, slow down their decline and provide stimulus and interest by looking back at their own history throughout their life. Ongoing benefits thus derived are a personal history of the subject which can be used in the future to maintain a much better quality of life (the reminiscence effect).

In the United Kingdom the South West Yorkshire Partnership NHS Foundation Trust Collaborative, of which the presenter is proud to be the Patron have developed a multimedia toolkit for this Life Story work.

This toolkit, entitled “Portrait of a Life” has been spearheaded by a small project team lead by Suzanne Wightman, one of the Trust's senior nursing managers and Collaborative lead and who will be co-presenting today.

“Portrait of a Life” received funding from the UK Mental Health Foundation following an open competition with over 100 applicants. The product has been professionally produced by the team in the Collaborative and comprises a multimedia toolkit aimed at care homes, hospitals, the voluntary sector and all those concerned with the wellbeing of people with dementia.

In this presentation, a marvellous couple Leo, who has dementia, and his wife and carer Edith, have allowed us to use them as an example of how the toolkit can be applied to very positive effect. Prior to starting with our project team, Leo was quite and introverted, demonstrating the classical signs of late dementia. As they worked with our project team Leo became much happier and he became outgoing with his MMSE raised by some 6 points.

We launched this product in the UK this February/March and because of its instant success, we decided to bring it to the attention of the International community at this ADI Conference.

WS12: CREATING PARTICIPATION AND RELATION FOR PEOPLE WITH DEMENTIA IN JAPAN

Ryu Yoshino, Yoko Mizutani
Alzheimer's Association Japan

In the occasion of ADI International Conference in Kyoto in 2004, Japanese person with dementia spoke out. Following that, governmental measures for dementia in Japan have been advanced greatly. In 2005, “The committee for supporting network of people with dementia” was established as a supporting project by government, in which AAJ has been carrying secretariat.

We will report concerning participation and relationship of people with dementia in AAJ activities as follows;

“Appeal and presentation at a meeting of people with dementia”, “Summit on dementia of early onset”, “Presentation at memory lecture by people with dementia on World Alzheimer's Day” and “Organizing participation in a branch office”.

Abstracts - Poster presentations

P001 CRISIS RESOLUTION/HOME TREATMENT APPROACHES TO HOME SUPPORT FOR OLDER PEOPLE WITH MENTAL HEALTH PROBLEMS: A SYSTEMATIC REVIEW 02. Ageing and dementia

S. Sandhu¹, C. Miranda¹, J. Hoe¹, D. Challis², M. Orrell¹

¹Department of Mental Health Sciences, University College London, London, ²PSSRU, University of Manchester, Manchester, United Kingdom

Objectives and Study: To evaluate the effectiveness of crisis resolution/home treatment approaches to home support for older people with mental health problems compared with other forms of treatment including 'treatment as usual', standard community treatment and other non-crisis resolution/home treatment interventions.

Methods: A broad range of controlled comparison studies and papers which incorporate quantitative as well as qualitative research will be considered for this review. Randomised controlled trials provide the most reliable evidence on the effectiveness of interventions but there have been few studies in this area. The studies will be rated against a set of pre defined criteria to rate the quality of each study and to assess eligibility for inclusion. The participants to be included in this review are older people who live in the community and have a mental health problem (and their carers) who present to or are referred to a health/social care home treatment/crisis service because they were experiencing a psychosocial crisis. The primary outcomes to be considered for this review will be maintenance of community residence/avoidance of institutionalisation and length of hospital stay in the eight weeks after the crisis.

Results: The results of the review will be summarised in the following way; details of included and excluded studies will be presented; interventions which have been identified will be summarised by characteristics, effectiveness and outcomes. Each study included will be quality rated which will be highlighted in the results.

Conclusions: Crisis resolution and home treatment approaches for people with dementia are becoming more widespread particularly in the UK to help older people with mental health problems remain at home longer, be discharged from hospital earlier and to avoid hospital and care home admissions. However, despite many anecdotal reports of reductions in bed usage the effectiveness of such services remain very much under researched. This review is very much needed to assess the evidence available and to consider applicability in current practice.

P002 USEFULNESS OF ADMINISTRATION OF 10MG/DAY DOSAGE DONEPEZIL HYDROCHLORIDE (ARICEPT) TO DEMENTIA ALZHEIMER'S TYPE (DAT) - COMPARATIVE STUDY WITH 5 MG BY NEUROPSYCHOLOGICAL TESTING AND SPECT IMAGING-- 02. Ageing and dementia

K. Kanaya¹, S. Abe¹, M. Sakai¹, H. Fujii¹, K. Koizumi², T. Iwamoto³

¹Geriatric medicine, ²Radiology, Tokyo medical university Hachioji medical center, ³Geriatric medicine, Tokyo medical university, Tokyo, Japan

Objectives and Study: Although DAT is normally treated in Japan with donepezil hydrochloride (DH) at a dosage of 5 mg/day, use at a dosage of 10 mg/day has recently been approved for advanced DAT. We assessed symptoms and changes in cerebral blood flow after increasing the dosage to 10 mg/day in advanced DAT patients having previously undergone long-term administration at 5 mg/day to investigate the usefulness at the higher dosage, the results of which are reported here.

Methods: The subjects consisted of 25 DAT outpatients for which dosage of DH had been increased to 10 mg/day due to progression of dementia symptoms (7 men, 18 women, average age: 78.4 years). The study consisted of assessing the subjects by MMSE, ADAS-jcog and to assess cerebral blood flow, 99mTc-ECD SPECT, twice after administration at 5 mg and 10 mg. Efficacy was evaluated by judging MMSE ≥ 2.0 and ADAS ≤ -2.0 to indicate improvement, MMSE < 2.0 and ADAS ≤ -2.0 to indicate exacerbation, and other results to indicate no change based on a comparison before and after increasing dosage. Comparison of cerebral blood flow after increasing dosage was used SPM8 based on MATLAB.

Results: Although administration was discontinued in only 1 case due to adverse effects involving gastrointestinal symptoms, compliance was favorable. Improvement of cognitive functions using ADAS-jcog at the increased dosage was observed in 31.2%, no change in 37.5% and exacerbation in 31.3%, while inhibition of progression of symptoms (improvement + no change) was observed in 68.7%. In the comparison of changes in cerebral blood flow, significant increases were observed in the bilateral temporal, occipital, and parietal lobe at 10 mg DH as compared with 5 mg DH.

Conclusions: Administration of Aricept at 10 mg/day is considered to be somewhat effective in considerably advanced cases of DAT in terms of dementia symptoms and cerebral blood flow.

P003 AN ELECTROPHYSIOLOGICAL MODEL OF RETROGENESIS 02. Ageing and dementia

L. R. Borza¹, B. Reisberg², V. Astarastoe³

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Objectives and Study: The objective of the present study is to provide electroencephalographic (EEG) evidence for retrogenesis. Previous studies have documented retrogenesis as the process by which degenerative mechanisms in Alzheimer's disease (AD) reverse the order of acquisition in normal human development.

Methods: We perform a systematic review and a metaanalysis based on the relevant EEG original papers from the scientific literature.

Results: We show that the EEG activity pattern in AD inversely recapitulates the one in normal development: in AD there is a progressive decrease in fast wave activity and a progressive increase in slow wave activity, while in normal development, with increasing age, slow wave activity is replaced by fast wave activity.

Conclusions: The present work creates an EEG retrogenic model that could help us to improve the management of AD.

P004 THE ATTITUDES TOWARDS AGING, DEMENTIA AND BPSD 02. Ageing and dementia

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Objectives and Study: In many developing countries studies for dementia are missing. The specialists are meeting patients in moderate and severe stages of dementia. The aim of this study is to analyse the situation in our country. Epidemiological studies don't exist and the registered cases are in lower numbers than the real situation. If we take in consideration the incidence of the Alzheimer's disease we could expect more than 10.000 affected persons.

Methods: We have analysed 60 patients diagnosed with Alzheimer's or vascular dementia, according to ICD 10 criteria, CT scan, Mini Mental State Examination, Hachinski Ischemic Score and the Behavioural Pathology in Alzheimer's disease Rating Scale at the Department for Geriatric Psychiatry.

Results: 80% of the patients were in moderate and severe stage of dementia. The average time from the beginning of the disease was 3,5 ($\pm 1,8$) years. The Behavioural and Psychological Symptoms of dementia (BPSD) were present in all patients with average time of 17 (± 15) months. The motivation for examination or hospitalisation was BPSD. The patient's family took care in 86,7%.

Conclusions: The patients who were on examination were in high percentage in the advanced stages. The motivation for examination was BPSD and the examination happens when the tolerance of the family is exceeded. The patient's family carry the huge burden of dementia. The tradition that children care about elderly, accepted problems with memory associated with age has influence on later taking patients on examination. The family and the physicians of the primary care are not informed enough about the nature of the disease and possibilities for treatment. Epidemiological studies for dementia are needed. Education of healthcare providers for dementia and BPSD is needed as well as change of the attitude towards treatment of dementia in general.

Abstracts - Poster presentations

P005 RETROGENESIS: EVIDENCE FROM BRAIN DEVELOPMENT

02. Ageing and dementia

L. R. Borza¹, B. Reisberg², V. Astarastoe³
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Objectives and Study: The objective of the present work is to offer brain developmental evidence for retrogenesis, a process of Alzheimer's disease (AD) degenerative inverse recapitulation of human ontogenic acquisition patterns.

Methods: We complete a systematic review and a metaanalysis of magnetic resonance imaging (MRI) articles that have been carefully selected from the PubMed database.

Results: Our study points out that the brain regions that normally develop last are the first to degenerate in AD. Brain atrophy occurs in a well-defined sequence as AD progresses, mirroring the sequence in which the normal brain structures develop.

Conclusions: This work defines a new retrogenic model that can be relevant for the understanding of the nature of AD, thus pointing to previously unexplored prevention and treatment approaches.

P006 AGGRESSIVE COGNITIVE COURSE IN AN OLD WOMAN

02. Ageing and dementia

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Objectives and Study: The dementia is defined by the decline of cognitive functions with daily life activities impairment. Two kinds of evolution are described: "slow cognitive decline" and "rapid cognitive decline" (RCD: - 3 points on the MMSE by Greco and + 4 points on the Adas-cog in 6 months). The main predictive factors of RCD are: onset before 65 years, denutrition, extrapyramidal or psychotic symptoms, apolipoprotein 4 or butyrylcholinesterase k.

Methods: A 75 year old Woman suffering from Alzheimer's disease (AD) diagnosed in 2006, visited geriatric memory clinic in 2007 for important cognitive decline [MMSE: 26/30 (04/2006), 17/30 (12/2007)] and a persecutive delusion. To confirm the diagnosis, a standard geriatric assessment was realized (anamnesis, previous history, neuropsychological tests, clinical and psychiatric examination, cerebral CT scan, standard serum parameters, electrocardiogram).

Results: The previous history was: dyslipidemia, hypertension and no dementia's family history. Cerebral CT scan, biological and neurological exams were normal. A weight loss of less than 10 % was observed. The cognitive assessment showed a decrease of performance on memory testings. Consequently the diagnostic of AD was confirmed and a treatment by RIVASTIGMINE was started. Thereafter, ECG conduction disorders lead to stop RIVASTIGMINE and to introduce MEMANTINE. Moreover, a home care and memory workshop's were started in 2008. However RCD persisted. Lastly, patient had repeated stress.

Conclusions: This observation illustrates the case of RCD with only one predictive factor (psychotic trouble) despite treatments and non-drug care. This decline appears in a repeated stress context. RCD's etiology is unknown but setting up an antidepressant treatment and cerebral MRI exam may be the clues...

P007 KNOWLEDGE ATTITUDES AND BELIEVES OF THE GENERAL POPULATION REGARDING ALZHEIMER DISEASE

03. Challenging behaviours

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Objectives and Study: The present study has been undertaken between January – July 2009, in the following regions: Athens, Thessaloniki, Volos, Evvia. The sample was comprised of 150 persons under the age group of 30-80 years old and 150 undergraduate and graduate students under the age 18-30 years old. In the sample were included people working both in the health field and in other not related professions. From them 180 were women and 120 men.

Methods: For the collection of the data, a standards questionnaire with 33 questions was used as well as open interviews to selected persons. The data analysis was performed with the use SPSS 13.

Results: The results saw that women were more informed in 70% more than men regarding the clinical manifestation of the disease as well as the methods used for the diagnosis of Alzheimer's disease. The analysis also indicated the same results for the undergraduate and graduate students, especially for the later in the percentage of 87%. Regarding the causation and the therapeutically treatment of the disease, women were adequately informed in the percentage of 45% and men of 35%, meanwhile students were more knowledgeable of the causation, pathogenesis of therapy of the disease in percentage of 70%. The results to the question regarding the organization and the provision of care both from the state and the church were partly contradictory focusing to the fact that, more combined efforts are needed to tackle the serious problem of the continuously rising number of the Alzheimer's disease victims (160000 victims in the Greek territory).

Conclusions: Knowledge and attitudes of the general and the student population of selected regions of Greece was found to be satisfactory, regarding Alzheimer's disease. As far as it concerns the provision of health social and economics support from the state and the church to the Alzheimer's disease patients the results saw that the level of support is still in the mediocre stage.

P008 ESTABLISHING QUALITY CARE BY IMPROVING SLEEPING PATTERN

03. Challenging behaviours

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Objectives and Study: Sleeping pattern of people with dementia are often abnormal. There may be many reasons why a person with dementia has difficulty sleeping. The purpose is to evaluate the sleep-improving effects by changing the care service and to establish the quality life of a person with dementia.

Methods: For an 82-year-old man with Alzheimer's disease and sleep disorder we conducted the care service based on the objectively measured sleep-wake pattern. His sleep-wake pattern was measured by SLEEP SCAN (Paramount Bed, Japan). SLEEP SCAN is a new technology to measure sleeping pattern without wearing anything. By 2 weeks monitoring, we decided to conduct 4 action plans for him, preventing the nap after 14:00 and encouraging daytime activities.

Results: After 1 month intervention, the cause of sleep disorder was defined. A nap after lunch was reduced and a short walk was taken. The active participation in the rehabilitation program increased and sleep conditions were improved.

Conclusions: The causes of sleep difficulties were reduced and the daily life of a person with dementia was settled down. It was indicated that the care service based on the objectively measured sleep-wake pattern was effective for the aged care.

Abstracts - Poster presentations

P009 THE VALIDATION OF THE ITALIAN VERSION OF THE GPCOG (GPCOG-IT), A SCREENING TEST FOR DEMENTIA IN GENERAL PRACTICE 05. Diagnosis and treatment - role of GPs

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Objectives and Study: To validate the Italian version of GPCOG (1) (GPCOG-It). The General Practitioner Cognitive Assessment of Cognition (GPCOG), a brief, efficient dementia-screening instrument for use by general practitioners (GPs), consists of cognitive test items and historical questions asked of an informant. The validity of instruments across different cultures and languages requires confirmation.

Methods: The validity of the GPCOG-It was assessed against standard criteria for diagnosis of dementia (Diagnostic and Statistical Manual of Mental Disorders - Fourth Edition) as well as the Clinical Dementia Rating scale. Participants: 200 community-dwelling patients aged at least 55 years with (patient group) or without memory complaints (control group). Seven GPs were involved. Measurements: Cambridge Cognitive Assessment, Mini-mental State Examination with standard (24/25) and Italian cut-off (26/27), Alzheimer Disease Assessment Scale-Cognitive scale and Geriatric Depression Scale.

Results: The GPCOG-It, total score and two-stage method, were at least equivalent in detecting dementia to the MMSE using the standard 24/25 or the Italian 26/27 cut-offs. The two-stage method of administering the GPCOG-It (cognitive testing followed by informant questions if necessary) had a sensitivity of 82%, a specificity of 92%, a misclassification rate of 17.4% and positive predictive value of 95%. Patient interviews took less than 4 minutes to administer and informant interviews less than 2 minutes; this was half that needed for MMSE administration.

Conclusions: GPCOG-It maintains the same psychometric features and time efficiency as the original English version of the GPCOG. Despite methodological limitations, i.e. use of defined samples, the GPCOG-It performed well in detecting clear cut and borderline cognitively impaired patients and can be introduced in Italian GPs' daily practice.

P011 THE VALUE OF BIOMARKER STUDY ON DIAGNOSIS OF ALZHEIMER'S DISEASE 05. Diagnosis and treatment - role of GPs

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Objectives and Study: Previously, the diagnosis of Alzheimer's disease (AD) was conducted through clinical evaluation and was finally confirmed by autopsy. Recently, diagnosis of AD has been greatly advanced on biomarkers (including structural, functional neuroimaging, and biomarkers in CSF and serum). These new methods promoted diagnosis, prediction and monitor in AD progress.

Methods: The study on biomarkers in CSF and structural neuroimaging has been processed. Phosphorylated Tau and Ab40, Ab42 are important biomarkers in CSF, 18F-FDDNP is important for neuroimaging.

Results: Longitudinal study indicated that between AD and control groups, serum Ab40 and Ab42 both are different in AD groups from Control group. Especially there is high level of Ab40 in serum and low level of Ab42 in AD group. These are important risk factors in predicting AD in early stage. In addition, structural neuroimaging, such as Measurement of applied configuration, could trace progress of AD. Structural MRI could show atrophy of hippocampus in patients of dementia and mild cognitive impairment. Functional neuroimaging, such as using 18-FDG PET, could trace glucose metabolism. The glucose metabolism in cortex of temple lobe and parietal lobe of AD patients is lower. This method is valuable to some patients of AD. 18F-FDDNP and 11 C-PIB are the other valuable markers in tracing Ab plaques in AD brains. FDDNP is a lipid-soluble small molecule of chemical compound. It could pass through brain /blood barrier fast and stain the plaques and neurofibrillary tangles in brains of AD patients. There are two different domains in Aβ dynamically. These domains could monitor Aβ and its accumulation quantitatively. This is especially valuable to diagnose for early stage of AD patients.

Conclusions: These methods could sensitively and straightly reflect Aβ and its accumulation in brains before there is no change in cognitive examination. It is objective, sensitive and specific biomarker. New biomarkers are merging in large degree and will become the new diagnostic methods to AD early diagnosis.

P010 THE ROLE OF LEPTIN IN THE PATHOGENESIS OF THE ALZHEIMER'S DISEASE AND ITS POTENTIAL THERAPEUTIC USE. 08. Future treatments in Alzheimer's disease

M. Tsintou¹
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Objectives and Study: Leptin was initially found to be a hormone, produced by lipocytes, regulating the metabolic energy levels via acting on the hypothalamus receptors, which check the feeding behaviour(1). Its receptors have been determined in various peripheral tissues, while they are found in the arcuate nucleus, the median eminence of the hypothalamus and the hippocampus(2).

Leptin is distributed in the cerebral tissue since it crosses the blood-brain barrier and it acts via special receptors(3). Its action is multiple and it is owed to its capability of boosting various signaling pathways.

As far as the Alzheimer's disease (AD) is concerned, leptin was found to lead to the Aβ peptide reduction both in vitro and in vivo(4), and to the down-regulation of the TAU phosphorylation in vitro (5). Thus, in the classic "amyloid cascade" and "tau and tangle" hypotheses, which largely explain the AD pathobiology, leptin gets added to the multiple other factors, which interconnect between the Aβ and TAU molecular pathways, indicating a potential improvement in the AD pathogenesis and the cognitive decline.

The leptin action in neuronal human and rat cultures led to the Aβ peptide reduction and the decreased TAU phosphorylation via the activation of the AMP activated kinase (AMPK)(5), which is involved as a basic regulator in both of the AD pathways. The activated AMPK can suspend the activation of the GSK-3β, which is recognized as the main brain kinase, the hyper-expression of which causes the forming of neurofibrillary tangles(6,7). Moreover, leptin can deactivate the GSK-3β through the phosphorylation at Ser9.

Methods: -

Results: -

Conclusions: Conclusively, the decreased leptin levels found in brains of AD patients, combined with the unique biological leptin activities and its positive intervention in the disease pathways, constitute elements - supported by many experimental and clinical studies - hold promise for a future therapeutic benefit for AD patients.

P012 GENERAL PRACTITIONER DEMENTIA SERVICES IN AUSTRALIA 05. Diagnosis and treatment - role of GPs

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Objectives and Study: Our project measures the perceived role of general practitioners (GPs) and practice nurses in diagnosing and managing dementia, comparing dementia knowledge and preparedness for providing dementia services across Australia.

Methods: A survey was distributed to GPs and nurses measuring their dementia training and knowledge and perceived role in providing dementia care.

Results: Our respondents were 84 GPs and 17 nurses trained in 15 different countries practicing at 40 different sites throughout Australia, 25% city and 75% rural. All nurses and 48% of GPs were female. Fifty-eight percent of GPs were Australian trained, but only one nurse had trained outside of Australia. Forty-two percent of GPs had no dementia training, with no significant difference between city or rural, $p=386$. GPs whose initial medical training was in a western developed country were more likely to have received dementia training, $p=.003$. Twenty-seven percent of GPs and one nurse preferred not to manage dementia patients or were unsure, and this was more likely if they lacked dementia training, $p=.028$. Fifty-seven percent of GPs had graduated over 20 years ago, only one of whom had received dementia training in the past five years. All respondents thought a doctor or nurse should talk to patients about dementia despite only 18% of nurses and 25% GPs considering their dementia knowledge adequate. Although GPs indicated they would refer dementia patients for support (43%), treatment (30%), diagnosis (21%) and behavior problems (18%), only 30% of GPs worked in areas with access to geriatric or psycho-geriatric specialist services.

Conclusions: The general practice workforce in Australia consists of doctors trained in many different countries, some of whom lack dementia training and a majority of whom rate their dementia knowledge as inadequate. Despite this, they may be the only medical practitioners accessible to people with dementia in rural areas.

Abstracts - Poster presentations

P013 STUDY ON COMFORTABLE COLOR LIGHTING IN PATIENTS WITH ALZHEIMER'S DISEASE

08. Future treatments in Alzheimer's disease

S. Arai¹, K. Inada¹, T. Momoi², S. Katayama¹

¹Neurology, Hiroshima-Nishi Medical Center, Otake, ²Environmental Protection Group, SHARP, Osaka, Japan

Objectives and Study: There is a possibility that the optic nerve system has been changed in Alzheimer's disease (AD). However, the color vision, especially the color felt comfortable is uncertain. Moreover, though symptoms such as memory deficits, cognitive dysfunctions, and the frontal lobe dysfunctions caused in AD, the difference of how to feel the lighting color according to the level of the dysfunctions is not clear. In this study we examined physiological and psychological effects of AD by lighting color in daily life.

Methods: Patients with very mild to moderate AD (n = 20, MMSE: 21.48±4.11) and their family members (N=16) participated in the study. Participants completed a neuropsychological assessment battery that included the Rivermead Behavioral Memory Test (RBMT), MMSE, Frontal Assessment Battery (FAB). After the color of happiness was chosen from 13 colors, each color lighting (green, orange, white, and the color of happiness) was irradiated for five minutes by the LED. Physiological and psychological effects were examined using the Semantic Differential Method and salivary amylase activity. AD was divided 2 groups (low/high) by the median of each neuropsychological score, and 2-way ANOVA was employed for comparing the three subject groups (low/ high/family) and examining the effects of 4 colors (SPSS Statistics 17.0).

Results: No significant differences existed between color and RBMT or MMSE. There were significant interactions between FAB and color, the FAB-low group evaluated more comfortable than FAB-high group and Family group about lighting of green.

Conclusions: These results suggest that feeling of the color lighting is different by the frontal lobe function in patients with AD. And, these results suggest the importance of understanding the comfortable color of AD on the basis of frontal lobe function.

P015 STUDY ON SEARCHING THE COMFORTABLE LIGHTING COLOR FOR PATIENTS WITH ALZHEIMER'S DISEASE AND THEIR FAMILY

08. Future treatments in Alzheimer's disease

K. Inada¹, S. Arai², T. Momoi³, S. Katayama¹

¹Neurology, National hospital organization Hiroshima-Nishi Medical Center, ²Neurology, National hospital organization Hiroshima-Nishi Medical Center, Ohtake, ³Environmental Protection Group, Sharp, Osaka, Japan

Objectives and Study: Patients of Alzheimer's disease use regularly, or which end up in shades of color lighting, color or a color which is pleasant, not known yet. We have Alzheimer's disease patients and their families to feel comfortable exploring the lighting color and present.

Methods: For the purpose of diagnosis of dementia in the hospital, 37 (males 19 females 18 people) Alzheimer's disease patients were diagnosed and 37 persons (11 women: 26 men) families of patients as control. Lighting of the room, with variable color LED lighting direct lighting, indirect lighting installed as. LED lighting colors are red, orange, yellow, green, blue, purple, pink, orange bulb, yellow, green, blue, white light and three other species using 13 colors. First, under white light, each color card was selected from among 13 color cards, coincidence with my mind, success, happiness, sadness, anger feeling and sexy, and favorite color, impressive color of myself and impressive color of family. Under the color selected by patient and his family as happiness and sexy, we spent five to 10 minutes while chatting. In each lighting color, each of the patient and his family was asked to evaluate three levels of Yes, No and not about the six items as uplifting, being happy, relieved, feeling restless and feel the bad cozy.

Results: Percentage of people chose the color pink card is happiness, Alzheimer's disease patient; male 7.7% and female 25%, the family; male 8.3% and female 38.7%, and Pink is the best part as sexy color, Alzheimer's disease patients male 37.5% and female 53.6%, the family; male 54.6% and female 42%, respectively. Percentage of people chose purple, green and red color was obviously lower. The evaluation of 25 persons provided pink LED lights was Yes; uplifting 44%, being pleased 32%, relieved 56% and uncomfortable 48% in Alzheimer's patients. The evaluation of each family, 36%, 73%, 56%, 60%, respectively. No patients were evaluated with Alzheimer's disease 28%, 12% had a foil.

Conclusions: Noteworthy was the high-backed pink. Using the pink, I thought it necessary to further explore how to incorporate the lives of future expansion.

P014 SCREENING FOR DEMENTIA IN PRIMARY CARE

05. Diagnosis and treatment - role of GPs

D. Dimitriadou¹, A. Strilakou², L. Charalambidou³, S. Mparas⁴, A. Papanasiou⁴, G. Avraam⁴, S. Katsoulakou⁴, E. Koutra⁴

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Objectives and Study: Dementia clearly satisfies the World Health Organization criterion that the condition be an important public health issue. It affects about 8% of the population at age 65 and prevalence roughly doubles every five years, thereafter to reach about 58% in those older than 95 years.

Methods: The screening tests (MMSE, GPCOG, MIS, Mini-Cog), can be performed and interpreted by other members of the healthcare team may further improve feasibility through reduced time and staffing costs.

Results: Three well-conducted systematic reviews have compared the properties of a multitude of screening tests for dementia. The first review compared tests taking 10 minutes or less that had been studied in community care settings.

Conclusions: Screening presents opportunities for amelioration of reversible contributors to cognitive impairment and optimization of risk factor profiles.

P016 SHARING PATHOGENETIC MECHANISMS BETWEEN ACUTE MYOCARDIAL INFARCTION AND ALZHEIMER'S DISEASE

11. Multidisciplinary approach of dementia

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Objectives and Study: Gene variants modulating inflammation and cholesterol metabolism have been associated with acute myocardial infarction (AMI) and Alzheimer's disease (AD) and it seems that AMI and AD sharing these gene variants. Promoter polymorphisms with functional relevance in the expression of the inflammatory genes are often found at elevated frequency among patients with AMI. Data presented here represent an approach to define individual risk profiles that may be applied to healthy subjects of different ages to predict intrinsic risk of AMI or AD.

Methods: We investigated a panel of relevant polymorphisms (interleukin 10 (IL10) -1082G/A, IL6 -174G/C, tumor necrosis factor (TNF) -308G/A, interferon gamma (IFNG) +874T/A, SERPINA3 -51G/T, 3 hydroxy 3 methylglutaryl coenzyme A reductase (HMGCR) -911C/A, apolipoprotein E (APOE) e2/3/4) in 280 AMI, 257 AD, 1307 controls. A grade-of-membership (GoM) statistical analysis identified six risk sets. Each individual was included in one set by membership scores.

Results: Sets I to III represented low risk (I) or low risk < age 65 (II, III); in these categories pro-inflammatory alleles for HMGCR, TNF, APOE were absent. Sets IV & VI described the etiologic overlap of AMI and AD, these groups carried pro-inflammatory alleles for SERPINA3, IL10, IFNG and HMGCR. Set V was most typical of AMI, and distinct from AD (TNF and IL6 genes). The membership of individuals in these sets varied widely defining a range of genetic predilection related to the investigated gene variants.

Conclusions: Our results describes an emerging picture showing that an abnormal regulation of inflammation is implicated in the pathogenesis of atherosclerosis and its complications and neurodegenerative processes leading to AD. This profile may be used to identify among healthy individuals those with intrinsic high risk of developing with age these diseases. These risk profiles might then be used to further define diagnostic procedures which might indicate specific early therapeutic interventions aimed at prevention or significantly delay of the clinical manifestations of these two diseases.

Abstracts - Poster presentations

P017 NEWLY DIAGNOSED PATIENTS WITH MB.ALZHEIMER AND VASCULAR DEMENTIA AT THE GERONTOLOGY INSTITUTE SKOPJE IN THE PERIOD 01.01. 2009- 1. 09. 2009

11. Multidisciplinary approach of dementia

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Objectives and Study: Alarm the general public, especially the medical personal of the growing number of patients with Mb. Alzheimer with a main intent in early diagnostics and adequate treatment in domestic and ambulance conditions

Methods: Medical and Psychological tests

Results: In the period of 9 months in the Gerontology Institute Skopje 740 patients were examined of which 630 were hospitalized and 110 treated in ambulance and domestic conditions. 61% patients were diagnosed with multimorbidity and chronic diseases aged between 67 and 94 years. 32% have vascular dementia (122 patients) and they have had the condition for 3-7 years, without being diagnosed and treated fully. Most patients were treated for the other conditions they had such as hypertension, diabetes mellitus, cardiomyopathy and brain stroke whilst dementia was treated as a normal side condition to the other long term illnesses.

As a final result to the age and chronic conditions, the vascular dementia has taken its toll and the patients were admitted at the Gerontology institute in final stages of vascular dementia. Specific tests and examinations for vascular dementia were done in a small number of patients. 26 patients were diagnosed with Mb. Alzheimer and they are aged 56-75 and are without any other chronic conditions. 9 of these patients are hospitalized and 17 are treated in ambulances and home care.

Conclusions: From the case study it is clear that the education of the general practitioners for conducting the minimal mental tests and basic examinations for the diagnosing of Mb. Alzheimer is necessary. This will result in early diagnostics and hospitalization or further examinations of the patients in specialized institutions in order to ensure education of the patients and family about the life with vascular dementia. This conditions leads to full invalidity and requires constant care. Early diagnostic would better the quality of life of both patient and family.

P019 SPATIAL ATTENTION AND EYE MOVEMENT BEHAVIOUR DURING VISUAL TASK PERFORMANCE IN EARLY ALZHEIMER'S DISEASE. CONTRIBUTION OF EYE TRACKING MONITORING SYSTEMS

13. Neuropsychology and dementia

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Objectives and Study: In early Alzheimer's disease (AD) patients experience an impairment of spatial attention traditionally assessed by paper-and-pencil visual exploration tests. Eye movement behaviour is related to performance in daily activities even for overlearned tasks and consequently, to functional autonomy. The aim of this exploratory controlled study is to evaluate visual exploration in AD while resolving a set of computer-based tasks using an eye tracking system which provides a neurophysiological measure of the scanpath sequences.

Methods: A total of 40 mild-to-moderate AD patients and 40 healthy elderly age-matched controls, with normal or corrected vision, have been recruited through a memory clinic. All the subjects are required to participate in a two-hour session. A neuropsychological assessment and a set of progressively difficult computerized visual search tasks are performed. An infrared eye-tracker is used to record eye position and movement. Evaluation criteria includes: task accuracy, reaction time, scanpath patterns, Trail Making Test, and functional evaluation.

Results: The study is currently in course. It is expected a divergence between groups in visual tasks performance: AD patients would have longer reaction times and detect fewer targets than controls. Concerning scanpath patterns AD patients might present shorter saccade amplitudes and longer fixation duration than controls.

Conclusions: Preliminary results confirm previous findings about decline in spatial attention and visual exploration in AD. Besides, scanpath comparison between healthy and cognitive impaired elderly will facilitate the understanding of these deficits. This study shows the contribution of using eye tracking technology for assessment in AD. These findings will allow us to design computerized training programs individually tailored for this population.

P018 EFFECT OF MEDICATIONAL AND PSYCHIATRIC INTERVENTION ON BRAIN FUNCTION OF ALZHEIMER'S DISEASE IN THE MEMORY CLINIC

11. Multidisciplinary approach of dementia

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Objectives and Study: Psychiatric intervention was performed on patients of Alzheimer's disease and their family upon the medical treatment as dosage of donepezil in the memory clinic between 2007, April and 2009, March. Educational program about Alzheimer's disease and the methods of the avoidance of stress on patients of Alzheimer's disease were performed. Consider the change in cognitive function tests, clarify the items to improve item progression through the transition, and discusses how to intervene in the future.

Methods: Forty-two patients of Alzheimer' disease and their families had medical educational program and psychiatric intervention in the memory clinic. Mini-mental examination (MMSE) and Rivermead Behavioral Memory Test (RBMT) were performed as psychiatric test. They were divided into 3 groups by duration among the two examinations, as 200-299 days, 300-399 days and 400-499 days, and 4 groups by age as 56-65 years old, 66-75 years old, 76-85 years old and 86-95 years old, and 3 groups by MMSE scores in the first examination as 12-15 points, 16-19 points, 20-23 points, 24-27 points. The each result of psychiatric examination of two times in the two years was compared the second result of psychiatric examination with the first result using Mann-Whitney-U test.

Results: In a 200-299 days group a total score of RBMT and MMSE was improved significantly. Though in 300-399 and 400- 499 days group a score of total ,SPS, and SS in RBMT, and a score of loss orientation in MMSE decreased significantly, a total score of MMSE didn't decrease. Separating groups by a total score of MMSE, a score of SPS and MMSE only decreased significantly in 12-15 points group. By age we recognized a score of SPS and SS only decreased in 75-84 years old group.

Conclusions: We didn't recognized psychiatric intervention decreased significantly a total score of RBMT and MMSE 500 days later. But the score of short-term memory and loss-disorientation decreased significantly- specially in severe AD and a 75-84 years old group. So we considered psychiatric intervention needed to include recall method and repeated exercise therapy.

P020 AN AUDITORY MENTAL SCREENING EXAMINATION

13. Neuropsychology and dementia

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Objectives and Study: Hundreds of tests are constructed every year as supplementary tools for the diagnosis of Alzheimer's disease in clinical praxis. As many elderly people have visual or movement problems the clinician can't administer screening tests as Mini Mental State Examination. For this reason we created an Auditory Mental Screening Examination (AMSE) with 35 every day meaningful sounds in order to discriminate Alzheimer's disease (AD) patients from normal elderly.

Methods: In our pilot study our sample was 64 non demented and Alzheimer's disease outpatients recruited from the Memory clinic of Geriatric Unit of Hippocraton hospital and the Neurologic clinic of Panagia hospital in Thessaloniki in Greece. The participants were 70.9 years old and they had 9.7 years of typical education. The mean of the MMSE for the non demented and AD participants was 28/30 and 21/30 respectively.

Results: Our results showed that the AMSE has strong correlation with the MMSE ($r=.728, p=.01$) and about the same discriminate ability as well as the MMSE, 87.5% and 82.5% respectively. The AMSE can discriminate the non demented in 97.5 % and the AD in 70.8%. It has also high sensitivity (92.5%) and specificity (91.7%). The a-Cronbach showed 79.3 reliability according to MMSE.

Conclusions: We are continuing our research study, however we suggest the AMSE in clinical praxis for people with visual or movement problems because of its high reliability and discriminate ability.

Abstracts - Poster presentations

P021 THREE SCORING PROTOCOLS OF THE CLOCK DRAWING TEST: THEIR POTENTIALS IN THE DIAGNOSIS OF DEMENTIA AND MILD COGNITIVE IMPAIRMENT.

13. Neuropsychology and dementia

F. Ouzouni¹, M. Gialaouzidis¹, F. Kounti¹, M. Tsolaki²¹Day Center of Greek Association of Alzheimer's Disease and Relative Disorders, Greek Association of Alzheimer's Disease and Relative Disorders, ²3rd Department of Neurology, School of Medicine, Aristotle University, Thessaloniki, Greece**Objectives and Study:** The study aimed to compare different scoring protocols of the Clock Drawing Test (CDT) in respect to their sensitivity and specificity in the diagnosis of Mild Cognitive Impairment (MCI) and Dementia.**Methods:** The study included 144 subjects (40 male, 104 female), 36 with MCI MMSE = 26.42 (2.51), 46 with dementia MMSE = 18.37 (5.74) and 62 healthy elderly MMSE = 27.87 (1.86), with age 74.19 (5.15) and education 8.63 (4.10). Clock drawings were scored according to protocols based on Camdex Examination, Shulman and Rouleau methods.**Results:** Non parametric test for 2 independent samples was performed to examine the differences between groups considering each one of the scores in the three protocols of CDT. The patients with dementia have shown significantly worse performance than MCI patients and healthy elderly (p=0.00). There was no difference between the healthy elderly and MCI patients (p>0.08). MANOVA showed that none of the three tests was affected by age, education and gender. There were significant correlations between the three scoring methods and MMSE as an external criterion of validity (p=0.00). Logistic Regression Analysis did not reveal any of the three tests as predictive factor for the diagnosis of the groups. Camdex and Shulman tests appeared a moderate sensitivity and specificity in diagnosis of the 3 groups. Rouleau test has shown a sensitivity 80% and specificity 81% between healthy elderly and patients with dementia, with a cut-off of 8 points.**Conclusions:** Rouleau test is an assistive tool for the diagnosis of dementia but not of MCI.

P022 CONSIDERING THE 5 WORDS TEST AS PART OF DEMENTIA SCREENING

13. Neuropsychology and dementia

M. Gialaouzidis¹, F. Kounti¹, M. Tsolaki²¹Day Center of Greek Association of Alzheimer's Disease and Relative Disorders, Greek Association of Alzheimer's Disease and Relative Disorders, ²3rd Department of Neurology, School of Medicine, Aristotle University, Thessaloniki, Greece**Objectives and Study:** The aim of the study was to examine the psychometric properties of the 5 words test in dementia screening in a Greek sample.**Methods:** The study sample consisted of 192 participants, 49 men and 143 women, with mean age 73.13 (7.58) and education 9.51 (4.51). They were classified in three groups: 73 patients with Mild Cognitive Impairment (MCI) MMSE 26.85 (2.34), 62 patients with dementia MMSE 19.08 (3.94) and 57 healthy elderly MMSE 28.79 (1.25). The 5 words test consists of four items, which provide a total score of 20 points.**Results:** The four items of the test showed a high internal consistency (Cronbach's Alpha = .811). Univariate analysis of variance showed significant difference in the total score of the test between the three groups (p=0.00). There was no effect of age, education and gender in any of the groups. There was significant correlation between the total score of the 5 words test with MMSE (r=.693) and FUCAS (r=.653). A cut-off point of 18 points in the total score showed a high sensitivity (85%) and specificity (93%) between healthy elderly and patients with dementia. Moderate sensitivity and specificity was observed between MCI patients and healthy elderly or between MCI patients and patients with dementia.**Conclusions:** The 5 words test was proved a useful and quick tool for dementia screening, in the Greek sample of the study. It can be used as a first assessment in order to differentiate only healthy subjects from patients with dementia.

P023 DIFFERENTIATING BETWEEN MILD COGNITIVE IMPAIRMENT (MCI) AND ALZHEIMER'S DISEASE (AD) AND HEALTHY ELDERLY USING MEASURES OF RULE ATTAINMENT, INDUCTION AND COGNITIVE FLEXIBILITY

13. Neuropsychology and dementia

S. Tsina¹, T. Christodoulou¹, M. Tsolaki²¹Day Centre of Greek Association of Alzheimer's disease and relative disorders, ²3rd Department of Neurology Aristotle University, Greek Association for Alzheimer's disease and relative disorders, Thessaloniki, Greece**Objectives and Study:** The aim was to find measures that differentiate between MCI and AD using tasks assessing cognitive domains which show impairments early in the disease process and examine their specificity and sensitivity.**Methods:** The sample consisted of (MCI=30), (CNTR=30) and (AD=30). All participants underwent the same neuropsychological and clinical assessment. The former consisted of the Brixton Spatial Anticipation Task (BSAT), measuring cognitive flexibility, rule detection and attainment. The later included the Geriatric Depression Scale (GDS) and the Functional Rating Scale for Symptoms of dementia (FRSSD) whereas overall cognitive function was examined using the Mini Mental State Examination (MMSE). Demographic information was collected for all participants.**Results:** The mean age of participants was 74.5 for the AD group, 71.2 for the MCI and 70.8 for the CNTRL. The mean MMSE was 21.2, 25.8 and 29.8 respectively. Finally the mean educational level was 11.0, 5.2, and 10.5 respectively. All groups were matched for gender. The AD group will show impairment compared to both the MCI as they fail to switch between rules and are unable to detect the rule change and attain to it. Both MCI and AD will underperform compared to controls. This will lead to increased number of errors. Correlations will be performed between duration of illness, medication, MMSE and FRSSD in order to specify possible relationships among those variables.**Conclusions:** The BSAT will be sensitive in differentiating between the AD and MCI groups from controls and will specify the kind of cognitive deficits that are experienced by the former. Cut off scores will also be presented.

P025 FUNCTIONAL - COGNITIVE ASSESSMENT SCALE (FUCAS): A SCALE TO ASSESS EXECUTIVE COGNITIVE FUNCTION IN DAILY LIFE ACTIVITIES IN PATIENTS WITH MILD DEMENTIA AND MILD COGNITIVE IMPAIRMENT

13. Neuropsychology and dementia

C. Agogiatou¹, F. Kounti², M. Tsolaki³¹Greek Association of Alzheimer's Disease and Relative Disorders, Association of Alzheimer's Disease and Related Disorders, Kalamaria, ²Greek Association of Alzheimer's Disease and Relative Disorders, Association of Alzheimer's Disease and Related Disorders, Kalamaria, ³Greek Association of Alzheimer's Disease and Relative Disorders, 3rd Department of Neurology, School of Medicine, AUTH, Thessaloniki, Greece**Objectives and Study:** FUCAS assesses executive function in ADL directly in patients with dementia. It is objective because it is relatives' bias free. This study aimed to investigate psychometric properties of FUCAS as internal consistency, criterion-related reliability and discriminative ability.**Methods:** FUCAS assesses six activities of ADL: telephone communication, shopping, orientation in place, taking of medication, personal hygiene, and clothing. Seven parameters of executive function are assessed during the execution of each daily activity by the patient: awareness of the problem, working memory, planning of the solution, distribution of time between the steps of the activity, sequence of steps, accuracy of steps, and goal maintenance. Participants were 514 elderly, 180 men and 334 women with age=69.06 (5.97) and education=10.40 (4.01). They were classified in healthy elderly (N=67), MCI patients (N=304) and patients with mild dementia (N=143). The three groups were matched in age (p=0.05) and education (p=0.37).**Results:** FUCAS is a reliable ($\alpha=.94$) cognitive-behavioral scale. Significant correlations were observed between FUCAS (p=.001), MMSE (p=.001), MoCA (p=.001), and FRSSD (p=.001). Statistical analysis showed that FUCAS can successfully discriminate healthy elderly from MCI patients, with specificity 100%, sensitivity 76% and cut-off score of 42. FUCAS can successfully discriminate patients with dementia from MCI patients with specificity 90%, sensitivity 75% and cut-off score of 47.**Conclusions:** FUCAS is a useful and reliable diagnostic tool for MCI.

Abstracts - Poster presentations

P026 FAMILY QUALITY OF LIFE OUTCOMES WHEN AGING & DEMENTIA CARE ARE FACTORS FOR PEOPLE WITH INTELLECTUAL DISABILITIES & THEIR FAMILIES
14. New approaches to home care

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Objectives and Study: The interwoven processes of ageing and dementia progression challenge an individual's quality of life in terms of both health and physical well-being and the psychological, social and allied aspects of life. As the well-being of the family is also of major importance, the authors examined the relevance of a procedural quality of life approach to both assessing and supporting the family as a whole and individual circumstances involving dementia caregiving.

Methods: With ethics approval, the Family Quality of Life Survey (FQLS) was used to collect data from a cohort of families of adults with ID resident in Australia and Canada. Interviews and focus groups were held with older-aged family members, including siblings and adults with an intellectual disability. Combined data analysis used quality of life concepts and principles to examine various aspects of life affected.

Results: Using quantitative data as a backdrop to qualitative findings, the FQLS results indicated high satisfaction levels for family relations and spiritual beliefs along with low levels of satisfaction for support from other people and services as well as issues such as the impact of family values and individual self image. Qualitative findings indicated presence of specific concerns about dementia as it affects older-aged family members, including those adults with ID. Challenging, but variable, issues were perceived in life domains such as health, finance and economy, community relations, and leisure.

Conclusions: A quality of life approach is relevant to both practice and applied research and can be used to improve care and support at individual and family levels when confronting demands of aging and dementia care. However, wide variability of family processes is often evident so it is critical to examine perceived life satisfaction in each domain in providing support and keeping in mind each individual's particular circumstances.

P027 THE COMMUNITY-BASED ,CASE MANAGEMENT MODEL OF DEMENTIA IN TAIWAN--- THE PRIMITIVE REPORT
14. New approaches to home care

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Objectives and Study: The purpose of this randomized assigned, quasi-experimental study was to assess the effectiveness of case management model of dementia in Taiwan.

Methods: The experimental group received case management related strategies including a 12 hours psychoeducation group, 15 weeks home visits and telephone counseling to provide individualized caretaking strategies, and community resources referral when needed. Emotional support and suggestion about the caring facilities at home were provided. The control group received usual outpatient department treatment. The Chinese Version of the Zarit Burden interview (CZBI), and the Appraisal Form of Confidence Level in Dementia Problem Behaviors Management were used to evaluate caregivers' distresses and their management of dementia problem behaviors. All the data were analyzed with statistic software(SPSS 13).

Results: The total of 25 dyads caregivers and dementia patients in experimental group, and 16 dyads in control group received intervention. The per-test demographic data showed no significant difference as table 1. The up-to-date result revealed that both the burden score, including "do you feel that your relative seems to expect you to take care of him/her" and "overall, how burden do you feel" in experimental group were less than control group after intervention (p<. 05). The CZBI score showed no significant difference between experimental and control group at both pre-test and post-test. Frequency score of lack of interest in daily activities, verbally abusive and curses for dementia patients in experimental group were improved significantly than control group (p<. 05). The data also showed distress of hoarding things for no obvious reason in control group was elevated than experimental group statistically (p<. 05).

Table:

Table1. The pre-test demographic data of participants.

Character	Experimental group (n=26),Mean(SD)	Control group (n=16),Mean(SD)	t-test
Caregivers			
Age,Gender(%):Male/Femal	54(11),20/80	53(15),38/62	0.1
Care duration,Care days/week	53(72),6(1),12(9),33(13)	90(149),6(2),12(8),37(9)	-1,0,1,-3,-1.3
Care hours/day,CZBI			
Behavior frequency,Distress, Confidence	31(11),18(11),141(41)	35(13),17(9),144(43)	-0.4,0,0,-0.1
Dementia patients			
Age,Gender(%):Male/Femal	81(9),28/72	84(7),31/69	-0.9
MMSE,CDR,ADL,IADL	14(9),2(1),58(35),7(5)	13(7),2(1),55(31),6(5)	0.4,-0.04,0.2,0.8

Conclusions: Case management can reduce burden of caregivers and improve the management of problematic behaviors of dementia patients effectively.

P028 THE ROLE OF HOME CARE PROGRAMS IN PATIENTS WITH DEMENTIA IN RURAL AREAS OF CRETE
14. New approaches to home care

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Objectives and Study: Community treatment includes home care programs (HCP) which have recently been implemented in Greece. The aim of this study was the description of epidemiologic characteristics and therapeutic interventions of HCP in demented patients in the rural area of Zaros and Krousonas, Crete.

Methods: Our sample consisted of 44 patients with dementia living in the communities of Zaros and Krousonas, Central Crete, who participated in HCP between 2003-2009.Data was analyzed with SPSS 15.

Results: Patients with dementia was 46,3 of the total participants in the program. The mean age of our sample was 81.9+- 7.4 years(range 68 yrs- 95yrs).Among our group 59% had dementia with behavioral symptoms and 36,4% had comorbid depression. Regarding the status of living 47,7% lived alone, while the rest lived with family members. In 52,3% of our sample, HCP was their first contact with mental health services. Pharmaceutical interventions included administration of antedementia medications(95,5%) , antidepressants (34,1%), antipsychotics(54,5%), and benzodiazepins (9,1%). 73,8% was compliant to treatment and 85,7% had more than 2 follow visits. Compliance and follow-up visits showed a significant correlation(p=0,0000), while other parameters i.e. economic condition, living alone, or medical conditions were not correlated to compliance.

Conclusions: HCP in Zaros and Krousonas mainly applies to the elderly About half of them were diagnosed with dementia many of which have never contacted to mental health services before. Pharmaceutical interventions were made to the majority of the participants and compliance to treatment was significant high. In conclusion, our study suggests that home care programs may be highly useful for the management of neuropsychiatric disorders, like dementia, in the elderly in the community.

P029 A RESEARCH ON THE PROMOTION OF HOLISTIC CARE FOR DEMENTIA PATIENTS BY THE DEPT. OF SENIOR CITIZEN CENTER AT YMCA IN TAINAN, TAIWAN
14. New approaches to home care

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Objectives and Study: It is crucial to encourage institutions to integrate the concept of holistic care into health care service resources and provide dementia patients with comprehensive care services in their own community. The provision of integrated care services help dementia patients readjust to living on their own, and thus is the objective of this study.

Methods: The purpose of this literature review is to examine the concept of holistic health care in recent years. This is an important concept for institutions to take into account when they help dementia patients to live at home at their own communities. The autonomy of dementia patients, the continuity of care services, social support networks, and the convenience of environmental facilities are the three basic criteria for consideration. This research is conducted through the actual participation and observation of dementia patients in order to improve their quality of life. Moreover, "Small-Scale Multi-Function Developmental Project" is conducted by Tainan YMCA Elderly Center in 2009. The project team consists of professionals from nursing care, social work, and architectural design departments. It helps to review, evaluate, and make improvements of four actual dementia cases.

Results: In order to enable dementia patients to live a stable life in their own communities, research results showed that the caregivers have to follow the first three fundamental principles and display the following characteristics: (1) respect the wishes of dementia patients (2) closely integrate various care services (3) assign volunteers to the right position (4)utilize day care services frequently (5) arrange routine outdoor activities (6) assess and prevent barriers in the home environment (7) receive support and encouragement from family.

Conclusions: In conclusion, the concept of a holistic approach to health care should be incorporated into the provision of care services for dementia patients. Holistic care not only allows patients to be autonomous and safe living in their own communities, but also helps integrate care services in their existing way of life. Most importantly, holistic care recognizes the reciprocal interaction between families and the institution and helps dementia patients to age in place.

Abstracts - Poster presentations

P030 TELEMEDICINE FOR THE NEEDS OF DEMENTED PERSONS AND THEIR CAREGIVERS

14. New approaches to home care

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Objectives and Study: To evaluate the impact of a project of telemedicine, called Telemedicine for the Needs of Dementia (TND), on the home care and the quality of life of the patients and their Caregivers (Cs). The dementia represents the cornerstone of home care for disabling chronic diseases in which the Cs and the General Practitioners (GPs) face up to the daily care troubles, mainly the Behavioral and Psychological Symptoms of Dementia (BPSD) like insomnia, depression, hallucinations, agitation, irritability, feeding disorders, etc.. In the management of these problems, the GPs and Cs can need frequently a specialist consultation often not easily available at home. For these reasons, we have implemented the project TND focused to ameliorate the availability of the specialists aside Cs and GPs in the daily home care.

Methods: Participants : 99 persons with light-moderate dementia (MMSE: 14-26 / 30) including the presence of BPSD and exclusively assisted at home from an informal caregiver. The sample was subdivided in two groups balanced for: 1) type of dementia 2) comorbidity 3) presence of BPSD 4) informal network. 1°. Experimental group (cases 49; F = 37): the Cs were formed to interact with the Call Center (C C) of the project. The operators of the C C were all formed to answer with standardized check-lists. If the Cs or the GPs need a specialist consultation, the operator contact, via mobile phone, the geriatrician or the psychologist provided by the project. The C C gather the Cs' needs from Monday to Saturday, from 8 am to 6 pm and, consequently, the specialists are available in the same days from 1 to 3 pm. When alerted from the C C, then the specialists call the Cs or the GPs and provide their suggestions to balance the problems. 2°. Control Group (cases 50; F = 36): the Cs do not interact with the C C. In the 12 months of the study, the 2 groups were assessed at T0 and re-assessed at T6 and T12 with MMSE, ADL, IADL, NPI and Caregiver Burden Assessment

Results: The BPSD were balanced in the 2 groups at the end of the study (NPI = 9). In the experimental group, the Cs and the patients showed a better, but not statistically significant, improvement in the quality of life. Moreover, the Cs of the experimental group showed an improvement on relief from stress and a feeling of gratification due to their care activity. As for the GPs, the TND appears to be a valid support in their activity aside the Cs.

Conclusions: The TND can be a valid tool to support the Cs and the GPs, aimed to reinforce the home care for demented persons and their Cs and quality of life of both of them. Our results need to be confirmed by further researches conducted on wider samples.

P032 FACTORS ASSOCIATED WITH SURVIVAL OF THE COMMUNITY-DWELLING JAPANESE ELDERLY: THE RELATIONSHIP BETWEEN COGNITIVE IMPAIRMENT AND 5.9-YEAR SURVIVAL IN AN URBAN POPULATION

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Objectives and Study: To clarify factors associated with 5.9-year survival of the elderly in an urban community.

Methods: Self-administered questionnaires were mailed in September 2001 to all aged 65-year and older living with a spouse and/or child's family (response rate: 80.7%), and 13,058 subjects were analyzed, among which 12,143 survivals were followed up for 5.9 years. Those whose family member responded as a proxy due to an addressee's demented status were defined as the family-recognized demented (FRD), and the others as the non-demented (ND). Abilities of deposits/withdrawals, filling-out documents, reading books/newspapers, food preparation and shopping were variables input into Cox proportional hazards regression analysis (Cox regression). Cognitive scores were measured by the first three, and ND was divided into a lower and a higher score cohort (LSC and HSC respectively) by a cutoff point 0-1/2-3 determined by receiver operator characteristic curves. Factors associated with survival were discussed in relation to 5.9-year mortality rates in HSC, LSC and FRD.

Results: As results of Cox regression, factors associated with 5.9-year survival except age in men were FRD (hazard risk (HR)=0.524, p=0.031), shopping (HR=1.813, p=0.000), food preparation (HR=1.453, p=0.000), deposits/withdrawals (HR=1.483, p=0.008) and reading (HR=1.574, p=0.001), and in women shopping (HR=1.932, p=0.000) and food preparation (HR=1.366, p=0.021). With LSC deleted and HSC and FRD input into Cox regression, factors in men were shopping (HR=2.053, p=0.000) and food preparation (HR=1.399, p=0.001), and in women FRD (HR=1.390, p=0.050) and shopping (HR=2.464, p=0.000). With FRD deleted and HSC and LSC input, factors in men were shopping (HR=1.936, p=0.000), food preparation (HR=1.460, p=0.000), deposits/withdrawals (HR=1.358, p=0.044) and reading (HR=1.510, p=0.003), and in women shopping (HR=1.910, p=0.000), food preparation (HR=1.383, p=0.020) and deposits/withdrawals (HR=1.507, p=0.027).

Conclusions: Common factors associated with 5.9-year survival in all cases were shopping and food preparation. Inability of shopping was the highest risk factor, and LSC and FRD were less associated with survival, however, as Yamamoto's previous study showed that mortality rates during 5.9 years were 15.3% and 8.1% in men and women respectively in HLC, 55.6% and 45.6% in LSC, 63.5% and 54.0% in FRD, and that LSC's demented status was overlooked, family caregivers should pay attention to declining abilities of shopping and food preparation as essential indicators for demented status and survival.

P031 PRESENT STATE OF PALLIATIVE CARE AT GROUP HOMES FOR THE DEMENTED ELDERLY IN JAPAN

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Objectives and Study: This study was conducted for the purpose of determining the accommodation of serious symptoms and palliative care at group homes (GH) for the demented elderly in Japan and to assess whether uses are able to remain in GH for the end of their lives.

Methods: A survey was conducted by mailing questionnaires to 2128 GH in Japan. The survey lasted from January 10 to January 31, 2009. Replies were obtained from 809 GH (response rate:38%). The survey covered: 1) physical status of users, 2) discharge status, 3) hospitalization status, 4) palliative care status, 5) awareness of operators regarding severity of symptoms and palliative care and 6) collaboration with health care professionals.

Results: 1) The average age of users was 84.6 years, 19.9% required minor care, 55.6% intermediate care, and 22.6% advanced care. 2) There were an average of 1.9 users per unit, 48.3% were discharged to hospitals, 21.9% to special elderly nursing home and 18.0% died. 3) An average of 3.8 users were hospitalized annually per home. 40.2% of users had difficulties during hospitalization due to being confined, 29.7% behavioral disorders during, and 27.7% requiring assistance. 4) 36.5% of users had received palliative care while 60.4% had not. Total of 409 users that are now deceased, 191(46.7%) died in the GH. 5) 38.4% of the GH replied that they aggressively provided palliative care as desired, while 23.5% provided care for serious cases but not palliative care. 6) 50.9% of the GH had registered nurses on staff, 23.3% had agreements with visiting nursing stations, and 20.4% had agreements with hospitals.

Conclusions: The numbers of GH that accommodate sever cases and provide palliative care is increasing. However, there are many issues that must be overcome in determining whether or not palliative care is provided at GH.

P033 THE EFFICACY OF THE CASE MANAGE MODEL FOR ELEVATING THE REVISITING RATE OF DEMENTIA PATIENTS AT PSYCHIATRIC OUT-PATIENT DEPARTMENT IN EAST TAIWAN

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Objectives and Study: Dementia is a devastating, overwhelming disease to patients and their families. The purpose of this study was to elevate the revisiting rate of patients with dementia, lowering the burden of care-givers by constructing a case manage model which consisted of standard protocol of follow-up, psychoeducation about disease, caring and medication counseling by telephone and computer-aid monitor system.

Methods: 1. Total 206 dementia patients' families were interviewed at patients' visit or by telephone to assess the reasons of loss follow-up in one general hospital outpatient department in east Taiwan from September 2007 to February 2008. 2. From July 2008 to December 2008, the intervention of case manage model began by using computer-aid monitor system to assist telephone follow-up protocol, and provide education and guidance about medication, caring skills, methods of dealing with behavioral psychological symptoms of dementia, emotional instability, delusion, hallucination, wandering behavior and the refuses to be cared. 3. Descriptive statistics to show the results.

Results: The reasons of loss follow-up were lack of knowledge about dementia, poor drug adherence and low caring confidence of families. The participants' demographic data showed no significant difference before and after intervention. After cases manage model intervention, the revisiting rate increased from 71.4% to 90.5%, other data was shown as Table 1.

Table:

Table 1. The comparison before and after intervention

Date	Before Intervention 2007,09 to 2008,02	After Intervention 2008,07 to 2008,12
Total number	206	235
Average age	81.5	81.7
Death	17	13
Patients who should return clinic	189	222
Revisiting rate	71.4%	90.5%

Conclusions: Case manage model can elevate the revisiting rate, improve care-givers' knowledge and ability of caring. They have more confidence to deal with patients' problematic behaviors. Otherwise, telephone follow-up provide the opportunity for caregivers to ventilate stress, express the feelings and gain suggestions.

Abstracts - Poster presentations

P034 PHYSIOTHERAPY TEST "LIA"

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Objectives and Study: Evaluate mobility in every stage of dementia

Methods: Identify the problem, analyze it, and organize the therapy

Results: Evaluate patient's mobility and recognise any improvement or deterioration

Conclusions: Useful tool for evaluation and organize the therapy. Collaborates with other tests for best results in diagnosis

P035 IMPROVING ALZHEIMER DEMENTIA TREATMENT: EPIDEMIOLOGICAL ASSESSMENT OF DOCTORS', PATIENTS' AND CAREGIVERS' UNMET NEEDS (IDEA)

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Objectives and Study: Caring for a patient with Alzheimer's dementia (AD) involves many short- and long-term burdens. Medical treatment may considerably contribute to a reduction of the disease burden for caregivers, but effects have not yet been explored comprehensively from a broader epidemiologic and public health impact perspective.

Specific objectives are: (a) to describe the current care and therapy status for patients with mild or moderate AD, (b) to describe the situation of caregivers by assessing their burden and problems in terms of instrumental, functional and emotional aspects, (c) to identify patients, doctors and caregivers factors, that have an effect on the burden, (d) to describe the degree of met and unmet needs for patients with AD and their care-givers.

Methods: IDEA is a strict naturalistic observation study. Approximately 2.500 patients with mild or moderate AD and their caregivers will be enrolled. First, a sample of neurologists and psychiatrists in outpatient settings will be invited. Those willing to participate will be asked to enrol at least five patients with mild or moderate AD and their caregivers. Each patient will be assessed by the physician (duration and severity of dementia, medication and other interventions, neuropsychiatric complications). Second, patients' caregivers will be assessed by the research team (combined interview/questionnaire approach); interviews will be performed face-to-face or by telephone. Assessment domains are: current care situation (description of assistance, expenditure of time), the burden as well as measures for depression and anxiety (DSQ, ASQ), quality of life (SF-8) and caregivers' physical status (somatic disorders). A small subsample of patients and their caregivers will be followed longitudinally for 10 weeks.

Results: First results will be available in November 2009.

Conclusions: Not available yet.

P036 PREMATURE CENTROMERE DIVISION (PCD) IN ALZHEIMER DISEASE: IMPACT OF GENDER, AGE AND CHROMOSOME TYPE

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Objectives and Study: Aging is suggested to be a confounding factor for the onset of neurodegeneration in Alzheimer's disease (AD). It has been suggested that chromosomal alterations may be involved in the etiology and/or pathogenesis of aging and Alzheimer's disease. Premature centromere division (PCD), a chromosomal instability syndrome, has also been found in aging patients and Alzheimers. The purpose of the present study is to evaluate the incidence of premature centromere division in peripheral blood lymphocytes in sporadic Alzheimer disease patients in relation to their gender and age and compared with values obtained in sex- and age-matched unaffected controls.

Methods: Using Fluorescent in situ hybridization with the chromosome aberration assay one hundred metaphase nuclei per each subject were analyzed and the results were expressed as the number of metaphases with at least one: a) chromosome showing PCD, b) X chromosome with PCD (PCD,X), and c) acrocentric chromosome showing PCD.

Results: The results demonstrated that patients with AD, regardless of age, also demonstrated increased incidence of PCD on any chromosome and PCD on any acrocentric chromosome in both sexes, whereas an increase in frequency of PCD,X was expressed only in women.

Conclusions: This cytogenetic analysis, thus, suggests that PCD is clearly representative of AD, rather than epiphenomenon of chronological aging.

P037 HOMOCYSTEINE, VITAMIN B12, FOLATE AND COGNITIVE FUNCTION

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Objectives and Study: To explore possible relationships between serum homocysteine, vitamin B-12, folate levels and cognitive function in a Hispanic elderly population. Increased plasma homocysteine levels in patients with Alzheimers disease (AD) were initially reported by Regland et al in 1990, who considered the differential effects of AD-related oxidative stress on the two key pathways of homocysteine metabolism.¹ Deficiencies of vitamin B-12 and folate have also been correlated with cognitive dysfunction in several studies, but no specific data in Caribbean Hispanics is available.

To determine the prevalence of cognitive impairment, a prospective community-based cohort study was conducted in a representative catchment area in the Caribbean island of Puerto Rico, as a component of the ADI 10/66 worldwide dementia prevalence study.² Door knocking was done to invite all residents over 65y/o to participate. Two thousand elderly residents were interviewed and their cognitive function evaluated. In a second visit, a physical exam was done and fasting laboratories were drawn.

Methods: From a total of 2,000, a subgroup of 474 subjects with cognitive evaluation analyzed using DSM-4 and ADI 10/66 algorithm, and laboratories done from 12/08 to 05/09 were included. Ages = 65 - 97y/o.

Results: A statistically significant correlation was found between folate deficiency and DSM-IV dementia criteria, consistent with published literature. No correlation between elevated homocysteine, B-12 levels and cognitive function was found.

Table:

Variables	Chi-Square	P-value
Folate deficiency and DSM IV major depression criteria	0.543	0.762
Folate deficiency and DSM-IV dementia criteria	8.62	0.013
Folate deficiency & 10/66 dementia criteria	2.35	0.309

Conclusions: A comprehensive nutritional evaluation in elderly patients is essential. We recommend to assess folate levels in every patient over 65 years old, mostly if cognitive impairment is suspected.

Abstracts - Poster presentations

P038 WAH000

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Objectives and Study: To develop a set of quality standards and criteria for memory services to form the basis of a quality improvement initiative.

Methods: The standards development process involved five main elements: literature review; discussion groups with key stakeholders; formulation and distribution of the consultation draft; consultation with expert/clinical advisors and members of the accreditation network; and editing the final draft, ensuring the standards and criteria are SMART (i.e. that they are specific, measurable, agreed upon, related, and theoretically sound). Participants in the consultation included representatives from the professions involved in dementia care, namely psychiatry, nursing, psychology, occupational therapy, social work, primary care, and speech and language therapy; charities; and service user and carer representatives. All countries within the United Kingdom were represented. The resulting draft edition standards were piloted in thirteen memory services in the North West of England, who provided evaluation of the standards against the SMART framework. This feedback was used to formulate and edit the finalised first edition standards and criteria.

Results: The finalised version resulted in 26 high level standards and 148 associated criteria, focusing on diagnostic assessment of memory problems/dementia. Each was classified as type 1, 2 or 3 depending on importance. There was consensus that the standards and criteria were best categorised along the following domains: management; resources available to support assessment and diagnosis; assessment and diagnosis; and ongoing care management and follow up. Criteria covered themes such as accessibility of the service, support given to patients and carers, and consent and capacity issues.

Conclusions: It was possible to develop a SMART set of quality standards for diagnostic assessment of memory problems/dementia, which have been applied through a quality improvement programme for memory services. Future challenges include widening the scope of the standards to cover the full range of functions performed by memory services.

P040 PREVALENCE OF DEMENTIA IN «MEGAS ALEXANDROS» A MUNICIPALITY IN GREECE

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Objectives and Study: Background: Dementia is an important public health problem as it is one of the most common diseases in the elderly and a major cause of disability and mortality. Prevalence of dementia is destined to increase in the developing but also in developed world in tandem with the ageing population. Current data from developing countries suggest that age-adjusted dementia prevalence estimates in 65 year olds are high (>or=5%) in certain Asian and Latin American countries, but consistently low (1-3%) in India and sub-Saharan Africa; In subjects aged over 65, crude prevalence rates for dementia vary between 5.9% and 9.4%. in Europe and 9% in an old study in urban area, Pylea Thessaloniki, Greece. Aim of the study: The aim of this study was the estimation of prevalence in a municipality of seven small villages in North Greece.

Methods: Methods: It was a door to door study and 693 elderly aged over 65 were examined with a structured questionnaire for risk factors and neuropsychological assessment with MMSE or HINDI for illiterate subjects, Instrumental Activity of Daily Living and Geriatric Depression Scale. Four hundred twenty three (423) subjects were denied to take part in this study.

Results: Results: Only 3,6% had dementia, 26,1% Mild Cognitive Impairment, 9,6% Mild Cognitive Impairment because of depression, 4,6% depression without cognitive impairment and 57,7% were normal.

Conclusions: Conclusion: The prevalence of dementia in greek villages in North Greece is lower than in Pylea, a city in North Greece. Further analysis of risk and protective factors may give us an explanation.

P039 ALZHEIMER'S DISEASE AND GLAUCOMA-A LITERATURE REVIEW

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Objectives and Study: Objectives of this study are: to identify 1.whether co-existence of Alzheimer's disease and glaucoma is often and 2.whether we could use the same treatment in both diseases.

Methods: Literature

Results: Evidence of a link between Alzheimer's disease (AD) and glaucoma has emerged from studies showing that patients with AD may have a significantly increased occurrence rate of glaucoma. In addition, it has been reported that patients with AD exhibit optic nerve degeneration and loss of Retinal Ganglion Cells (RGCs). The AD-related changes in the retina are also associated with reduction of the retinal nerve fibres, increase in optic disc cupping, retinal vascular tortuosity and thinning and visual impairment. At the molecular level, the apoptosis of RGCs activates specific proteases, termed caspases. Caspases are activated in chronic neurodegeneration such as AD. It is shown that in rat glaucoma models caspase-3, a major effector of the apoptotic cascade, is activated in RGCs and cleaves Amyloid Precursor Protein (APP) to produce neurotoxic fragments that include amyloid-beta. Caspase-8, which initiates apoptosis after activating receptors of the Tumor Necrosis Factor (TNF) superfamily, is also activated in RGCs. This suggests a new hypothesis for RGC death in glaucoma involving chronic amyloid-beta neurotoxicity, mimicking AD at the molecular level.

Memantine, a neuroprotective drug, is approved for the treatment of AD as it preferentially blocks excessive NMDA receptor activity without disrupting normal activity. In 2009, one clinical trial conducted to test the efficacy of memantine as a neuroprotectant for glaucoma was unsuccessful. Though it is considered that memantine may have benefited patients taking it but to a level that was difficult to detect with present methodologies. Therefore, the idea of neuroprotection in glaucoma should not be abandoned. Citicoline is also indicated for treatment of senile cognitive impairment in AD. It has also been shown to be effective in Parkinson disease as well as in amblyopia and glaucoma. Finally, treatment with nicergoline appears to induce an improvement of the retinal function and of the visual cortical responses in patients affected by glaucoma.

Conclusions: Recent findings on retinal degeneration in AD prove that there are pathological as well as treatment similarities between AD and glaucoma and highlight the potential of modern technologies for the detection of prospective biomarkers in the eye in early AD.

P041 DEMENTIA SYNDROMES REGISTRATION IN THE DODECANESE PREFECTURE

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Objectives and Study: In border areas of Greece, where elder population prevails, there is no research interest shown. In the present study an attempt was made in order to register the Dementia Syndromes in the Dodecanese prefecture with an open invitation to diagnostic tests for people over 60 years of age.

Methods: The sample was comprised by 439 people, with a range of 60-95 years of age, 280 females and 159 males. This sample occurred after the scientific team visited the islands of Rhodes, Symi, Kalymnos, Kos, Kastelorizo, Tilos, Chalki, Karpathos and Kassos. The scales used were the following:

- 1) The Mini Mental State Examination Test (MMSE) about the cognitive functioning diagnosis
- 2) The Clock Test about mental functioning diagnosis
- 3) The Geriatric Depression Scale (GDS) to detect depression indicators
- 4) A short demographic questionnaire and functional elements.

Results: The results showed a significant number of dementia patients who do not receive medication and they are not under regular surveillance by health professionals. Specifically, 70,6% had a score of 25-30 on the MMSE, 22,2% scored 19-24, 5,9% scored 14-18, and 1,1% had a score less than 13. One of the subjects failed to complete the test (0,2%). On the GDS scale, 59% showed normal levels of depressive symptomatology, 28,7% showed mild depression, 7,3% showed severe depression, while 5% failed to complete the scale.

Conclusions: Furthermore, it was demonstrated that there is an urgent need for prevention and primary intervention in the remote areas of our country. In the future, we aim to extend the research, using the "door to door" method for safer conclusions regarding the prevalence of dementia in the Dodecanese Complex.

Abstracts - Poster presentations

P042 COMMUNITY INTERVENTIONS ABOUT DEMENTIA IN DODECANESE

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Objectives and Study: One of the key objectives set by operators in the area of dementia is to develop preventive and informative interventions for the community.

Methods: Within these activities, the Children's and Adults' Mental Health Community Development Services Federation, 'Panacea', has developed actions in the prefecture of Dodecanese.

Results: Actions:

- Regular arrangement of workshops on prevention and treatment, open to the public
- Free distribution of printed information for residents of the prefecture of Dodecanese and caregivers of patients with dementia.
- Free screening of memory through neuropsychological tests to persons over sixty years of age
- Organized events on the occasion of World Day for Alzheimer's Disease
- Annual Film Festival institutionalization, covering mental health disorders and dementia.
- Informing of children in school and preschool age, running the program: "Memory: Updates, prevent, care"
- Local Press publications and participation in news reports on local television stations.

Conclusions: In the future, we aim to the extension of all these activities in all the islands of the Dodecanese complex, whereas the primary intervention in remote areas of our country is extremely limited.

P043 A COMPARISON OF THE EFFECTS OF ADULT DAY PROGRAMS ON THE QUALITY OF LIFE OF ALZHEIMER'S DISEASE PATIENTS.

19. Quality of life in demetia

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Objectives and Study: Little research has been conducted on examining the relationship between interventions such as adult day programs (ADP) and the quality of life (QOL) of Alzheimer's disease patients. Our objective was to compare QOL of Alzheimer's disease patients who attend or do not attend ADP. We hypothesized that Alzheimer's disease patients who attend ADP have higher QOL than those who do not.

Methods: We employed a cross-sectional comparative study design involving primary data collection using assisted self-report questionnaires and a 13-item quality-of-life scale. Subjects were recruited at five adult day programs and at six caregiver support groups in Durham region in Ontario, Canada.

Results: All 130 participants were classified into one of three groups: disease-free ADP clients (n=73), Alzheimer's disease patients who attend ADP (n=29) and Alzheimer's disease patients who do not attend ADP (n=28). Age distribution was similar across three groups. However, more females attended ADP than males. All ADP clients were similar in gender distribution, living arrangement and frequency of ADP visits. All patients were similar in education level and marital status. There were equal numbers of moderate disease stage in both disease groups but slightly more patients with severe disease stage in those who do not attend ADP. Our results showed that QOL scores for patients who attend ADP were comparable to those of non-patients (2.7 vs. 2.9, p=0.1), whereas QOL scores were lower for patients who do not attend ADP than patients who attend ADP (1.9 vs. 2.7, p=0.0001).

Conclusions: Although disease stage may explain some of the differences in QOL among patients, we conclude that attending ADP improves QOL of Alzheimer's disease patients.

P044 AN INTERVENTION TO IMPROVE SLEEP-ACTIVITY CYCLES OF OLDER PERSONS WITH DEMENTIA.

19. Quality of life in demetia

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Objectives and Study: The purpose of this study was to assess the effects of an intervention to improve sleep-activity cycles of older persons with dementia.

Methods: Sixty-five patients from long-term care facilities were recruited. Forty subjects were analyzed after obtaining informed consent from their families. We checked the sleep-activity cycle of residents over 48 hours and examined residents' medications from medical charts. Four residents received an intervention that included lying down after they felt sleepy and resting after meals and other activities. They were assessed that they have the disorder associated with sleep-activity cycle by a caregiver in the long-term care facilities. We measured their behavior before and after intervention using the Multidimensional Observation Scale for Elderly Subjects (MOSES).

Results: The mean patient age was 87.3 (SD=6.2) years, and 85% of the subjects were women. 70% of the subjects were diagnosed with some dementia including Alzheimer's dementia, cerebrovascular dementia, and senile dementia. 80% of the subjects had disorders associated with the sleep-activity cycle. Of these, 40% had hyperactive disorder, 32.5% hypoactive disorder, and 7.5% circadian rhythm disorder. The mean number of medications per resident was 2.9 (SD=2.3). 15% of the subjects took benzodiazepines, 55% antihypertensive, 32.5% purgative, and 22.5% anti-dementia medication. 12.5% of the subjects took no prescription medicines. The intervention improved the sleep-activity cycle of 2 residents. The MOSES psychological distress score decreased in all residents who received the intervention.

Conclusions: These results indicate that interventions that improve the sleep-activity cycle are beneficial for older persons with dementia.

P045 TERMINAL CARE POLICIES IN JAPANESE NURSING HOMES FOR INDIVIDUALS WITH DEMENTIA

19. Quality of life in demetia

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Objectives and Study: The purpose of this study was to determine differences in nursing home practices related to terminal care policies for residents with dementia.

Methods: The survey form was distributed to 5249 nursing homes with confirmed addresses according to Wamnet. The number of residents and residents' activities of daily living (ADLs), as well as the facilities' terminal care policies and nursing practices were investigated. The quality of nursing home practices was determined according to our previous research findings, and is based on a 20-item evaluation. Descriptive statistics were used to describe the data in quantitative terms, and chi square tests were used to analyze the data.

Results: The questionnaire was answered by 1137 facilities, with the rate of response being 21.5%. The resident or the resident's family made end-of-life care decisions in 900 facilities (79.2%). 665 (58.5%) nursing homes had their own policy of terminal care. Nursing homes with terminal care policies scored higher in nursing practices compared to facilities that did not. There were significant differences in 19-items related to nursing practices for terminal care between the two groups.

Conclusions: There were relationships between terminal care policies and nursing practices for people with dementia in nursing homes. It is necessary to administer care based on the decisions of the elderly and provide support to both the elderly and their families for end-of-life care purposes.

Abstracts - Poster presentations

P046 ON THE COUCH WITH PICASSO

19. Quality of life in demetia

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Objectives and Study: Presenting a kit of visual art to enhance the quality of life of people with dementia

Methods: Following the program "Meet Me at MoMa," EMDA, Israel's Alzheimer association, launched "Going out to Art," through which groups from day centers and family caregivers go out outings to museums. Participants and institutions alike asked to make the encounter with art more accessible and affordable. The result was a special kit, developed by EMDA.

Results: A professional think-tank was created and different professionals were called on the support the process. The end result is a kit of 50 pieces of art, specially chosen for their ability to address long-term memory and emotional capacities which are less accessible in day-to-day life. The kit comes with general booklet explaining the relation between art and Alzheimer's and how to look and talk about art with a person with dementia. There are specific questions for each piece of art, as well as background material on the artists and suggestions for activities. The pictures are printed card and on CD/DVD

Conclusions: Through a series of lectures on the topic of viewing art with people with AD, there is a real expectation for the launch of this kit as a means of communication with the person in their home or in a care setting.* The kit is due to be launched at the Israeli Gerontology Conference in February 2010, and initial reactions and sales information will be presented at the Thessaloniki conference.

P048 DEVELOPMENT OF A SUSTAINABLE ACTIVITY PROGRAM AS A PART OF OPTIMAL CARING FOR DEMENTED PERSONS IN LONG TERM FACILITIES.

19. Quality of life in demetia

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Objectives and Study: The objectives of the study was to develop and implement an integrated activity program, customary designed for demented patients in mild and moderate stages of their illnesses in long term facilities in the Free State, South Africa.

Methods: The study was qualitative in design, allowing the researcher to gather information and investigate the phenomenon within the actual environment of a dementia unit within a long-term facility. An inductive exploratory study was conducted where the effect of certain activities and techniques was observed and interaction monitored to identify which activities in effect enhance interaction and activity. Data was analyzed through content analysis allowing the researcher to determine specific themes. Discretion from the researcher and caregivers was used as a mean to select suited activities.

Results: While it is assumed that persons with dementia benefit from being involved in meaningful activity, how individuals with dementia perceive this involvement is poorly understood. Each person that is challenged by dementia still remains a distinctive individual with unique needs and preferences. Results of the study proved that different activities are enjoyed in the various stages of dementia. Prescribed therapeutical activities are not suited for every dementia case. Individualism needs to be valued.

Conclusions: The contribution of this study is an up-to-date intervention program in the form of an activity sheet. The activity sheet is complete with activities for every day of the month, including instructions for caregivers with the option of inter- changeable activities for those in mild and moderate stages. Such a monthly program can easily be distributed between various long-term facilities that care for persons with dementia, providing a solution to keeping patients active and also maintaining optimal levels of functioning and contributing to the patient's health.

P047 SPATIAL IMAGES AS LIVING ENVIRONMENT THAT SHOULD BE CONSIDERED FOR ENVIRONMENTAL IMPROVEMENT OF GROUP HOME FOR PERSONS WITH DEMENTIA

19. Quality of life in demetia

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Objectives and Study:

The study investigates how the spatial images as living environment are important to create a familiarity in the environmental improvement of group home for persons with dementia.

Methods:

- 1) Interview to examine the realities of improvement
The content of interviews is chiefly five aspects such as "improved part in activity spaces, improvable characteristics, reasons for improvement, improvement method and effect". And, the photographs of the improved parts and space are taken. The subjects are chief staffs who work in fifty-four group home.
- 2) The evaluations of spatial images that improves living environment
The photographs taken by the previous investigation are presented for evaluators who are twenty-four young persons. They are made to point out the part in order with a strong sense of incompatibility in a spatial image as the living environment from among those photographs.

Results:

- 1) In the living room, a flexible spatial planning that enables a variety of table arrangement is important.
- 2) The easy signature display is required. However, a handmade signature such as arrows can become a factor with senses of incompatibility. Therefore, it is necessary to examine the signature display that becomes easy and familiar with the living environment from an initial stage of the group home planning.
- 3) The necessity of the handmade artifacts is pointed out. It is necessary to examine what artifacts are sensible enough.

Conclusions:

It is not only improving the space into a human scale, but also necessary to arrange the home-like various elements.

P049 EFFECT OF THE STRESS FROM PROVIDING CARE ON CAREGIVERS' COGNITIVE FUNCTIONS

19. Quality of life in demetia

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Objectives and Study: A vast majority of dementia patients are cared for at home by their spouse. Spousal caregivers are usually of the same age as the patients and therefore at risk of age-related cognitive decline. They also have to cope with the burden of caregiving and with chronic stress. The way caregivers appraise their role influence their emotion and consequently their distress.

Methods: 17 spousal caregivers of demented patients from the Dementia Day Care Center of Athens Association of Alzheimer's disease and Related Disorders were compared with 15 controls (non-caregivers) of the same sex, marital status, age and education. Data on caregivers' demographics, perceived Stress (Cohen's Perceived Stress Scale) and cognitive status (Logical Memory I & II, Digit-Span, Letter - number sequencing) were collected. Statistical analysis was made the statistical package for the social science (SPSS, version 13) .

Results: Caregivers performed significantly worse on short-term memory and episodic memory tests. They also had higher scores on perceived stress scale than non-caregivers. Interestingly, there was a negative correlation between perceived stress and short - term memory in caregivers group.

Conclusions: The results indicate that cognitive impairment of spousal caregivers may mirror the high levels of perceived stress. Cognitive impairment may affect the quality of caregiving. Caregivers' appraisal of their situation may influence their emotion and consequently may augment their perceived stress, which has negative consequences on their cognition.

Abstracts - Poster presentations

P050 ORGANIZATIONAL RESEARCH RESULTS IN IMPROVED SUCCESS IN ALZHEIMER'S PROGRAMS AND LONG-TERM CARE

19. Quality of life in demetia

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Objectives and Study: Currently there are more than 5 million Americans with dementia and future predictions indicate that the number of persons affected will rise exponentially. Many individuals require extensive care now, and millions more will be in need of care and support in the near future as will their families. Despite the introduction of special care units for persons with Alzheimer's disease and dementia in the mid 1980's, the daily quality of care and life of residents with dementia in long term care continues to be of concern. This project was conducted to determine essential organizational components of long term care communities that lead to enhanced consumer satisfaction, employee satisfaction and retention; quality care outcomes and financial feasibility.

Methods: Researchers conducted a historical case study of a specialized Alzheimer's disease facility, extensive review of dementia program literature and successful organizational business models. A model consistent with exemplary program findings was developed and entitled SERVICE, an acronym for domains of practice hypothesized to be essential for success. Programs developed to support the domains included a focus on service, education, respect, vision, inclusion, communication and enrichment. Programs in each domain were studied as developed and results of the effectiveness measured over time. To determine the ability to replicate, the model was implemented in two continuing care retirement communities, 200+ accommodations, in two separate states. Data was collected at baseline and quarterly for one year and at the end of the second year including staff and resident/family surveys, turnover, agency utilization and outcome review data.

Results: Results indicate that dedication to the model and consistent attention to programs in the domains led to enhanced resident, family and staff satisfaction, reduction in employee turnover and positive financial outcomes. Statistically significant changes were seen in categories such as recognition for efforts, supervisor listens/compliments, administrator/department head availability and openness to new ideas, and the ability to perform to professional standards. Staff turnover was reduced to single digits and temporary staff agency use declined.

Conclusions: Models exist and SERVICE is one for leaders to use that has a positive impact when implemented and when there is a dedication to the continuation of programs. This proactive model includes the education, support, inclusion, care and nurturing of residents with Alzheimer's disease and dementia, families and staff, enhancing satisfaction, retention and finances.

P052 REVIEW ON LITERATURE CONCERNING CHANGES IN THE DAILY LIFE RELATED TO THE IMPROVEMENT OF SLEEP CONDITIONS OF THE ELDERLY

19. Quality of life in demetia

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Objectives and Study: By reviewing the literature on intervention in sleep care for elderly patients staying at medical and long-term care facilities for the elderly in Japan, we aimed to clarify some sleep care problems for elderly people with dementia.

Methods: Eighteen papers on intervention in sleep care for elderly people with sleeping problems who stayed at medical and long-term care facilities were extracted for analysis from the databases of Ichushi Web (Ver. 4) (1983-2007) and the Japan Nursing Society (1996-2006).

Results: (1) The intervention items included morning care, afternoon exercise, distribution of sleeping medicine after supper and before bed, and reduction of noise at night. (2) Although actigraphs were used in some studies, most were conducted by observation using a sleep log. The observation duration varied from only night time to 24 hours with intervals from 30 minutes to two-hours. To judge whether asleep or awake, eyes' status, body posture, breathing, and response to stimuli when spoken to during sleep, were observed. (3) Three types of changes were found: an increase at night and a decrease during the day; an increase both during night and day; a decrease both during night and day. (4) Improvements in daily life due to better sleep included stabilization of posture in seating, less drowsing while eating, continence, and an increase in voluntary behaviors.

Conclusions: Better organizing the observation methods (observation duration and interval) and establishing uniform means of assessing and analyzing sleep, considering expressions of desire, facial expression, and body movement during meals, bodily function, and leisure activities, would make sleep observation more effective.

P051 FEAR OF FALLING AMONG OLD PERSONS WITH MILD COGNITIVE IMPAIRMENT AND ALZHEIMER'S DISEASE

19. Quality of life in demetia

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Objectives and Study: Fear of Falling is a major health problem among elderly people and can lead to activity restriction.

Objective: To identify whether old persons with Mild Cognitive Impairment (MCI) and Alzheimer's disease (AD) could develop a subsequent fear of falling, and whether this fear of falling is associated with the cognitive, psychological and functional parameters.

Methods: Forty eight (48) elderly with MCI and AD aged ≥ 50 were randomly included in the study. Fear of Falling was assessed by the FES-I a 16 item questionnaire with easy and more complex physical and social activities. MMSE and MoCA were used to assess cognitive function, FRSSD and FUCAS for function and GDS for depression.

Results: 37% of the participants expressed no fear of falling, 40% expressed a little concern about falling and the rest 23% expressed a great concern. Fear of falling was associated with sex ($r=.330$, $p=.023$), age ($r=.300$, $p=.05$) and cognitive function $r=.400$, $p=.009$.

Conclusions: Among people with MCI and AD the fear of falling seems to be related with several factors as the advancing age, the female gender and the deterioration of cognitive function.

P054 COGNITIVE STIMULATION PROGRAM FOR PERSONS WITH DEMENTIA, FAMILIES AND CAREGIVERS

19. Quality of life in demetia

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Objectives and Study: The Alzheimer Association of Monterrey (Mexico), knowing the need of relatives and the own people who present or display a slight mental deterioration, or who already are in the first stage of the disease, started to work to carrying out a program in which we could give a better quality of life to be offered both to persons with dementia as to relatives and caregivers.

Methods: Through a structured program, our association offered a series activities mainly cognitive stimulation to improve memory; but, also, important aspects good like are it the socialization and adaptation to the environment in which we lived.

Some Therapies: Language, playful Reminiscence, Activities, physical Exercises, artistic Sensotherapy, Musictherapy, Other activities, Therapy of relaxation and Therapy with animals.

Results: Main benefits: Security in themselves, Joy reflected in the face, Self-esteem, Mobilization, To be more alert, Sociabilization, Capacity to understand and to follow instructions, Better family dynamics, To discover capacities that they themselves, nor their relatives knew that they had, Recognition of they themselves and its relatives that this kind of programs like cognitive stimulation really works.

Conclusions: Finally, at the same time as the relative is performing the activities assigned for that day, the caregiver receives information about the development of the disease.

Abstracts - Poster presentations

P055 MEMANTINE FOR PATIENTS WITH DEMENTIA IN CLINICAL PRACTICE

23. Up to date on drug treatments

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Objectives and Study: The pathophysiology of Alzheimer's disease is complex and involves several different biochemical pathways. A combination of cholinergic and glutamatergic dysfunction appears to underlie the symptomatology of Alzheimer's disease. Survey has shown that the present prescription can't provide a cure for Alzheimer's disease, however, drug treatments have been developed to improve symptoms, or temporarily slow down their progression, in some patients. There are two main types of drugs used in Alzheimer's disease treatment. These are the Cholinesterase Inhibitors and the N-methyl-D-aspartate receptor antagonist, known as memantine hydrochloride. In current study we tried to find out if a combination of memantine and a cholinesterase inhibitor is more effective than using the inhibitor by itself.

Methods: Methods. Two hundred nine demented outpatients who visited the 3rd Department of Neurology took part in the present study. One hundred and fifty of them took a combination of cholinesterase-inhibitor and memantine hydrochloride and the rest 59 took only an inhibitor for the same period. All patients were examined at baseline and after 3, 6, 9 and 12 months treatment. At each examination MMSE, FRSSD and GDS were used to test cognitive, functional and affective performance. For statistics we used the SPSS14 program (especially with Mann-Whitney method-2 independent groups).

Results: No statistical significant difference was found in the efficiency of treatment between those who were prescribed monotherapy and those who took inhibitors combined with memantine, according to their progress in MMSE and GDS. However, statistical significant difference between the two groups was found in ADL- FRSSD- ($p < 0,043$, $p < 0,008$, $p < 0,00$, $p < 0,001$, respectively).

Conclusions: A combination of a cholinesterase inhibitor with memantine hydrochloride is most effective treatment than cholinesterase inhibitor alone in ADL of patients with dementia.

P057 FACTORS ASSOCIATED WITH DEMENTIA IN PATIENTS WITH PARKINSON'S DISEASE.

01. Aetiology, pathogenesis, clinical features and differences in all types of dementia

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Objectives and Study: Previous studies have indicated that the following risk factors may be associated with dementia in PD: advanced age, long duration of the disease, severe motor symptoms (UPDRS score over 25), concurrent depression, anxiety or psychosis, predominant akinetic-rigid symptoms, cardiovascular disease and low socioeconomic and educational status. The aim of the study is to detect any statistically significant differences between the two aforementioned groups, concerning the following parameters: i) age ii) duration of illness iii) severity of motor symptoms (UPDRS score) and iv) comorbid depression.

Methods: Forty three (43) patients (27 male, 16 female) aged $70,1 \pm 7,16$ with identified PD based on the results from the clinical examination, the UPDRS scale and the DAT-SCAN entered the study. The patients were examined with the Mini Mental State Examination (MMSE) and the Wechsler II Memory Scale (WMS II) in order to determine whether a coexisting cognitive impairment existed. According to the results of the aforementioned scales the patients were divided into two groups: (a) 22 patients without cognitive deficits and (b) 21 patients with coexisting mild to moderate cognitive impairment. The Hamilton Depression Scale (HAM-D17) was applied and mild to severe depression was found in twenty (20) patients. Ten patients from each group had coexisting depression.

Results: No statistically significant differences were found between the two groups concerning the aforementioned parameters: i) age: (a) $68,73 \pm 6,62$ years, (b) $72,18 \pm 7,3$ years ($p = 0,235$), ii) duration of illness: (a) $4,36 \pm 4,01$ years, (b) $5,64 \pm 4,78$ years ($p = 0,296$), iii) severity of motor symptoms: (a) UPDRS: $24,1 \pm 9,26$, (b) UPDRS: $37,27 \pm 21,12$ ($p = 0,115$), iv) comorbid depression: (a) 10/22, 45,45%, (b) 10/21, 47,62% ($p = 1,000$). We did not detect any specific risk factors, which may be associated with the development of cognitive impairment in PD.

Conclusions: We did not detect any specific risk factors, which may be associated with the development of cognitive impairment in PD.

P056 PREDICTION OF TREATMENT RESPONSE TO RIVASTIGMINE IN ALZHEIMER'S DEMENTIA. A PROSPECTIVE MULTICENTER STUDY

23. Up to date on drug treatments

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Objectives and Study: Effect size in studies on acetylcholine esterase inhibitor (AEI) treatment in Alzheimer patients is modest, with large interindividual differences in treatment response. Decrease of EEG slow-wave activity under a test dose or short-term application of an AEI has been consistently reported to correlate with individual treatment response. Thus, in a prospective study, we assessed the predictive value of EEG theta power decrease for treatment response to rivastigmine after six months.

Methods: In a group of 50 Alzheimer patients (MMS: 12-24), EEG and neuropsychological parameters were assessed before and after two weeks of rivastigmine treatment. Follow-up examination was performed after six months, applying improvement of short-term memory as criterion for treatment response. EEG theta power decrease under rivastigmine and neuropsychological parameters were related to treatment response.

Results: A decrease of EEG theta power after two weeks of rivastigmine treatment was significantly associated with treatment response after six months. In the patients, in whom theta power decreased substantially, there were twice as much responders (70 %) than in the other patients (32 %). Good baseline performance in various neuropsychological domains, particularly visuospatial capabilities, was also positively correlated with treatment response. Both parameters, theta power decrease and visuospatial capabilities, allowed a correct prediction of treatment response in 74 % of the patients.

Conclusions: The decrease of EEG theta power under short-term application of an AEI has proven useful for the prediction of treatment response. Baseline neuropsychological parameters may provide additional prognostic information. For a clinically relevant prognostic application, which may influence individual indication for AEI treatment, a more precise prediction based on both electrophysiological and neuropsychological parameters has to be achieved.

P058 A COMPARATIVE MULTIDISCIPLINARY STUDY OF MIXED DEMENTIA

01. Aetiology, pathogenesis, clinical features and differences in all types of dementia

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Objectives and Study: Alzheimer's disease associated with cerebrovascular disease is now considered as the most frequent type of dementia. The aim is to study psychopathological features and clinical evolution of mixed cases of dementia with Alzheimer's and vascular brain affection. 89 patients with mixed dementia were admitted to day-clinic of Moscow Alzheimer's disease center in 2005-2008. Two control groups made up 72 patients with vascular dementia (VaD) and 104 patients with Alzheimer's disease (AD) without vascular risk factors.

Methods: MRI, neuropsychological examination, EEG-mapping, ultrasonography of intracranial vessels and APO E genotyping are used. The cases of mild and moderate dementia are included.

Results: Mixed dementia had more frequent late onset (91,0%) than in cases of VaD and AD (resp. 84,7 and 65,3%). Mild dementia is much more common in patients with VaD (81,9%) than in mixed cases (53,9%) and in DAT (26,9%). Non-cognitive neuropsychiatric disorders were common for all three groups. Non-cognitive neuropsychiatric disorders are presented in 62,9% of mixed dementia, in 62,5% of AD and in 78,1% of VaD. Confusional episodes with delirious symptoms are equally frequent in mixed dementia and vascular dementia (resp., 44,9 and 39,3%), but much more rare in pure AD (7,7%). A history of stroke/TIA was in 75,0% of VaD cases and in 37,1% of mixed dementia since in 2,9% of AD cases. MRI picture of ventricular and subarachnoid space enlargement was common in three groups of patients., but signs of leukoariosis as well as number and localization of vascular focal changes were very various in VaD and mixed dementia since were single or absent in AD. 39 patients with VaD, 58 mixed cases and 49 with AD without vascular factors were genotyped. ApoE genotyping showed the most frequent presence of ApoE ε3/ε4 in mixed dementia (51,2%). ApoE ε3/ε3 is the most common in VaD (71,0%). ApoE 4/4 was three times more frequent in AD than in mixed cases and was absent in VaD (table 1). Some differences in neuropsychological syndrome demonstrated various involvement of Luria's three brain blocks in a picture of cognitive impairment. Profound cerebral structures were less affected in mixed dementia as well as in AD in comparison with VaD. Neuropsychological assessment found an improvement of regulatory cerebral functions as a target of neurotransmitter therapy. Differences in neurotransmitters, neuroprotective and vasoactive treatment response are studying. A longitudinal (5-years follow-up) prospective study is proposed.

Conclusions: Late onset, history of vascular factors, MRI picture and APO E4 genotype are common in mixed dementia as well as increased risk of TIA/stroke and delirium-like confusion in the evolution of AD with cerebrovascular disease.

Abstracts - Poster presentations

P059 COGNITION AND EXTRAPYRAMIDAL SIGNS IN THE ELDERLY IN A POPULATION-BASED STUDY

01. Aetiology, pathogenesis, clinical features and differences in all types of dementia

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Objectives and Study: Extrapyrarnidal signs (parkinsonian signs: tremor, rigidity, bradykinesia) occur frequently in the elderly. It was reported that the severity of these signs was greater in people with dementia or Alzheimer's disease than in people without cognitive dysfunction. We evaluated whether cognitive dysfunction such as Alzheimer's disease or mild cognitive impairment (MCI) were associated with extrapyramidal signs in the elderly Korean.

Methods: A total of 598 elderly Koreans were recruited. Data on demographic and extrapyramidal signs were compared with status of cognitive function (no cognitive impairment, MCI, dementia).

Results: There were 462 elderly without cognitive impairment (no CI), 129 elderly with MCI and 7 elderly with dementia. The mean score mini-mental status examination (MMSE) was different according to cognitive status: 27.40 in no CI vs 24.74 in MCI vs 16.14 in dementia. There was the different extrapyramidal signs prevalence according to cognitive status: 14.1% in no CI vs 30.2% in MCI vs 57.1% in dementia. These different distributions were statistically significant after adjusting for sociodemographic data.

Conclusions: The extrapyramidal signs were risk factors for cognitive dysfunction in the elderly Korean. Although these signs were mild and easily missed, these should be checked in the elderly with cognitive dysfunction.

P060 THE USE OF WESTERN APHASIA BATTERY – REVISED TEST (WAB-R) FOR THE STUDY OF SPEECH DISTURBANCES IN PATIENTS WITH ALZHEIMER'S DISEASE

01. Aetiology, pathogenesis, clinical features and differences in all types of dementia

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Objectives and Study: It is common knowledge that Alzheimer's disease and other dementias are not affecting only memory, but also many other higher cognitive functions of the brain, among them speech. Demented patients early in the course of their disease start to lose their fluency, their vocabulary becomes poorer, they have paraphasias and difficulties in naming. As the disease advance and their verbal abilities continuously deteriorate they also start to have disturbances in comprehension, so that verbal communication becomes insufficient. WAB-R (Western Aphasia Battery – Revised) is a very useful clinical scale detecting disturbances of speech especially in patients with neurological diseases.

Methods: In this study we examined thirteen patients with moderate Alzheimer's disease (MMSE 13.44-6.1) and ten age-matched healthy individuals, using subtests of the WAB-R, to detect and quantify their speech disturbances. More specifically we used subtests testing auditory verbal comprehension (yes/no questions, auditory word recognition, sequential commands), naming and word finding (object naming, word fluency, sentence completion, responsive speech).

Results: Our results showed statistically significant differences between patients' and healthy individuals' performance in practically all the subtests, with patients' performance being worse in the parts testing naming, word fluency, and sentence completion.

Conclusions: We conclude that WAB-R is an easy-to-use, reliable test for detecting speech disturbances in demented patients and it can be used from the speech and language pathologist in order to plan therapeutic interventions to improve or stabilize patients' ability to communicate.

P061 ALZHEIMER-DEMENCIA IN PRIMARY CARE

01. Aetiology, pathogenesis, clinical features and differences in all types of dementia

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Objectives and Study: Dementia is characterized by loss of or decline in memory and other cognitive abilities. It is caused by various diseases and conditions that result in damaged brain cells.

Type of Dementia:

- a) Parkinson's Disease
- b) Dementia with Lewy bodies
- c) Frontotemporal Dementia
- d) Creutzfeldt-jakob disease
- e) Hydrocephalus normal pressure

Methods: Different types of dementia have been associated with distinct symptom patterns and distinguishing microscopic brain abnormalities. Increasing evidence from long-term epidemiological observation and autopsy studies suggests that many people have microscopic brain abnormalities associated with more than one type of dementia.

Results: Percentages of Medicare Beneficiaries aged 65 and older with Alzheimer's and other Dementia's by specified coexisting medical conditions (2004)

- 1) Hypertension 60%
- 2) Coronary heart disease 26%
- 3) Stroke 25%
- 4) Diabetes 23%
- 5) Osteoporosis 18%
- 6) Congestive heart failure 16%
- 7) COPD 15%
- 8) Cancer 13%
- 9) Parkinson's disease 8%

Conclusions: The 85 years and older population currently comprises nearly 50 percent of the individuals with Alzheimer's disease or about 2.7 million people.

P062 COMORBIDITY PREVALENCE IN A GROUP OF PATIENTS WITH ALZHEIMER DEMENTIA AND THYROID PATHOLOGY

01. Aetiology, pathogenesis, clinical features and differences in all types of dementia

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Objectives and Study: The comorbidity of Alzheimer's disease (AD) is a challenge. Although thyroid pathology is not a risk factor for AD, its early diagnosis and prompt treatment could help the prognostic of the cognitive deficit's future evolution. The evaluation of the cognitive deficit in an AD patient only based on psychometric tests, without the exclusion of thyroid pathology, could be erroneous. Our study aimed to investigate the relationship of thyroid dysfunctions with the cognitive deficits.

Methods: The study was realized at the Geriatric and Gerontology Clinic, Elias Hospital – Bucharest, where our Standardized Geriatric Evaluation was performed for each of the 850 patients enrolled in the study. The prevalence of dementia and thyroid dysfunctions, as well as of thyroid dysfunctions depending of dementia type was estimated, including as an outcome related to the epidemiological hypothesis supposing that hypothyroidism could be a risk factor for the degenerative dementias.

Results: From the 850 patients enrolled, 327 (38.5%) was registered as having dementia, while 41 (408%) as presenting associated thyroid pathology. Together with the value of estimated odds-ratio (OR=0.89), statistically non-significant (IC: 0.09 – 7.82, $\chi^2=0.12$, $p>0.05$), our data do not confirm the epidemiological hypothesis related to hypothyroidism as risk factor in dementia. However, among the patients with hypothyroidism 80% were diagnosed with degenerative dementia, as against 20% patients with mixt dementia.

Conclusions: The obtained data do not allow the conclusion that hypothyroidism constitutes a risk factor in dementias. In a series of recent studies, scientists have determined that both hypothyroidism and hyperthyroidism have been shown to disrupt a number of key steps in the memory formation and retrieval process, but further studies are needed in order to clarify their true role in degenerative dementias.

Abstracts - Poster presentations

P063 TO TELL OR NOT TO TELL? THE ATTITUDES OF GREEKS TOWARDS DISCLOSURE OF THE DIAGNOSIS OF ALZHEIMER'S DISEASE

07. Ethical issues

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Objectives and Study: Controversy exists concerning telling the truth in Alzheimer's disease. This study examines whether Greek adults' would want disclosure of the diagnosis of Alzheimer's disease for themselves or for their potentially afflicted family members. Additionally, their attitudes towards revealing the diagnosis to the patient's caregivers, relatives and friends were examined, focusing on the kind of information they would prefer to be revealed (name of the disease, prognosis, available medication etc).

Methods: A self-administered, semi-structured questionnaire was used to investigate current attitudes in Greece. The questionnaire was administered mainly in urban, but also rural areas of the country from September to December 2009.

Results: The results remain to be seen. The answers of the participants are of particular interest since, to our knowledge, this is the first study of this kind in Greece.

Conclusions: The results of the study will provide us with insight into a variety of topics concerning truth telling in Alzheimer's disease.

P067 CAN MEASURES OF NATURAL LANGUAGE DETECT MILD COGNITIVE IMPAIRMENT AND PREDICT COGNITIVE DECLINE?

10. Mild cognitive impairment

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Objectives and Study: Mild cognitive impairment (MCI) is considered a possible prodrome of Alzheimer's disease (AD). MCI can affect various cognitive domains including language function. The objective of this study is to investigate which measures of language function are more sensitive in differentiating normal ageing, MCI and early AD and which measures most reliably predict deterioration after 12 months.

Methods: 76 subjects with MCI (MMSE 25-27, age 80.0 ± 5.9, education 10.84 ± 2.20) 32 patients with mild AD (MMSE 19-29, age 79.9 ± 5.5, education 10.72 ± 2.73) and 38 age and education matched controls (MMSE 28-30, age 80.4 ± 5.1, education 10.68 ± 2.45) were assessed in a cross-sectional and prospective longitudinal study design using phonemic and semantic fluency and the Boston Naming Test. In addition, indices of natural language were derived from two speech samples. MMSE and CERAD scores were used to assess general cognitive function, while the National Adult Reading Test (NART) and the WAIS Vocabulary Scale were conducted to determine premorbid verbal intelligence and vocabulary knowledge.

Results: Cross-sectionally, the AD group performed significantly worse on all measures including aspects of natural language such as information content, Type/Token Ratio and pauses. Relative to controls, the MCI group showed an impairment only in the verbal fluency tasks, but not in the Boston Naming Test or any of the natural language measures. At follow-up, the MCI group showed a significant decline in the Boston Naming Test but none of the natural language measures.

Conclusions: While both standardised tests of language function and natural language are sensitive to AD, measures of natural language do not appear to be sensitive in distinguishing MCI from controls and predicting cognitive decline after 12 months.

P066 STIGMA TOWARDS THE PATIENT WITH ALZHEIMER'S DISEASE IN NORTHERN GREECE

07. Ethical issues

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Objectives and Study: The main aim of the study was to explore and define the degree of social stigma by the public towards the patient with Alzheimer's disease (AD). The objectives were to:
 • Investigate the level of knowledge on AD by the lay public.
 • Explore differences in opinions through three different types of sub-groups of lay people.

Methods: A total of 90 people were recruited. For this purpose, three different groups of lay people were approached. The first group was drawn from the population of a major Greek city. The second group was comprised of people from a small town and the third group was drawn from the inhabitants of a small village. There were 41 male and 49 female participants with a mean age was of 37 years (range 18-32).

Results: Data were collected via personal interviews using a 19 item questionnaire which was based on the national and international literature search. The first 6 questions concerned demographic data and the remaining 13 were concerned with knowledge, biased attitudes and behaviors towards patients with AD. Although 17 interviewees had a member of their immediate family with AD, the majority of the sample presented with low knowledge concerning symptoms and physical manifestation of the disease. Stigma behaviours were recorded; the majority of the sample (62.7%) thought that the patient himself was responsible for falling ill. Also, 32% suggested that patients with AD should not have the same legal rights as the rest of the population. Marked differences between the three sub-groups were also reported.

Conclusions: These results have show that AD is a disease that carries considerable amount of social stigma within contemporary Greek populations. Even more worrying is the fact that even relatives of patients with AD seem to hold some degree of stigmatization against sufferers.

P068 EFFECT OF GLUCOSE REGULATION ON COGNITIVE FUNCTIONS IN ELDERLY TYPE II DIABETIC PATIENTS WITH AND WITHOUT MILD COGNITIVE IMPAIRMENT (MCI)

10. Mild cognitive impairment

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Objectives and Study: Experimental data suggest that glucose may improve memory through a facilitation of acetylcholine (ACh) synthesis and release in the brain. Research data have shown that the memory-improving action of glucose depends on each individuals' blood glucose regulation. Objectives: To evaluate the effect of glucose regulation on cognitive function in Type II diabetic patients with and without MCI. Design: A case-control study conducted at the outpatient memory clinic of an academic Geriatric Unit. Patients: Fifty nine (59) elderly Type II diabetic patients, 30 with and 29 without MCI.

Methods: A battery of dementia screening tools, MMSE, Boston Naming, Clock Drawing, Trail Making B as well as a CDS questionnaire, history, clinical examination and selected laboratory tests, fasting blood glucose and glycosylated haemoglobin concentrations (HbA1c) as glucose regulation index were used. Patients were examined at baseline and one year later. Statistical processing was performed by SPSS 16.0 for windows.

Results: Diabetic patients without MCI had in general higher scores in all tests than those with MCI. Patients with better glucose regulation also showed a better baseline cognitive function as well as a slower decline at MMSE and Trail Making B scoring one year later. Cognitive function showed a weak negative correlation with HbA1c levels.

Conclusions: Elderly Type II diabetic patients without MCI have in general a better memory and cognitive function than diabetics with MCI. In either group patients with a better glucose regulation (lower fasting blood glucose and HbA1c) show a higher Cognitive Scoring at baseline and a slower decline after one year.

Abstracts - Poster presentations

P069 DYSEXECUTIVE MILD COGNITIVE IMPAIRMENT: NEUROPSYCHOLOGICAL AND NEUROIMAGING PROFILES

10. Mild cognitive impairment

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Objectives and Study: It is not clear whether dysexecutive mild cognitive impairment (dMCI) is an entity distinguished amnesic MCI (aMCI). Although recent studies indicated regions of brain atrophy and rate of death were different in dMCI compared to aMCI, the definitions of executive dysfunction was different between studies.

Methods: We examined 18 normal subjects, 19 subjects with single-domain dMCI and 11 subjects with single-domain aMCI. They were recruited from normal volunteers. There were no differences in age, education and gender. Amnesia was defined by Word Sequence Learning (WSL)-Recall. Dysexecution was defined by completed categories of Wisconsin Card Sorting Test. Cutoff was 1.5 SD or below 7th percentile. A battery of neuropsychological assessments and brain MRI were performed.

Results: The subjects of aMCI scored significantly less than normal controls and dMCI on delayed recall, cueing and recognition trials of Word Sequence Learning test. In contrast, the dMCI patients performed significantly worse than normal controls and aMCI on and non-perseverative and unique errors of WCST and digit span. Significant group differences were also noted on CDR, with the aMCI patients scoring greater than both normal controls and the dMCI patients. However, there was no statistic significance among the other tests of individually cognitive domains, including memory, language, attention, visuospatial and executive functions, global general cognitive functions and their subdomains (i.e., MMSE and CASI), and neuropsychiatric symptoms (i.e., NPI and HAM-D). aMCI had higher MTA score of Scheltens.

Conclusions: Our study confirmed dMCI could be distinguished from aMCI. However, there were no difference in clinical characteristics and neuroimaging profiles. It warrants further studies to investigate the differentiating features, including genetic, morphometry or rate of conversion to dementia.

P071 ASSESSMENT OF BEHAVIORAL AND PSYCHOLOGICAL SYMPTOMS OF DEMENTIA BY FAMILY CAREGIVERS

16. Non-cognitive symptoms of dementia

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Objectives and Study: This study was designed to test the performance and related factors of a self-administered instrument in assessing behavioral and psychological symptoms of dementia (BPSD) by family caregivers.

Methods: We recruited 173 patients with dementia and major caregivers from two neurological clinics. Information about clinical diagnosis, the Mini Mental State Examination (MMSE), and the Clinical Dementia Rating (CDR), the Dementia Behavior Disturbance Inventory (DBDI), and global caregivers' strain were collected from interview and chart review.

Results: We found that DBDI has acceptable construct validity and good internal consistency reliability. BPSD was more frequently found in patients with advanced dementia, poor cognitive function and highly correlated to caregivers' strain. Multivariate analysis revealed that female patients and caregivers, advanced CDR stages, patient-caregiver relationship, types of dementia and MMSE score were related to the increased of frequency and disturbance index of DBDI

Conclusions: We concluded that BPSD can be evaluated by family caregivers using a self-administered instrument. Further study is indicated to clarify how caregiver characteristics affect the report of behavioral symptoms, and its clinical importance.

P070 DELUSIONS OF IRANIAN PATIENTS WITH ALZHEIMER'S DISEASE

16. Non-cognitive symptoms of dementia

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Objectives and Study: Delusions comprise one of the most psychiatric complications in Alzheimer's disease (AD). However there were no studies about prevalence and characteristics of delusions in Iranian patients with AD.

Methods: The demographic data of 156 patients with AD were assessed and the presence of delusion and characteristics of it were determined by the Neuropsychiatric Inventory (NPI) and the severity of the disease were specified by the Global Deterioration Scale (GDS) in a cross sectional study.

Results: 120 patients had delusion (77%). Three most common delusions were delusion of theft (70.2%), delusion of being in danger (59.6%) and misidentification of house (55.3%) consecutively. In patients with delusion, 46% had very frequent and consistent delusion and 40.4% had severe delusions. Caregiver's distress were assessed very severe in 51% of cases. According to GDS, most of patients were in severe cognitive decline group (32.7%). We found no relationship between sex (PV=0.09), ethnicity (PV=0.08), education (PV=0.26) and positive family history (PV=0.52) and delusion, but in alzheimeric patients who had lost their spouse for any reason, the delusions were meaningfully higher (PV=0.031).

Conclusions: We found that Iranian patients with AD had a high prevalence of delusion in comparison with most other countries, and this may be due to this fact that Iranian patients with AD consult the doctors in the middle part of their disease. Also we realized that lack of spouse is related with the expression of delusion in Iranian patients. We know that our study has some deficits, but since it is one of the first studies in this field in Iran and even in middle east countries, so it can put new looks for this matter.

P072 SELF-RATED HEALTH AND MORTALITY IN PATIENTS WITH MILD ALZHEIMER'S DISEASE: A PROSPECTIVE STUDY WITH 36 MONTH FOLLOW-UP

16. Non-cognitive symptoms of dementia

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Objectives and Study: In both epidemiological studies and in clinical trials the patients' own health perception, measured by a single question, known as perceived health, self-assessed health, or self-rated health (SRH). SRH has constantly been associated with future use of health care service and mortality independently of objective health measurements in various populations. The aim of this study was to investigate self-reported health and mortality among patients with mild Alzheimer's disease (AD) during a 36 month follow-up period in order to evaluate the potential of SRH as an overall health assessment measurement for this group of patients.

Methods: The data used in this study was part of the Danish Alzheimer Intervention study (DAISY). DAISY was a 3-year multi-center single-blinded randomised controlled trial, with randomisation to an intensive support and counselling program or to usual care. SRH and potential confounders were investigated in Cox proportional hazard models.

Results: A total of 321 patients with mild AD participated in this study. The mean age of the patients at baseline was 76.2 years (range 54-92), 46% were males and the average MMSE at baseline was 24.0, ranging from 20 to 30. A total of 208 (65%) rated their SRH as excellent or good, whereas 113 (35%) rated their SRH as fair, poor or very poor. During the study period 54 patients died. After adjusting for potential confounders poor SRH was not associated with subsequent mortality (HR 1.39, 95% CI: 0.74; 2.60).

Conclusions: SRH does not predict subsequent mortality in a population of patients with mild AD as compared to epidemiological studies. Based on our results we would be cautious in suggesting SRH as a global health score in patients suffering from mild AD, since SRH may not reflect the patients mental disease severity.

Abstracts - Poster presentations

P073 COMORBIDITY IN MCI PATIENTS IN EUROPE: THE DESCRIPA STUDY

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Objectives and Study: DESCRIPA (Development of screening guidelines and diagnostic criteria for predementia Alzheimer's disease) is a multicenter study whose goal is to reach an evidence-based European consensus and develop clinical criteria on the identification of subjects with preferential Alzheimer's disease (AD). Potential markers and risk factors of predementia AD and comorbidity of Mild cognitive impairment (MCI) were studied.

Methods: 880 patients (375 males, 505 females; mean age±SD 70.34±7.8; mean±SD years of education 10.37±4.22) with mild cognitive complaints, who were recruited from 20 European study centers, were studied. Their mean±SD MMSE performance was 27.42±2.2 (range 18-30). Exclusion criteria were age below 55 and obvious causes of cognitive impairments. Cognitive problems occurred at median year 2001. A complete history was taken in all patients, demographical data was collected and several factors were studied. All patients underwent clinical, neuropsychological assessment and brain imaging (MRI,CT).

Results: 254 patients (28.8%) were self-referred, whereas 397 (45.1%) were referred by general practitioners and 188 (21.4%) by other physicians. Comorbidity was also investigated. 389 subjects (44.2%) suffered from hypertension, 295 (33.5%) from hypercholesterolemia, 180 (20.4%) from depression, 96 (10.9%) had angina pectoris, 92 (10.4%) had diabetes and 112 (12.7%) thyroid problems. Moreover 594 patients (67.5%) were drinkers and 92 (10.4%) smokers. Other factors were studied including medications (type and dosage) and blood pressure. During the period of study, 28 patients (3%) were already under anti-dementia medication.

Conclusions: Hypertension, hypercholesterolemia, depression and problems in thyroid function (particularly hypothyroidism) appear to be the most prevalent co morbidity factors in MCI patients. Given the fact that about 10-15% of MCI patients convert to AD per year these factors might be potential risk factors in AD development.

ACKNOWLEDGEMENT: The study was funded by the European Commission-Fifth Framework Programme (QLK6-CT-2002-02455).

P075 INTRODUCING AN INTERACTIVE SEAL ROBOT IN AN OCCUPATIONAL THERAPY GROUP OF ALZHEIMER'S PATIENTS: EFFECTS ON SOCIAL INTERACTION BEHAVIOR

15. Non-pharmacological interventions

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Objectives and Study: Alzheimer's disease (AD) leads to progressive social withdrawal. Technology is used to help patients maintaining their cognitive and social functioning. The aim of this exploratory study was to assess whether a therapeutic animal robot can help to improve social interactions in AD. We compared patients' behavior in two conditions: during occupational therapy sessions and throughout sessions where the robot was introduced.

Methods: Six moderate-to-severe AD patients (83 to 95 years old), living in a long-term care unit participated in this study and attended an occupational therapy group led by a psychologist. Naturalistic observations were conducted during 8 sessions with alternated use of the Japanese seal robot "Paro". The interactive robot has light, sound, balance and tactile sensors. Each session was video-recorded. Verbal and nonverbal behavior was coded for each participant with an observation grid.

Results: Preliminary results showed that during the Paro sessions some participants were more reactive to social transactions (gaze, posture, facial expression, physical distance, topics discussed). The frequency of nonverbal and verbal behavior for most of the participants increased as well during these sessions. The robot was used as a mediator between the therapist and the patients facilitating their interactions. Some of the patients showed several positive affective behaviors. However, other participants rejected the robot and did not show any change on their behavior in the Paro sessions.



Conclusions: The first results confirm previous findings from Japanese studies about animal robot therapy. Conducting studies including a larger number of participants and throughout longer periods is necessary in order to evaluate the potential benefits in an occidental population.

P074 CAREGIVER REPORTS FOLLOWING DIETARY INTERVENTION WITH MEDIUM CHAIN FATTY ACIDS IN 47 PERSONS WITH DEMENTIA

15. Non-pharmacological interventions

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Objectives and Study: The purpose of this study was determine if persons with dementia improve in response to a dietary intervention using oils with medium chain fatty acids, and what specific types of improvements were noted by their caregivers.

Methods: Caregivers of persons with dementia, using oils with medium chain fatty acids as a dietary intervention, were encouraged to report responses, whether positive or negative to the author, and were not prompted with regard to specifics of response. Responses were then categorized for purpose of tabulation.

Results: Of the 47 individuals there were 26 males, 20 females, 1 unknown; 30 of 47 reported age, with range of 55 to 94 years old (average 76.8.) 29 used coconut oil only, 3 medium chain triglyceride oil (MCT oil) only and 15 a combination of coconut oil and MCT oil. 42 (89.5%) reported improvement, 1 (2%) stable over six months, and 4 (8.5%) no improvement. Specific reported improvements included 31(66%) in memory/cognition, 22(47%) in social interaction/behavior/mood, 17(36%) in speech/verbal skills, 15(32%) in resumption of lost activities, 10(21%) in physical symptoms, 4(8.5%) in sleep, 2(4%) in appetite, and 2(4%) in vision.

Conclusions: A tabulation of anecdotal reports from caregivers of 47 persons with dementia showed improvement in the vast majority, many in aspects of human life other than memory and cognition. The positive responses are presumably due to metabolism of medium chain triglycerides to ketone bodies for use by neurons as an alternative fuel in cells with decreased ability to transport glucose, thereby improving neuron function and viability. Other currently unknown or unreported effects of ketone bodies in the brain could also be involved. Effects of medium chain fatty acids should be further studied in controlled trials. Consideration should be given to looking not only at improvements in memory and cognition, but other areas impacting human life as well.

P076 GROUP ACTIVITY THERAPY FOR ELDERLY WITH DEMENTIA IN REHABILITATION WARD

15. Non-pharmacological interventions

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Objectives and Study: No empirically based program for prescribing interventions has been developed for elderly people suffering from dementia in hospital, though movement is a basic human need. The aim of this pre- and post- intervention study was to evaluate the impact of a group movement program on the physical, psychiatric, and cognitive functions of elders with dementia.

Methods: The purposive sample was eight elderly people, with a mean age of 68.38 years, from the rehabilitation ward of a medical center in southern Taiwan. Based on the Need-Driven Dementia-Compromised Behavior Model (NDB Model; Algase et al., 1996), the program ran for five weeks, 30 minutes per time, three times a week.

Results: The average number of times that each elder participated was 4.88. Pre- and post-program data were obtained and the findings were as follows: (1) The Barthel Index score increased from 46.88 to 58.75 (p = .027); (2) The Geriatric Depression Scale score decreased from 5.38 to 3.38 (p = .041); and (3) The Mini-Mental Status Examination score increased from 18.13 to 20.38 (p = .034).

Conclusions: The data support the view that the program had positive effects. Large sample sizes and individually tailored programs would be appropriate alternatives.

Abstracts - Poster presentations

P077 COGNITIVE TRAINING PROGRAMME THROUGH MUSICAL STIMULI: A NON PHARMACOLOGICAL COGNITIVE TRAINING INTERVENTION IN MILD COGNITIVE IMPAIRMENT (MCI) PATIENTS

15. Non-pharmacological interventions

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Objectives and Study: The project investigated the effectiveness of a cognitive training through musical stimuli. The intervention aimed to improve the cognitive and functional performance of patients with Mild Cognitive Impairment (MCI).

Methods: The study included 12 women and 10 men with MMSE=27.55 (1.84), age=67.23 (6.71), education=10.27 (4.41) classified in one experimental group and one control group matched in age (p= 0.16), gender (p= 0.51), education (p= 0.12), MMSE (p= 0.41) and cholinesterase inhibitors (p= 0.55). Experimental group attended 20 weekly sessions training for a period of six months included exercises of attention, memory, dual task and language, based on musical stimuli. Controls did not attend any non pharmacological therapy during the same period and were at waiting list. Participants were assessed with the same psychometric battery at baseline and at the end of the therapy.

Results: At baseline there were no differences between groups in respect to cognitive abilities. At the end of the therapy, there were differences between groups in favor of the experimental group, in executive function (p= 0.00) and naming (p= 0.00). Within subjects analysis showed that the experimental group ameliorated verbal episodic memory (p= 0.00) and naming (p= 0.01) while the control group deteriorated in verbal memory (p= 0.01).

Conclusions: The experimental patients had a significant benefit from the cognitive training through musical stimuli in respect to controls.

P078 NONPHARMACOLOGICAL APPROACHES TO STIMULATION OF COGNITIVE FUNCTIONS IN ALZHEIMER'S DISEASE PATIENTS EVALUATED WITH MRI IMAGING AND PROTEOMIC BIOMARKERS – CURRENT STATUS AFTER 1ST. YEAR OF THE PROJECT

15. Non-pharmacological interventions

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Objectives and Study: The study of the influences of specialised nonpharmacological approaches to stimulation of cognitive functions in Alzheimer's disease (AD) patients on improvement of cognitive outcomes.

Methods: The screening of cognitive functions in slovak population was performed by neuropsychological tests of cognitive domains (Mini-Mental State Examination /MMSE/ and Addenbrooke's Cognitive Examination /ACE-R/). The inclusion criteria for the study were MMSE 20-24 points representing mild AD. The appropriate pharmacotherapy with cholinesterase inhibitors was started in the patients meeting the criteria for mild AD. In the subgroup of 5 AD patient the stimulation of cognitive functions in the form of individual and group cognitive trainings was performed as adjuvant therapy to pharmacotherapy by cholinesterase inhibitors. The duration of cognitive trainings is 12 months, once weekly for 90 minutes. The cognitive trainings contain the exercises for improvement of individual cognitive domains and to increase the cognitive reserves: concentration, memory and learning, orientation, troubleshooting of daily living issues, language, sociability.

Results: After 1 year of ongoing project the neuropsychological screening (MMSE, ACE-R) was performed in 404 persons sent to Centre Memory by general practitioners. The inclusion criteria for the study (MMSE 20-24) were met in 15 patients (3.7%). All included patients started therapy with cholinesterase inhibitors. The MMSE scores in the subgroup of 5 patients with cognitive stimulation training after 1 year increased by 1-3 points. The MMSE scores in the second subgroup of 10 patients treated with cholinesterase inhibitors without cognitive stimulation trainings were as follows – MMSE declined by 1-2 points in 3 patients, remained stable in 4 patients and increased by 1 point in 3 patients.

Conclusions: The presented ongoing study aims to provide supporting evidences for the relevance of nonpharmacological approaches to stimulation of cognitive functions for AD patients. The cognitive functions stimulation should be nowadays considered as promising adjuvant therapy for promotion of cognitive reserves of the brain in the AD patients and for slowdown of the cognitive deterioration in this devastating neurodegenerative disorder.

P079 PREPARING NURSING STUDENTS TO INCORPORATE PREVENTION STRATEGIES IN OLDER ADULTS WITH DEMENTIA AND CHRONIC DISEASE

18. Prevention and dementia

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Objectives and Study: The elderly population is increasing in numbers, in part due to the advancement of better screening practices, health promotion efforts and the baby boomers in vast numbers who are living a longer life. As a result, nursing students need to be knowledgeable about and interested in caring for this special population. Research has shown that nursing students and nurses do not prefer caring for older adults. This approach to incorporating prevention strategies offers the opportunity for nursing students to be educated about caring for the elderly along the entire nursing curriculum, rather than the traditional one semester lecture approach. With the implementation of this education, it is anticipated nursing students will be able to identify significant intervention strategies for the "well" elderly, for the older adult with dementia, as well as for those are chronically ill.

Methods: Methods—The experience will be initiated in the first clinical course, which focuses on health promotion and disease prevention. Students will be required to assess their well elder, identify health promotion and early detection interventions, and develop and implement a teaching plan. In subsequent semesters, the focus includes strategies for caring for the older adult with dementia and chronic disease management.

Results: It is anticipated students will implement nursing interventions which focus on disease prevention, screening for early identification of dementia, and chronic disease management for the older adult.

Conclusions: Nursing students will be able to identify significant intervention strategies for the "well" elderly, older adults with dementia, as well as for those who are chronically ill.

P080 PARTICIPATION IN INTELLECTUAL ACTIVITIES AND EDUCATIONAL LEVEL OF OLDER PEOPLE: A SUGGESTION FOR A PREVENTIVE POLICY (1)

18. Prevention and dementia

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Objectives and Study: Active participation in intellectual activities has protective effects against dementia, whereas a low level of education is associated with a higher risk of dementia. This study explores the characteristics of activity participation among older people with different educational backgrounds.

Methods: We conducted a self-administered questionnaire survey of 334 individuals who participated in activities at the national Culture Centers of the Third Age (CC3As) in Mexico City. We analyzed the answers using the chi-squared test after dividing the subjects in two groups, one with 12 or more years of education, and the other with less education.

Results: The mean age of the respondents was 70.6±6.6 years, 85.6% of them were women, and 53.4% belonged to the high education group with 46.6% in the low education group. There was no significant difference in age or gender between these two groups. A larger proportion of the low education group than the high education group was housewives, lived with their son or daughter and grandchildren, perceived their economic status as average rather than good, did not participate in intellectual activities at the CC3As, and read books less frequently (p<0.01).

Conclusions: The level of education affects the older people's preference of activity participation. The people with less education did not prefer learning foreign languages, history, the use of computers and the Internet, etc. to physical or manual activities at the CC3As. They possibly had a high risk of dementia because of their disadvantaged past, and most of them did not participate in protective activities even though they had the opportunity. The risk remains high. Active intervention that induces older people to both have interest in and try new activities will be necessary to change such a path of self-reinforcement.

Abstracts - Poster presentations

P081 PATH DEPENDENCE IN SOCIAL RISK FACTORS FOR DEMENTIA: A SUGGESTION FOR A PREVENTIVE POLICY (2)

18. Prevention and dementia

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Objectives and Study: Path dependence is an established theory in social science. If we apply this to the life course, we can say that choices or events in earlier life, such as formal education, largely determine those in later life, such as occupation and lifestyle in adulthood. Life course and lifestyle have relations with dementia, because not only genetic predisposition but also environments provide cognitive reserve. This study presents a suggestion for a preventive policy against dementia in older people by reviewing previous studies from the perspective of path dependence.

Methods: We reviewed 23 population-based studies concerning social risk factors for Alzheimer's disease, dementia, and cognitive impairment.

Results: Some studies found that a low level of education was associated with a higher risk of dementia or cognitive decline. Others pointed out that childhood (parental) socioeconomic status, occupation, income, participation in social or cognitively stimulating activities, pre-morbid intelligence, etc. were independently associated with the risk. However, most of these studies also implied that their independent variables had a positive relation to educational level, or that educational level had a negative relation to risk. All of the studies used years of schooling as a measure of educational level.

Conclusions: The life course and lifestyle of higher educated people are more likely to be protective against dementia, but not always, probably because years of schooling and the quality of educational experience do not always coincide. Whereas the spread of basic education is indispensable especially in developing countries, public education should include more programs that widen the choice of careers, stir up interest and develop skills in lifelong active participation in social and intellectual activities as preventative measures against dementia for the present young and next generations.

P083 SEX CAN HAVE A PROTECTIVE ROLE TO THE ELDERS

18. Prevention and dementia

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Objectives and Study: Sexual function expresses the complete balance between humans' mental and biological health, although research on sexuality in the elderly is still rather scarce. Nowadays many researches have shown that sexual function is quite beneficial for humans' health. Making sex improves us physically and psychologically. Particularly, sexual intercourse enhances the cardiovascular system, declines the blood pressure and has an important role against heart attack and stroke. In addition sexual function supports the immune system, as many surveys demonstrate, while empower our physical situation because is a kind of aerobic exercise. The aim of the present study is to discover whether the normal elders who are sexual active, have less health problems compared to those who are sexual inactive. For this purpose we have studied the health state of elders according to their medication and have searched whether they were sexual active or not.

Methods: Methods 130 controls (35 men and 95 women) took part in the present study. We divided our sample into three groups 1) those who took one medicine compared to those who took two medicines 2) those who took one medicine compared to those who took three medicines 3) those who took two medicines compared to those who took three medicines) To find out their sexual function and prescription we used the Sexual Satisfaction and Experience Questionnaire. For statistics we used the SPSS14 program (Mann-Whitney method).

Results: Results No statistical significant difference was found among controls' sexual activity and prescription in the first group, although was found statistical significance between controls' sexual function and their prescription in group two and three ($p < 0,03$ group two, $p < 0,01$ group three).



Conclusions: Sex was a significant health factor, as those who were sexual active were under less medication.

P082 MRB. ALZHAIMER TREATMENT AND SUPORT

18. Prevention and dementia

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Objectives and Study: Dementia is a disorder that affects how the brain works. Symptoms of dementia vary from person to person, but can include:

- loss of memory
- difficulty thinking things through and understanding
- problems with language (reading and writing)
- confusion and agitation
- hallucinations and delusions
- difficulty controlling movements of the body.

Symptoms of dementia usually get worse over time and can become very severe, so that it is difficult for the person to do many daily activities or to care for him or herself.

Dementia is more likely to affect older people, but younger people can also develop the condition.

Methods: In writing this study i have used these methods: Taking informations of patient; Taking informations of family; Psychological tests; Observation on patient; Family psychotherapy; Behavior therapy; Drugs therapy

Results: Following 600 patients from 2001 untill 2008 with dementia i have made conclusion that from 600 patients, 80 were with Alzheimer dementia, from whom 30 mens and 50 women. From these patients 3 women were with early Alzheimer dementia, and one of them was men.

Conclusions: Dementia is an incurable chronic disease, but assistance to caregivers can reduce the severity of patients' symptoms and delay institutionalization. Because this assistance requires provision of multiple health care and social services, patients and caregivers might benefit from a coordinated system of care.

In the end of the life more of those patiens must come in Geriatric Institution, about paliative care.

P084 BOMBESIN, A GRPR AGONIST, PREVENTS MEMORY IMPAIRMENT INDUCED BY B-AMYLOID(25-35) IN A MODEL OF MEMORY DYSFUNCTION ASSOCIATED WITH EARLY ALZHEIMER'S DISEASE.

18. Prevention and dementia

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Objectives and Study: The development of methods for the early diagnosis of Alzheimer's disease (AD) is an important challenge for neuroscientists (Rowan, 2005). B-amyloid (25-35) is a peptide that appears to be responsible for cognitive impairments in patients with AD (Evanko, 2005). Studies have indicated that the GRPR might be involved in cognitive dysfunctions associated with AD (Ito et al., 1994). In the present study we used a single intrahippocampal infusion of a low dose of AB(25-35) in rats as a model of memory dysfunction associated with AD. Moreover, we have also examined whether GRPR activation in the hippocampus alters memory impairment induced by intrahippocampal infusion of AB(25-35).

Methods: Adult male Wistar rats were implanted with cannula in the CA1 area of the dorsal hippocampus. We used inhibitory avoidance (IA) as an established model of aversively motivated, hippocampus dependent memory (Izquierdo et al., 1997). First experiment: animals received vehicle or AB(25-35) (Sigma) (1nmol, 0.1nmol, 0.01nmol or 0.001nmol) immediately after IA training session. Second experiment: bombesin (BB) or SAL were infused 10 min prior to IA training, and vehicle or AB were infused immediately after training. $P < 0.05$ was taken as indicative of statistical significance for the tests.

Results: Post-training administration of AB impaired IA in short- and in long-term memory at the doses of 0.01nmol, 0.1nmol and 1nmol. Figure 1: Pretraining infusion of an ineffective dose of BB prevented the AB-induced retention impairment.



Conclusions: GRPR is a target for the development of cognitive enhancers for AD.

Abstracts - Poster presentations

P085 THE HIDDEN PATIENT AT RISK: NEW DIRECTIONS OF COGNITIVE BEHAVIOR THERAPY FOR FAMILY AND PRIMARY CAREGIVERS.
 21. Supporting and educating caregivers

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Objectives and Study: A combination of two interventions is currently implemented, as follows,

Methods: Compassion focused therapy is designed for family caregivers who have complex and chronic difficulties and for whom developing an internal sense of safeness, security, contentment and soothing is very difficult. The training aspects focus on mental imagery, reframing and restructuring, are called compassionate mind training, and suggest that the soothing system of their brain is stimulated by the interventions of the therapist. Mindfulness training is a meditation based approach that, in alliance with cognitive therapy, can effectively impact on several therapeutic targets such as recurrent depression, anxiety problems and chronic physical pain. It suggests that family caregivers react automatically, e.g. "mindlessly", and reinforcement is regarded as being dependent upon learned reactions toward intrinsically coupled cognitions and body sensations.

Results: Not yet available.

Conclusions: By developing a non-judgmental, non-reactive and accepting attitude, family caregivers prevent such automatic reactions. Cognitive reappraisal emerges from this freeing experience, while self-worth springs from a deep sense of achievement, sense of control and self-efficacy.

Table:

Table1. Background data (N=33)

Demographic data and baseline assessment	General data	Sex(F/M)
Mean age of patients (years)		
Mean age of caregivers (years)	80.4(8.5), 53.4(10.7)	66.7/ 33.3, 78.8/21.2
Caring duration (months)(SD)	65(104.3), 6.5(1.3)	-
Caring days/week (SD)		
Caring time(hours)/day(SD)	10.9(9.2)	-
Severity of functioning impairment		
ADL (SD), IADL (SD)	57.8(31.7), 6.41(5.9)	-
Degree of severity	14.2(6.2), 2.5(1.4)	-
MMSE (SD), CDR (SD)		

Conclusions: Short-term psychoeducation group therapy can elevate caregivers' confidence to deal with problematic behaviors of dementia patients, but not decrease the burden.

P088 RESEARCH FOR THE DEVELOPMENT OF THE REGIONAL SHOPPING SUPPORT PROGRAM
 21. Supporting and educating caregivers

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Objectives and Study: The statistical estimation tells that the number of the aged people with dementia will be over 3.5 million in 2025 in Japan. It is our urgent issue to support their social activities while they are at home. Though it is known that they cause various kinds of troubles in shopping, the actual circumstances are rarely investigated yet. In this study, we carried out a research for the actual circumstances to assess the needs of the people with dementia in their shopping activity.

Methods: The questionnaire was mailed to the members of the Aichi chapter (n=624) in August 2008, and 152 were completed. Questionnaire contents were basic attributes, frequency of shopping, kinds of the shopping places, accompanying person, and trouble experiences.

Results: (1) Response of the family members (n=106)

51 patients went shopping, 32 went over twice a week, and 23 went alone. The top-three of the shopping places were supermarket, convenience store and retail store. 41 family members had trouble experiences.

(2) Response of the care-professions (n=46)
 36 had trouble experiences in shopping.

Conclusions: The result of our research showed that shopping activity was an important part of the daily life of the people with dementia. Almost half of the patients went shopping customarily, 40% of family members had trouble experiences, and 80% of care professions experienced shopping troubles. Most patients went shopping on foot, and the cases they went alone were not rare case. Therefore, to support their shopping activity, the Regional Shopping Support Program is necessary to develop.

P086 THE EFFECTIVENESS OF THE PSYCHOEDUCATION GROUP THERAPY FOR THE CAREGIVERS OF DEMENTIA PATIENTS IN EAST TAIWAN
 21. Supporting and educating caregivers

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Objectives and Study: The purposes of the research were to evaluate the degrees of caregivers burden, elevate caregivers' confidence in caring, and to alleviate the burden by psychoeducation group therapy for dementia caregivers.

Methods: Structured questionnaires, including the Chinese Version of Zarit Burden Interview (CZBI), the Appraisal Form of Confidence Level in Dementia Problem Behaviors Management Persons were used to assess caregivers' distress and the management of problematic behaviors before and after psychoeducation group. Total 37 participants were recruited from psychiatric outpatient department who has at least one dementia family and 33 participants finished the whole course of group therapy which was designed with 6-week, 4 sessions, 3 hours in each session, and performed by psychiatric interdisciplinary professionals. Statistics with paired t-test analysis

Results: The background data was shown as table 1.

The CZBI total score was positively related with the frequency of problematic behaviors at pretest, but not at posttest. The CZBI score, frequency score of problematic behaviors, distress score and confidence score were no significant difference statistically. Analysis showed that the frequency of problematic behavior did not change at posttest, and the confidence score items, including, wake up at night, makes unwarranted accusations, verbally abusive and curses, dresses inappropriately, cries and laughs inappropriately, wanders at night, throws food, screams for no reason, exposes private body parts, gets lost outside and refuses to take medication increased (p<. 05) after group therapy. Interestingly, the frequency of refuses to eat and makes physical attacks increased (p<. 01), and caregivers' confidence increased too (p<. 01).

P087 DEVELOPMENT OF THE REGIONAL SHOPPING SUPPORT PROGRAM (RSSP)
 21. Supporting and educating caregivers

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Objectives and Study: Shopping is an important activity in our daily life. With the worsening of dementia, patients cause various kinds of troubles in shopping. The support system, however, is not enough. In this study, we constructed a theory to develop the RSSP, and investigated the possibilities of this program.

Methods: We analyzed the trial experiment conducted in a rural area of Aichi.

Results: Input: This program was managed by an NPO "Heart to Heart" with the cooperation of family members, inhabitants, store-owners, local government as well as patients themselves. Activity: Enlightenment and education about dementia. Output: (1) To decide a "Safety Shopping Mark" for people with dementia through public contributions. (2) DVD and leaflets to prevail information about dementia. (3) To execute outreach lectures for the salesclerks, community inhabitants and students. Outcome: The following outcomes are expected. Patients would live longer in their accustomed community and improve their Quality of Life. Family members would learn to deal with the shopping troubles and watch the patients calmly. Salesclerks would get correct knowledge about dementia and lessen troubles. Inhabitants would get correct knowledge about dementia and build up citizen cooperation and network to support. Local government would construct the support system and drive for the realization of the co-habitant community with the dementia.

Conclusions: The RSSP is necessary to develop in cooperation of the people and government. With the enlightenment and education, people can get enough knowledge and enhance the regional support. Our future challenges are to measure the outcome and to revise the program as needed.

Abstracts - Poster presentations

P089 ROLES OF TELEPHONE SUPPORT FOR FAMILIES WITH ALZHEIMER'S PATIENTS - ANALYSIS OF 5,300 CALLS TO THE ALZHEIMER'S ASSOCIATION OF JAPAN

21. Supporting and educating caregivers

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Objectives and Study: This paper studies details of calls for help from family members caring for an Alzheimer's patient, with the aim of identifying the roles and benefits of such telephone support.

Methods: A frequency and cross-tabulation analysis was performed on each of the items recorded on a call reception card: caller's details, patient's details, call duration, call contents, advice given, and recipient's notes.

Results: The Alzheimer's Association of Japan (Aichi Chapter) receives an average of 583 calls per year. Callers were mainly women, and often a daughter of the patient, which is similar to data for previous studies. 22.8% of callers had been caring for the patient for 10 years or longer, suggesting that even experienced carers with knowledge and skills still require support. Call duration was mostly 11 to 13 minutes; however, 6.5% exceeded 1 hour. This confirmed that some callers require time to reach their core issue. The most frequent call content was about Alzheimer's symptoms, and the second highest was regarding human relationships concerning care.

Conclusions: The roles of the telephone support line were confirmed as: supporting carers; accepting carers' perplexity in facing Alzheimer's symptoms; advising on appropriate approaches taking account of future symptom development; fulfilling the carer's desire to meet and talk with people in the same situation; empathizing with the carer's work demands; and helping carers to accept their experiences as a part of their life. It was also confirmed that the support line provides an entry point for carers who wish to become supporters for other care providers, utilizing their own experience in caring.

P092 IMPACT OF A NURSE EDUCATION AND COUNSELLING PROGRAMME ON KNOWLEDGE, ATTITUDE, NEUROPSYCHIATRIC (NP) SYMPTOMS, AND CAREGIVER BURDEN: AN ASIAN PERSPECTIVE

21. Supporting and educating caregivers

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Objectives and Study: Caring for persons with dementia is demanding and stressful. This study aims to look at the impact of a nurse education and counselling programme in improving knowledge, attitude, distress from NP symptoms, and burden among caregivers of persons with dementia.

Methods: We prospectively recruited 35 caregivers of persons with newly diagnosed dementia who had a minimum weekly contact time of 15 hours. All caregivers underwent a 1-hour education and counselling program conducted by a nurse clinician on common misconceptions of persons with dementia. We administered caregiver knowledge and attitude questionnaire, Neuropsychiatric Inventory Questionnaire (NPI-Q) and Zarit Burden Interview (ZBI) at the initial visit and 3 months later. We compared the outcome variables pre- and post-intervention.

Results: 91.4% was the primary caregiver living together with the person with dementia. The majority were: female (74.3%), aged between 41-60 years (62.9%), spouses (22.9%) or adult children (71.4%), and spent a mean of 60.4(SD 44.2) patient-contact hours/week. Post-intervention performance on caregiver knowledge test improved on the average (83.2% vs 74.2%, $P < .01$), with trend towards improvement in the domains of disease knowledge, progression, structured activities, availability of dementia daycare and support group for caregivers of dementia patients. No significant differences were observed in caregiver attitude and burden. Despite a lack of difference in the prevalence and severity of NP symptoms, there were trends towards decreased caregiver distress related to NP symptoms (sleep/nighttime behaviour, aberrant motor behaviour, irritability, disinhibition, apathy, elation, hallucinations) although appetite/eating disturbance caused increased distress.

Conclusions: We conclude that our nurse-led programme was effective in improving caregiver knowledge and some aspects of distress from NP symptoms. The lack of follow-up sessions and short 3-month study duration may have limited its usefulness. Future studies involving a more sustained caregiver education and support programme with a longer study period may yield clearer benefits.

P090 EFFECTS OF THE FAMILY SUPPORT PROGRAM PROVIDED BY THE ALZHEIMER'S ASSOCIATION OF JAPAN

21. Supporting and educating caregivers

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Objectives and Study: The Alzheimer's Association of Japan (Aichi Chapter) developed the Onouchi Family Support Program, designed to offer inexperienced Alzheimer's patient carers educational support by teaching the knowledge and skills required for Alzheimer's care, together with emotional support through communicating with other carers. Sessions are held once a month over six months. This study aimed to verify the effects of the Program by identifying changes in the participants after following the Program.

Methods: The Program was held at eleven locations from June 2007 to March 2008. From 175 participants, data from 98 responses to questionnaires in the first and last sessions was used for analysis.

To understand their needs, participants were asked to complete a questionnaire titled "What I Expect from the Program." The questionnaire contained 12 questions, comprising three questions over four fields: information provision; problem-solving skill improvement; social support; and empowerment. Two fields were related to educational support and two to emotional support. Participants responded to these questions on a 4-point scale, ranging from strongly disagree (1) to strongly agree (4). At the end of the Program, the same set of questions was given to the participants under the title "What I Have Gained from the Program."

Results: There were significant differences between what the participants expected before the Program and what they actually gained from following it. Pre-Program expectation rankings were: information provision 3.68; problem-solving skills 3.66; social support 3.16; and empowerment 3.07. The post-Program outcome rankings were: social support 3.40; information provision 3.34; problem-solving skills 3.26; and empowerment 3.19. This suggests that participants actually benefited in terms of emotional support from the Program through communicating with other carers, despite their initial expectations of gaining knowledge and skills.

Conclusions: The study identified that providing emotional support was the major effect of the Program.

P093 BURDEN AND PSYCHOLOGICAL DISTRESS IN CAREGIVERS: A CLUSTER ANALYSIS

21. Supporting and educating caregivers

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Objectives and Study: The role of caregivers is related frequently to higher levels of burden and psychological distress. The level of burden and psychological symptoms is not present in all caregivers and furthermore caregivers can be differentiated upon their different level of stress related to primary or secondary stressors. The aim of this pilot study is to outline differences between caregivers based on their level of burden and psychological distress. We hypothesise that a part of caregivers is symptom free while the presence of burden and psychological distress are associated only in a specific group of caregivers. The final aim of the overall study is to develop a set of criteria which help in addressing caregivers for psychological support or other interventions.

Methods: A number of 76 caregivers of person with dementia are involved (70% female, mean years of caregiving 2.2 and mean age of 60 years) in the study and are recruited at the Centre for Cognitive Disorders, Local Health Agency of Modena (Italy). An informed consent is obtained and the following instruments are administered: the General Health Questionnaire (GHQ), psychological wellbeing), the Zarit Burden Interview (ZBI, burden), the Symptom Check List (SCL-90-R, Psychological Symptoms) and the Sense of Competence Questionnaire (SCQ). Demographic data are also collected. Data regarding cognitive status (MMSE) and behavioral Symptoms (NPI) of the person with dementia are also registered. A cluster Analysis was performed based upon GHQ and ZBI data and a solution of three cluster was obtained.

Results: The cluster analysis using the ZBI results show that that 18% show a high burden level, 38% had a medium level and 32% had no burden. While looking to psychological distress only 26% had symptoms of clinical interest (4% had a severe level) and the distress is correlated only with the presence of higher level of burden and BPSD.

Conclusions: the main conclusion of this pilot study is that a large part of caregivers are feeling well and a significant group of them don't show any level of burden; only a smaller part of caregivers are experiencing some level of psychological distress. We can conclude that caregiving is not always associated with burden and distress; furthermore only high level of burden are associated with psychological distress. So we can argue that psychological interventions had to be well tailored to those carers with high level of distress while other interventions are needed for those experimenting some burden level.

Abstracts - Poster presentations

P094 NEW IN ALZHEIMER'S UNIT ORGANISATION

21. Supporting and educating caregivers

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Objectives and Study: The aim was to develop the differentiated approaches to care and treatment of patients with dementia and carers and to evaluate some results of work of one psychogeriatric unit in Moscow.

Methods: The main forms of psychogeriatric help to persons with dementia in this unit made up following: 1) in-patient care including clinical diagnostics, MRI, neuropsychological assessment, IADL, diagnostics and treatment of cognitive and non-cognitive disorders; 2) full-time stay for comprehensive examination; 3) initiation of treatment, titration of doses, control of undesirable effects and ECG; 4) day-care, i.e., for infusional neuroprotective therapy; 5) half-way at home with weekly visits; 6) rehabilitation courses including cognitive training and skills maintaining, homework for patient and caregiver; 7) short-time admission for social reason; 8) option of admission for both patient and caregiver; 9) respite wards for caregivers; 10) treatment of caregivers with depression or other stress disorders; 11) school for caregivers, educational programs, care skills training, psychological support for all family.

Results: Ratio of patients with dementia admitted to this unit increased from 28% (2004) to 46% (2008). A number of persons with mild dementia was increased because earlier and better diagnostics. Full-time period of stay in the unit was decreased from at means two months (2004) to 2-4 weeks (2006-2008). A ratio of patients on half-way or day care was increased up to two times. On note a compliance improvement of patients and that is not less important of their caregivers. A number of patient receiving neurotransmitters or other therapy regularly and by long courses (more than one year) was increased from 12% (2004) to 38% (2008). Galantamine was more frequently used for long treatment because it is the most available (it is in the list no payment for patients). Caregivers showed a better awareness of problems concerning dementia and care skills, they noted relief of care burden experience because of psychological support and possibility or short respite. Memberships in Russian national non-profit partnership "Help to Alzheimer's family" as well as sharing in self-support groups promote to maintain quality of life, tend to "Active life with dementia".

Conclusions: A five-year experience of special psychogeriatric unit showed evidences of variable possibilities of help to persons with dementia and their family members.

P096 EFFECTIVENESS OF PSYCHOSOCIAL INTERVENTIONS FOR CAREGIVERS OF PATIENTS WITH DEMENTIA

21. Supporting and educating caregivers

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Objectives and Study: The study aimed to evaluate the effectiveness of education and psychological support on caregivers' sense of burden and psychological health.

Methods: Participants were 256 caregivers (69 men, 187 women) classified in three experimental groups. Each of them attended either education (n=42), or cognitive behavioral psychotherapy (n=82), or simultaneously education and psychotherapy (n=70). There was one control group (n=82). Experimental groups participated in 24 weekly sessions for 6 months. Controls received no psychosocial intervention. A psychological battery was administered to the participants prior to and at the end of the intervention.

Results: At the end of the intervention, differences between experimental and control group were noticed in favour of the experimental. The education group showed difference in anxiety (p=0.00) and depression (p=0.00), the psychotherapy group in anxiety (p=0.00), depression (p=0.00) and burden (p=0.00), the combination group in anxiety (p=0.00) and depression (p=0.00). Between experimental groups there was no difference between education and combination group. The psychotherapy group was superior to the education group in depression (p=0.02) and the combination group in depression (p=0.01) and burden (p=0.02). Within group analysis has shown that the education group reduced depression (p=0.04), the psychotherapy group reduced burden (p=0.00), anxiety (p=0.00), depression (p=0.00) and dysfunctional attitudes (p=0.01), and the combination group reduced dysfunctional attitudes (p=0.00). Control group showed aggravation of anxiety (p=0.00), depression (p=0.00), and burden (p=0.00).

Conclusions: The proposed interventions improved caregivers' psychological health and sense of burden. Psychotherapy alone provided a broader spectrum of improvement.

P095 DIFFERENT OUTCOMES OF INFORMATIVE OR SUPPORTING GROUPS FOR CAREGIVER

21. Supporting and educating caregivers

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Objectives and Study: Psychosocial intervention make an important contribution to dementia care but is more and more important support and test these good practices by consistent outcome measures in order to evaluate their effectiveness. The objective of the present paper is to provide first step of a screening regard the efficacy of two specific psychosocial intervention: the support slow-open group, and the informative group

Methods: The groups are hold in a co-conduction setting, by two psychologist. Caregivers are sent by geriatrics to the informative group. During one session are given informations about pathology and the services that could help caregivers, about risks connected to the caregiving burden and copying. At the end of informative group there is a session of a group screening by which caregivers are evaluated by GHQ, their perceived burden by Zarit Burden Interview, and their sense of competence by S.C.Q.. If the level gauge are high they are suggested to attend to the support slow-open group, where the same test will be submitted after 6 month and/or at the end of the intervention.

Results: During informative group caregivers has expressed high burden at Zarit and psychological distress on G.H.Q. During informative group caregivers says that has perceived the group as useful, but don't perceive improvements in the perceived burden and in the sense of competence. They, indeed, perceive an improvement in the sense of wellbeing. Caregivers that, instead, has attended to the slow-open group has felt improvements in the sense of competence. Detailed data shall be reported during the presentation.

Conclusions: We can conclude that only small part of caregivers agree to participate in support slow-open group, even if the burden level is higher. The perceived improvement from caregivers after slow-open groups seems to suggest that support group in a slow open setting interventions helps caregivers particularly on the sense of copying and competence. In conclusion is necessary an accurate assessment of caregivers to address them to different interventions.

P097 HELP FOR FAMILIES WITH ALZHEIMER'S DISEASE IN SLOVAKIA

21. Supporting and educating caregivers

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Objectives and Study: Goal:

Helping families of Alzheimer's disease patients through building contact places of the Slovak Alzheimer's Society throughout Slovakia.

Methods: Methods:

•Professional training for caregivers in social institutions with focus on caring for people with dementia, particularly Alzheimer's disease (there are approx. 200 social institutions in Slovakia).

•Organizing seminars and workshops for caregivers aimed at sharing of experience.

•Training professionals educating family members caring for their relatives suffering from dementia, particularly Alzheimer disease, at home.

•Organization of supporting groups.

•Formation of departments for Alzheimer's patients in existing social institutions.

Results: During the last two years we have educated caregivers from various social institutions, in cooperation with the Memory Centre in Slovakia. We have already organized seminars and workshops focused on activations of seniors and non-pharmacological treatments in Alzheimer's disease.

In June this year we have opened our first contact place of Slovak Alzheimer's Society in Holic, in association with the municipal Retirement and social services home in Holic. They have already started organizing meetings of supporting groups. They initiated, in the cooperation with the municipal institutions, the first cycle of memory trainings for active seniors of the Club Senior in Holic.

Conclusions: We believe that by building contact places and supporting network for people suffering from Alzheimer's disease and their relatives we will help to ease the problem of Alzheimer's disease in Slovakia.

Abstracts - Poster presentations

P098 EFFECTS OF MUTUALITY, PREPAREDNESS AND FINDING A BALANCE POINT ON CAREGIVING OUTCOMES FOR FAMILY CAREGIVER OF PATIENTS WITH DEMENTIA

21. Supporting and educating caregivers

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Objectives and Study: A lack of studies exploring the influence of role implementation process for family caregivers of elders with dementia in Taiwan was found. The purpose of this was to investigate the relationships between caregiving demand, mutuality, preparedness and balance between competing needs and both positive and negative caregiving outcomes.

Methods: One hundred-seventy-six family caregivers of patients with dementia completed Caregiving Activities, Mutuality, Preparedness, Role Strain, and Caregiving Rewards scales of the Family Caregiving Inventory (FCI), Finding a Balance Scale, Mental Health Scale of the Medical Outcomes Study Short Form and The Chinese version of Center for Epidemiologic Studies Depression Scale.

Results: After controlling for the age and gender of the family caregiver and mental status of the elderly persons, mutuality and preparedness associated negatively with role strain and depressive symptoms and positively with rewards and mental health. Less balance associated with more depressive symptoms and poorer mental health. For family caregiver with better balance between competing needs, the more caregiving demand, the more caregiving rewards.

Conclusions: Specific attention, support, and consultation for caregivers with low mutuality, less preparedness, less balance between competing needs need to be emphasized.

P100 A GESTALT PSYCHOTHERAPY SUPPORT GROUP: EXPERIENCES OF CAREGIVERS OF PATIENTS WITH ALZHEIMER'S DISEASE

21. Supporting and educating caregivers

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Objectives and Study: Gestalt Foundation of Thessaloniki in collaboration with the Greek Association of Alzheimer Disease and Relative Disorders conducted a quantitative and qualitative research on gestalt group therapy's efficacy to support and improve the care-givers' quality of life. Caring for a person with Alzheimer's disease has an enormous impact on the caregiver and is associated with high level of stress. The term "caregiver burden" is used to describe the physical, emotional and financial cost of providing care. Respite services and programs for psycho-social intervention are the main methods of dealing with this burden. The aim of this study was to explore the experiences of caregivers in a Gestalt support and psychotherapy group and, more specifically, the extent and the ways caregivers found the group helpful, supportive, and interesting.

Methods: This group consisted of 7 caregivers (4 men and 3 women) and took place during 2008-2009 in "Agia Eleni", a structure of the Greek Association of Alzheimer Disease and Relative Disorders. The group coordinator was a Gestalt therapist and the researchers were divided in two groups. All sessions were tape-recorded and transcribed, while participants filled the Zarit Burden Interview - Short Form and a Perception about the Group Questionnaire, once before the end of the group and once at follow-up. Two supervisors were responsible for the coordination of the investigators and the results.

Results: Important and frequent themes that emerged in the group's sessions are described and the usefulness of Gestalt psychotherapy in supporting caregivers of senile patients is discussed.

Conclusions: One group of 3 observers and 5 analysts was conducting a qualitative research and the other group was conducting a quantitative research.

P099 EFFECTIVENESS OF FAMILY PSYCHOLOGICAL SUPPORT FOR FAMILY MEMBERS OF PATIENTS OF DEMENTIA

21. Supporting and educating caregivers

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Objectives and Study: The study aimed to reduce negative feelings and sense of burden in families with dementia patients, through education and psychological support.

Methods: Participants were 15 families (27 members, 10 men and 17 women) in an experimental group and 24 caregivers (7 men and 17 women) in a control group. They had a mean age of 46.29 (12.88), min. 23 and max. 76 years. The groups were matched in age (p=6.90), education (p=0.93) and gender (p=2.41). All of them were evaluated for depression by the Beck Depression Inventory (BDI), anxiety by the Beck Anxiety Inventory (BAI), sense of burden by the Zarit Burden Interview and dysfunctional attitudes by the Dysfunctional Attitudes Scale (DAS) at baseline and at the end of the intervention. The 15 families attended 24 weekly sessions for a period of 6 months. Sessions included education on dementia and approaches for family psychological support. Controls received no psychosocial intervention for the same period.

Results: At baseline there were no differences between the two groups in all the measures. At the end of the intervention, differences between groups appeared, in favour of the experimental group, in anxiety (p=0.00), depression (p=0.00) and burden (p=0.00). Within group analysis has shown that the experimental group reduced anxiety (p=0.00), depression (p=0.00), burden (p=0.00) and dysfunctional attitudes (p=0.02). Control group showed aggravation of burden (p=0.01).

Conclusions: The proposed family psychological support program reduced negative feelings, sense of burden and dysfunctional attitudes of the participants.

P101 POLARITIES AMONG CAREGIVERS OF PATIENTS WITH DEMENTIA: EXPLORATION AND MANAGEMENT IN GESTALT PSYCHOTHERAPY

21. Supporting and educating caregivers

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Objectives and Study: In our daily lives as caregivers the concept of polarity concerns a wide range of issues encountered, which are completely inevitable and "unresolvable". This, of course, may sound as bad news, just like it would be if we heard a doctor tell us that we or someone we love suffers from Alzheimer's disease or another type of dementia. However, there is also good news: these inevitable and "unresolvable" issues, known as polarities in Gestalt psychotherapy, are recognizable. Our study explores polarities in relation to how they are experienced by caregivers of demented persons. Caregivers have to face infinite needs, both physical and psychosocial, which are forever increasing. As the disease progresses and patients' functions become all the more impaired, making them more dependent on their caregivers, the threat of neglect becomes all the more likely in caregivers. Long-term neglect leads to sickness or, even, death. This is why it is important to recognize the polarities caregivers are encountering in their lives and help them to adjust creatively.

Methods: The aim of this study is to present the most typical polarities experienced by caregivers, as these emerged from the Gestalt support and psychotherapy group held within the structures of "Agia Eleni", the Greek Association for Alzheimer's Disease and Related Disorders (2008-2009). There were 7 participants in the group (4 men and 3 women).

Results: This paper what the main polarities experienced by caregivers of demented persons are. For example: reason versus emotion, "I" versus "We", "but" versus "and", body versus mind, irritation versus self-restraint, reality versus non-reality, "hooked" patient versus "unhooking" of caregiver.

Conclusions: The theoretical basis for polarities is briefly outlined and additional examples about how polarities are managed in Gestalt approach are used to illustrate the ways of dealing with polarities in our daily lives.

Abstracts - Poster presentations

P102 TRANSLATING RESEARCH INTO PRACTICE: A PILOT STUDY EXAMINING THE USE OF COGNITIVE STIMULATION THERAPY (CST) AFTER A ONE-DAY TRAINING COURSE

22. Training of professional caregivers

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Objectives and Study: Past studies evaluating training in dementia care have shown variable and limited findings, with most showing that staff training does not lead to any lasting change. This pilot study looks at the outcome of a one-day training course in Cognitive Stimulation Therapy (CST), an evidence-based therapy for people with dementia. Following the Medical Research Council's guidelines for complex interventions, this study represents 'phase IV' – the implementation of CST in practice following an earlier clinical trial

Methods: 152 people who had attended a one-day CST training course were contacted, of whom 76 responded. Respondents completed a questionnaire which established whether or not they had taken up CST groups and the obstacles that they had faced. It also included measures of attitude towards dementia (ADQ), job satisfaction (JS) and learning transfer (LTSI).

Results: The sample of 76 was divided into two groups: those who took up CST (27) and those who did not (49). Independent samples t-tests were used to compare group scores on the measures. The group taking up CST scored significantly better on work environment and ability/enabling. There were no differences between groups on the other measures and no relationship between having started a CST group and job title, place of work, gender, age or ethnicity.

Conclusions: There has been little research on the long-term implementation of complex interventions in practice and almost nothing in dementia care, hence this is a novel study. It showed that individuals with better learning characteristics may be more likely to take up CST following training, and simple factors such as a lack of staff time and resources may prevent people from doing CST. Future research could focus on comparing the effectiveness of different training methods in the form of a randomised controlled trial.

P105 MEDICAL COOPERATION FOR DEMENTIA END-OF-LIFE CARE IN JAPANESE GROUP HOMES

22. Training of professional caregivers

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Objectives and Study: In Japan, there are over 9,600 small nursing homes (called Group Homes; GH) that provide care to fewer than 10 residents. Presently, the number of GH is rapidly increasing. The purpose of this study was to clarify the issues affecting the medical cooperation system of end-of-life care for older people with dementia in Japanese GH.

Methods: Focus group methodology was used, with semi-structured questions designed to elicit information about end-of-life care experiences of older people with dementia, and medical cooperation difficulties with visiting nurses and care providers in GH. Eleven groups were requested to join focus group interviews. Each group consisted of administrators, care providers, and visiting nurses. The constant comparative approach was used for data collection, and key concepts relating to medical cooperation were extracted from verbatim records. Written consent was obtained after explaining the terms of confidentiality, risk, and offering the right to refuse participation. The protocol of this research was approved by the ethical committee at Hyogo University of Health Sciences.

Results: Most care providers indicated their fear of caring for deathbed residents and hoped to obtain appropriate end-of-life care advice from visiting nurses and physicians. The difficulties were solved by having staff meetings with all care providers, preparing special sheets for end-of-life care, and talking about difficult issues or cases in their GH. Known issues affecting the medical cooperation system for dementia end-of-life care included: 1) failure of visiting nurses and care providers to share information, 2) provisional determination of who should confirm a death, and 3) insufficiency of opportunities for care providers to receive medical practice education.

Conclusions: The results of this study suggest that visiting nurses and providers of end-of-life care for patients with dementia in Japanese GH need to establish a close relationship, and it's important to develop more useful medical corporation system.

P103 RELATIONSHIP BETWEEN THE QUALITY OF DEMENTIA CARE PROVIDED BY PROFESSIONAL CAREGIVERS OF UNIT-TYPE HEALTHCARE FACILITIES FOR THE ELDERLY AND THEIR JOB SATISFACTION

22. Training of professional caregivers

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Objectives and Study: The purpose of this study was to evaluate the relationship between the quality or level of dementia care provided by professional caregivers of unit-type healthcare facilities for the elderly and their job satisfaction.

Methods: Subjects were full-time caregivers of unit-type healthcare facilities for the elderly in Japan. The questionnaire included 20 items selected from "Scale for Rating the Quality of Dementia Care at Unit-type Healthcare Facilities for the Elderly" developed by researchers, and 10 items selected from "Job Satisfaction Scale" developed by Macdonald et al. A hypothesis was established that the quality of dementia care provided by caregivers affected their job satisfaction (causal model) and structural equation modeling was adopted to analyze the fitness of the causal relation model to the data. Subjects were allowed to participate in the questionnaire survey on a voluntary basis. The questionnaire was conducted on an anonymous self-completed basis.

Results: A total of 1,056 valid responses was collected (valid response rate 52.8%). Under the condition that dementia care quality was defined as an independent variable, the degree of fitness of the causal relation model to the data was evaluated. As demonstrated by the comparative fit index (CFI, 0.928) and the root mean square error of approximation (RMSEA, 0.052), the results were within the statistically acceptable range. All the path coefficients met the statistically significant levels. The path coefficient reflecting relationship between dementia care quality and job satisfaction was 0.27 and the contributing rate was 7%.

Conclusions: The results showed that caregivers who provided dementia care of higher quality found more satisfaction in their jobs. Therefore, the rating of dementia care quality was expected to provide caregivers with useful data that contributed to improving job satisfaction of caregivers of healthcare facilities for the elderly.

P106 RESEARCH RESULTS OF AN ORGANIZATIONAL INTERVENTION ON STAFF RECRUITMENT, RETENTION AND SATISFACTION IN A DEDICATED ALZHEIMER'S FACILITY

22. Training of professional caregivers

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Objectives and Study: Staff recruitment and retention continue to be on the minds of many in long-term care, particularly those who struggle daily to secure enough staff to meet the needs of the residents with Alzheimer's disease and dementia. Turnover rates for direct staff, nurses and administrators range from 40% to well over 100% in nursing homes as well as assisted living. Perceived reasons for this tend to center around monetary and benefit issues extrinsic to the work itself, rather than intrinsic factors related to working conditions, relationships with other and autonomy within the employee's position.

Methods: This session will describe the results of a research project and programs on staff recruitment, retention and satisfaction related to a leadership model and program within a specialized Alzheimer's facility over the past 22 years. Intervention include: 1) successful staff selection; 2) interviewing strategies; 3) vision and mission; 4) staff preparation and orientation; 5) ongoing direction and support; 6) providing a stimulating and motivating environment; 7) staff participation/ownership; 8) monitoring techniques; and 9) recognizing and celebrating accomplishments. Annual staff satisfaction surveys consisting of 52 questions about all aspects of their work were conducted and data compared. Survey answers range from very unhappy, unhappy, happy, and very happy. Turnover rates were calculated on a quarterly basis to analyze retention.

Results: Staff turnover continually increased and remains in the single digits. Staff satisfaction survey results in 52 categories continue to improve over time, with an overall rating of Very Happy. The facility enjoys high family satisfaction and has experienced a number of deficiency free state surveys. In addition, the staff have received multiple individual and group awards, including Step II of the American Health Care Association's National Quality Award and Top 25 in Family Satisfaction for the State of Ohio.

Conclusions: While there is not one simple solution to staff retention and satisfaction, opportunities exist to alleviate the turnover crises. Improved staff retention and satisfaction leads to improved quality care of individuals with Alzheimer's disease and dementia, in turn increasing resident and family satisfaction.

Abstracts - Poster presentations

P107 STRESSORS AND STRESS MANAGEMENT STYLES OF NURSES CARING FOR OLDER PERSONS WITH DEMENTIA IN LONG-TERM CARE SETTINGS

22. Training of professional caregivers

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Objectives and Study: Nurses experience a great variety of stressors related to the difficulties associated with BPSD (Behavioral and Psychological Symptoms of Dementia) while caring for older persons with dementia. As a result, most nurses develop physical and mental health problems, leading some nurses to resign from their job. Therefore, the purpose of this study was to determine specific stressors and stress management styles of nurses who work at elderly health care service facilities in Japan.

Methods: Data were obtained from semi-structured interviews with 25 female nurses (ages 22-61) in 12 elderly health care service facilities. Content analysis was used to determine specified categories within the data.

Written consent was obtained after explaining the terms of confidentiality, risk, and offering the right to refuse participation.

Results: Recognized stressors were categorized into four types: 1) "frustration caused by patients' behavior", 2) "difficulties communicating with patients", 3) "management of BPSD", and 4) "inability to obtain family's cooperation with care", while nurses' stress management styles were categorized into four types: 1) "improving overall nursing skills", 2) "controlling emotions", 3) "acquiring a better knowledge of dementia", and 4) "improving relationships with residents' families".

Conclusions: We determined several stressors and stress management styles of nurses in a long-term care setting. These findings indicate the importance of developing stress management programs for nurses caring for older persons with dementia, as well as facilitating nurses' understanding of dementia and ability to communicate with residents' families. This research was supported by the Grants-in-Aid-for-Scientific-Research (Fundamental Research C) in 2009 (No. 20592675).

P109 KNOWLEDGE OF ALZHEIMER'S DISEASE AMONG NURSE STUDENTS IN GREECE

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Objectives and Study: The main aim of present study was to estimate the level of knowledge on Alzheimer's disease among two cohorts of nurse students. A secondary aim was to explore the behaviours and opinions of first year and graduate nurse students towards patients with Alzheimer's and their relatives.

Methods: For the needs of this study, a sample of 120 student nurses was approached and consented to participate. They were grouped in two categories, which were first year and fourth year graduates. As expected the majority of the sample were women (92) and 28 were men. Their age ranged from 18 to 28 years. Medium age was 21.1 years. A questionnaire with 21 items was improvised, based on literature and previously data obtained focus group interviews.

Results: Data analysis indicated substantial differences in knowledge levels between first year and graduate nurses. Only 45% of first years could describe accurately the physical symptoms of the disease as opposed to 68.3% of graduates. With regards to the social bias towards the disease, both groups presented with biased behaviours regarding the patient's rights to self-determination, self management of financial matters and voting rights.

Conclusions: The data showed that although Alzheimer's is an illness which receives worrying dimensions worldwide, the training of student nurses fails to provide them with sufficient skills and knowledge. Furthermore, explicit bias towards patients with Alzheimer's was recorded. The negative behaviours demonstrated by first year students are also due to insufficient motives. Traditional lecturing on Alzheimer's should be complemented by workshops and other forms of sophisticated educational interventions.

P108 DEVELOPMENT OF THE ORAL FEEDING GUIDELINE TO WITHDRAW TUBE FEEDING IN THE ELDERLY WITH DEMENTIA

22. Training of professional caregivers

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Objectives and Study: The purpose of this study was to develop the oral feeding guideline to withdraw tube feeding in the elderly with dementia and to examine the clinical practice feasibility of the guideline for care providers in nursing homes and geriatric hospitals in Japan.

Methods: This study was done in stages. First, development of the guideline was based on a literature review, interviews of nurses with experience maintaining oral feeding in the elderly with dementia, and a panel discussion by expert nurses, speech therapists, dieticians, care workers, dental hygienists, and medical doctors who had been involved in successful transitions from tube to oral feeding in the elderly with dementia. Second, the guideline was examined by multiple care providers who evaluated every item of the guideline with respect to necessity and feasibility on a 4-point rating scale.

Results: The guideline was structured into three major sections: 1, criteria for oral feeding; 2, assessment tools; and 3, care directions and skills to maintain oral feeding and/or to withdraw tube feeding. Furthermore, all sections had two aspects. The one of aspects was to assess the oral feeding abilities in the elderly with dementia. The other was to manage the risk factors related to withdrawal of tube feeding, such as pneumonia, brought about by dysphagia. The necessity and feasibility of the guideline were evaluated as 3.3-4.0 points and 3.1-4.0 points, respectively.

Conclusions: The results from this study suggest that this oral feeding guideline for the elderly with dementia is useful in clinical practice to help care providers support patients' oral feeding abilities and withdraw tube feeding safely.

P110 THE DEMENTIA CAREGIVER VULNERABILITY SCALE (DEM-CVS): DEVELOPMENT OF A NEW SCALE WITHIN THE HOPE STUDY.

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BACKGROUND: we developed the Caregiver Vulnerability Scale (Dem-CVS) comprising common risk factors for anxiety and depression for caregivers of patients with dementia.

OBJECTIVE: to evaluate the sensitivity and specificity of the Dem-CVS in order to measure its usefulness in identifying dementia caregivers at risk of anxiety and depression and therefore to identify clinically relevant areas of psychopathology for intervention. **METHOD:** 113 family caregivers were interviewed as part of a larger study for caregivers of patients with Dementia. Caregiver anxiety, depression and emotional distress were measured using the Beck Anxiety Inventory (BAI), Beck Depression Inventory (BDI), Beck Hopelessness Scale and Emotional Distress Scale (EDS).

RESULTS: the Dem-CVS had high sensitivity and specificity in detecting caregivers with positive symptoms of anxiety and depression. Four areas of vulnerability were indicated: co-residence, relationships with the patient, physical health of the caregiver and high score of distress.

CONCLUSIONS: the use of the scale can identify vulnerable caregivers or caregivers most likely to develop anxiety or depression and indicate appropriate intervention and support.

Abstracts - Poster presentations

P111 THE QUALITATIVE ANALYSIS OF THE MMSE FINDINGS

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BACKGROUND: The MMSE has been shown to be useful in evaluating memory dysfunction as a principal measure outcome. A lot of clinical researchers recognized the important role of several factors (like age, sex, education). Actually we presume that further on of these parameters, professional activities and hobbies of the elder life influence the MMSE score.

Methodology: Descriptive statistics were used to picture the distribution of each variable that was used within the dataset. For the depiction of the relationships between the different types of variables multiple tests were used such as Pearson correlations, Chi-square tests, independent samples t-test and ANOVA analysis etc.

Results: The **Age** factor was associated with statistically significant worsening of the memory decline (ANOVA=.001). The **Sex** factor was associated with its impact on the outcome. The **Low Educational Level** represents a very strong correlation with the lowering MMSE score (ANOVA=.000). The **Professional Activities** factor has no influence in a quantitative level at the MMSE score (ANOVA=.233) in contrast, the qualitative aspect of this issue reveals that handicrafts men and housewives have lower MMSE score (-2 points (based on the mean) comparatively to the intellectuals and merchants. **Hobbies** in the elder life play a very important role influencing quantitatively the total MMSE score (ANOVA=.005). Old aged people, who prefer to stimulate their cognitive skills (reading books, solving crosswords etc) reveal a four point distance comparatively to those, who show absence of hobbies in their activities and a five point distance comparatively to those, who choose to have a passive attitude towards hobbies like watching TV, gambling lotteries etc.

CONCLUSIONS: The qualitative analysis of the MMSE influencing factors accomplish the quantitative one and introduce alternative prospective in order to sophisticate the available tools and to develop new ones for researchers making plans for new studies in witch cognitive status is a variable of interest.

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P113 *In vitro* investigation of neuroprotective effects toward A β and A β amyloid peptide interactions in hippocampal cells

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Objectives and Study

Numerous studies on discrete risk factors A β (1-40) amyloid peptide and aluminum have been reported over the years, inquiring into their toxicity in the brains of Alzheimer's disease patients.^{1,2} In the current *in vitro* study, the long-term toxicity behavior of A β (1-40) and its potential correlation with inorganic and well-defined aluminum complexes was investigated in primary rat hippocampal cultures.

Methods

In the course of this research, neuronal and glial cell cultures of neonate Sprague-Dawley rats were used for the experiment. Short and long term incubations of the cells were carried out in presence of Al(III) compounds and Al-quininate K[Al(C₂H₃O₂)₂](OH)·4H₂O or combination of Al(III) with A β (1-40), respectively, at appropriate concentrations. Furthermore, chelator agents (clioquinol (Clio), desferrioxamine (DFO) and the physiological quinic acid (QA)) were applied to the above conditions, separately. Cell staining and image acquisition were employed allowing survival cell assessment.

Results

The experimental data indicate that diminution of the survival rate of neuronal and glial cells due to Al(III) toxicity was dependent on exposure time, the nature of the ligand bound to the metal and cell susceptibility. The collective data suggest that the A β peptide and well-defined forms of aluminum likely follow different biotoxic molecular pathways of action on hippocampal cells *in vitro*, with no apparent synergistic effects. The protective effects of the chelator agents Clio, DFO and QA against Al(III) toxicity were explored, showing statistically significant positive results. Of the three chelator agents *in vitro*, naturally occurring QA showed for the first time well-defined neuroprotective properties comparable to those of Clio and DFO, thus presenting itself as a candidate in future studies aimed at the development of structure specific anti-degenerative pharmaceuticals in Alzheimer's disease.

Conclusions

A β toxicity may variably be regulated through interactions with soluble complex forms of Al(III). A well-defined protection profile for QA should be perused when the latter is applied to neurons and glia exposed to both Al(III) and A β risk factors. Its natural origin linked to the chemistry of cellular physiology is in line with the protective results exhibited in this study and predisposes for in-depth details of its molecular interactions providing neuronal protection in sensitive loci.

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P112 ENRICHMENT COGNITIVE STRATEGIES FOR BRAIN STIMULATION

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BACKGROUND: Recent research suggests that psychological interventions have equal value with AchEI in an holistic approach of dementia's deficits. Especially in BPSD their implementation at first is usually effective avoiding in parallel the drug side effects.

Objective: to examine and compare the effectiveness of psychosocial interventions in three cohorts at the community: amnesic MCI individuals, early ALZ patients and moderate stage ALZ patients.

Methods and techniques: At first we use different tools according to each cohort based theoretically on Cognitive – Behavioral Case Management approach. Reminiscence emotional therapy, Behavioral activation, reality orientation therapy ROT, social skills training, solving problems strategy, Snoezelen formula, aroma and music therapy etc are the most popular and efficient non pharmacological treatments for individuals (45-50 minutes) and for group sessions (100 – 110 minutes). The appropriate use of electronic devices (e.g. computers, GPS etc) is strongly recommended because it enhances cognitive reinforcement and alternative functional adjustment depending on the case.

Results: The combination of ROT, music therapy, reminiscence approach and social – behavioral activation improves the patient's capabilities and delay the memory and functional decline. Assertiveness training aims to reduce care – givers depressive mood and anxiety and high hopes for the future.

Conclusions: the non – pharmacological interventions provide an effective tool in parallel with AchEI to improve median temporal lobe deficits increasing at one hand the brain neuroplasticity and at the other hand fight the diseases stigma.

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Poster Presentation Abstract

Dementia – impact on relationships

Lynda Hogg, Scotland

Objectives and study

This small scale study aims to discover how living with a diagnosis of dementia impacts on couples' relationships. It is a 9 month study funded by the Averil Osborn Fund, which aims to encourage and support research and development work that enhances the quality of life and citizenship of older people. The researcher herself has a diagnosis of Alzheimer's disease.

Methods

A questionnaire was piloted using one couple, and feedback sought from staff at Alzheimer Scotland. Potential participants were recruited via Alzheimer Scotland's newsletter, Alzheimer Scotland staff and members of the Scottish Dementia Working Group. Both the person with a dementia diagnosis and his or her partner had to be able to participate fully, give written consent and respond directly to questions. Initial meetings were held with 17 couples to explain the purposes of the study; 10 couples went on to participate. Each couple was interviewed together, in their own homes, using a structured questionnaire, with the opportunity for either partner to provide additional comments privately, if wished. The interviews were recorded to aid transcription.

The questionnaire looked at the impact on each couple pre-diagnosis, at the time of diagnosis, and post-diagnosis.

Preliminary findings

Analysis and transcribing of the questionnaire responses and additional comments is still underway to see if there are any underlying commonalities. A report of the study will be provided to the funders by April 2010 and a paper presented at their annual conference in July 2010.

Not surprisingly, a common theme running through the responses so far is the sense of loss for both partners, particularly loss of an anticipated future life. Although couples have adapted to their changed circumstances, it was not the future they had imagined.

The researcher was encouraged by how supportive of each other the partners were, both emotionally and practically; she also noted how keen the partners without a diagnosis were for the person with the diagnosis to still be involved within the community and how they strived to make that happen.