

25th International Conference of Alzheimer's Disease International

10-13 March 2010

Thessaloniki, Macedonia, Greece



DEMENTIA: MAKING A DIFFERENCE



Alzheimer's Disease International aims to raise global awareness about dementia. The 25th International Conference of Alzheimer's Disease International is targeted at medical professionals, researchers, family and professional carers and people living with the disease. Anyone touched by Alzheimer's Disease and other dementias will benefit from attending. The variety of people attending is what makes this conference truly unique.

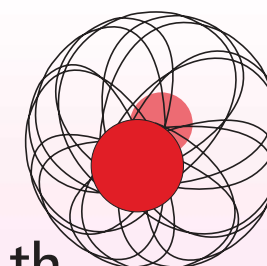
REGISTER YOUR INTEREST TO RECEIVE
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www.adi2010.org

Online registration opens 1st June 2009

Online abstract submission opens 2 May 2009 and closes 30 September 2009

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24th CONFERENCE OF ALZHEIMER'S DISEASE INTERNATIONAL

25-28 MAR 09

S I N G A P O R E

"Dementia : Engaging Societies Around the World"

PROGRAMME and ABSTRACTS Handbook

25 - 28 MARCH 2009, SINGAPORE



Jointly Organised by:



www.adi2009.org

Photography by Jan Fredriksson

Alzheimer's—together
on the long road ahead.



Caring for the Caregiver:

An Inspiring Caregiver's Journey
Captured Over 20 Years
of Video Recordings

with

Daniel D. Christensen, MD
Clinical Professor of Psychiatry
Clinical Professor of Neurology
Adjunct Professor of Pharmacology
University of Utah Neuropsychiatric Institute
Salt Lake City, Utah, USA



Alzheimer's isn't waiting.

24th
Conference of
Alzheimer's Disease
International

Date:
26 March 2009
Location:
**Suntec Singapore International
Convention Centre – Ballroom 3**
Time:
12:15 – 13:45
Lunch will be served.



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• Lunch Symposium : 27 March 2009

• Lunch Symposium : 26 March 2009
• Breakfast Symposium : 27 March 2009

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Special thanks to H. Lundbeck A/S for their sponsorship of travel bursary for a person with dementia to attend the conference.

Jointly Organised by :



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Dear Friends and Colleagues,

It is with our great pleasure that we welcome you to the 24th Conference of Alzheimer's Disease International (ADI) in Singapore. "Dementia: Engaging Societies Around the World" is jointly organised by Alzheimer's Disease International (ADI) and Alzheimer's Disease Association, Singapore (ADA).

ADI's annual conference is the only one in the world that brings together scientists, clinicians, care professionals, family carers, volunteers and people with dementia. This multidisciplinary event will provide a unique opportunity to examine achievements and priorities in Alzheimer's research, innovative techniques in the management and care of people with dementia, identify policy issues affecting people with dementia and feature training workshops for Alzheimer associations.

As the federation of 77 member Alzheimer's associations worldwide, ADI is raising awareness about the global impact of dementia and calls for recognition of dementia as a global health priority. We live in a world where there is one new case of dementia every seven seconds and worldwide costs for dementia care are US\$ 315 billion annually. This number will rise dramatically as the number of people with dementia are projected to escalate from 30 million to 100 million by 2050.

With this conference we have an opportunity to engage all societies around the world and truly make dementia a global health and social priority. Each day there will be a focus on 2 themes. On the first day we will look at Engaging Society and People in Dementia, which will include personal stories from a person with dementia and a family carer. On the second day we will look at Engaging Science and Creativity in Dementia, learning more about new treatments and research and looking at different ways in caring and the benefits of the use of arts. On the last day we will focus on Engaging Quality Care in Dementia, on how we can improve the lives of people with dementia and all those involved in their care.

This event is an opportunity to engage and make friends with people across the world, whilst enjoying the delights and hospitality that the beautiful island of Singapore has to offer. We hope that after the conference you return home inspired to continue to work to improve the lives of all those touched by dementia now and in the future!



Dr Daisy Acosta

Dr Daisy Acosta
Chairman
Alzheimer's Disease International

Dear Friends and Colleagues,

On behalf of the Alzheimer's Disease Association, it is my pleasure to welcome you to Singapore to the 24th Conference of Alzheimer's Disease International.

The theme of the conference 'Dementia: Engaging Societies Around The World' revolves on the word 'Engagement.' The conference logo, built on this theme, illustrates a global outlook; the swirls symbolising the interaction and engagement of the various societies coming together to a single point (the red dot) which represents Singapore. The conference theme is carried through in the Parallel Sessions: 'Engaging People', 'Engaging Science' and 'Engaging Quality Care and Creativity'.

As in all ADI conferences where the aims are to raise global awareness about dementia and provide delegates a platform for networking, sharing of experiences and learning about the latest advances and best practices in dementia research, treatment and care, I hope that the Singapore conference will engage, enrich and inspire you to achieve a better quality of life for people with dementia and their caregivers.

Welcome to Singapore and we wish delegates an enjoyable and fruitful conference and stay.



Dr Ang Peng Chye

Dr Ang Peng Chye
President
Alzheimer's Disease Association, Singapore
Chairman, Local Organising Committee ADI 2009

Alzheimer's Disease International (ADI) is the international federation of 77 Alzheimer associations. It was founded in 1984 as a network for Alzheimer associations around the world to share and exchange information, resources and skills. ADI is based in London and is registered as a non-profit organisation in the USA. ADI has been in official relations with the World Health Organization since 1996. Each member is the national Alzheimer association in their country who support people with dementia and their families. ADI's mission is to improve the quality of life of people with dementia and their families throughout the world.

ADI works to strengthen its member organisations with materials and publications as well as continued practical and financial support so they are better able to meet the needs of people with dementia and their carers.

ADI was established in 1984 with 4 founding members. 25 years later ADI is now an internationally recognised organisation with a range of activities and events.

ADI holds an annual international conference which is the longest running international conference on dementia. The conference is a unique multi-disciplinary event which unites people with an interest in dementia from around the world.

ADI also runs the Alzheimer University, a series of practical workshops aimed at helping staff and volunteers of Alzheimer associations build and strengthen capacity and develop their organisations.

World Alzheimer's Day, celebrated on September 21 each year, was launch in 1994 with the support from the World Health Organization. It is an opportunity to raise global awareness about dementia and its impact on families and the important work of ADI members throughout the world. ADI coordinates World Alzheimer's Day and provides members with materials to help them organise their own events.

ADI supports the 10/66 Dementia Research Group. This group gets its name from the fact that less than 10% of all population based research into dementia is directed towards the 66% or more of all people with dementia who live in developing countries. The network is made up of 100 active researchers from 32 developing countries that are studying the prevalence and impact of dementia in communities where it has not been studied before. The group has had its work published in leading journals including the Lancet, and presented study findings at major international conferences.

The Alzheimer's Disease Association (ADA) was formed in 1990 as a result of growing concern for the needs of people with dementia and their families. ADA is a voluntary welfare organisation and is made up of caregivers, professionals and all who are interested in dementia.

ADA piloted the first Dementia Day Care Centre in Singapore in 1991 with the setting up of New Horizon Centre (Toa Payoh). Since then, it has set up two more Dementia Day Care Centres and will be setting up its fourth Centre by early 2009. The Day Care Centres also provide volunteering activities for students, homemakers, retirees and corporations and training attachments for nursing, medical, occupational therapy and social work students.

ADA also runs a Caregiver Support Service providing Information and Referral, training programmes on dementia care for family caregivers and domestic helpers, a Helpline, Counselling, Caregiver Support Groups (in English, Mandarin and Malay) and a Safe Return Programme.

ADA's Public Education programmes on dementia awareness include talks, forums and exhibitions targeted at the public, caregivers, employees, senior citizens and students. They are conducted at Community Centres, public libraries, hospitals, Eldercare Centres, schools, offices and shopping malls. It also works closely with the media in providing information and stories on dementia and caregiving.

Besides its initiatives in dementia day care and caregiver support, ADA's other initiatives include the Early Dementia Programme, training in Person Centred Care and Dementia Care Mapping.

ADA shares its expertise in dementia care with local eldercare services and with other Alzheimer's Associations regionally through collaborations in providing staff attachments, conducting training workshops and research projects.

ADA's collaborations with ADI include hosting the 1st and 2nd Asia-Pacific Regional Conferences of ADI in 1999 and 2000 respectively and the Alzheimer University Training programme in 2005 held in Singapore.

CONFERENCE MANAGEMENT COMMITTEE

Chairman & ADI 2003 Conference Organiser	Daisy ACOSTA	ADI, Dominican Republic
Board Member & ADI 2001 Conference Organiser	Wendy FLEMING	ADI, New Zealand
Chair, Medical and Scientific Advisory Panel	Bengt WINBLAD	ADI, Sweden
Treasurer/ Financial Management	Martin ELSE	ADI, United Kingdom
Sponsorship / Budget / Promotion	Marc WORTMANN	ADI, United Kingdom
Chair, Local Organising Committee ADI 2009	ANG Peng Chye	ADA, Singapore
Chair, Local Organising Committee ADI 2010	Magda TSOLAKI	GAARDR, Greece

LOCAL ORGANISING COMMITTEE

ADA President	ANG Peng Chye	ADA, Singapore
ADA Executive Director	Theresa LEE	ADA, Singapore
ADA Vice President & Co-Chair, Scientific Programme Committee	NG Li-Ling	ADA, Singapore
ADA Finance	Jason FOO	ADA, Singapore
Chair, Social Programme	SENG Boon Kheng	ADA, Singapore
Chair, Marketing / Media	LIM Swee Im	ADA, Singapore
Perspective of Person with Dementia	Myrna BLAKE	ADA, Singapore
Professional Conference Organiser	Ace:Daytons Direct (Int'l) Pte Ltd	Singapore
















SCIENTIFIC PROGRAMME COMMITTEE

Co-Chairpersons	NG Li-Ling		ADA, Singapore
	Henry BRODATY		ADI, Australia
MSAP Chairman	Bengt WINBLAD		ADI, Sweden
Hon Vice President, ADI	Nori GRAHAM		ADI, United Kingdom
Members (Local)	CHIN Jing Jih	Geriatrician	ADA, Singapore
	Philip YAP	Geriatrician	ADA, Singapore
	ONG Pui Sim	Psychogeriatrician	ADA, Singapore
	Donald YEO	Psychologist	ADA, Singapore
	Myrna BLAKE	Person with Dementia	Singapore
	Helen LIM	Family Carer	Singapore
	Jenny GOH	Medical Social Worker	Singapore
	KOH Hwan Jing	Occupational Therapist	Singapore
	Alina ISMAIL	Nursing	Singapore
	Muthukumari PITCHAI	Nursing	Singapore
	Theresa LEE	Secretariat	ADA, Singapore
	Ace:Daytons Direct (Int'l) Pte Ltd		PCO, Singapore

INTERNATIONAL ADVISORY BOARD MEMBERS

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• Kazuo HASEGAWA	Japan
• Philip POI	Malaysia
• Wendy FLEMING	New Zealand
• Socorro MARTINEZ	The Philippines

25 March 2009 Wednesday	Time	Room	26 March 2009 Thursday
Council Meeting (ADI Members Only) (0900 - 1030) Room 325 / 326	0815 - 0945	Ballroom 2 & 3	Keynote 2 : Engaging Society in Dementia Topic : Economic Impact of Dementia Speaker : Anders WIMO (Sweden) Topic : Global Impact of Dementia Speaker : Martin PRINCE (United Kingdom)
Coffee/Tea Break (1030 - 1100)	0945 - 1030	Ballroom Foyer	Coffee/Tea Break
Council Meeting (ADI Members Only) (1100 - 1230) Room 325 / 326	1030 - 1200	Ballroom 2	Support for Family Caregivers
		Ballroom 3	Younger Onset Dementia
		Room 325	Cross-Cultural Issues In Dementia Care
		Room 208	Services and Dementia Care
		Room 209	Policy Session: Dementia - Global Epidemic National Action (Panel Discussion)
		Room 326	ADI Workshop Dementia Care in the Asia Pacific Region
Lunch (1230 - 1330)	1215 - 1345	Ballroom 3	Lunch Symposium by Pfizer
Council Meeting (ADI Members Only) (1330 - 1500) Room 325 / 326	1345 - 1515	Ballroom 2	Behaviours that Challenge
		Ballroom 3	Arts and Creativity In Dementia
		Room 325	Non-Pharmacological Treatment and Intervention
		Room 208	Dementia Care - Long-Term Care
		Room 326	ADI Workshop Global Strategy - Local Action
Registration Desk is open from 1400 - 1700 (1700 - 1830) Opening Ceremony Ballroom 2 Guest-of-Honour : Mr Lim Boon Heng, Minister, Prime Minister's Office (Guests to be seated by 1645 hours) Keynote 1 : Engaging Society in Dementia Topic : Social Impact of Dementia Speaker : Peter BAUME (Australia)	1515 - 1600	Ballroom Foyer	Coffee/Tea Break
Welcome Reception (1830 - 2030) Ballroom Foyer	1600 - 1730	Ballroom 2 & 3	Keynote 3 : Engaging People in Dementia Topic : Enabling and Empowering People with Dementia as Viewed from the Inside Out Speaker : Richard TAYLOR (United States) Topic : Experiences of the Care Givers Speaker : TAN Ching Hong (Singapore) Topic : Quality of Life in Dementia Speaker : Peter RABINS (United States)

Time	Room	27 March 2009 Friday	28 March 2009 Saturday												
0815 - 0945	Ballroom 2 & 3	<p>Keynote 4 : Engaging Science in Dementia</p> <p>Topic : Can Your Lifestyle Prevent Alzheimer's Disease? Speaker : Henry BRODATY (Australia)</p> <p>Topic : Emerging Treatment for Alzheimer's Disease Speaker : Bengt WINBLAD (Sweden)</p>	<p>Keynote 6 : Engaging Quality Care in Dementia</p> <p>Topic : Advance Directives - Ethical Dilemmas in Dementia Care Speaker : CHIN Jing Jih (Singapore)</p> <p>Topic : Quality Care in Dementia - Focus on Collaboration Speaker : Helen CHIU (Hong Kong SAR)</p> <p>Topic : Quality End of Life Care Speaker : Jenny ABBEY (Australia)</p>												
0945 - 1030	Ballroom Foyer	Coffee/Tea Break													
1030 - 1200	Ballroom 2	Non-Pharmacological Treatment and Intervention	Dementia Care and Research In Asian Countries												
	Ballroom 3	Training of Professional Caregivers	Technology for People with Dementia												
	Room 325	Lifestyle Issues	Diagnosis and Treatment - Role of GPs												
	Room 208	Caregivers	Awareness and Education												
	Room 209														
	Room 326	ADI Workshop Quality of Life : Are Care Systems For or Against Us? The 8th Stroud Interactive Workshop	ADI Workshop Strengthening Your Alzheimer's Association												
1215 - 1345	Ballroom 2	Lunch Symposium by Novartis	Closing Ceremony												
1345 - 1515	Ballroom 2	People with Dementia	<table><tr><th>Color</th><th>Legend</th></tr><tr><td></td><td>Keynote Session</td></tr><tr><td></td><td>Parallel Session</td></tr><tr><td></td><td>Free Paper Session</td></tr><tr><td></td><td>Lunch Symposium (Open to Medical Professionals only)</td></tr><tr><td></td><td>ADI Workshop</td></tr></table>	Color	Legend		Keynote Session		Parallel Session		Free Paper Session		Lunch Symposium (Open to Medical Professionals only)		ADI Workshop
	Color	Legend													
		Keynote Session													
		Parallel Session													
		Free Paper Session													
	Lunch Symposium (Open to Medical Professionals only)														
	ADI Workshop														
Room 325	Basic Sciences														
Room 208	Dementia Activities and Caregiving														
Room 209	Additional Topics														
Room 326	ADI Workshop 10 / 66 : Evidence of Advocacy														
1515 - 1600	Ballroom Foyer	Coffee/Tea Break													
1600 - 1730	Ballroom 2	<p>Keynote 5 : Engaging Creativity in Dementia</p> <p>Topic : Creative Ways in Caring Speaker : Jiska COHEN-MANSFIELD (United States)</p> <p>Topic : Creative Technology in Caring for People with Dementia Speaker : Chris NUGENT (United Kingdom)</p> <p>Topic : The Arts in Dementia Speaker : Hilary LEE (Australia)</p>													
2000 - 2300	Ballroom 3	Gala Dinner													

Note: Information in this handbook is correct at time of print.



Keynote Speakers



Jenny ABBEY, Australia

Professor Jenny Abbey was Foundation Director of one of the three Australian National Dementia Collaborative Research Centres and Queensland's first Professor of Nursing (Aged Care). She is the author of the Abbey Pain Scale and has undertaken foundation work in relation to palliative care for people with dementia. Jenny sits on the SA Guardianship Board and now holds university adjunct academic positions.



Peter BAUME, Australia

The Honourable Emeritus Professor Peter Baume AC was Professor of Community Medicine and Head of School, University of New South Wales from 1991 - 2000. He was a Senator for New South Wales between 1974 and 1991; was successively Government Whip, Minister for Aboriginal Affairs, Minister Assisting the Minister for National Development and Energy, Minister for Health, Minister for Education, and a Minister in Cabinet. He was Chancellor of the Australian National University from 1994-2006, was Foundation Chair of the Australian Sports Drug Agency, a Commissioner of the Australian Law Reform Commission, Deputy-Chair of the Australian National Council on AIDS, President of the Public Health Association (NSW Branch), Patron of the Voluntary Euthanasia Society of NSW and holds other positions. He is a physician who holds a doctorate, an honorary doctorate, and several fellowships and is an Officer in the Order of Australia. He has published extensively, reviews for a number of journals and has received a number of competitive grants.



Henry BRODATY, Australia

Henry Brodaty is Professor of Age Care Mental Health and Director of the Dementia Collaborative Research Centre at the University of New South Wales. He is also Director, Aged Care Psychiatry and Head of the Memory Disorders Clinic at Prince of Wales Hospital in Sydney. He is Past President of Alzheimer's Australia and Past Chairman of Alzheimer's Disease International. Professor Brodaty has published over 300 scientific papers.



CHIN Jing Jih, Singapore

Associate Professor Chin Jing Jih is Senior Consultant Geriatrician and Head of the Cognition and Memory-Related Disorders Service at Tan Tock Seng Hospital, and Adjunct Associate Professor at the National University of Singapore's Centre for Biomedical Ethics. He is a member of the Singapore Medical Council and the National Medical Ethics Committee, and Executive Director of the Singapore Medical Association's Centre for Medical Ethics and Professionalism.



Helen CHIU, Hong Kong SAR

Professor Helen FK Chiu is Professor and Head of the Department of Psychiatry at the Chinese University of Hong Kong, Past President of the Pacific Rim College of Psychiatrists, Past President of the Hong Kong College of Psychiatrists, as well as Past President of the Hong Kong Psychogeriatric Association. Professor Chiu is now President of the International Psychogeriatric Association.



Jiska COHEN-MANSFIELD, United States

Jiska Cohen-Mansfield is the Head of the Heczeg Institute on Aging, and Professor and Chair of the Department of Health Promotion at the School of Public Health at Tel-Aviv University. She is also Professor of Health Care Sciences and of Prevention and Community Health at the George Washington University Medical Center and School of Public Health. Her work focuses on improving quality of life for persons with dementia by understanding the perspective of the person with dementia, on end of life decision-making and on health.



Hilary LEE, Australia

Hilary is an Occupational Therapist specialising in the creative arts in dementia care. She brought the Society for the Arts in Dementia Care into Australia from Canada, and is currently the Chair of the Society. She developed a creative-expressive abilities assessment tool with two professors at the University of British Columbia. Hilary has a Masters Degree in researching the outcomes of the 'Spark of Life' programme and currently works with Dementia Care Australia.



Chris NUGENT, United Kingdom

Chris received a Bachelor of Engineering in Electronic Systems and DPhil in Biomedical Engineering both from the University of Ulster. His research within biomedical engineering addresses themes of Technologies to Support Independent Living, Medical Decision Support Systems and the development of Internet based healthcare models. His particular interests lie in the development of technological solutions to support persons with dementia.



Keynote Speakers



Martin PRINCE, United Kingdom

Martin Prince trained in Psychiatry at the Maudsley Hospital and in Epidemiology at the London School of Hygiene and Tropical Medicine. He is Professor of Epidemiological Psychiatry, Institute of Psychiatry and a liaison psychiatrist for older inpatients at King's College Hospital, London, UK. He coordinates the 10/66 Dementia Research Group's studies of over 20,000 older people in eleven low and middle income countries.



Peter V. RABINS, United States

Dr. Rabins received a BA in Political Science from the University of Florida in 1969, an MD from Tulane University in 1973 and an MPH from Tulane University School of Public Health in 1974. After a psychiatry residence at the University of Oregon, he completed a one-year fellowship in consultation/liaison and neuropsychiatry at the Johns Hopkins School of Medicine and has been on the faculty there since 1978. He is currently Professor and Vice-Chair for Academic Affairs in the Department of Psychiatry and has joint appointments in the Department of Medicine, Health Policy & Management and Mental Health. Currently Dr. Rabins is Director of the Division of Geriatric and Neuropsychiatry in the Department of Psychiatry and Principal Investigator on an NINDS grant to assess care decisions in late stage dementia.



TAN Ching Hong, Singapore

Ching Hong is a nursing lecturer at the School of Health Sciences, Nanyang Polytechnic (Singapore). She received her nursing training in Singapore and Postgraduate Diploma in Australia. A keen educator, she has also completed her Master in Educational Management from Nanyang Technological University (Singapore) in 2001. Ching Hong specialises in gerontological nursing and has a special interest in dementia care.



Richard TAYLOR, United States

Richard Taylor, PhD, a former psychologist, has lived in the U.S.A. (Houston, Texas) with the diagnosis of dementia probably of the Alzheimer's type for the past seven years. Four years ago he discovered that thinking, speaking, and writing about what it is like for him to live with this condition had become the new purpose for his life. He speaks of Alzheimer's from the inside out in order to create a supportive community where others affected by the challenges of dementia can speak up, share their thoughts, and take life-affirming actions to improve dignity, quality of life, and sense of purpose for all of us who are aging. He believes by sharing his experience and ideas and encouraging others to do the same that jointly they can demystify and disarm Alzheimer's disease and create a joint sense of purpose that can change the way individuals, countries and the world view, understand, and respond to all forms of dementia.



Anders WIMO, Sweden

Professor Anders Wimo, MD, PhD at the KI Alzheimer Disease Research Center, Karolinska Institutet, Stockholm Sciences in Sweden has a research focus on health economy and epidemiology of dementia. He is a member of the Swedish Brain Power and is one of the organisers of IPECAD, the International Pharmacoeconomic Conference on Alzheimer's Disease. His total publication list includes more than 200 papers.



Bengt WINBLAD, Sweden

Professor Bengt Winblad, MD, PhD has been involved in the field of dementia research for many years. He became MD in 1971 and took his PhD in 1975 at the University of Umeå, Sweden, where he became a Docent in 1977 and Professor of Geriatric Medicine and Chief Physician in 1982. Bengt Winblad has since been a guest professor at the Department of Psychiatry in Frankfurt and honorary professor at Beijing University, Wuhan University and Shanghai University in China. Currently, he is working in Stockholm, Sweden as Professor of Geriatric Medicine at the Karolinska Institutet and is Chief Physician at Karolinska University in Huddinge.

Nutrition in Alzheimer's...

Nutricia is the leading medical nutrition company in Europe. For the past 10 years, in collaboration with other research institutions, we have been developing a nutritional product, Souvenaid®, for use in Alzheimer's Disease.

The first clinical trial reported encouraging results in 2008. Further clinical trials are now underway and will be completed in 2010.

If you would like to know more please send an e-mail to: Souvenaid@nutricia.com



Conference Information

Organisers

Alzheimer's Disease Association (Singapore)
Blk 157 Lorong 1 Toa Payoh, #01-1195 Singapore 310157
Tel : +65 6353 8734
Fax : +65 6353 8518
Email : alzheimers.tp@pacific.net.sg

Alzheimer's Disease International
64 Great Suffolk Street, London, SE1 0BL, United Kingdom
Tel : +44 20 79810880
Fax : +44 20 79282357
Email : info@alz.co.uk

Conference Venue

Suntec Singapore International Convention & Exhibition Centre (Suntec Singapore)
1 Raffles Boulevard, Suntec City, Singapore 039593
Tel : +65 6337 2888

Conference Secretariat & Housing Bureau

Ace:Daytons Direct (International) Pte Ltd
2 Leng Kee Road, #04-01 Thye Hong Centre, Singapore 159086
Tel : +65 6379 5259 / +65 6379 5261
Fax : +65 6475 2077
Email : admin@adi2009.org

CME Accreditation

The 24th Conference of Alzheimer's Disease International 2009 is recognised by The Singapore Medical Council as a Continuing Medical Education Programme (CME). All fully and conditionally registered Doctors can sign up for their CME (up to 12 points) at the counter located at Ballroom Foyer, Level 2, Suntec Singapore.

VCF Funding

All delegates who received VCF funding to attend this conference, should acknowledge attendance by signing their names at the Registration Desk at the Ballroom Foyer, Level 2, Suntec Singapore.

A-Hah!

Brought specially to all conference delegates, >60 Design Centre and Ad Planet Group, in collaboration with Alzheimer's Disease Association (Singapore), is proud to debut A-Hah! card games for people with dementia and for their families. Each registered and paid full conference delegate will receive a pair of complimentary packs of Memoritz and Fruito. Conference delegates can redeem their complimentary A-Hah! card games by producing the redemption coupon. For collection of complimentary A-Hah! card games and to purchase additional packs, please proceed to the Bag Collection Desk at the Ballroom Foyer, Level 2, Suntec Singapore.

Quiet Room for People with Dementia

People with Dementia and their accompanying carers may proceed to Room 323, Level 3, Suntec Singapore, for some quiet time away from the main conference sessions. This room will be open during the following hours :

- 25 March 2009, Wednesday 1400 hrs – 1700 hrs
- 26 - 27 March 2009, Thursday - Friday 0800 hrs – 1800 hrs
- 28 March 2009, Saturday 0800 hrs – 1200 hrs

Registration Desk

Registration will be available at the Registration Desk, Ballroom Foyer, Level 2, Suntec Singapore, during the following hours :

- 25 March 2009, Wednesday 1400 hrs – 1700 hrs
- 26 - 27 March 2009, Thursday - Friday 0700 hrs – 1700 hrs
- 28 March 2009, Saturday 0700 hrs – 1200 hrs

On-Site Registration Fee (Per Person)	SGD
Delegate	745.00
Local Delegate ¹	495.00
Delegate with Reduced Rate ²	295.00
One Day – Delegate	490.00
One Day – Local Delegate ¹	355.00
One Day – Delegate with Reduced Rate ²	200.00
Opening Ceremony / Welcome Reception for Accompanying Person	65.00
Gala Dinner	145.00

¹ Only applicable to Singapore citizens and personnel currently working in Singapore. To qualify for local rate, please provide NRIC/FIN.

² Only applicable to a person with dementia, a person accompanying a person with dementia, family caregiver of a person with dementia, student, medical trainee, delegate from low-income countries. Students and medical trainees are required to provide proof of their status e.g. student pass or a letter from their head of department.

Note that the Organiser and Conference Secretariat reserve the right to request for proof of identification to qualify for local and reduced rates stated above.

(a) All onsite registrations will be treated as individual registrations. No discounts will be accorded.

(b) Only cash (Singapore Dollars) and credit card payments will be accepted.

Full Delegate (Doctor / Trainee / Nurse / Medical Student) are entitled to :

- Name Badge, Conference Bag and Programme and Abstracts Handbook
- Admission to all scientific sessions at the 24h Conference of Alzheimer's Disease International 2009, and exhibition
- Invitation to Opening Ceremony / Welcome Reception
- Two tea breaks per full-day conference; One tea break for half-day conference
- Certificate of Attendance

Full Delegate (Patient / Caregiver / Lab Technologist / All other Non-Medical Professionals) are entitled to :

- Name Badge, Conference Bag and Programme and Abstracts Handbook
- Admission to all sessions at the 24h Conference of Alzheimer's Disease International 2009, except those sessions marked for Medical Professionals only.
- Invitation to Opening Ceremony / Welcome Reception
- Two tea breaks per full-day conference; One tea break for half-day conference
- Certificate of Attendance



Certificate of Attendance

Certificate of Attendance will be inserted into the Programme and Abstracts Handbook.

Opening Ceremony and Welcome Reception

The ADI 2009 Opening Ceremony will take place on the evening of **25 March 2009, Wednesday**, at 1700 hours, Ballroom 2, Level 2, Suntec Singapore. All delegates are welcome to attend, and to be seated by 1645 hours to prepare for the arrival of Guest-of-Honour : Mr Lim Boon Heng, Minister, Prime Minister's Office. After the Opening Ceremony, delegates are invited to join the Welcome Reception at the Ballroom Foyer at 1830 hours.

Gala Dinner

The Gala Dinner will take place on the evening of **27 March 2009, Friday** at 2000 hours, Ballroom 3, Suntec Singapore. A special award presentation of the Alzheimer's Award for Dissemination of Psychosocial Intervention Research will be presented by Fondation M  d  ric Alzheimer and Alzheimer's Disease International. There will be a live band and dancing throughout the night so don't forget your dancing shoes! Each gala dinner ticket is priced at SGD145, and can be purchased at the Registration Desk at Ballroom Foyer, Level 2, Suntec Singapore. *(only a limited number of tickets are available)*

Tea Breaks

There will be 2 tea breaks held daily at the Ballroom Foyer (Level 2, Suntec Singapore). There will only be one tea break on **28 March 2009, Saturday**.

Industry-Sponsored Breakfast and Lunch Symposia

Lunch Symposia will take place on **26 – 27 March 2009**.

Exhibition

The Exhibition Area will be located at the Ballroom Foyer, Level 2, Suntec Singapore. Delegates may take the opportunity to network and exchange information amongst themselves. Tea Breaks (**26 – 28 March 2009**) and Poster Presentations (**26 – 27 March 2009**) will be held at the Exhibition Area daily during stated conference days.

The Exhibition Area will be open for admission during the following times :

- **26 - 27 March 2009, Thursday - Friday** 0930 hrs – 1700 hrs
- **28 March 2009, Saturday** 0930 hrs – 1300 hrs

Name Badge

Name badges are required to be put on at all times for identification purposes and admission to all scientific sessions, symposia and exhibition. Name badges are not transferable. The Organiser reserves the right to request for proof of identification.

Should you lose your badge, please proceed to the Registration Desk at Ballroom Foyer, Level 2, Suntec Singapore, for a replacement badge. Each replacement badge costs SGD30.

Language

The official language of the Conference is English. There will be no simultaneous translation.

Cancellations and Refunds

Any cancellation and request for refunds must be submitted in writing to the "24th Conference of Alzheimer's Disease International" Conference Secretariat by **31 December 2008, Wednesday**. Refunds, less SGD100.00 administrative fee, will be made within two months after the 24th Conference of Alzheimer's Disease International. No refunds will be made for requests received after **31 December 2008, Wednesday**.

Liability

The Organising Committee and Conference Secretariat are not liable for personal accidents, losses or damage of private properties of registered delegates during the conference. Delegates should make their own arrangements with regards to personal insurance.

Disclaimer

While every effort will be made to ensure that all aspects of the conference mentioned in this Programme and Abstracts Handbook will take place as scheduled, the Organising Committee reserves the right to make last-minute changes should the need arise.

24th Conference of Alzheimer's Disease International 2009

There will be 6 plenary lectures and 20 symposia from **25 - 28 March 2009**.

The 6 plenary lectures are :

- P1 / P2 : Engaging Society in Dementia
- P3 : Engaging People in Dementia
- P4 : Engaging Science in Dementia
- P5 : Engaging Creativity in Dementia
- P6 : Engaging Quality Care in Dementia

Symposia will cover the following themes :

- S1 : Additional Topics
- S2 : Arts and Creativity in Dementia
- S3 : Awareness and Education
- S4 : Basic Sciences
- S5 : Behaviours that Challenge
- S6 : Caregivers
- S7 : Cross-Cultural Issues in Dementia Care
- S8 : Dementia Activities and Caregiving
- S9 : Dementia Care – Long-Term Care
- S10 : Dementia Care and Research in Asian Countries
- S11 : Diagnosis and Treatment : Role of GPs
- S12 : Lifestyle Issues
- S13 : Non-Pharmacological Treatment and Intervention
- S14 : People with Dementia
- S15 : Policy Session: Dementia - Global Epidemic National Action
- S16 : Services and Dementia Care
- S17 : Support for Family Caregivers
- S18 : Technology for People with Dementia
- S19 : Training of Professional Caregivers
- S20 : Younger Onset Dementia



Speakers' Preview Room

This will be at Room 321, Level 3, Suntec Singapore.

Operating Hours

- **25 March 2009, Wednesday** 1400 hrs – 1700 hrs
- **26 - 27 March 2009, Thursday – Friday** 0700 hrs – 1800 hrs
- **28 March 2009, Saturday** 0700 hrs – 1200 hrs

Keynote, Parallel Session Speakers & Free Paper Presenters

They are requested to :

- (a) Submit PowerPoint presentations in CD-ROM or USB stick at Room 321, Level 3, Suntec Singapore.

Presentation Time	Submission Time
Morning Session	1 Day Before
Afternoon Session	4 Hours Before

- (b) Collect CD-ROM or USB stick immediately after individual presentations. The Organising Committee and Conference Secretariat will not be held responsible for lost or damaged CD-ROMs and USB sticks.

- (c) Kindly be present at the correct presentation venue at least 15 minutes before the start of the session.

- (d) Strictly adhere to the allocated presentation time allowance.

The following equipment will be provided for presentations :

Microphones, laser pointers, LCD projector, Intel Core2 Duo Processor Notebook pre-loaded with Window Vista Business / MS Office 2003 Professional. Only MS PowerPoint format is acceptable. Single projection is provided for presentations. No 35mm slide projector or VHS recorder will be provided at the conference.

Chairpersons

Chairpersons are requested to drop by the Speakers' Preview Room – Room 321, Level 3, Suntec Singapore, to collect speakers' curriculum vitae one hour before the start of the session chairpersons are chairing. Chairpersons are also required to check on speakers' attendance for the allocated chairing session.

Free Paper Communication Presenters

Each presenting author is allowed a maximum of 10 minutes for the Free Paper Presentation followed by 2 minutes for Questions & Answers session.

All presenting authors should familiarise themselves with the date, time and venue of their sessions, and arrive at the correct venue at least 15 minutes before the start of the session.

Oral Communications (Parallel & Free Paper Sessions)

Please refer to the Abstracts section for details on Parallel and Free Paper Sessions.

26 March 2009, Thursday (1030 hrs – 1200 hrs)

- Cross-Cultural Issues In Dementia Care
- Policy Session: Dementia - Global Epidemic National Action
- Services and Dementia Care
- Support for Family Caregivers
- Younger Onset Dementia

26 March 2009, Thursday (1345 hrs – 1515 hrs)

- Arts and Creativity In Dementia
- Behaviours that Challenge
- Dementia Care - Long-Term Care
- Non-Pharmacological Treatment and Intervention

27 March 2009, Friday (1030 hrs – 1200 hrs)

- Caregivers
- Lifestyle Issues
- Non-Pharmacological Treatment and Intervention
- Training of Professional Caregivers

27 March 2009, Friday (1345 hrs – 1515 hrs)

- Additional Topics
- Basic Sciences
- Dementia Activities and Caregiving
- People with Dementia

28 March 2009, Saturday (1030 hrs – 1200 hrs)

- Awareness and Education
- Dementia Care and Research In Asian Countries
- Diagnosis and Treatment - Role of GPs
- Technology for People with Dementia

Poster Presenters

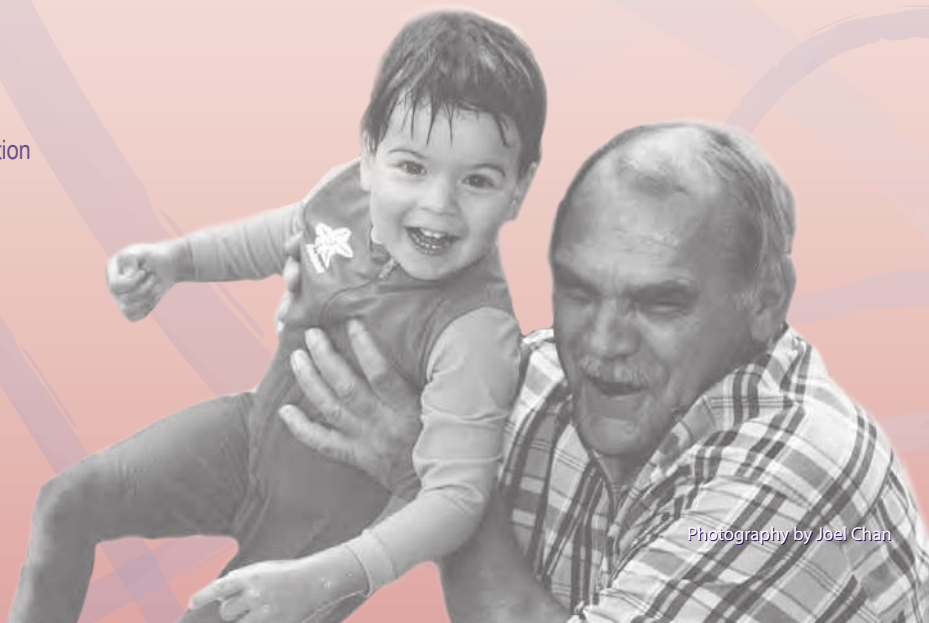
Location

The Posters are on display at the Exhibition Area, Ballroom Foyer, Level 2, Suntec Singapore. Each poster board will be individually marked with the relevant Abstract ID numbers. The full directory of Abstract ID numbers is printed on Pages 76-77, and will be attached to the upper left hand corner of each poster board. Mounting supplies will be provided at the Exhibition Area.

Poster Setting Up and Removal

- Date : **26 – 27 March 2009**
- Setup : 0800 hrs – 0900 hrs on the day of the designated poster presentations
- Tear Down : 1700 – 1730 hrs on the day of the designated poster presentations.

Poster presenters are requested to stand by their posters during their designated presentation viewing time.



Photography by Joel Chan


**Alzheimer's Disease
International**
26 March 2009, Thursday

Room 326, Level 3, Suntec Singapore International Convention & Exhibition Centre		
1030 – 1200	Dementia Care in the Asia Pacific Region This session is to highlight the different care systems and different approaches to care in the Asia Pacific Region. As well as celebrating the achievements in this field it is also a time to learn of new developments in the region, share experiences and best practice. It is also a learning opportunity for other Alzheimer's associations across the world to see how this can be translated and used in their own countries and for the global community to come together and share their ideas and have an open dialogue on this topic.	Frank Schaper (Australia) Teresa Tsien (Hong Kong SAR) Yee-Ming Wu (Hong Kong SAR)
1345 – 1515	Global Strategy – Local Action By 2050, it is projected that there will be 100 million people with dementia in the world. The launch of the Global Alzheimer's Charter in September 2008 provided opportunities within the six key principles outlined for key stakeholders to raise awareness of the needs of those affected by Alzheimer's disease and related dementias. Furthermore, key action steps were recommended to serve as a starting point for ADI members on how to make Alzheimer's disease and related dementias a global health priority. Using the charter as a guide, this workshop will focus on discussion around the principles and development of action plans that meet the unique needs of ADI member countries to address this growing problem. This is an opportunity for ADI member representatives to exchange ideas and experiences. <i>This session is supported by Novartis</i>	Marc Wortmann (United Kingdom) Amber Spierer (United States) Jim Jackson (United Kingdom) TBC (Japan)

27 March 2009, Friday

Room 326, Level 3, Suntec Singapore International Convention & Exhibition Centre		
1030 – 1200	Quality of Life : Are Care Systems For or Against Us? The 8th Stroud Interactive Workshop This is the final interactive workshop held at ADI conferences co-ordinated by the Stroud Center for Quality of Life (QOL) at Columbia University. We have two aims: to develop a framework for understanding QOL in dementia; and to generate ways of using this to improve service planning and delivery. We will start by a brief review of the insights generated in the previous workshops, summarised on our website, www.stroudsymposia.org Participants will be encouraged to contribute statements on any or all of the issues and to work with us after this workshop to develop ideas on how everyone can continue to learn from, and contribute to, this pool of understanding and advice. The main part of the workshop will be to address the question posed above and "How can health and social care systems better meet the needs of people with dementia and carers?" These workshops are spontaneous in spirit. All contributions will be recorded and combined with previous workshop data to broaden our understanding.	Nori Graham (United Kingdom) Sube Banerjee (United Kingdom) Barry J Gurland (United States)
1345 – 1515	10/66 : Evidence of Advocacy Evidence from research can be used to call for change. There are several recent examples of associations using research reports to argue successfully for governments to make dementia a priority. We should all be doing this! In this workshop we shall cover the need for research, the numbers and impact, how can we tell which treatments work, and understanding and using research. Active participation is encouraged and during the workshop, time will be given to groups to look at one of two research papers, and then attempt to draft either a press release or bullet points for a report for policymakers.	Martin Prince (United Kingdom) Juan de Libre Rodriguez (Cuba) Henry Brodaty (Australia)

28 March 2009, Saturday

Room 326, Level 3, Suntec Singapore International Convention & Exhibition Centre		
1030 – 1200	Strengthening Your Alzheimer's Association In this session we will discuss how Alzheimer's associations can benefit from using elements of Relationship Marketing to both improve member services and donor support. Key issues are: understand the concepts and terminology of Relationship Marketing, establish a plan for finding customers, identify communication options and know about supportive resources. This will be an introduction session. There will be a follow-up session for representatives from ADI-members during the afternoon of 28 March 2009. <i>This session is supported by Pfizer.</i>	Marc Wortman (United Kingdom) Rich Kaminsky (United States)

(Session continues from 1400 hrs -1700 hrs)

Pfizer Lunch Symposium, Thursday, 26 March 2009

Ballroom 3, Level 2, Suntec Singapore International Convention & Exhibition Centre		
Caring for the Caregiver: An Inspiring Caregiver's Journey Captured Over 20 Years of Video Recordings		
1215 – 1230	Welcome and Introduction	Daniel D Christensen (United States)
1230 - 1330	Presentation : Caring for the Caregiver - The Impact of Alzheimer's Disease Worldwide on Patients and Their Caregivers - A Brief History on Dr Christensen's Video Project - One Caregiver's Story Told Through Video Clips and Journal Entries - Caregiver Burden in Alzheimer's Disease, Changing Demands on the Caregiver, and the Consequences of Caregiving - The Benefits of Treatment for Patients with Alzheimer's Disease - Interventions for the Caregiver	Daniel D Christensen (United States)
1330 - 1340	Question & Answer	
1340 - 1345	Conclusion	


Novartis Lunch Symposium, Friday, 27 March 2009

Ballroom 2, Level 2, Suntec Singapore International Convention & Exhibition Centre		
Dementia Therapy : The "Next Generation" Unlocking the Potential of Cholinesterase Inhibition		
1215 – 1220	Chairman's Introduction	Bengt Winblad (Sweden)
1220 - 1240	The Battle Against Alzheimer's Disease : A Call to Action!	Henry Brodaty (Australia)
1240 - 1305	Achieving Optimal Benefits with Cholinesterase Inhibitors	Bengt Winblad (Sweden)
1305 - 1330	Practical Aspects of Treatment : Clinical Experience with the Rivastigmine Transdermal Patch	Gus Alva (United States)
1330 - 1340	Question & Answer	
1340 - 1345	Chairman's Conclusion	Bengt Winblad (Sweden)

Sponsored Symposia are open to Medical Professionals only



Oral Communications Summary

26 MARCH 2009, THURSDAY
TIME : 1030 HRS – 1200 HRS

SUPPORT FOR FAMILY CAREGIVERS Ballroom 2

Invited Speaker : *Title to be advised*
Peter Rabins

SUP-PS06 : Mobile Dementia Respite Teams: Overcoming the Tyranny of Distance
Val Meredith

SUP-PS07 : Counselling Spouses of Patients with Alzheimer's Disease as Add-On to Donepezil Treatment in Three Countries: Effects on Time to Nursing Home Admission and Death in the Patients
Henry Brodaty

YOUNGER ONSET DEMENTIA Ballroom 3

Invited Speaker : The Progression Continues - Moving from Early-Onset, Early-Stage -To- Just Past Early-Onset, Late-Stage-Early-Stage
Richard Taylor

Invited Speaker : What is the State of Play for Younger Onset Dementia Research?
Brian Draper

Invited Speaker : Getting Dementia Out of the Closet
Glenn Rees

CROSS-CULTURAL ISSUES IN DEMENTIA CARE Room 325

CRC-PS07 : Alzheimer's Disease International's Global Survey of Dementia Carers – Singapore's Perspective
Donald Yeo

CRC-PS08 : 'Sharing Your Memories' Engaging Caregivers in Lebanon
Diane Mansour

CRC-PS09 : Dementia in Armenia: New Emerging Medical and Social Problem
Manvelyan HM

SERVICES AND DEMENTIA CARE Room 208

SVC-FP01 : The AIBL Study : Baseline Data from a Multi-Centre, Prospective Longitudinal Study of Ageing in 1100 Volunteers
David Ames

SVC-FP02 : Urban and Rural Differences in Non-Communicable Diseases and Care Arrangements Among Elderly Chinese: A 10/66 Dementia Research Group Population-Based Study
Zhaorui Liu

SVC-FP03 : Needs of Family Caregivers of Persons with Dementia in Singapore
Fong Ngan Phoon

SVC-FP04 : A Comparison Study of Dementia Services in Singapore and Northern Ireland
Chionh Hui Ling

SVC-FP05 : Training of Professional Caregivers. The Venezuelan Experience
Aura Tovar

POLICY SESSION : DEMENTIA - GLOBAL EPIDEMIC NATIONAL ACTION Room 209

Panel Chair : **Professor Sube Banerjee**

Invited Panelists : **Emeritus Professor Peter Baume (Australia)**
Sube Banerjee (England)
Florence Lustman (France)
Jacob Roy (India)
Sung-Hee Lee (Korea)
Derrick Heng (Singapore)

ADI Workshop Room 326

Dementia Care in the Asia Pacific Region
Frank Schaper, Teresa Tsien, Yee-Ming Wu

26 MARCH 2009, THURSDAY
TIME : 1345 HRS – 1515 HRS

BEHAVIOURS THAT CHALLENGE Ballroom 2

Invited Speaker : Behaviours that Challenge
Jiska Cohen-Mansfield

Invited Speaker : Meeting Needs of People with Dementia in Care Homes
Ann Scott

CHA-PS02 : Handling Disturbed Behaviours in Older People with Dementia in Hong Kong: A Holistic Approach
Mok Wai Kit Linda

ARTS AND CREATIVITY IN DEMENTIA Ballroom 3

Invited Speaker : Enabling Success in Creative Expression
Hilary Lee

Invited Speaker : Healing the Spirit with Poetry and Painting: Image-Making, Creativity, and Dementia
Patricia Baines



Oral Communications Summary

NON-PHARMACOLOGICAL TREATMENT AND INTERVENTION Room 325

NON-FP13 : The Challenges and Triumphs of Involving Relatives in Joint Training with Care Home Staff
Henry Simmons

NON-FP14 : Smartphone Application for Improving Short-term Memory Loss in Patients with Alzheimer's Dementia
Padmaja L Battagiri

NON-FP15 : Innovative Approach Multi Sensory Activities for Clients with Dementia and Visual Impairment
Chiu Tat San

NON-FP16 : Evaluation of a Long Term Non-Pharmacological Treatment for Patients with Mild Cognitive Impairment (MCI) and Mild Alzheimer's Disease (Mild AD)
Magdalini Tsolaki

DEMENTIA CARE – LONG-TERM CARE Room 208

LTC-FP01 : The Dementia Difference - A 2-day Workshop on Caring for People Dying with Dementia
Janice Robinson

LTC-FP02 : A Case Study on How Dementia Care Mapping Has Improved the Quality of Life of the Dementia Residents and Also Helped to Reduce the Cost of Ineffective Use of Manpower of a Nursing Home in Singapore
Arivazhagi Varadhan

LTC-FP03 : Person Centered Approach to Care Giving
Kar Nair

LTC-FP04 : Monitoring Pain in Severe Dementia by Automatic Vision System
Eric Triau

LTC-FP05 : Designing a Housing Complex for The Elderly with Dementia: A Case Study of a Nursing Home in South Urban City at Taiwan
Po-Tsung Chen

LTC-FP06 : Evaluating Results of a 6-Month Intervention Programme in a Dementia Day Care Centre
Efthymiou A.

ADI Workshop Room 326

Global Strategy – Local Action
Marc Wortmann, Amber Spierer, Jim Jackson

27 MARCH 2009, FRIDAY
TIME : 1030 HRS – 1200 HRS

NON-PHARMACOLOGICAL TREATMENT AND INTERVENTION Ballroom 2

NON-PS10 : Dementia Beyond Drugs
G. Allen Power

NON-PS11 : The Best Friends Model of Dementia Care
Virginia M Bell

NON-PS12 : Personhood, Relationships and...Beyond : Contextualising the Dementia Experience
Deborah O'Connor

TRAINING OF PROFESSIONAL CAREGIVERS Ballroom 3

Invited Speaker : Enabling Care : Staff Work More Effectively with Behaviours that Challenge
Ann Scott

TRA-PS06 : 2 Young 4 Dementia
Susan Bromhead

LIFESTYLE ISSUES Room 325

Invited Speaker : Treatment and Prevention of Vascular Cognitive Impairment
Vincent Mok

LIS-PS01 : Life is Cool with a Fit Brain - The Health Promotion Campaign for Teenagers
Sanna Kaijanen

LIS-PS02 : The Efficacy of a Medical Food (Souvenaid®) in Alzheimer's Disease : Results First Randomised Controlled Trial and Design Future Trials
Patrick JGH Kamphuis

LIS-PS02 is open to Medical Professionals only

CAREGIVERS Room 208 / 209

CGV-FP01 : Can a Husband be a Caregiver?
Pieter M Heyns

CGV-FP03 : Caring for the Person with Dementia by the Domestic Helper : The Employer's and Domestic Helper's Perspectives in Singapore
Siti Zubaidah Yusoff

CGV-FP04 : Early Cognitive Changes in Persons with Alzheimer's and Their Adult Child Caregivers: Does Symptom Similarity Add to Caregiver Stress?
Stephen J. Cutler



Oral Communications Summary

CGV-FP05 : Improving Hospital Discharge Preparation and Support for Families of Patients with Dementia
Michael Bauer

CGV-FP06 : The Help Seeking Behaviour and Burden of Informal Carers for Demented Elders in Hong Kong
Brenda Ho Wan Li

CGV-FP08 : "Connections And Talents" - Activities For Health Programme, Bringing Activities Back Into The Home
Debi Lahav

ADI Workshop Room 326

Quality of Life : Are Care Systems For or Against Us? The 8th Stroud Interactive Workshop
Nori Graham, Sube Banerjee, Barry J Gurland

27 MARCH 2009, FRIDAY
TIME : 1345 HRS – 1515 HRS

PEOPLE WITH DEMENTIA Ballroom 2

Invited Speaker : My Experience with Alzheimer's
Myrna Blake

PWD-PS01 : Recognising and Supporting Selfhood Within Interaction : A New Way to Facilitate a Person-Centred Approach to Dementia Care
Fiona Kelly

PWD-PS02 : Younger Onset Dementia: Sharing our Experiences
Gordon Smeeton

PWD-PS03 : UK Strategy on Transforming the Quality of Dementia Care - The Person with Dementia's Contribution
Peter John Stapleton Ashley

BASIC SCIENCES Room 325

BAS-FP01 : Protective Effect of Curcumin, A Diferuloylmethane Against Behavioural and Biochemical Alterations Induced by Chronic Aluminium Exposure in Rats
Atish Prakash

BAS-FP03 : Chyawanprash for the Management of Alzheimer's Disease
Nitin Bansal

BAS-FP04 : Thiamine Deficiency Increases β -Secretase Activity and Accumulation of β -Amyloid Peptides
Zun-Ji Ke

BAS-FP05 : Early Stages of Pathological Tau Protein Processing is Characterised by a Specific Sequence of Phosphorylations and Truncations in Alzheimer's Disease
Raúl Mena

BAS-FP06 : Tau Polymorphism in Intron 9 Associated with Alzheimer's Disease
Michal Novak

DEMENTIA ACTIVITIES AND CAREGIVING Room 208

ACT-FP09 : Writing a Life Story for a Person with Dementia: Its Uses and Benefits
Tory Kowalski

ACT-FP10 : Gains in Alzheimer's Care Instrument (GAIN) - A Novel Scale to Assess Gains in Dementia Caregiving
Philip Yap

ACT-FP11 : Activity Patterns of People with Dementia in Residential Nursing Home and Hostel in Singapore: An Ethnographic Study
Lum Kai Mun Abigail

ACT-FP12 : "A New You" – A Novel Programme to Invigorate Minds and Sustain Personhood in Persons with Early Cognitive Impairment
Jenny Goh

ACT-FP13 : Using Spontaneous Activity Opportunities to Promote Engagement of People with BPSD in Residential Care
Alissa Westphal

ADDITIONAL TOPICS Room 209

OTH-FP01 : Strengthening Dementia Care in Indigenous Communities
Mark J Elliott

OTH-FP02 : NORMS: A Non-Intrusive Respiratory Monitoring System
Foo Siang Fook Victor

OTH-FP03 : Validation of the Zarit Burden Interview for Caregivers of Persons with Dementia in Singapore
Seng Boon Kheng

OTH-FP04 : Population-Based Survey: Cognitive Performance vs Memory Complaints
Sakka P

OTH-FP05 : Managing Behavioural Symptoms of Fronto-Temporal Dementia Using a Non-Pharmacological Approach
Robyn Attoe

OTH-FP06 : The Effects of Alzheimer's Disease Symptom Severity on Caregiver Outcomes
Joan Mackell



Oral Communications Summary

ADI Workshop Room 326

10/66 : Evidence of Advocacy
Martin Prince, Juan de Libre Rodriguez, Henry Brodaty

28 MARCH 2009, SATURDAY
TIME : 1030 HRS – 1200 HRS

DEMENTIA CARE AND RESEARCH IN ASIA Ballroom 2

Invited Speaker : Primary Prevention of Dementia : Research Findings from the Singapore Longitudinal Ageing Studies
Ng Tze Pin

Invited Speaker : Dementia Care and Research in the Asian Region – A Quality of Life Perspective
Edmond Chiu

DEM-PS07 : Epidemiological Study of Mild Cognitive Impairment and Pilot Evaluation of Methods of Early Dementia Detection in Community
Yueqin Huang

DEM-PS08 : A Study of Prevalence of Dementing Disorders in Kerala, India
K. Jacob Roy

TECHNOLOGY FOR PEOPLE WITH DEMENTIA Ballroom 3

Invited Speaker : Mobile Phone as a Means of Reminder
Chris Nugent

Invited Speaker : Technological Challenges in Dementia Care: A Case-Study Based Approach
Jit Biswas

TEC-PS07 : GPS Technology - Another Restraint or a Key to Freedom?
Jason Burton

DIAGNOSIS AND TREATMENT - ROLE OF GPS Room 325

DIA-PS04 : Predicting Safety to Drive in People with Dementia
Nadina B Lincoln

DIA-PS05 : Helping GPs Assess When Genetic Testing is Appropriate
A. Dessa Sadovnick

DIA-PS06 : Diagnostic Utility of the Clock Drawing Test (CDT) in Early Dementia in an Asian Population
Latana Aida Munang

DIA-PS07 : Accuracy of Mild Cognitive Impairment (MCI) Criteria for the Diagnosis of Individuals at High Risk of Dementia
Blossom Christa Maree Stephan

AWARENESS AND EDUCATION Room 208 / 209

EDU-FP01 : "Alzheimer & You" - Young People Engaged for People with Dementia and Their Caregivers
Sabine Jansen

EDU-FP02 : Effective Mobility Management for People with Dementia
Veronica Hanna Naughton

EDU-FP03 : Planning and Preparing Culturally Appropriate Materials for Training Indigenous Communities
Linda Helen Taylor

EDU-FP04 : "Seize the Day" A Project by Alzheimer Scotland Positive Dementia Group
Christine McGregor

EDU-FP05 : Dementia :Engaging Societies Around the World
Nirmala Narula

ADI Workshop Room 326

Strengthening Your Alzheimer's Association
Marc Wortmann, Rich Kaminsky





Poster Communications Summary

26 MARCH 2009, THURSDAY

TIME : 1215 HRS – 1345 HRS

Exhibition Area, Ballroom Foyer, Level 2, Suntec Singapore

CROSS-CULTURAL ISSUES IN DEMENTIA CARE

- CRC01** : Dementia Research in South Africa; The Challenges of Community Access
Rick Vanderpoel
- CRC02** : A Rapid Situation Assessment (RSA) of the Needs of Elderly People in Various Settings in Kenya
David Musyimi Ndeti
- CRC03** : Effects of Body Weight on Tolerability of Rivastigmine Transdermal Patch
Jae-Hong Lee
- CRC04** : BPSD in Nursing Home Residents in Sydney and Shanghai
Henry Brodaty
- CRC05** : Effects of Culture on Caregiver Burden Among Australian and Chinese Caregivers
Henry Brodaty
- CRC06** : Offering Education Without Judgement to Indigenous Women in the Goldfields Western Australia
Rae Bransgrove

DEMENTIA CARE AND RESEARCH IN ASIAN COUNTRIES

- DEM01** : Care Provided by Professional Caregivers to Residents with Dementia in Unit-Type Geriatric Health Service Facility
Sachiko Hara
- DEM02** : Prevalence of Potentially Overlooked Dementia in the Community-Dwelling Japanese Elderly: Association of Cognitive Impairment and Mortality Derived from 6-Year Survivals
Chisako Yamamoto
- DEM03** : Dementia Screening in a Community Sample in Singapore
Sin Gwen Li
- DEM04** : Clinical Presentation, Nutritional Status and Outcomes of the Hospitalised Dementia Patients
Natesan Selvaganapathi
- DEM05** : Low Socioeconomic Status, Social Isolation and Challenging Behaviours are Risk Factors of Institutionalisation in Dementia Patients in an Acute Care Setting
Lawrence Lim
- DEM06** : The Present Conditions of Understanding on Dementia in Rural Japanese
Yumiko Momose
- DEM07** : The Current Challenge and Mission
XianHao Xu

DEM08 : Cognitive Impairment and Osteoporosis in the Elderly Korean
Moon Ho Park

DEM09 : NOS3 Gene G894T Polymorphism and Late-Onset Alzheimer's Disease in an Iranian Population
Nahid Majlessi

DEM10 : Cortical Gray Matter Volume Changes in Subcortical Ischemic Vascular Dementia
Ji-eun Song

DEM11 : Discharge Contorol for Patients with Dementia
Minori Tokui

DEM12 : Severity of Neuropsychiatric Symptoms and Related Caregiver Distress and Not Caregiver Knowledge Contribute to Caregiver Burden in Mild to Moderate Dementia Patients Attending a Tertiary Memory Clinic: An Asian Experience
Han Huey Charn

DEM13 : Utilisation of Dementia Daycare Services by Dementia Patients Attending a Tertiary Memory Clinic in Singapore
Philomena Anthony

DEM14 : Cognitive, Behavioural and Functional Factors Influence Eventual Institutionalisation in Geriatric Patients Following Acute Hospitalisation
Lam Ming Ai

DEM15 : What Do the Elderly Residents Need? From Nurses' Perspectives
Yeu-Hui Chuang

DEM16 : The Informant Questionnaire on Cognitive Decline in the Elderly (IQCODE) as a Screening Tool in a Singapore Population, and Its Correlation to Dementia Diagnosis and Severity, and Caregiver Stress
Adeline Mee Leh Chuo

DEM17 : Validation of the Route Map Memory Test for the Elderly
Kuo Yen-Chun

DEM18 : Establishment of the Plasma Biomarkers for the Pre-Symptomatic Detection of AD : Australian Imaging, Biomarker and LifeStyle (AIBL) Flagship Study of Ageing
Ralph Martins

SUPPORT FOR FAMILY CAREGIVERS

- SUP01** : A Study of Restraint Usage by Primary Caregivers Who Care for Elderly Relatives with Dementia at Home in a Rural Area
Fujimi Arai
- SUP02** : Family Caregivers' Perception of Care Burden and Coping Strategies in Japan And Korea
Midori Watanabe



Poster Communications Summary

SUP04 : Support for Both Stroke Survivors and Caregivers Enhances Coping Skills and Reduces Depression
Piero Antuono

SUP05 : Difficulties Encountered and Coping Strategies Adopted by the Home Caregivers of Persons with Dementia in Singapore: Family Caregivers and Domestic Workers' Perspectives
Zhang Di

TECHNOLOGY FOR PEOPLE WITH DEMENTIA

- TEC01** : Studying Sleep Wake Circadian Rhythm in Persons with Dementia Using Actigraphy Based Sleep Activity Pattern Monitoring (SAPM)
Maniyeri Jayachandran
- TEC02** : Intelligent Continence Management System (iCMS)
Aung Aung Phyto Wai
- TEC03** : Agitation Monitoring through Multi-Modal Sensors Using the SOAPD Scale (AMSS)
Jit Biswas
- TEC04** : Understanding and Correction of Erroneous Behavior Among Mild Dementia Patients (UCEB)
Mohamed Ali Feki
- TEC06** : Exploring the Use of Online Touch-Screen Computerised Programme in the Assessment of Cognitive Function - A Pilot Study
Schwinger Wong Chi-Kit

TRAINING OF PROFESSIONAL CAREGIVERS

- TRA02** : Training Programme for Japanese Group Home Staffs Dealing with End-of-Life Care for Elders with Dementia
Naomi Hiraki
- TRA03** : Equipping Eldercare Staff with Knowledge and Skills on Ageing and Mental Health – An Evaluation of the Training Provided by the Community Psychogeriatric Programme (CPGP) for Nursing Home Staff
P'ing-Ping Joy Lim
- TRA04** : How Does Dementia Care Mapping (DCM) Provide an International Language to Improve Person Centered Care for People with Dementia
Carol H Fusek

YOUNGER ONSET DEMENTIA

- YOU01** : Connexus - Connecting People
Kathryn Cunningham

27 MARCH 2009, FRIDAY

TIME : 1215 HRS – 1345 HRS

Exhibition Area, Ballroom Foyer, Level 2, Suntec Singapore

ACTIVITIES FOR PEOPLE WITH DEMENTIA

- ACT01** : Assessment of Daily Energy Expenditure of Elderly Women with Alzheimer Disease Living in Nursing Home
Dariusz Wlodarek
- ACT02** : Dementia as a Strong Independent Predictor of Rehabilitation Efficiency and Effectiveness
Gerald Choon-Huat Koh
- ACT03** : Busy Days Makes Happy Days for People with Dementia
Natalie Sell
- ACT05** : Promoting Accessibility to Appropriate Activities for People with Dementia in Residential Care
Alissa Westphal
- ACT06** : Alzheimer's Disease and Stigma Fight in Croatia
Ninoslav Mimica
- ACT07** : A Taiwanese Experience of School of Wisdom
LiYu Tang
- ACT08** : Creativity in Care for Persons with Dementia
Lee Nga Yee Maggie

ARTS AND CREATIVITY IN DEMENTIA

- ART01** : Richard Mahony: The Misfortunes of Younger Onset Dementia
Brian Draper

CARER QUALITY OF LIFE

- CAR01** : Improving the Quality of Life More on the Relation Between The Degree of Satisfactory and Life Environments for Elderly Persons Spent Alone at Home
Satoko Sasahara
- CAR02** : Clinical and Economic Predictors of Quality of Life in Dementia
Franziska Gallrach
- CAR03** : A Psycho Social Study of Challenges of Caregivers in Alzheimer's Disease
Mathew
- CAR05** : Activities of Daily Living that Matter Most to Caregivers
Daniel D. Christensen

CHALLENGING BEHAVIOURS

- CHA01** : Archie & Ethel - A Way Forward - Aggression, Dementia & Singing
Mary-Barr le Messurier



DIAGNOSIS AND TREATMENT - ROLE OF GPS

- DIA01** : Dementia Secondary to a Potentially Treatable Cause -- Role of GPs
Mohammad Yousuf Rathor
- DIA02** : Palliative Care for Persons with Dementia
Minoru Irahara
- DIA03** : Thiazin Red as a Neuropathological Tool for the Rapid Diagnosis of Alzheimer's Disease Using Tissue Imprints
José Luna-Muñoz

FUTURE TREATMENTS IN ALZHEIMER'S (MEDICAL)

- FUT01** : Involvement of Protein Tyrosine Phosphatase in Memory Deficits
Seema Bansal
- FUT02** : A Small Molecule Toxicity Inhibitor Prevents 7PA2 Cell Medium-Induced Behavioural Effects in the Rat
Eugene O'Hare

LIFESTYLE INTERVENTION

- LIF01** : How Could We Be Far from Senile Dementia and Life Span Be Healthily Longer?
Jun Wang
- LIF02** : Memory Groups: Improving Memory Knowledge, Satisfaction and Functioning of Healthy Elderly
Olga Lymporopoulou

NON-PHARMACOLOGICAL TREATMENT AND INTERVENTION

- NON01** : Integration of Pharmacological and Non-Pharmacological Treatments of Dementia Care in a Psychiatric Day Hospital
Shaw-Ji Chen
- NON02** : The Effect of Music Therapy and Structured Activities on Behavioural and Depressive Symptoms in Dementia
Han Pei Min
- NON03** : Effects of Aromatherapy & Touch on Cognitive Functions & Agitation Behaviour of Elderly Residents with Dementia
Chow Yeow Leng
- NON04** : Increasing Wellbeing Through Brokered Services for People Living with Dementia
Debbie
- NON05** : The Effectiveness of Bright Light Therapy and Nutrition Support for Older Adult with Dementia in Delirium
Fuyuko Fujita
- NON08** : An Overview of the Non-Pharmacological Approaches for Patients with Dementia
Wu Szu-Hui
- NON09** : Effect of Cognitive Treatment for the Elderly with Mild to Moderate Alzheimer's Disease in the Cognitive Function and the Psychological Well-Being
Wei-Ren Wu

ALTERNATIVE DRUG TREATMENTS (TRADITIONAL CHINESE MEDICINE)

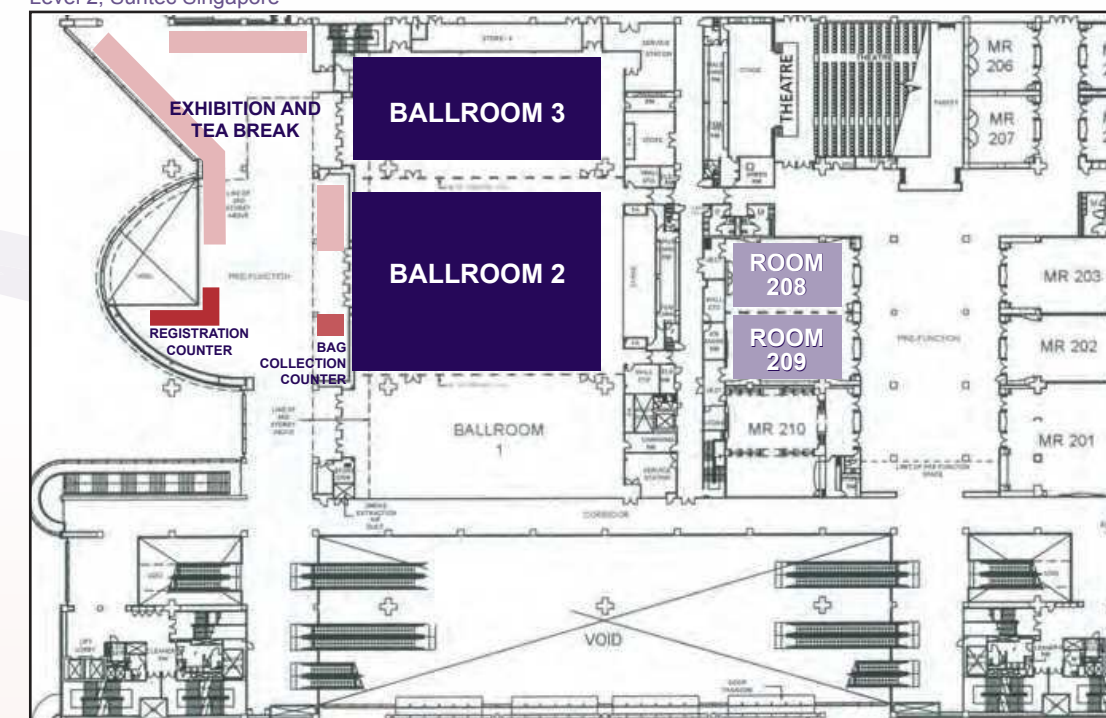
- TCM01** : The New Hope to the Old Disease
HongZheng Wang



Photography by Nicole Haas

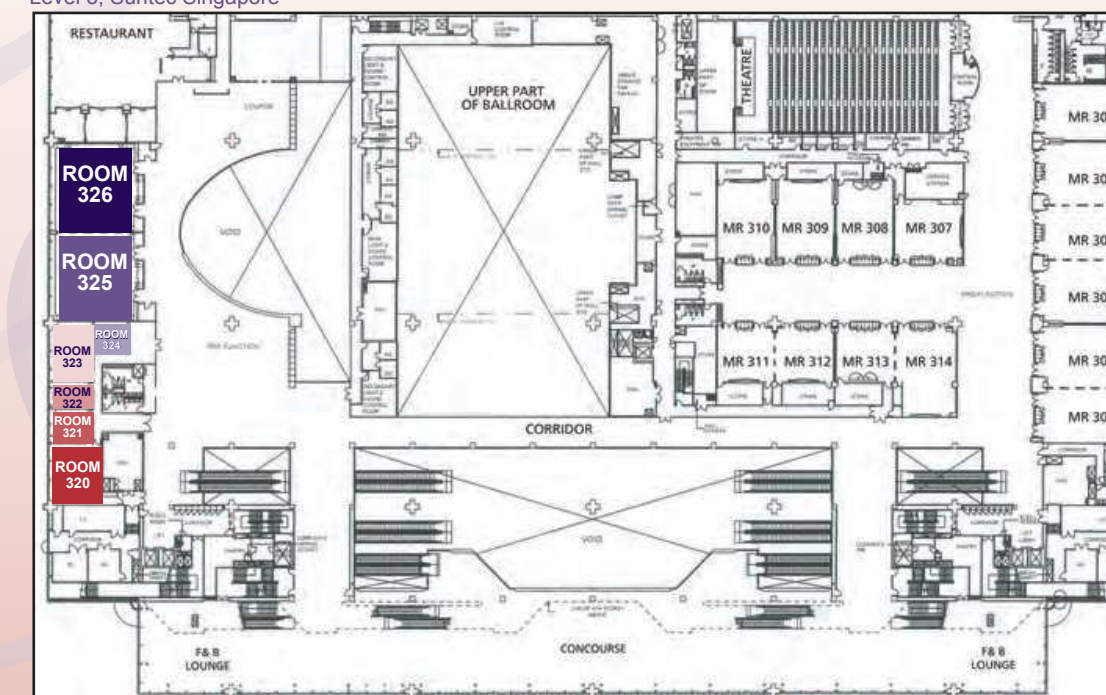


Level 2, Suntec Singapore



Room	Function	Color
Ballroom 2 & 3	Opening Ceremony	Dark Blue
	24th Conference of Alzheimer's Disease International 2009	
Room 208 & 209	Oral Communications Sessions (26 - 28 March)	Light Blue
Ballroom Foyer	Exhibition / Poster Display & Tea Break Area	Pink
	Registration Counter	Red
	Bag Collection Counter	Red

Level 3, Suntec Singapore

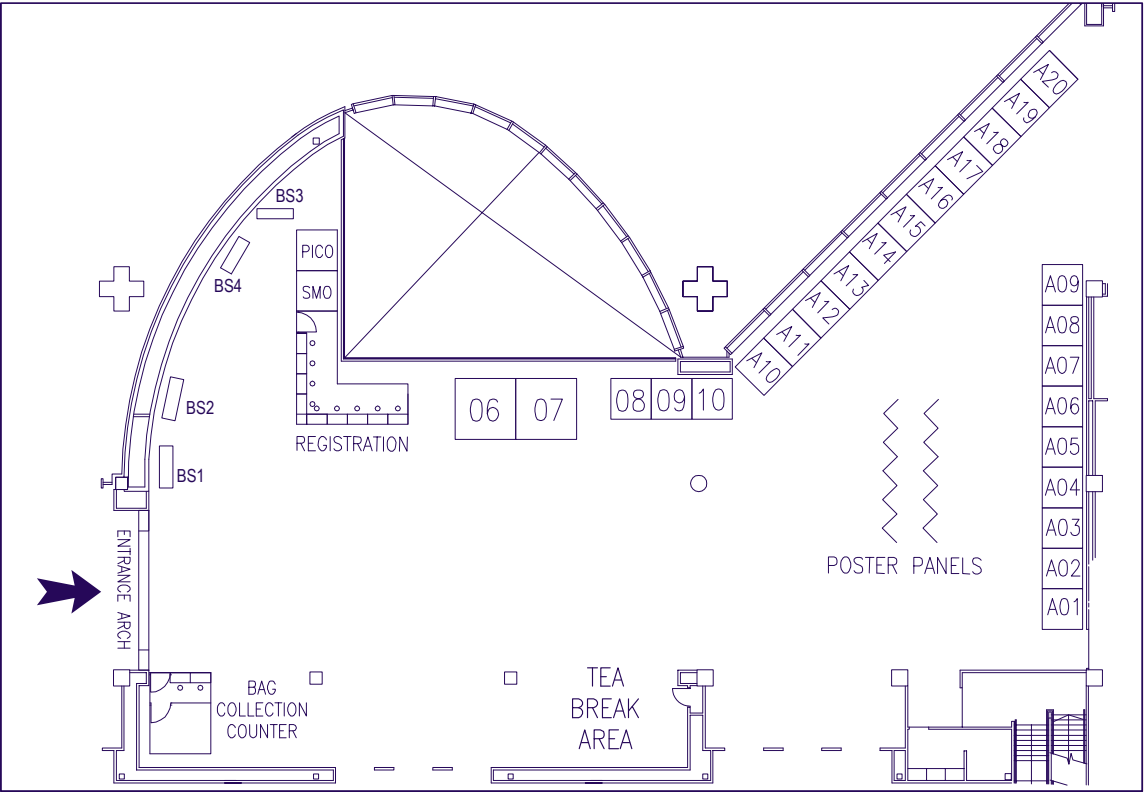


Room	Function	Color
Room 326	ADI Council Meeting (25 March) / ADI Workshops (26 - 28 March 2009)	Dark Blue
Room 325	Oral Communications Sessions (26 - 28 March)	Light Blue
Room 324	Nutricia Hospitality Suite	Pink
Room 323	Quiet Room for People with Dementia	Light Blue
Room 322	ADI Office	Red
Room 321	Speakers' Preview Room / Press Room	Red
Room 320	Conference Secretariat Room	Red



Exhibition Floorplan and Listing

Level 2, Suntec Singapore (Ballroom Foyer)



Exhibitors				Booth No.
Alzheimer's Disease International				08
Bayer Schering Pharma AG				07
Dementia Activities				BS 4
EISAI Inc.				10
Information Resources Pte Ltd				BS 1
MarketAsia Distributors (S) Pte Ltd				BS 2
Singapore Tourism Board				06
Site Management Office				SMO
PICO (Official Contractor)				PICO
>60 Design Centre				BS 3
ADI Showcase				
Alzheimer Society of Canada	A1		Alzheimer's Disease Foundation Malaysia (ADFM)	A12
Alzheimer Disease Societies Croatia	A2		Alzheimer's Association Nepal	A13
Deutsche Alzheimer Gesellschaft	A3		Alzheimers New Zealand	A14
Greek Association of Alzheimer's Disease and Related Disorders	A4		Alzheimer's Pakistan	A15
Hong Kong Alzheimer's Disease Association	A5		Alzheimer Scotland	A16
Alzheimer's and Related Disorders Society of India	A6		Alzheimer's Disease Association	09
Indonesian Alzheimer Association (IAZA)	A7		Taiwan Alzheimer's Disease Association	A17
Iran Alzheimer Association	A8		The Alzheimer's and Related Disorders Association-Thailand (ARDAT)	A18
Alzheimers Association Israel EMDA	A9		Alzheimer's Association of Trinidad and Tobago	A19
Alzheimer's Association Japan	A10		Alzheimer's Society	A20
Alzheimer's Association, Korea	A11			



Travel Information

Singapore is a cosmopolitan city state that is colourful and rich in the arts, architecture, entertainment, hospitality and culinary fare.

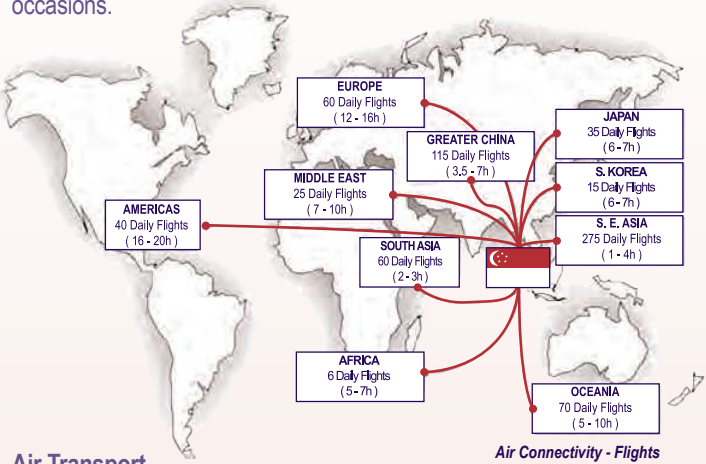
A bridge between the East and the West for centuries, Singapore is a vibrant melting pot of ideas, cultures and people. Local in its perspective but global in outlook, Singapore has evolved uniquely, where age-old traditions and cutting-edge innovations are celebrated, a place brimming with unbridled energy and bursting with exciting events.

Get ready to bring home a wonderful memory that's "Uniquely Singapore."

Visit: www.visitsingapore.com for more details.

Climate and Dress

Singapore has a mild tropical climate with abundant rainfall throughout the year with an average temperature of 28 degrees Celsius. Dress code is generally informal but formal wear will be required at some places or occasions.



Air Transport

Singapore's Changi International Airport is a premier international air hub and a crucial point on air traffic routes across the world. With over 4,200 weekly flights by more than 80 international airlines, Changi International Airport connects Singapore to over 190 cities in 59 countries around the world. With many low cost carriers serving the region, travelling to Singapore is indeed very affordable.

Safety

The World Competitiveness Yearbook (WCY) identified Singapore as the most politically stable country in Asia. In research done by Mercer Human Resource Consulting in 2003, Singapore was ranked second in personal safety among the world's top 50 cities.

Credit Card and Currency

Major credit cards and charge cards such as American Express, Diners, MasterCard, Visa are acceptable at most establishments. The currency is the Singapore Dollar (SGD). Banks and exchange bureaus are located in major shopping centres and airports to facilitate currency exchange.

Tipping

Tipping is officially discouraged in Singapore. Most hotels and restaurants levy a 10% service charge on their bills.

Electricity

Singapore's voltage is 220-240AC, 50 Hertz. Most hotels can provide a transformer to convert electrical 110-120AC, 60 Hertz.

Time Difference

Singapore Time is 8 hours ahead of GMT.

Goods and Services Tax

A 7% Goods and Services Tax (GST) is levied on most goods and services imported into Singapore. In line with most other countries, Singapore prohibits the entry of some items, while others are subject to

Smoking

Smoking is not permitted in public service vehicles, museums, libraries, lifts, theatres, cinemas, air-conditioned restaurants, non-air conditioned eating houses, food centres, hair salons, supermarkets, department stores and government offices. In line with efforts to improve the nightlife experience for all, there are smoking restrictions on entertainment outlets. Smoking is no longer allowed in all pubs, discos, karaoke bars and nightspots, unless within approved smoking rooms or smoking corners. Offenders can be fined up to SGD1,000.

Public Transport

Transportation is comprehensive and inexpensive in Singapore. An efficient public transportation network of taxis, buses and the modern Mass Rapid Transit (MRT) rail system ensures that getting from point A to point B is hassle-free and extremely affordable.

The following modes of travel are available:

○ Buses

- A fleet of more than 3,500 fully air-conditioned buses operate daily from 0530 hours till 2300 hours. Fares for buses are as low as SGD1.00 to about SGD2.00 depending on the fare stages.
- The Singapore Trolley bus service runs between the Orchard Road shopping belt, the colonial district, the Singapore River, Raffles Hotel, Clarke Quay, Marina and Suntec City. The fares are SGD15.00 per adult and SGD10.00 per child per day (unlimited rides) and include a free riverboat tour.

○ Mass Rapid Transit (MRT)

- The air-conditioned passenger train service has stations all over the city. Trains operate from 0600 hours to 2330 hours at frequencies of 3 to 8 minutes (during peak hours) and 10 to 15 minutes (during off-peak hours). Travelling by MRT is very affordable, with rides ranging from SGD1.00 upwards.
- Stored value cards are used for travelling on MRT trains. There is a host of ticketing schemes based on stored value smartcards to suit a wide variety of needs. From standard tickets for one-time travel to tourist passes, and student and senior citizen concession passes. Stored value cards can be purchased from the TransitLink Ticket Office located at selected MRT stations and standard value tickets may be purchased from the General Ticketing Machines (GTMs) located at all MRT stations.

○ Taxis

- Singapore has more than 24,000 air-conditioned cabs, including the unique London cabs that are operated by eight different companies namely, CityCab, Comfort, SMRT, Premier, SMART, SilverCab, Trans Cab and TIBS. They can be flagged down 24 hours a day on most roads. Well-marked taxi stands are available outside most major shopping centres and hotels. Current rates and surcharges applicable are obtainable at tourist information.

Shopping

The famous Singapore shopping scene features mall after mall of glitzy clothes, shoes, electronic goods, furniture, rugs, cosmetics, etc. There's always a big sale going on somewhere, the people all around you are laden with shopping bags - it's impossible not to join in the fun. Shops are mostly open from 1000 hours to 2130 hours daily.

Language

The official commercial language of Singapore is English.

Visa Requirements

Nationals of a large majority of countries do not require visas for social visits of 30 days' duration provided they are in possession of recognised valid travel documents, adequate funds and a return or onwards ticket.

For more information on visa application and requirements, visit: http://ica.gov.sg/services_centre_overview.aspx?pageid=254&secid=17



City Sights

Singapore offers various attractions, from nature parks, offshore islands, famous landmarks and museums to places of worship. There are different tours you can sign-up for to discover the different facets of the city-state.

City Tour

Visit the “colonial heart” for a view of the **Padang, Cricket Club, historic Parliament House, Supreme Court** and **City Hall**. Have a look inside **Thian Hock Keng Temple**, one of Singapore's oldest Buddhist-Taoist temples, before driving past **Chinatown**, and lastly, **Little India**.

East Coast & Changi

Soak in the rich cultural heritage of the Malays at **Malay Ethnic Area**. Allow our guide to recount stories of the collective spirit that rose through the darkest times of World War II as you proceed with your tour of **Changi Chapel & Museum**. A drive through the rustic and laid-back **Changi Village** gives you a chance to see the relaxing side of Singapore and provides a contrast to your final stop at **Tampines New Town**, a typical heartland township of present day Singapore.

Jurong Bird Park

Jurong Bird Park is home to over 8,000 birds, which is more than 6,000 species. A Panorail ride brings you to a tropical world of jungle mists at the Waterfall Aviary. You'll enjoy the spectacular Penguin Exhibit and All-Star Bird Show.

Founding Footsteps of Raffles

This tour starts from where it all began – at **Raffles Landing Site**, where Sir Stamford Raffles is believed to have first stepped ashore in 1819, and then to an Exhibition that traces the history of the hive of activities for high-society in the 1800s. Stop at **Raffles Hotel** for Afternoon Tea, then embark on a bumboat cruise to **Clarke Quay**, where the **Pewter Gallery** uncovers the history of pewter and the role of tin in the development of Singapore as a trading port.

The Original Singapore Walks

The Original Singapore Walks is no typical sightseeing tour. There are eight walks to choose from and each walk shows a different side of Singapore. You could be led to reputedly haunted nooks and crannies in Kampong Glam, a war cemetery in Kranji or the red-light district in Chinatown, among others. The walking tours bring to life the colourful characters that once populated these historical districts.

Morning At The Zoo (Jungle Breakfast Option)

A haven to over 3,600 mammals, birds, reptiles and even some endangered species. Take a tram ride around the zoo and you'll be impressed by the natural habitat. Don't miss the chance to have breakfast with the magnificent Orang Utan, Otter and reticulated Python.

Voted Singapore Tourism Board Leisure Attraction of the Year 2001, 2002 & 2005

Go Racing

Head to where the action is! Nothing beats watching a thrilling horse race at the Singapore Turf Club. The 81.2 hectares **Singapore Racecourse** ranks among the premier racecourses and boasts some “firsts” such as the racetrack that features a mixture of El Toro-Zoysia and local Bermuda Couch grass and a glass-sided horsewalk which runs through the grandstand and connects the parade ring to the racetracks. Racing is conducted in the evenings under spectacular floodlights on Friday, and in the afternoons on Saturday and Sunday.

Night Out In Chinatown (Dinner)

Discover the rich historical beginnings at **Chinatown Heritage Centre** where it takes you into the lives of early Chinese immigrants. At the **Night Market**, wander along the narrow lanes and test your bargaining skills with street vendors. Then hop onto a **Trishaw** for a ride to **Clarke Quay**, and then a **Bumboat** cruise along the **Singapore River**.

Night Safari (Dinner Option)

The world's first **Night Safari** covers 40 hectares of secondary jungle, with 1,200 nocturnal animals roaming the land. A tram ride will take you round the East and West loop passing by a large reservoir, weaving through different habitats designed specifically to replicate the natural environment from the Himalayan Foothills to the Southeast Asian Rainforest and Indian Subcontinent. On completion of the tram ride, your tour guide will lead you on a walking trail where you will be able to view some animals up close and personal.

Voted Singapore Tourism Board Leisure Attraction of the Year 2000, 2003 & 2004

Peranakan Trail (Food Tasting)

Amble along the **Spice Garden** and uncover the intricacies of spices and herbs that go into Peranakan cooking. Admire a fascinating display of Peranakan costumes, embroidery, beadwork and more. Adventure into **Katong** and **Joo Chiat** areas that showcase rich and baroque architecture that dates back to the twenties and thirties. A sampling of **Nonya Delicacies** completes the tour.

Singapore By Night (Dinner)

Enjoy dining by the river, Singaporean's latest sunset haunt. Enroute to the world's largest fountain, take in the beautiful sight of the central business district via **Benjamin Sheares Bridge**. Next, advance to **Bugis Street** or other night bazaars during the festive period, where our guide will take you for a stroll at the night market or 'pasar malam' where you may chance upon bargains you could never imagine. Our last stop for the evening is at **Raffles Hotel** for a taste of Singapore's very own concoction the 'Singapore Sling', included for those who have booked the tour with this option. As the saying goes, 'If you have not been to Raffles, you have not been to Singapore'.

Uniquely Singapore Shop and Eat Tour Heartlands Trail

Discover how Singaporeans truly shop and eat at **Toa Payoh** – the most colourful suburban town, and **Holland Village** – a bohemian enclave. You'll be pleasantly surprised by the best local offerings in town from the arts, to carpets and antiques, to fashion apparel and accessories. Tuck into delicious local dishes such as Singapore's famous **laksa** (rice noodles and seafood in spicy coconut milk gravy), and **nasi lemak** (fragrant coconut rice with spicy sambal and condiments like fried fish, eggs and cucumber) at a traditional coffee shop. It's an experience you can't miss out on!

Feng Shui Tour

An interesting tour that introduces you to the ancient Chinese art of Feng Shui or geomancy. The art harnesses the powers of nature to promote your business and general well-being. In the tour, you'll learn how Feng Shui has played a part in the design and shaping of some prominent buildings in Singapore. The excursion culminates at the world's largest fountain at Suntec City, where the guide will regale you with tales of people who have found success after visiting the fountain.



City Sights

Afternoon Till Sunset At Sentosa (Dinner Option)

Begin with a cable car ride from **Mount Faber** into **Sentosa**, a resort island of peace and tranquility. You will soon be fascinated by the adorable pink dolphins performing their natural antics at the **Dolphin Lagoon**. **The Underwater World**, on the other hand, has an 80-metre transparent acrylic tunnel which allows you to view over 2,500 sea creatures in close proximity. After dinner, head for **Songs of the Sea** – Singapore's multi-sensory extravaganza – watch a world-class water show comprising dramatic effects, water jet, lasers, bursts of fire and foot-tapping music set in the deep waters.

Round Island (Lunch)

Gain an interesting insight into Chinese mythology characters, legends and folklore at **Haw Par Villa**. Then, continue your journey northwards to the **Kranji War Memorial**. Unveiled in 1957, the memorial commemorates over 20,000 men and women who gave their lives for freedom in World War II. Lunch at a local restaurant before proceeding to **Bright Hill Temple**, a famous Chinese ancestral worship place. Drive past the Johore Battery and view a replica 15-inch 'Monster Gun', the largest to be installed outside Britain during World War II. The final stop is the **Changi Chapel & Museum**. The museum focuses on the memories and lives of both POWs and civilian internees who survived the Japanese occupation while the **Changi Chapel** is a symbolic replica of the original chapel found in the Changi Prison.

Golfing

With perfect weather nearly all year round, Singapore is the ideal destination for golfers from all over the world to tee off. International events such as the Caltex Singapore Masters, are held here. With the superb golfing facilities and an extensive selection of clubs - some of which have signature courses of their own - you'll be spoiled for choice on our beautiful fairways. You need not worry about your handicap either, as most courses have multiple tee off positions. You can play golf at almost anytime of the day - and night! - as some courses are open for play in the evenings. This means you can enjoy the courses at a wide variety of clubs, regardless of your skill level.

Ducktours & HiPPOtours

Ride along with the Singapore Ducktours as they bring you on the Singapore Heritage Tour around the **Civic** and **Marina District** before plunging into the Singapore River onboard an amphibious craft. The LARC (Light Amphibious Resupply Craft) was first used as a military vehicle during WWII for the transportation of cargo. Today, the half-boat, half-truck vehicle is restored for visitors to experience the unique journey from land to sea as they take in the many sights around the area. While the 'duck' tours have been around in the US, UK and Australia, Singapore is the first in Asia to have this. Hop onto 'duck' and expect 60 minutes of wacky fun and waddling entertainment as you learn offbeat facts about Singapore from the entertainer-cum-tour-guide.

HiPPOtours is a double-decker open-top bus introduced in June 2004. It is a hop-on and off, topless HiPPOtour that will allow you to explore at your own pace and indulge in the things that you love. It is a unique way of city sightseeing and you can choose either the Sunny HiPPO-Day City Sightseeing or the Moonlight HiPPO – Night City Sightseeing.

Cruises

For a holiday with a touch of luxury, try a cruise. Singapore is the cruise hub in the Asia-Pacific. Choose from a diverse selection of cruise operators, both local and international, offering luxury cruises of discovery to nearby tropical destinations like the Malaysian resort islands of **Tioman, Penang** and **Langkawi**. Head off to the nearby Indonesian islands of **Batam** and **Bintan** and lie on idyllic beaches and dine on delicious seafood. Exotic destinations like **Phuket** and **Malacca** are also a short sail away.

Harbour & River Cruises

Cruises around the Southern islands of **Kusu, St. John's, Sisters** and **Lazarus** are offered by a number of tour operators. These cruises include meals like lunch, high tea and romantic dinners for lovebirds.



OUTSIDE OF SINGAPORE

Johore Bahru

Drive across the causeway linking Singapore and Malaysia. After immigration, the tour of Johore Bahru commences with a visit to a **Handicraft Centre** to observe batik painting. This is followed by a visit to **Sultan Abu Bakar Mosque** before arriving at a local **Kampung**. The final stop will be at a Muslim Cemetery with a view of the exterior of **The Royal Mausoleum** before proceeding back to Singapore.

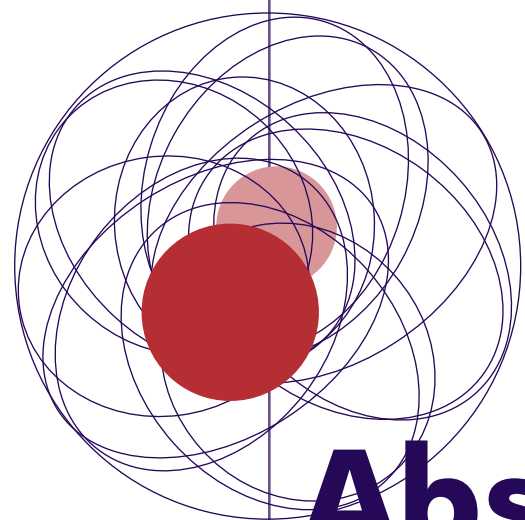
Malacca (Lunch)

Visit Malaysia's most historical city, which has seen the rise and fall of major empires that extended their influence to this region. The legacy of the Malay Sultanate, Portuguese, Dutch and British is eminent in Malacca's medieval charm, picturesque buildings, multi-racial population and narrow streets. This tour includes a visit to historic sites such as **St Paul's Hill** where St. Francis Xavier, was interned, **Cheng Hoon Teng Temple** – the oldest Chinese temple in Malaysia and **Porta De Santiago** – the Portuguese fortress.

Terms & Conditions apply. Detailed packages and prices are available for booking at the Tour Counter at the Ballroom Foyer, Level 2, Suntec Singapore.



Image courtesy of Singapore Tourism Board



Abstracts



Dear Friends and Colleagues,

On behalf of the Scientific Programme Committee, I welcome you to Singapore and to the 24th Conference of Alzheimer's Disease International. The theme "Dementia: Engaging Societies Around the World" highlights the global impact of dementia and calls for societies to respond and recognise dementia as a health priority.

The ADI's annual conference provides a unique opportunity for policy makers, scientists, clinicians, care professionals, family carers, volunteers and people with dementia to learn more about recent advances in Alzheimer's research, as well as share innovative ideas in the care of people with dementia. We believe that the conference will foster interaction and collaboration among clinicians, scientists, caregivers and people with dementia.

The scientific programme has been planned to provide a comprehensive and updated overview of dementia research and management. We have a faculty of distinguished international, regional and local speakers and are confident that the various keynote and parallel sessions will be stimulating and engaging.

We would like to thank all the speakers, international, regional and local for taking the time to attend the Conference and share their expertise with us. We would also like to thank the sponsors and exhibitors for their support in making this conference a success.

Thank you for coming to Singapore to attend the conference. We wish everyone an enjoyable and fruitful meeting.

Dr Li-Ling Ng
Chairperson, Scientific Programme Committee
24th Conference of Alzheimer's Disease International

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- Immediate publication on acceptance
- Inclusion on PubMed and PubMed Central



Keynote 1, 25 March 2009, Wednesday

Emeritus Professor Peter Baume
Professional Fellow UNSW, New South Wales, Australia

SOCIAL IMPACT OF DEMENTIA

There is an inevitable avalanche of dementia world wide coming in the next few years. We are ill-prepared for the increased numbers of sufferers, both in terms of institutions, places available for individuals and trained people.

We owe a great debt of gratitude to voluntary carers now looking after so many people. This is an opportunity to thank them.

Singapore is not immune from the epidemic. It, like other countries, is not ready.

Keynote 2, 26 March 2009, Thursday

Martin Prince
Institute of Psychiatry, King's College Hospital, London, UK

GLOBAL IMPACT OF DEMENTIA

The 10/66 Dementia Research Group (<http://www.alz.co.uk/1066>) refers to the 66% of people with dementia that live in developing countries and the less than one tenth of population-based research carried out in those settings. In the last 10 years, we have attempted to redress this imbalance through south-south and south-north research collaborations, working with Alzheimer's Disease International to provide an evidence-base to guide policy development. Thirty-seven publications have appeared in international and regional peer-reviewed journals.

- 1. Developing and validating dementia diagnostic procedures.** Our pilot studies in 26 centres in Latin America, Africa, India, Russia and China demonstrated the feasibility and validity of a one stage diagnosis for population-based research – '10/66 Dementia'.
 - 2. Dementia prevalence, incidence and risk factors.** The group has completed cross-sectional surveys of 1,500 to 3,000 over 65 year old residents in catchment areas in nine low and middle income countries (China, India, Nigeria, Cuba, Brazil, Dominican Republic, Venezuela, Mexico, and Peru), with three other studies still in the field (Argentina, Puerto Rico and South Africa). The 10/66 Dementia diagnosis has shown that the true prevalence of dementia may be much higher than previously estimated, particularly in least developed regions, where family members are less likely to report problems even in the presence of marked memory impairment. Dementia is consistently, independently associated with anaemia, shorter leg length and smaller skull circumference, older age, lower education and family history of dementia. 10/66 incidence studies are now underway in seven Latin American countries and in China, to study risk factors for dementia and stroke and causes of death. Depression among older people was consistently associated with dementia, physical illness, disability, less education and less social contact. Associations with poverty were less consistent. However, the prevalence of depression was high in centres with limited social protection for older people (low pension coverage, high reliance on family transfers, high prevalence of food insecurity).
 - 3. The impact of dementia.** Dementia is often linked to other chronic physical and mental health conditions. However, dementia is overwhelmingly the most important contributor to needs for care and caregiver strain in all centres. Caregiver strain is as evident as in developed countries, despite extended family networks. Caregivers often cut back on work to care. Behavioural symptoms are common, lead to stigma and blame, and caregiver distress. There is a lack of awareness, health services are unresponsive, and many families do not seek, let alone receive help.
 - 4. Service development and evaluation.** Early on, we showed that community health workers in Brazil and India could be trained to identify dementia in the community. We developed a low-level, brief caregiver education and training intervention 'Helping Carers to Care', which is now being evaluated in randomised trials in Russia, India, China and four Latin America centres. Encouraging early findings will be presented. Scaling up services for people with dementia will need non-specialists to be involved, particularly in primary care. Guidelines and packages of care are currently being developed by the WHO MHGAP programme, and for a series to be published in PLOS Medicine later this year.
- Conclusions:** Earlier studies may have underestimated the prevalence of dementia in regions with low awareness of this emerging public health problem. Dementia is particularly burdensome because of its strong link to disability and dependency. Primary healthcare services, and governments, have, so far, failed to respond to families' complex needs for long-term support and advice. Attention needs to be directed towards the development of age-appropriate healthcare, a long-term care policy, and mechanisms for ensuring, as a right, the social protection of older persons. 2009 will see the launch, by ADI, of the first World Alzheimer Report alerting governments, policymakers and donors of the urgent need to give priority to these actions.

Funders: The Wellcome Trust, the US Alzheimer's Association, the World Health Organisation



Keynote 3, 26 March 2009, Thursday

Richard Taylor
Former Member of the Board of the Houston and Southeast Texas Alzheimer's Association, USA

ENABLING AND EMPOWERING PEOPLE WITH DEMENTIA AS VIEWED FROM THE INSIDE OUT

Before organisations, professionals and caregivers rush off to start caring for and supporting individuals living with the symptoms of cognitive decline shouldn't they first spend some time listening to and talking with the individuals in whose name and for whose benefits they are about to provide support? What are the unintended consequences of some of the supportive behaviours that are common with many caregivers? What's it really like to be on the receiving end of sincerely delivered support services, most of which I have not asked for nor do I believe I really need? How can people with dementia be supported in ways that enable them to live in today; enable them to be all they can be; enable them to act and feel like whole human beings rather than as half empty vessels that have sprung a (dementia) leak? And what about individuals deep into cognitive decline who have for all practical purposes "given up?" How can they be "reabled" to be all they can and should be? Richard Taylor, PhD, a form psychologist and a person living for the past six years with the diagnosis of dementia, probably of the Alzheimer's type answers these questions from his own experiences and point of view. Alzheimer's, enabling, disabling and reabling - as lived from the inside out.

Keynote 3, 26 March 2009, Thursday

Tan Ching Hong
School of Health Sciences, Nanyang Polytechnic, Singapore

EXPERIENCES OF THE CARE GIVERS

Dementia raises crucial questions about the 'person'. It is not unusual to hear people commenting that a parent or spouse with dementia is a different 'person' from the one they knew. Some say that in severe dementia the 'person' and the 'self' are lost. Does dementia destroy the 'person' and the 'self' as it destroys the brain? This paper will focus on the concept of personhood, the ways in which dementia undermines personhood, and the approaches of care based on personal reflections in caring for a loved one with dementia.

Keynote 3, 26 March 2009, Thursday

Peter Rabins
Department of Psychiatry, Johns Hopkins School of Medicine, Maryland, USA

QUALITY OF LIFE IN DEMENTIA

Abstract unavailable at time of print

Keynote 4, 27 March 2009, Friday

Henry Brodaty
Dementia Collaborative Research Centre, University of New South Wales, New South Wales, Australia

CAN YOUR LIFESTYLE PREVENT ALZHEIMER'S DISEASE?

It's a tantalising tale but is it true? Can we really eat, drink, exercise, socialise and think our way out of Alzheimer's way? Are vitamins, Ginkgo, Brahmi, fruit/vegetable juice and red wine the elixirs for youthful brains? Genes are important but so is the environment. Epidemiological studies report protective effects for education, exercise, mental activities, fluids rich in anti-oxidants and polyphenols such as fruit or vegetable juice, wine and (green) tea, fish, long-term use of certain medications - non-steroidal anti-inflammatory drugs, anti-cholesterol drugs and hormone replacement therapy. High blood pressure, diabetes (type II), obesity, high fat diets, high cholesterol, head injury, loneliness, lack of education, lack of exercise, depression, low birth weight for gestational age, and smaller head circumference have been found to be risk factors.

These findings are suggestive but not proof. In a randomised controlled trial, *hormone* replacement therapy in women aged 65+ was found to be a *risk factor* for AD. Anti-inflammatory drugs, vitamin E and Ginkgo biloba have been found to have no significant preventative effect. Brahmi has not been adequately tested. However, a randomised controlled trial of walking three times a week demonstrated improvement of cognition over 12 months compared to controls.

Bewildered consumers should note: (1) there is no absolute prevention against Alzheimer's disease; (2) prevention often means disease postponement rather than eradication; (3) until reports are confirmed by several groups around the world, consumers should be wary of media hyperbole; and (4) even where a risk or protective factor is significant, this only changes the risk slightly for individuals.

Future research will focus on more complex questions: gene-environment interactions and dose effects. Meanwhile, the best evidence for prevention is regular physical exercise, mental activity and blood pressure control. In general what is good for your heart is good for your brain.



Keynote 4, 27 March 2009, Friday

Bengt Winblad
NVS KI-ADRC, Karolinska Institutet, Stockholm, Sweden

EMERGING TREATMENT FOR ALZHEIMER'S DISEASE

Elderly patients constitute an escalating proportion of the population resulting in an increased prevalence of Alzheimer Disease (AD). Treatment regimens throughout the different stages of dementia vary, with objectives broadening as the disease progresses and patients experience a deterioration of their symptoms. In the early stages of AD, an active patient role is encouraged and residual abilities are important. In severe dementia, in addition to treating the patient, means of reducing the burden on both the caregiver and health system must be considered. The pharmacoeconomic aspects of dementia are important. The cost of treating AD is high and the financial burden increases as the disease progresses.

Acetylcholinesterase inhibitors have been approved for treatment of mild to moderate AD. Two studies have been positive in moderately severe and severe AD. The NMDA-antagonist memantine has shown to be effective in moderate to severe AD. A pharmacoeconomic study showed that treatment with memantine reduced caregiver time and delayed institutionalisation, ie was cost effective. Furthermore a study in moderately severe and severe AD, with the combination donepezil and memantine, was very positive. Memantine is in Europe and US approved for moderate to severe AD, and donepezil is in US approved also for severe AD.

Rivastigmine patches were shown to be as effective as capsules but with only one-third of gastrointestinal side effects and are now approved worldwide. Patches were also shown to be preferred by the caregivers.

A new approach targeting the mitochondrial function has been tested in a Russian study with an antihistaminic drug (Dimebon) with very positive outcome. A confirmatory study is currently being performed in a number of European countries, Russia, Chile and US. Basic research studies to reveal the underlying mechanisms of action are ongoing.

Recent years, focus has more and more been put on early diagnosis and treatment. New biomarkers have been developed and are under validation. Biomarkers in CSF, eg Aβ40, Aβ42, tau and p-tau, have been established to support the clinical diagnosis and also as a marker to follow treatment effects for disease-modifying drugs. Several ligands are being developed for PET imaging of Aβ, so far PET-PIB is the most established. These new biomarkers are used, eg, to evaluate the effect of passive and active "vaccination" studies currently being performed.

Keynote 5, 27 March 2009, Friday

Jiska Cohen-Mansfield
Tel-Aviv University Herczeg Institute on Aging and Faculty of Medicine, Tel Aviv, Israel;
George Washington University Medical Center and School of Public Health,
Washington DC, USA

CREATIVE WAYS IN CARING

Superior care for persons with dementia involves an understanding of their basic needs, and assuring the preemptive fulfillment of these needs. Such needs include meaningful occupation and stimulation, social contact, and absence of discomfort. However, in order for caregivers to adequately provide this quality of care, they too must be cared for. This presentation will focus on two innovative models in caring: a systematic analysis of the engagement of persons with dementia with stimuli, and managerial flexibility in caring for nursing home residents and staff. The first section involves development of a model of engagement of persons with dementia based on a study in which 193 nursing home residents with dementia were presented, at random, with 25 stimuli. These differed on dimensions such as their social value, their manipulability, or their similarity to an occupational role. The results show the importance of personal, environmental and stimulus attributes in determining engagement with stimuli. The second innovative model is based on the experiences of the ADARDS nursing home in Tasmania, which demonstrate how it is possible to increase flexibility in procedures for staff and residents in nursing homes to enhance the well being of both parties.

Keynote 5, 27 March 2009, Friday

Chris Nugent
Computer Science Research Institute, Faculty of Computing and Engineering,

CREATIVE TECHNOLOGY IN CARING FOR PEOPLE WITH DEMENTIA

As technology evolves and becomes increasingly powerful, more portable and also more affordable the opportunity for it to be used to support both people with dementia and their carers also increases. Coupled with the evolution of technology is the rapid evolution of the underpinning communication infrastructure. Modern day communications now provide flexible and cost effective ways for people to communicate with each other in addition to providing access to information within normal and working living environments in addition to offering the same services whilst on the move.

This presentation will present the details of ongoing work aiming to map technological features and capabilities on to a form of services which can be created to address users' perceived needs and hence establish creative environments within which care may be delivered, monitored and managed. More specifically a number of case studies will be presented which will demonstrate the potential application of mobile phone technology, touch screen interfaces and sensorised home environments.

Results from two evaluations of new technological solutions will also be presented. This will include a discussion of the experiences of people with dementia and also their carers along with methodological details of how this information can be used to inform the redesign of subsequent solutions.

As a conclusion the challenges of introducing technology into both the homes and lives of people with dementia and their carers will be discussed. The discussion will largely focus on two particular points; firstly, how to deal with the practical challenges of the reliability and validity of the technology and secondly the challenges associated with the usability of the technology itself from a user's perspective.

Keynote 5, 27 March 2009, Friday

Hilary Lee
The Society for the Arts in Dementia Care (Australia) Inc, Perth, Western Australia, Australia

THE ARTS IN DEMENTIA

As the Chair of the Society for the Arts in Dementia Care in Australia, Hilary Lee will give an insight into unique applications of the creative arts in dementia from around the world and describe some of the fascinating projects she has personally been involved with in Australia. Hilary will introduce the audience to the unlimited possibilities that the arts offer in dementia care and show how the creative arts enable people with dementia to express their inner self and provide meaning in their life. In this presentation CEO's and managers involved in aged care organisations will learn what to look for when they employ people to facilitate arts projects in their facilities. Hilary will bring the arts in dementia to life through case studies, images and footage.



Keynote 6, 28 March 2009, Saturday

Chin Jing Jih
Department of Geriatric Medicine, Tan Tock Seng Hospital, Singapore
Centre for Biomedical Ethics, National University of Singapore

ADVANCE DIRECTIVES – ETHICAL DILEMMAS IN DEMENTIA CARE

Advance directives are now widely recognised in many societies as an acceptable ethical and legal framework to extend respect for a competent person's autonomy beyond the point when mental capacity is lost. However, not all agree on the appropriateness of applying what Ronald Dworkin calls "precedent autonomy" in patients with dementia, particularly those with in severe stages. Reservations have been expressed regarding the validity of living wills in patients where there is an obvious discontinuity of interests, and of personal identity, between the time a person executes an advance directive and the time when the patient has become severely impaired. Such advance instructions may even contradict the current overt wishes of the patient. Surrogate decision makers who adopt a subjective standard of substituted judgement when deciding for such patients also struggle with having to interpret and execute a "past" preference expressed by the pre-dementia person which is no longer in the best interest of the "present" demented person. But despite these criticisms, is there a better alternative? Should not the precedent choice, made by a mentally competent person, prevail over the choice of the "new but impaired self"? Is the execution of a precedent choice *the* ethically valid way of respecting a mentally incompetent person robbed of competency and hence autonomy? This paper reviews the arguments raised in support for either perspective and explores possibilities for a reasonable approach to this challenging ethical dilemma.

Keynote 6, 28 March 2009, Saturday

Helen Chiu
Department of Psychiatry, The Chinese University of Hong Kong, Hong Kong SAR

QUALITY CARE IN DEMENTIA – FOCUS ON COLLABORATION

Provision of quality care to people with dementia requires the involvement of multiple stakeholders. These include: persons with dementia, caregivers, health care professionals, the community partners and policy makers. Indeed, collaboration across different health care disciplines, various stakeholders, and different organisations is the key to successful holistic care for people with dementia. This presentation will focus on 3 aspects: collaboration in services, collaboration between organisations and collaboration in research.

In terms of services for people with dementia, evidence-based interventions for care of people with dementia in the community will be presented. The importance of collaboration between primary care, specialist care, allied health professionals, social services and community partners will be highlighted to address how to optimise models of care.

One of the major roles of Organisational Collaboration is in Advocacy. ADI is an organisation that is well-positioned to collaborate with its member associations as well as other organisations to improve dementia care in different countries in the world. Working with other international organisations including the WHO, International Psychogeriatric Association, World Psychiatric Association, etc. will enhance the Advocacy efforts. Some specific examples will be used to illustrate this.

Collaboration in research will be discussed briefly, in particular its impact on dementia care in developing countries.

Keynote 6, 28 March 2009, Saturday

Jenny Abbey
South Australian Guardianship Board, Adelaide, Australia

QUALITY END OF LIFE CARE

There is now a slowly-growing readiness to accept that the taboo subject of end-of-life care for people with dementia needs to be debated and researched, but there is still a dearth of evidenced-based information to guide care staff.

Without evidenced-based information conflict often arises among staff members themselves and/or with families, all of whom may find trying to manage a complex, idiosyncratic and often disruptive condition emotionally taxing. Families have the added difficulty of acting in an alien environment about which they may have little knowledge, where their initial experience has too often been a mix of apprehension and feeling like intruders.

Prognosis is at the core of many problems in the provision of quality end-of-life care for people with dementia. These problems are often compounded by the absence of a clearly understood process for sharing information and confronting issues, a process that can be initiated or resumed by any party who sees the need to do so.

This paper will outline some practical steps for dealing with a range of potential areas of conflict that are commonly found in aged care facilities serving people in the late stages of dementia and their families. The range of issues to be touched on includes hard questions about nutrition and hydration; assessing pain; body breakdown; difficult, out-of-character behaviours; and the perceived loss of personhood.



Oral Communications



Parallel Sessions

26 March 2009, Thursday
1030 hrs – 1200 hrs
Ballroom 2

SUPPORT FOR FAMILY CAREGIVERS

TITLE TO BE ADVISED
PETER RABINS
Department of Psychiatry, John Hopkins School of Medicine, Maryland, USA

Abstract unavailable at time of print

SUP-PS07
COUNSELLING SPOUSES OF PATIENTS WITH ALZHEIMER'S DISEASE AS ADD-ON TO DONEPEZIL TREATMENT IN THREE COUNTRIES: EFFECTS ON TIME TO NURSING HOME ADMISSION AND DEATH IN THE PATIENTS
HENRY BRODATY¹, MARY MITTELMAN², LOUISA GIBSON³, KATRIN SEEHER³, ALISTAIR BURNS⁴
Primary Dementia Collaborative Research Centre, University of New South Wales, Sydney, Australia¹; School of Medicine, New York University, New York City, USA²; Academic Department for Old Age Psychiatry, Prince of Wales Hospital, Randwick, Australia³; Psychiatric Research Group, University of Manchester, Manchester, UK⁴

Purpose : The aim of the study was to investigate whether additional counselling for caregivers to donepezil treatment for patients with Alzheimer's disease (AD) delays nursing home (NH) admission or death of patients in three countries.
Method : 158 persons with AD and their spouses were randomly assigned to donepezil + usual care or donepezil + caregiver counselling in Australia, United Kingdom and United States. The counselling intervention consisted of five sessions of individual and family counselling over 3 months as well as ad hoc counselling upon request. All couples were followed for up to 8.5 years (M = 5.4 years) and dates of NH placement and death were recorded. Cox Proportional Hazard models were conducted using time from baseline to institutionalisation or death as dependent variables.
Result : There were no differences in NH placement or mortality between the treatment and control groups. A significant difference between countries was observed, with Australian patients being at a higher risk for NH admission than both US (HR = 4.61, 95%CI: 2.33-9.09, p < 0.001) and UK (HR = 0.38, 95%CI: 0.20 – 0.71, p = 0.003) patients. Younger age (HR = 0.95, 95%CI: 0.91-0.98, p = 0.004), more ADL impairment at baseline (HR = 0.95, 95%CI: 0.92-0.98, p < 0.001), more behavioural symptoms at baseline (HR = 1.04, 95%CI: 1.01-1.07, p = 0.009) and less mastery in the caregiver (HR = 1.08, 95%CI: 1.003-1.16, p = 0.04) also predicted NH placement. Behavioural symptoms in the patients did not change significantly throughout the study.
Conclusion : Earlier NH admission of Australian than UK and US subjects may be due to less mastery in Australian caregivers at baseline and differences in health care and NH systems resulting in varying availability and affordability. If these could be controlled for, caregiver counselling may still be beneficial in delaying NH admission.

SUP-PS06
MOBILE DEMENTIA RESPITE TEAMS: OVERCOMING THE TYRANNY OF DISTANCE
VAL MEREDITH¹
Regional Services, Alzheimers Australia WA, Perth, Australia¹

Purpose : To demonstrate how Alzheimer's Australia WA provides quality dementia-specific respite services to our regional clients. Within our vast state of WA we operate four regional offices, each situated within 700km from our Perth based office and located within :
1. The blue coastal city of Mandurah, SW of Perth;
2. The green pastures of the great southern region, SE of Perth;
3. The red dust of the Goldfields, E of Perth;
4. The yellow fields of the Wheatbelt, NE of Perth.
Method : In order to objectively determine the effectiveness of our regional services, carer satisfaction surveys are distributed every twelve months from each regional office. These questionnaires are designed to elicit quantitative and qualitative responses from carers of people with dementia to determine their level of satisfaction with the services we provide.
Result : Thus far returned questionnaires have demonstrated a high level of satisfaction with services provided from our regional offices. The presentation will incorporate a selection of qualitative statements that will reflect positive statements about the quality of services we provide, and also statements that demonstrate areas in which we can improve, or about issues with which we should be concerned.
Conclusion : Despite the tyranny of distance and isolation from our Perth office, client satisfaction with our services has remained constantly high over the last five years. With this in mind, the presentation will explore and discuss:
• How our regional offices operate, noting that each region comes with its own unique set of issues
• How our quantitative responses demonstrate that the high level of client satisfaction is not just because carers are "desperate" for any respite services they can access
• How we can continue to improve our services in order to meet the changing needs of people living with dementia, now and in the future.



26 March 2009, Thursday
1030 hrs – 1200 hrs
Ballroom 3

YOUNGER ONSET DEMENTIA

THE PROGRESSION CONTINUES – MOVING FROM EARLY-ONSET, EARLY-STAGE-TO-JUST PAST EARLY-ONSET, LATE-STAGE-EARLY-STAGE

RICHARD TAYLOR

Former Member of the Board of the Houston and Southeast Texas Alzheimer's Association, USA

Six years ago I was the youngest person in the room filled with folks who were labeled as having dementia, probably of the Alzheimer's Type and in the early stage of the disease process. Today I am likely be to the oldest person in the room when it is filled with early-on-set early-stage diagnosed individuals. What have I experienced/thought about/learned in six years of living with this diagnosis? How have I changed by myself? How has the disease changed me? How have others imposed changes on me? What have I learned that I wish I knew the day after I was diagnosed, but instead had to learn from my own life experiences? What have I had to learn "the hard way?" What can caregivers, professionals and persons living with an early stage, early on set diagnosis discover from my mistakes and successes in living with early on set and early stage declining cognitive functions, that will make it easier for them to understand, appreciate, treat, support and/or live with Alzheimer's?

WHAT IS THE STATE OF PLAY FOR YOUNGER ONSET DEMENTIA RESEARCH?

BRIAN DRAPER¹, ADRIENNE WITALL²

Academic Department for Old Age Psychiatry, Prince of Wales Hospital, Randwick, Australia¹; School of Psychiatry/Dementia Collaborative Research Centre, University of New South Wales, Randwick, Australia²

Purpose : Dementia can occur at any age. Dementia in younger people (onset <65 years) is unexpected, distressing and can have psychosocial and financial consequences for the patient and family. Less common than late onset dementia, it is associated with qualitatively different issues. Younger patients with dementia have very different needs to people with the late onset form and do not fit in with mainstream dementia services geared towards the elderly population. Anecdotally, the diagnosis of younger onset dementia is distressing for the person and their family. Dementia in younger people is a serious medical and social issue however there is little research about this group.

Method : Research on younger onset dementia was systematically reviewed. Search terms included younger onset dementia, early onset dementia and presenile dementia across the areas of burden, service provision, and the behavioural and psychological symptoms of dementia (BPSD).

Result : Very few studies, including one pilot in Australia, have investigated the epidemiology of younger onset dementia. Carers for people with younger onset dementia report high levels of distress and burden, which is made worse by the lack of age-appropriate services. People with YOD have high rates of behavioural disturbance and this can be the presenting symptom. BPSD contributes to stress and burden experienced by carers. Younger onset dementia may be a risk factor for suicidal ideation and behaviour and family members may be at an increased risk of depression.

Conclusion : Planning on how best to help people with YOD and their families is hampered by lack of prevalence estimates, poor understanding of burden and lack of information regarding pathways to care, service use and needs. Research needs to be performed that targets these areas.

GETTING DEMENTIA OUT OF THE CLOSET

GLENN REES

Alzheimer's Australia, ACT, Australia

Purpose : Alzheimer's organisations have thought primarily in terms of awareness campaigns and information to break down the stigma and social isolation that attaches to dementia. These are important strategies and there is good evidence to support them. But other more innovative approaches are needed to make the point that life does not stop with a diagnosis of dementia. Important strategies include promoting social engagement as part of activities and service provision, empowering people with dementia and their family carers through Consumer Directed Care, development of assistive technology that helps people with dementia to walk safely and a symbol for cognitive impairment that would be used to ensure that people in hospital receive appropriate care or to indicate on the wall of a building that service staff in key organisations such as banks and social security agencies are trained to understand the issues that people with dementia face.

Method : Oral presentation with Powerpoint.

Result : To promote more innovative thinking about getting the idea across to the wider community that life goes on after a diagnosis of dementia. More than information and media activities are necessary to change community attitudes - rather there is a need to engage with people with dementia in the life of the community.

Conclusion : Promote the notion that a symbol for cognitive impairment might be considered for adoption at the international level as a concept.



26 March 2009, Thursday
1030 hrs – 1200 hrs
Room 325

CROSS-CULTURAL ISSUES IN DEMENTIA CARE

CRC-PS07

ALZHEIMER'S DISEASE INTERNATIONAL'S GLOBAL SURVEY OF DEMENTIA CARERS – SINGAPORE'S PERSPECTIVE

DONALD YEO¹, THERESA LEE¹, NG LI-LING¹, SENG BOON KHENG¹, LUO NAN², JUNE LIM¹, LEE SOAK MUN¹, CHIONH HUI LING², JENNY GOH¹, PHILIP YAP¹
Alzheimer's Association of Singapore, Singapore¹; Nursing, Alexandra Hospital, Singapore²; Community Occupational and Family Medicine, Yong Loo Lin School of Medicine, National University of Singapore, Singapore³

Purpose : Alzheimer's Disease International (ADI) recently commissioned a global survey of persons with dementia (PWD) and their carers in Europe, North America and Brazil. The survey focused on the following areas: 1) Source of dementia information; 2) Medication; 3) Awareness AD associations and use of dementia services; 4) Attitude to living with dementia. This study aimed to profile family carers of PWD in Singapore by adopting the content of the ADI survey.

Method : Family carers were recruited from the AD Association of Singapore as well as the geriatric clinic of a tertiary hospital (Alexandra Hospital). The survey questionnaire was self-administered with interviewer guidance.

Result : 134 carers (75.4% females), mean age 50.9 (SD 10.4) and had been caring for the PWD for a mean of 3.5 (SD 0.78) years were recruited. Daughters formed the majority (59%), 84.4% identified themselves as main carers, 66.4% were holding a full or part time job besides caregiving, and 57.5% employed a domestic helper to assist in caring for the PWD. Majority (66.4%) obtained information about dementia from the attending doctor or a healthcare professional, 45.5% from local AD association and 46.2% from the internet. 47.8% of carers had never attended or attended only once a dementia carer's programme or support group, and the commonest reasons cited were "no time" (20.1%), "can obtain information on our own" (10.5%) and "no need" (5.2%). Majority (74.6%) of PWD were taking anti-dementia medications and 56.7% of carers were at least somewhat satisfied with the medications. 38.8% of the PWD were not attending any dementia day programme, the reasons include "domestic helper available" (25.4%), "no need" (20.9%) and "PWD refuses" (18.6%). Although 67.2% of carers found caregiving burdensome, 38.8% acknowledged it was rewarding and 80.6% maintained a warm relationship with the PWD.

Conclusion : This snapshot view of dementia carers in Singapore provides understanding into the caregiving situation and identifies needs that can be better addressed.

CRC-PS08

'SHARING YOUR MEMORIES' ENGAGING CAREGIVERS IN LEBANON

DIANE MANSOUR¹

Alzheimer's Association Lebanon, Beirut, Lebanon¹

Purpose : Sharing your Memories is a one year - long educational program designed to raise awareness of Alzheimer's disease, its diagnosis and treatments; it also aims at increasing public awareness of the disease, its signs, symptoms, progression and the supports available to family to help them cope. The program encourages people to share a memory or special story about themselves or about someone they know who has or is battling Alzheimer's disease or a related dementia. This programme will involve caregivers through their story that would allow them to accept AD in a more positive way. The main objective of Sharing your Memories is to provide the opportunity for Lebanese people to learn more about Alzheimer's disease and the importance of early diagnosis.

Method : At its inception, Sharing your Memories involves a series of educational public forums including schools and Universities; and a full fledged media campaign calling for submission of testimonies.

Result : Through the different gathered testimonies, Sharing your Memories will provide the material for a book to be published under the title "Living with AD, the Lebanese experience".

Conclusion : This programme aims at both breaking barriers and allow the readers to witness the other side of Alzheimer's Disease, while having the writers think more positively about their experiences.

CRC-PS09

DEMENTIA IN ARMENIA: NEW EMERGING MEDICAL AND SOCIAL PROBLEM

MANVELYAN HM¹, HAMBARDZUMYAN HD¹, KHACHATRYAN SG¹, HARUTYUNYAN AS⁴, GEVORGYAN EM¹, AGHAJANOV MI², KARAPETYAN AA³, NARIMANYAN MZ³
Neurology Department, Yerevan State Medical University, Yerevan, Armenia¹; Alzheimer Armenian Association, Yerevan, Armenia²; Family Medicine Department, Yerevan State Medical University, Yerevan, Armenia³; Neurology Department, Clinical Hospital #2, Yerevan, Armenia⁴

Purpose : During last decades with significant growth of elderly population in Armenia we are facing new both medical and social problem as patients with dementia. Medical professionals and society in general was not ready to reveal, diagnose and help people with dementia. The problem is complicated because of low social awareness and underestimation of the problem from governmental bodies. Together with Neurology Department, Family Medicine Department and Alzheimer Armenian Association we created and launched educational program for family doctors as primary chain in medical evaluation how to find a patient with dementia.

Method : Family doctors-in-training underwent cycle of lectures dedicated to the problem of dementia, they train in dementia detection and evaluation scales, they receive additional booklets and information, dedicated to effective caregiver services for families with patients with dementia. We created sensitive dementia evaluation questionnaire on Armenian for better comprehensive assessment. More then 50 GP doctors and about 25 medical professionals from other spheres underwent those ongoing trainings already.

Result : Education of GP was initial successful step toward solving of the problem, and situation has changed since then. Early evaluation and diagnostics of dementia becomes possible, all information about these patients goes to the National Database of Dementia. The database now includes more then 800 names of patients with diagnosed dementia, and about 50 % of them are mixed Alzheimer/Vascular, about 20% - Vascular, 20%-Alzheimer types of Dementia, rest – Parkinson, MS, etc.

Conclusion : The role of GP in problem of dementia is underestimated too. Family doctors and GPs must be professionally trained in detection and evaluation of patients with dementia, and together with National Alzheimer Associations could serve as basis for creation of effective schools for caregivers. National Alzheimer Associations must serve as an umbrella for all interested persons: medical professionals, caregivers and patients, and effectively distribute all educational materials.



26 March 2009, Thursday
1345 hrs – 1515 hrs
Ballroom 2

BEHAVIOURS THAT CHALLENGE

BEHAVIOURS THAT CHALLENGE

JISKA COHEN-MANSFIELD

Tel-Aviv University Herczeg Institute on Aging and Faculty of Medicine, Tel Aviv, Israel;
George Washington University Medical Center and School of Public Health, Washington
DC, USA

Behaviours that challenge, agitation, behaviour problems, problem behaviours and disruptive behaviours are all terms that have been used synonymously to indicate verbal, vocal, or physical inappropriate behaviour by a person with dementia that is not caused by an apparent need or merely by confusion. Although the behaviour may be appropriate and indicate a need from the point of view of the person with dementia, this need is often not obvious to the caregiver or to the observer. These behaviours have been categorised into three main types: verbal/vocal behaviour (e.g. repeated sentences or requests), physically nonaggressive behaviour wandering, handling things inappropriately), and aggressive behaviours (hitting, kicking). Four main theoretical frameworks have been used to explain these behaviours: biological, behavioural, environmental vulnerability/reduced stress threshold, and unmet needs. Each type of model has direct implications for treatment. An evaluation of our studies of medical, social, psychological and environmental correlates of agitation most strongly supports the unmet needs model, though other models may be more useful in specific instances or with specific individuals. The most common unmet needs vary with type of behaviour, so that verbal/vocal behaviours are often associated with pain, discomfort, loneliness and boredom. Physically nonaggressive behaviours are most commonly related to need for stimulation, boredom, or sensory deprivation. Aggressive behaviours often express discomfort, refusal to participate in an activity such as an ADL, or feeling threatened by intrusion into personal space. The treatment is most commonly an alleviation of these needs, or, especially in the case of physically nonaggressive behaviours, it may involve accommodation of the behaviour when the behaviour itself addresses the need. A wide range of clinical interventions is available to caregivers to address those needs. The clinical intervention must address the needs while matching the older person's level of cognitive and sensory abilities, sense of identity, habits, and preferences.

MEETING NEEDS OF PEOPLE WITH DEMENTIA IN CARE HOMES

ANN SCOTT

Mental Health, Northern Health & Social Care Trust, County Antrim, Northern Ireland

Challenging behaviours in dementia exceed the capability of many care home staff. Medication is traditionally the first line treatment despite evidence it is of limited benefit, may hasten cognitive decline and is associated with vascular and cardiac problems in older people. Alternatively admission to hospital occurs even though ninety percent of challenging behaviours occur as a response to care practices or environmental factors. Instead, the reasons should be addressed with a particular focus on when, where, why and with whom these behaviours manifest themselves.

In 2006, a five-month pilot study within the Northern Health and Social Services Board (NHSSB) (Antrim and Ballymena, Northern Ireland), using the Newcastle Model, a bio-psycho-social intervention received 20 referrals involving 11 care homes.

The Newcastle Model formulates challenging behaviour in terms of peoples' needs, which are assumed to drive their behaviours. The model is a hybrid of well-established ideas from various psychological models, but its distinguishing feature lies in the unique integration of teaching, supervision and intense support provided to staff in care homes.

The NeuroPsychiatric Inventory Caregiver Distress (NPI-D) measures frequency and severity of behaviours and level of distress this causes staff. This was administered pre and post intervention. Staff were asked to complete an anonymous satisfaction questionnaire at discharge.

Findings indicated that as a result of interventions four hospital admissions were averted which, based on the average length of stay, would have cost an estimated £81,500. NPI-D scores decreased following interventions and staff questionnaires were positive. The potential of this pilot study was noted by the Institute of Healthcare Management Quality Awards scheme prompting the NHSSB to provide funding for the care components in the form of three behaviour sciences nurses. This preliminary study will form the basis of a study that will evaluate the service using a quasi-experimental intervention – comparison non-equivalent design.

CHA-PS02

HANDLING DISTURBED BEHAVIOURS IN OLDER PEOPLE WITH DEMENTIA IN HONG KONG: A HOLISTIC APPROACH

MOK WAI KIT LINDA¹

Social Work, Hong Kong Shue Yan University, Hong Kong, China¹

Purpose : To strengthen quality of care in institutional settings in Hong Kong, this research identified disturbed behaviours in older people with dementia and developed a Holistic training approach for improving practices of care staff.

Method : Stage I – 2007 : A quantitative study of staff members working directly with older people with dementia in both government sub-vented and private institutions in Hong Kong explored difficulties care staff encounter when handling disturbed behaviours and also their perception of burnout from working in institutional settings. 639 staff members completed self-administered questionnaires in 27 government sub-vented and 36 private homes. Stage II – 2008 : An intervention group (N=11) and a control group (N=6) were set up in two Care & Attention Homes respectively. The intervention group received eight weeks of Holistic Approach training while no training was provided for the control group.

Result : 1. The five most frequently reported "difficult to handle behaviours" exhibited by older people with dementia were: spitting; going missing; wandering; complaining about personal items being stolen; and complaining about personal items being lost. 2. Holistic Approach was found most effective in handling "wandering" behaviour. 3. Mace' behavioural dimension, one of the training elements of the Holistic Approach was found effective in handling disturbed behaviours. 4. A significant increase was found in the intervention group on personal accomplishment.

Conclusion : A Holistic Approach for training staff members in institutions strengthens caring practices and increases the personal accomplishment in care workers. Thus, the quality of care for older people with dementia can be improved while reducing staff burnout.



26 March 2009, Thursday
1345 hrs – 1515 hrs
Ballroom 3

ARTS AND CREATIVITY IN DEMENTIA

ENABLING SUCCESS IN CREATIVE EXPRESSION

HILARY LEE

The Society for the Arts in Dementia Care (Australia) Inc, Kalamunda, Western Australia, Australia; Dementia Care Australia, Western Australia, Australia

This inspirational workshop has 3 parts. In the first part, Hilary Lee will give two examples of pioneering arts programs - the first of these led directly to Hilary introducing the Society for the Arts in Dementia Care into Australia.

The first project was an intergenerational program involving 15 high school students working together with 15 people with moderate dementia creating a community art tapestry that portrayed meaningful stories and events from the residents' lives. The project was filmed and made into a documentary and a short clip of footage will be shown. The second program is her Ceramic Story project, which is significant in that it involved people with dementia who also had depression. As part of the project the participants each made a story book covering different themes. During the course of the project participants' signs of depression decreased and their well-being increased.

In the second part Hilary will increase the participant's awareness of how to be successful facilitators of any creative arts project. The delegates will be invited to take part in a group brainstorm to answer the question: What are the skills that bring out the human potential in people with dementia? A framework and a skill to successfully bring out the creative expression in people with dementia will then be described and demonstrated through footage.

Finally in the third part, Hilary will discuss the importance of evaluating the programs. Two specific assessment tools will be described with some general recommendations for the evaluation process.

During the workshop there will be opportunities for questions and discussion.

HEALING THE SPIRIT WITH POETRY AND PAINTING: IMAGE-MAKING, CREATIVITY, AND DEMENTIA

PATRICIA BAINES

Alzheimer's Australia Tasmania, Australia

This paper explores the work of an art therapist/psychologist/anthropologist into releasing the creative potential in individuals living with dementia. Starting from the premise that all human beings are creative, the objectives of the presentation are, firstly, to identify the obstacles experienced by individuals living with dementia to producing creative work, and, secondly, to elucidate the ways and means by which these inhibiting factors may be overcome.

Art therapy works with the concept that by engaging with images, whether painted/drawn or written, one can tap resources within the individual that nurture self-healing and self-esteem. Living with dementia does not destroy creativity. Indeed, as it may get more difficult to use conventional sentence structure, the person with dementia may find unusual and beautiful turns of phrase to express herself or himself. For those whose words seem to dissolve as they go to speak them or write them, communication through art work may be the most satisfying means of communicating.

Instead of starting from nothing, the therapist working with individuals with dementia may have to overcome a failing executive function in the brain and trigger or hook the links to images. To do this miniature objects and samples of words are used as a "warm-up" process prior to the invitation to paint, draw or write.

Individuals in all stages of dementia may be enabled to make creative "marks". The process of creating, in a space in which self-expression is accepted and recognised, often leads to spontaneous verbal expressions of the importance of being able to create. In other individuals altered non-verbal behaviour may be the indicator of emotional change as individuals show intense concentration as they work and start to smile and interact with others. "I feel calm doing this" or "This makes me feel good" may be expressed. Being able to use one's creativity bestows a sense of well-being.

Although there is very limited empirical research (the notable exception being the ongoing work of Rusted, Sheppard and Waller in UK) into the value of creativity in improving well-being, the findings of this current work are of significance, not only to art therapists, but to care givers and families, in finding ways of relating positively with individuals living with dementia and improving their quality of life.

27 March 2009, Friday
1030 hrs – 1200 hrs
Ballroom 2

NON-PHARMACOLOGICAL TREATMENT AND INTERVENTION

NON-PS10

DEMENTIA BEYOND DRUGS

G. ALLEN POWER¹, JANE VERITY², HILARY LEE³

Medical / Admin., St. John's Home, Rochester, New York, USA¹; Founder / CEO, Dementia Care Australia, Mooroolbark, VIC, Australia²; Chair, The Society for the Arts in Dementia Care (Australia) Inc, Kalamunda, Western Australia, Australia³

Purpose : In nursing homes in the US and other industrialised countries, about 40% of people with dementia are on antipsychotic medications. Despite increasing evidence that questions both the safety and efficacy of these drugs, their use continues to rise. Why do we continue to use these medications? Because we do not have a better pill. This is the paradigm that limits our care : we are only looking for a pill. Much of the excess morbidity of dementia is related to our model of care itself. This explains why non-pharmacologic approaches often fall short of success in practice. As international experts in culture change, Dr. Power and Ms. Lee will take the attendees to a different view of dementia and aged care. Building upon the groundbreaking work of innovators in clinical and social psychology, the presenters will then construct a new "experiential" view of dementia. They will use this paradigm to construct an enlightened care environment that fosters growth and engagement, rather than simply mitigating negative symptoms.

Method : Dr. Power will review the drawbacks of the biomedical model of care for Alzheimer's disease. He will introduce the new experiential paradigm. Ms. Lee will present a concrete application of these principles, the Spark of Life program, and a compelling video will show the dramatic effect it can have on people with severe dementia.

Result : Dr. Power's approach has allowed him to reduce his psychotropic drug use in the nursing home to a small fraction of that seen in other homes around the world. Ms. Lee will highlight the positive outcomes of the Spark of Life, even for challenging populations such as those with Korsakoff psychosis.

Conclusion : An enlightened care approach to dementia requires us to step beyond the biomedical model, which views the disease from a "declinist" perspective and disengages and disempowers people with dementia. An experiential approach can re-ignite the spirit and create opportunities for growth and increased well-being, even in advanced dementia.

NON-PS11

THE BEST FRIENDS MODEL OF DEMENTIA CARE

VIRGINIA M BELL¹

Program Consultant, Alzheimer's Association, Lexington, USA¹

Purpose : This session will describe the Best Friends model of dementia care which can be used by family caregivers and professionals to transform caregiving from a difficult and challenging burden to a more rewarding and successful experience with fewer frustrations. This philosophy suggests that we treat persons with dementia like we would want to be treated if we were in a similar situation. What a person with dementia needs is a friend, a Best Friend. A best friend accepts the person's situation, learns about the disease, is supportive, communicates effectively, knows the life story well, supports creative activities and works to help the person preserve dignity throughout the illness. Family members have used this approach to "recast relationships," and learn how to accept their loved one's illness. Professionals are using this approach as a philosophy of care in nursing homes, adult day centers and home settings to give staff members life-affirming, positive strategy with which to approach their daily tasks. Long-term care programs have found positive results using the Best Friends philosophy including enhanced staff morale, improved family satisfaction, and a reduction in challenging behaviour. Because the philosophy of care is inherently easy to understand (the concept of being a friend) and because friendship is multicultural, this philosophy of care is in use in many countries around the world and in programs with a great diversity of staff.

Method : Lecture, case-studies, Power Point with Photographs, story-telling & questions/discussion.

Result : Participants will be able to: Define person-centered care and the Best Friends model; Name three ways to enhance quality of life for the person with dementia; Name three ways to enhance activity programming.

Conclusion : Participant will learn about the Best Friends Model of care now in use around the world (book editions include copies in Korean, Spanish, Italian, German & Arabic) and how to apply it to their caregiving situation. The program will give applications for family carers as well as professionals and describe how participants can learn to enhance their work with persons with dementia. The program will also share words from persons with dementia about their attitudes toward activities and quality programming.



NON-PS12

PERSONHOOD, RELATIONSHIPS AND...BEYOND : CONTEXTUALISING THE DEMENTIA EXPERIENCE

DEBORAH O'CONNOR¹

Centre for Research on Personhood in Dementia, University of British Columbia, Vancouver, Canada¹

Purpose : Important steps in the area of dementia care, first to hear the voices of persons with dementia and, second, to recognise the importance of a relational approach to the dementia experience, have been taken over the past decade. The next step is to recognise the importance of understanding both of these within a broader socio-cultural context.

Method : The Centre for Research on Personhood in Dementia (CRPD) is a multi-site, virtual, interdisciplinary research centre located in Canada that is focused on non-biomedical approaches to understanding and supporting persons with dementia and their family. As part of our work, we have been developing a conceptual framework that facilitates a multi-dimensional approach to dementia research and practice by moving iteratively between the personal, interpersonal and societal context. This framework promotes interdisciplinary research and provides a lens for developing a broader understanding of the dementia experience. This purpose of this presentation will be to provide a brief overview of this framework and, drawing on current case study research, illustrate how each dimension leads to a complimentary but increasingly complex understanding of the dementia experience.

Result : How this experience is understood has implications for intervention. Specifically it highlights the need for a multi-level approach to practice that focuses simultaneously upon a) supporting persons with dementia and family members; b) changing views and responses of formal carers to foster more effective interactions; and c) challenging organisational practices and policies that inadvertently work to marginalise those with dementia and sabotage the efforts of formal caregivers to promote relational connections.

27 March 2009, Friday
1030 hrs – 1200 hrs
Ballroom 3

TRAINING OF PROFESSIONAL CAREGIVERS

ENABLING CARE STAFF WORK MORE EFFECTIVELY WITH BEHAVIOURS THAT CHALLENGE

ANN SCOTT

Mental Health, Northern Health & Social Care Trust, County Antrim, Northern Ireland

Challenging behaviours in dementia exceed the capability of many professional caregivers. Often a 'diagnostic overshadowing' exists whereby all behaviours are attributed to the dementia process. However, ninety percent of challenging behaviours occur as a response to care practices or environmental factors. Consequently, the reasons for the behaviours should be addressed with a particular focus on when, where, why and with whom these behaviours manifest themselves. Unfortunately most training concentrates on what staff do wrong without offering alternative strategies which may leave staff deskilled. Interactive workshops that focus on reflection on current care practice; with opportunities to develop problem-solving skills is recommended. Training should emphasise the importance of flexibility and the need to move away from rigid care procedures. It is important to recognise the repertoire of skills professional caregivers already have, and then build on these to equip them to develop a toolbox of strategies that are transferable for use in different situations.

In the Northern Health and Social Care Trust (NHSCT) a Behaviour Sciences Nursing Service has recently been developed to enable professional caregivers understand and work more effectively with behaviours they find challenging. Using the 'Newcastle Model', a conceptual framework, our core business is to:

- Provide teaching and training
- Consultancy and advice
- Support and supervision

To do this we bring:

- A new perspective on a case
- Use formulations to understand a person's behaviour
- Work collaboratively with professional caregivers to introduce new information. Present this information in a manner that helps them appreciate why the person is acting in a 'problematic' way and encourages them to think of some treatment approaches.
- Provide a holistic and thorough assessment of the person's needs as a focus.

This approach equips staff to work effectively with people with dementia.

TRA-PS06

2 YOUNG 4 DEMENTIA

SUSAN BROMHEAD¹

Policy, Alzheimer's Australia, ACT, Australia¹

Purpose : To inform participants of a new training resource developed for use by health professionals, auxiliary staff, volunteers and care staff working with people with younger onset dementia and their families. This resource contains information about the unique needs of younger people with dementia. It will create awareness and information about their needs and how to respond.

Method :

- Present an overview of the funding through Australian Government Department of Health and Ageing to Alzheimer's Australia ACT for special needs groups.
- Describe the contents of the resource.
- Show participants some of the audio visuals, interactive graphics used to make the resource a good learning tool.

Result : Participants will have:

- an increased understanding of the needs of younger people with dementia as different from older people with dementia. These include but are not limited to : issues of diagnosis; issues of stigma and awareness; employment and financial needs because of mortgages, school aged children; legal issues.
- more awareness of the needs of care partners, children and older parents of a person with younger onset dementia.
- more awareness of the needs of staff and the requirement for staff training for those working in this area.
- increased understanding of styles of service provision appropriate to younger people with dementia, particularly the need for flexible alternative models of respite and long- term residential care.

Conclusion : This increased understanding and awareness, will improve the quality of life for younger people with dementia and their families because of more age appropriate service provision.



27 March 2009, Friday
1030 hrs – 1200 hrs
Room 325

LIFESTYLE ISSUES

TREATMENT AND PREVENTION OF VASCULAR COGNITIVE IMPAIRMENT

VINCENT C.T. MOK

The Chinese University of Hong Kong, Prince of Wales Hospital, Hong Kong

Cerebrovascular disease is probably the second most common cause for cognitive impairment and dementia in the elderly. The mechanisms for vascular cognitive impairment (VCI) is complex and may involve an interplay between host factors (e.g. age, education), vascular lesions (e.g. severity of white matter lesion, location and size of infarcts), concurrent atrophy (e.g. frontal atrophy, cortical atrophy), and other concurrent dementing diseases (e.g. Alzheimer's disease). Since executive dysfunction is prominent in patients with VCI due to interruption of the frontal-subcortical circuits by vascular lesions, inclusion of executive test as part of the cognitive battery is critical for the evaluation of cognition for VCI patients. Recent meta-analysis suggested that the efficacy of acetylcholinesterase inhibitors and memantine is only modest for VCI. Given its "vascular" nature, prevention of VCI has become a major research focus in recent years. In PROGRESS, perindopril based therapy was found to decrease the incidence of stroke related dementia by 34% and the PROGRESS MRI substudy showed that perindopril based study was also able to retard the progression of white matter lesion. The ROCAS MRI substudy suggested that statin may be able to retard progression of white matter lesion among those with severe white matter lesion at baseline. Another study, VITATOPS – MRI substudy, is now underway to evaluate the effect of homocysteine lowering therapy for prevention of white matter lesion progression and cognitive decline among stroke patients with severe white matter lesion.

LIS-PS01

LIFE IS COOL WITH A FIT BRAIN - THE HEALTH PROMOTION CAMPAIGN FOR TEENAGERS

SANNA KAIJANEN¹

Alzheimer Society of Finland, Helsinki, Finland¹

Purpose : Life is Cool with a Fit Brain is a national health promotion campaign aimed at teenagers to increase their knowledge of the factors affecting their brain health, learning capabilities and memory function. The aim of the campaign was to empower the youngsters to take care of their brain and the future well-being of it. Different kinds of lifestyles influence the learning process and the functioning of our memory. The brain develops in social relationships, in interaction and with cognitive challenges. Physical exercise, an adequate amount of sleep, a healthy lifestyle and a balanced diet support the health of the brain. In contrast, substance abuse – e.g. the use of psychoactive drugs or excess drinking – may be connected to a premature decline of the memory.

Method : Together with its local associations The Alzheimer Society of Finland organised campaigns focusing on brain health, memory and active learning skills in the lower secondary schools in Finland. Pupils between ages 13 and 14 concentrated on finding new practical learning and memorising strategies. More than 600 pupils participated and answered the questionnaire before and after the campaign.

Result : The questionnaires show that the teenagers are interested in the well-being of their brain but do not pay much attention to the question. They are aware of the harmful impacts of the intoxicants and are keen on getting more information. The presentation will concentrate on describing the interventions in the schools, their effectiveness and the final results of the survey.

Conclusion : In the strategy for the coming four years the Alzheimer Society of Finland will be emphasising the importance of the primary prevention and the lifelong opportunity of taking care of one's brain, beginning already in the early years of teenage. It is also important to encourage the teenagers to take part in the activities arranged by the Alzheimer Society.

LIS-PS02

THE EFFICACY OF A MEDICAL FOOD (SOUVENAID®) IN ALZHEIMER'S DISEASE: RESULTS FIRST RANDOMISED CONTROLLED TRIAL AND DESIGN FUTURE TRIALS

PATRICK JGH KAMPHUIS¹, RICHARD J WURTMANC², PHILIP SCHELTENSB³

Danone Research, Centre for Specialised Nutrition, Wageningen, The Netherlands¹; Alzheimer Centre, VU University Medical Center Amsterdam, Amsterdam, The Netherlands²; Department of Brain and Cognitive Sciences, Massachusetts Institute of Technology, Cambridge, USA³

Purpose : Many epidemiological studies indicate a clear link between nutrition and Alzheimer's Disease (AD). Several nutrient deficiencies have been shown to be risk factors for AD. Prospective studies with nutrients, like omega-3 fatty acids or the Mediterranean diet, show a reduced risk of developing AD.

Method : Preclinical studies have shown that combinations of specific nutrients synergistically increased membrane and synapse formation, diagnostic features that have been demonstrated to be reduced in AD, resulting in improved learning behaviour in animal models. In addition this specific combination reduces abeta production, plaque burden and neurodegeneration in transgenic mice.

Result : The effect of a medical food (Souvenaid®), designed to improve synapse formation, on memory and cognitive performance was assessed in a proof-of-concept trial with drug naïve mild AD patients. Drug naïve mild AD patients (MMSE 20-26) were randomly allocated to Souvenaid®, a 125 mL (125 kcal) once-a-day milk-based drink or an iso-caloric control drink in a double-blind 12-week study. Primary outcome parameters were a delayed verbal memory task (Wechsler Memory Scale – revised) and the 13-item ADAS-cog, assessed at 12 weeks. In an optional, double-blind 12-week extension phase patients continued to receive the same study product. The trial is registered with the Dutch Trial Register (#SRCTN72254645). 212 patients were included in the primary efficacy analysis (mean MMSE 23.9 ; mean age 73.7; 50% men). Delayed verbal memory, analysed by non-parametric statistics, was significantly improved in the Souvenaid® group. In the statistical model excluding covariates, no suggestion for an effect was found for modified ADAS-cog. There was no significant difference in tolerance (compliance was 94%) and (serious) adverse events between the study groups throughout the study period.

Conclusion : Souvenaid® has a good safety and tolerability profile, and improves memory in mild AD. These promising results justify further studies in AD. Two clinical trials testing Souvenaid® in mild to moderate Alzheimer's patients will start in 2009, and the design of these trials will be discussed.



27 March 2009, Friday
1345 hrs - 1515 hrs
Ballroom 2

PEOPLE WITH DEMENTIA

MY EXPERIENCE WITH ALZHEIMER'S

MYRNA BLAKE
Formerly at Department of Social Work & Psychology, National University of Singapore, Singapore

A sharing experience by a person with dementia of the adjustments she had to make in living with dementia and her outlook at life after her diagnosis.

PWD-PS01
RECOGNISING AND SUPPORTING SELFHOOD WITHIN INTERACTION: A NEW WAY TO FACILITATE A PERSON-CENTRED APPROACH TO DEMENTIA CARE
FIONA KELLY¹
Dementia Services Development Centre, University of Stirling, Stirling, Scotland¹

Purpose : This paper reports on a three-year doctoral study exploring the social worlds of fourteen people with dementia in long-term care. Using a conceptual framework which combined Kitwood's (1997) person-centred approach and Sabat's (2001) work on selfhood, it documented different interaction types participants experienced from ward staff during everyday ward life and from occupational therapy staff during creative sessions. In an attempt to further theoretical and practical understanding of practice in dementia care, the study explored how participants responded to interaction types in terms of their well and ill-being and expressions of self.

Method : The person-centred and selfhood approaches were integrated throughout the design and analysis of this multi-method ethnographic study. Over six months of fieldwork, 17 six-hour Dementia Care Maps were carried out, along with video recording participants during creative sessions. Conversations, observations and reflections were documented in extensive fieldnotes.

Result : The key finding was that staff interaction types were influenced by whether or not they recognised and supported their patients' selfhoods. Those who recognised and supported selfhood engaged in more positive interactions with resultant increases in their patients' well-being. Those who did not recognise, and therefore could not support selfhood, engaged in limited and sometimes abusive interactions with resultant ill-being of participants with dementia. This paper argues that the quality of dementia care depends (in part) on whether selfhood is recognised and supported (or not) within interaction.

Conclusion : In order to facilitate high quality dementia care, this paper recommends using the selfhood approach within staff training programmes. This might encourage staff to recognise and respond to aspects of selfhood as they carry out care. There is the potential here to transform care practices and improve the lives of people with dementia in long-term care.

Kitwood, T. (1997) Dementia Reconsidered: The Person Comes First, Buckingham, Open University Press.
Sabat, S. (2001) The Experience of Alzheimer's Disease, Oxford, Blackwell Publishers Ltd.

PWD-PS02
YOUNGER ONSET DEMENTIA: SHARING OUR EXPERIENCES
GORDON SMEETON¹, BARBARA SMEETON¹
Support Services, Alzheimers Australia WA Ltd, Perth, Australia¹

Purpose : Dementia is a term used to describe the symptoms of a range of conditions that cause a progressive decline in cognitive functioning. This may include a loss of memory, intellect, rationality, social skills and 'normal' emotional reactions. Whilst the incidence of dementia increases with age, there is an emerging group of younger people who have been diagnosed with dementia. This provides different challenges, as a younger person with dementia may be more physically and socially active in the community and yet struggle in areas of meaningful employment, raising a family, holding financial responsibility and making plans for future retirement. With this in mind I have come to share our experiences having received a diagnosis of Younger Onset Dementia and our journey so far living with dementia.

Method : We have reflected on our experiences in life prior to the diagnosis of Alzheimer's disease. With hindsight we are able to recognise some of the changes that were occurring. Whilst I dismissed these at the time it was not until my family started to also notice these changes that we began the process of getting a diagnosis.

Result : In reflecting on our experiences we recognise how far we have come already since the initial diagnosis. My immediate reaction was total denial and I now see that this came from the insecurity of what the future would hold for me and my family. With time I have come to acknowledge and accept the diagnosis but there are some things I am still slowly coming to grips with.

Conclusion : I have now adjusted and changed my outlook in life; I have changed many habits, strive to live a healthier life, am open to all forms of medicine (traditional and alternate) and do the best that I can to remain positive.

PWD-PS03
UK STRATEGY ON TRANSFORMING THE QUALITY OF DEMENTIA CARE - THE PERSON WITH DEMENTIA'S CONTRIBUTION
PETER JOHN STAPLETON ASHLEY¹
Living with Dementia - Ambassador, Alzheimer's Society, London, United Kingdom¹

Purpose : To outline the UK government sponsored work with has been carried out during the fourth quarter of 2007 and 2008 to develop a unified national strategy for the provision of all aspects of care and support for people with dementia and their carers throughout the United Kingdom together with a unified programme for research. This was commissioned by the government through the lead of the Alzheimer's Society who developed the initial consultation document for national consideration and debate.

Three of the principle objectives were:-

- Improve awareness of dementia both among the general public and among health and social care professionals;
- ensure that the condition is diagnosed as early as possible to allow for early intervention; and
- deliver a high quality of care and support for both those with dementia and their carers.

Method : In August 2007, after much lobbying by the Alzheimer's Society and others, the Secretary of State for Health, speaking on behalf of the Government, identified dementia as a national priority and announced a one-year programme of consultation to develop a National Dementia Strategy. He commissioned Neil Hunt Chief Executive Officer of the Alzheimer's Society to establish expert reference groups, who, within 3 months, could produce a strategy for national consultation. Some 56 people, prominent in the field were thus selected and split into one of three sub-committees. I am delighted to say that people with dementia were not left out of this process and thus I had the privilege of sitting on one of these sub-committees. In June 2008 the collected thoughts of the three sub groups were brought together by the core external reference group and the Department of Health and a printed document "Transforming the Quality of Dementia Care" was produced and widely distributed throughout the country. This 83-page document concluded by making 15 main proposals for debate by the general public and asking for comment.

Result : Using a government agency, the Care Services Improvement Partnership (CSIP) consultation conferences were set up all over the country, North, South, East and West, and in many instances oversubscribed so duplication in some areas became necessary. Interest was overwhelming as was the feedback and by the close of the consultation period in late autumn the volume of additional information to be considered was clearly very encouraging although more than first thought. The intention was to complete the final release of the strategy in October 2008 but it has now been delayed until December 2008. Of one thing there is no doubt that when released it will form a dynamic policy document for the UK taking us forward into the 21st century with people with dementia and their carers no longer regarded as second class citizens but those with full right like everyone else. Stigmatisation will be a thing of the past.

Conclusion : I hope as an Ambassador of the Alzheimer's Society, a person with Dementia with Lewy Bodies who has been fortunate enough to survive my first 8 years (through "Use it or Lose it" strategy) and as one who had the delight of addressing you all at the plenary in 2002, to be able to present this important work we have done in the UK, particularly from the viewpoint of the person with dementia. Let us never forget it is us who LIVE with this disease day by day, we know what it's really like, we, with respect are the real EXPERTS.

NOTE. At the time of writing this abstract the full results of the strategy have yet to be published.



28 March 2009, Saturday
1030 hrs – 1200 hrs
Ballroom 2

DEMENTIA CARE AND RESEARCH IN ASIAN COUNTRIES

PRIMARY PREVENTION OF DEMENTIA : RESEARCH FINDINGS FROM THE SINGAPORE LONTITUDINAL AGEING STUDIES
NG TZE PIN
Yong Yoo Lin School of Medicine, National University of Singapore, Singapore

The Singapore Longitudinal Ageing Studies followed up a cohort of 2,800 older adults aged 55+ at 2 yearly intervals from 2004, and examined the relationships of leisure activities, depression, blood pressure, metabolic syndrome, nutrition, and dietary phytochemicals on cognitive impairment and decline in non-demented individuals.

In line with other studies, leisure time physical, social and productive activities were found to be associated with less cognitive decline, but productive activities appeared to show the strongest independent effect.

Depressive symptoms were associated with cognitive decline, but this was clearly evident only in men, not women. We found an increased risk of cognitive impairment in hypotensives with orthostatic hypotension suggesting that hypotension with OH may be an early co-morbid marker of a primary incipient dementia.

Across the range of values of *albumin* and *haemoglobin*, linear inverse relations with cognitive impairment and decline were observed. *Metabolic syndrome* was found to be positively associated with cognitive decline, and the SAS data also supported a protective effect of *statin* use on cognitive function.

Folate is critically involved in methylation reactions in the brain necessary for the production of monoamine neurotransmitters and membrane phospholipids. Decreasing levels of serum *folate* was associated with poor cognitive performance on memory and language. Increasing levels of *homocysteine* was associated with deficits in constructional ability and processing speed.

Fish and omega-3 PUFA may be protective against dementia. SLAS participants who regularly consumed *omega-3 supplements* were less likely to show cognitive decline.

Experimental data suggest a strongly neuroprotective effects of *tea and tea polyphenols (catechins and derivatives)*. The SLAS data shows that regular tea consumption was associated with lowered risks of cognitive impairment and decline, and better performance on a wide range of cognitive functions, effects not similarly observed with *coffee drinking*.

Curcumins, found in the curry spice, turmeric, has strong anti-inflammatory and anti-oxidant properties, and may reduce plague burden in the brain. The SLAS data showed that regular curry intake was found to be associated with better cognitive performance.

DEMENTIA CARE AND RESEARCH IN THE ASIAN REGION – A QUALITY OF LIFE PERSPECTIVE
EDMOND CHIU
Academic Unit for Psychiatry of Old Age, University of Melbourne, Australia

That dementia, with population ageing, is a demographic and social challenge in the Asian Region is well established and anticipated. How will our region, with a variety of cultures, economies, social and health care systems respond to this challenge?

Bringing together key players in the region to discuss this issue was seen to be an important early step to develop such a response. The Improving the Quality of Life for Asian People with Dementia (QOLDEM) programme, between 2004-2006, partnered with Eisai Human Healthcare, undertook to work towards a Consensus to identify the common and diverse approaches to dementia care and research underpinned by the driving force of Quality of Life for people with dementia.

This paper will summarise and highlight some of the consensus developed through this programme.

DEM-PS07
EPIDEMIOLOGICAL STUDY OF MILD COGNITIVE IMPAIRMENT AND PILOT EVALUATION OF METHODS OF EARLY DEMENTIA DETECTION IN COMMUNITY
YUEQIN HUANG¹, FANG YAN¹, SHURAN LI¹, XIN YU¹, ZHAORUI LIU¹, MARTIN PRINCE²
Institute of Mental Health, Peking University, Beijing, China¹; Institute of Psychiatry, King's College London, London, United Kingdom²

Purpose : To describe the prevalence of mild cognitive impairment (MCI) in urban and rural communities in Beijing and to evaluate the validity of simple case-finding method for dementia and the informant questionnaire of community screening instrument for dementia (CSID).

Method : 2609 elderly people aged 65 and over in urban and rural Beijing were investigated in a one-stage process by fully structured assessments developed by 10/66 dementia research group. Dementia and MCI were diagnosed in according with ICD-10 and MCI criteria provided by Petersen. MCI patients and normal cognition elderlies were matched by age, gender and residential area, and were interviewed by Mini Mental State Examination. A two-year follow-up study was carried out to observe the dynamic change of MCI. A community diagnostic test of the simple case-finding method for dementia and CSID Informant questionnaire was conducted in the same two communities.

Result : The prevalence of MCI was 5.0% and was higher among elderlies with older age, widow/widower and stroke or depression. Two-year cumulative conversion rate from MCI to dementia was 10.3%. Lower relayed recall score was the risk factor of the converting MCI into dementia. Two-year cumulative mortality rate among MCI patients was 11.0%, and the mortality risk ratio of dementia was 3.3 times higher than that of MCI. Simple dementia case-finding study showed the positive predictive value was 25.9%. The sensitivity was 86.2% when the cutoff point of CSID informant questionnaire was 6 or more.

Conclusion : Older age, stroke and depression are risk factors of MCI occurrence, and less score of relayed recall is a predictor of converting MCI into dementia. The mortality risk ratio of MCI is lower than that of dementia. The validity of simple case-finding method for dementia is not satisfied. However, CSID informant questionnaire has higher sensitivity and can be used for dementia screening in community.

DEM-PS08
A STUDY OF PREVALENCE OF DEMENTING DISORDERS IN KERALA, INDIA
K.JACOB ROY¹, S.SHAJI¹
Research, Alzheimer's and Related Disorders Society of India, Kunnamkulam, Kerala, India¹

Purpose : India is currently undergoing a demographic transition. The rapidly increasing demographic trend for the elderly population predicts rapid increase in the number of people suffering from various age related morbidities. Dementia being an important age related disease is expected to increase proportionately.

OBJECTIVES:

1. To estimate the prevalence of dementia in Thrissur District of Kerala, India.
2. To identify the potential socio demographic risk factors of Dementia.

Method : The field investigation was carried out in Thrissur district of Kerala. The sample persons were selected according to stratified sampling design. The rural areas constituted stratum 1 and urban areas stratum 2. A total of 20 wards were selected in random. A door-to-door survey was conducted in each of the selected wards to identify the residents aged 65 and above. Social workers with post graduate degree in Medical and Psychiatric specialisation conducted the survey. The study was carried out in 2 phases. During the first phase the field investigators administered the assessment tool which included Geriatric Mental State Examination (GMS-B3) as a screening test, History and Etiology Scheduled (HAS-B), Mini Mental State Examination – Malayalam Adaptation and Community Screening Instrument for Dementia (CSID) – informant interview. Geriatric Mental State Examination (Copeland et al,1986) is the most widely used comprehensive mental health research assessment for older persons. GMS is a 25 to 50 minutes clinical interview generating from a computerised algorithm AGE CAT (9 diagnostic clusters). A diagnostic confidence level of 3 and above represents likely cases. During the second phase all persons who obtained a confidence level of three and above in organ city cluster in GMS-B3 were clinically examined by a Psychiatrist at their households and the diagnosis of Dementia was made according to DSM-IV criteria. Evaluation in this phase included detailed medical history, physical and neurological examination. 10% of the negatively screened population were randomly selected and evaluated.

Result : A total of 72 cases of Dementia were identified from a sample of 2200 elderly persons aged 65 and above resulted in a prevalence rate of 32.7 per thousand 65% of the total Dementia cases were due to Alzheimer's Disease, 24% was due to Vascular Dementia and 11% was due to other causes which included Parkinson's Disease, Alcoholism, Head Trauma and Malignancy.

Conclusion :

1. The prevalence of Dementia in Thrissur District was 32.7 per thousand.
2. Prevelence of Dementia in rural community was 26 per thousand.
3. Prevelence of Dementia in urban municipalities and corporation was 37 per thousand.



28 March 2009, Saturday
1030 hrs – 1200 hrs
Ballroom 3

TECHNOLOGY FOR PEOPLE WITH DEMENTIA

MOBILE PHONE AS A MEANS OF REMINDER

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Purpose : Demographic changes are creating new demands on society in terms of care provision and economic costs. Of particular relevance is the challenge of dealing with the major health conditions associated with ageing, such as dementia. Associated with dementia are the key challenges with improving the quality of life and independence of such persons. Current research investigating the application of ICT has resulted in the provision of a number of devices and services that can be embedded in home environments to assist with supporting and promoting independent living.

Method : Our work aims to assist persons with mild Alzheimer's disease through the provision of memory cues to provide support when conducting daily activities. Specifically, an innovative ICT system allows caregivers to pre-record video based reminders using a web-cam for scheduled transmission over the GSM network to a single button mobile phone. At regular intervals familiar faces provide helpful instruction / reminding to persons with mild Alzheimer's via the delivery of the video reminders on their mobile phone.

Results : The first prototype system was evaluated on 9 subjects; 3 young controls, 2 elderly controls, and 4 persons diagnosed with mild stage Alzheimer's. Overall feedback was positive; young controls provided valuable information regarding system stability; elderly controls provided coherent insight regarding usability; carers reported that target group interacted appropriately with the device. The feedback following a set of 3 days of trials has been used to refine the system in preparation for a larger 1 week trial involving 12-15 patients scheduled for April 2009. Refinements include the inclusion of repeat reminders for missed events, optimising backlit display to extend battery life, and overcoming issues associated with poor GSM coverage.

Conclusion : The advantage of our system lies in the provision of supporting activities of daily living by providing a virtual carer to offer regular assistance, guidance and reminding.

TECHNOLOGICAL CHALLENGES IN DEMENTIA CARE: A CASE-STUDY BASED APPROACH

JIT BISWAS
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Dementia care should involve a holistic approach, providing needs based and assistive services, not only to the patients themselves, who are perhaps cognitively and functionally impaired, but also to their care-givers and family members. Despite progress made in technology, fundamental challenges make it infeasible to automate care delivery beyond a point. We have found that a case-study based approach, taking small measurable steps at a time, and addressing current needs is often the most meaningful way to ameliorate the hardships and complexities in dementia care. In this talk we will discuss the following challenges, namely a) fine grained activity recognition b) erroneous behaviour understanding and correction c) human computer interaction: hiding the complexity, and d) back-end issues: optimising resources and providing a service oriented interface for end users. We will demonstrate through real life deployment case studies how we have addressed, or are in the process of addressing each of these challenges.

TEC-PS07

GPS TECHNOLOGY - ANOTHER RESTRAINT OR A KEY TO FREEDOM?

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Purpose : The advancement of Global Positioning System Technology has for the first time given us devices that can accurately and reliably locate people living with dementia when they are out walking. Alzheimer's Australia WA has been at the leading edge of research into the use and development of this type of equipment and this paper will explore some of the practical and ethical issues around the use of this assistive technology.

Method : Using research conducted over the last 3 years, as well as the experience of a new service delivery model being applied in Western Australia, this presentation will discuss key issues such as ethics, terminology, barriers, people with dementia's views and effectiveness.

Result : Research conducted has led us to the development of an innovative dementia specific personal alert and location service. This included the design of an accessible GPS device and easy-to-use search interface. Barriers overcome include cost of access, ease-of-use and acceptability.

Conclusion : Assistive technology is playing an increasing role in the support of people living with dementia. The emergence of GPS technology may provide a supportive intervention to assist people living with dementia to maintain independence and freedom of choice.



28 March 2009, Saturday
1030 hrs – 1200 hrs
Room 325

DIAGNOSIS AND TREATMENT - ROLE OF GPS

DIA-PS04

PREDICTING SAFETY TO DRIVE IN PEOPLE WITH DEMENTIA

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Purpose : Lincoln et al. (2006) developed a cognitive test battery for predicting safety to drive in people with dementia. We aimed to check the accuracy of this battery and to assess whether it could be improved by shortening it, including additional tests, and by including measures of previous driving.

Method : Seventy five patients were recruited and completed the cognitive test battery. Of these, 66 were assessed on the road. These participants were aged 59 to 88 (mean=75.2, SD=6.7) and 50 were men. Most (51.5%) had Alzheimer's dementia, 21.2% vascular and 27.3% other. Cognitive testing included measures of concentration, executive function, visuospatial perception, verbal recognition memory, and speed of information processing. Patients were then assessed on the Nottingham Neurological Driving Assessment (Radford, 2001) by an Approved Driving Instructor, blind to the cognitive test results.

Result : Fourteen participants were unsafe and 42 safe to drive. Using a cut-off of 5, the original predictive equations correctly classified 79.4% of participants. A discriminant function analysis on the current data revealed no improvement in accuracy by including additional tests.

Conclusion : In the present study, a lower proportion of participants were found to be unsafe on the road than in previous studies. Despite this, the previously identified equations reliably predicted safety to drive. We suggest that the cognitive test battery might be used in routine clinical practice for identifying those patients with dementia who would benefit from an on-road assessment.

Lincoln et al. (2006), International Journal of Geriatric Psychiatry, 21(11), 1044-1051.
Radford (2001), University of Nottingham PhD Thesis.

DIA-PS05

HELPING GPS ASSESS WHEN GENETIC TESTING IS APPROPRIATE

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Purpose : Physicians in general practice are often faced with a dilemma when asked by AD patients or their family members about the need, availability, and relevance of genetic testing. In many countries and regions of other countries, limited clinical genetic services do not allow all such concerned individuals to be referred to a specialised genetics clinic. Thus community physicians must be able to:

1. Understand the role of genes in the cause/susceptibility of to AD (scientific point-of-view).
2. Understand when it is appropriate to test individuals for causative genes and the procedures that should be followed.
3. Understand the differences between causal/deterministic genes and susceptibility genes with respect to clinical practice.

Method : Practical case examples will be used to illustrate "in office" situations with which general practitioners commonly are faced. "Decision-making" information will be provided for use by these health care professionals. The presentation will also refer to guidelines for genetic testing from the 3rd Canadian Consensus Conference on Diagnosis and Treatment of Dementia.

Result : While this presentation focuses on AD, the concepts will be helpful to physicians when dealing with dementias other than AD.

Conclusion : General practice physicians can often act as "gatekeepers" to ensure that only appropriate individuals are referred for specialised genetic testing and counseling, thereby reducing the stress to the individual and ensuring that genetic services for a region are not unnecessarily overtaxed. In summary, they must understand the implications of the following statements:

1. Many different causes for dementia exist, even within a family;
2. Genetics can be complex, in particular when understanding the differences between causal/deterministic genes and susceptibility genes;
3. The majority of dementia does not typically run in families;
4. Genetic testing for dementia not available in most cases.

DIA-PS06

DIAGNOSTIC UTILITY OF THE CLOCK DRAWING TEST (CDT) IN EARLY DEMENTIA IN AN ASIAN POPULATION

LATANA AIDA MUNANG¹, MARK CHAN¹, LIM WEE SHIONG¹
Department of Geriatric Medicine, Tan Tock Seng Hospital, Singapore¹

Purpose : To compare the diagnostic utility of different CDT scoring protocols employing a pre-drawn circle in screening for early dementia in an Asian population.

Method : We retrospectively reviewed 13 cognitively intact and 55 early dementia subjects attending a memory clinic. Early dementia was defined as Clinical Dementia Rating (CDR) 0.5 (n=23) and 1.0 (n=32). Subjects were asked to draw a clock on a pre-drawn circle and copy a printed clock. The clocks were scored by three independent raters according to comprehensive [16-point clock drawing (CD); 16-point clock copying] and abbreviated (Watson; Schulman; 3-point CD) protocols. Areas under receiving operating characteristic curves (AUC), sensitivity, specificity and optimal cut-off points were determined for each method. Correlation between each method and Chinese Mini Mental State Exam (CMMSE) was also assessed.

Result : Among 55 demented subjects, the predominant etiologies were Alzheimer's disease (44%), vascular dementia (24%) and mixed dementia (25%). Subjects with dementia were older (mean age 76.8 vs. 71.5 years), less educated (4.7 vs. 10.3 years) and had lower CMMSE scores (18.2 vs. 25.9, all p<0.001). The CDT scoring methods required higher cut-offs compared with existing cut-offs (e.g. CD-comprehensive: 14 vs. 11; clock copying: 15 vs. 13; Schulman: 5 vs. 4). The comprehensive methods performed better than abbreviated methods, with clock copying attaining the best performance (AUC 0.91, sensitivity 69.2%, specificity 96.4%). Among abbreviated methods, the Schulman method performed best (AUC 0.79, sensitivity 76.9%, specificity 72.7%). Clock copying and Schulman methods demonstrate significant correlation with CMMSE (Pearson's correlations: 0.50 and 0.54 respectively, p<0.001), even after adjustment for age and education.

Conclusion : Using higher cut-off points, CDT scoring protocols using a pre-drawn circle demonstrate reasonable diagnostic utility in detecting early dementia. Among these methods, clock copying and Schulman merit further study as screening tools for early dementia in Asian populations.

DIA-PS07

ACCURACY OF MILD COGNITIVE IMPAIRMENT (MCI) CRITERIA FOR THE DIAGNOSIS OF INDIVIDUALS AT HIGH RISK OF DEMENTIA

BLOSSOM CHRISTA MAREE STEPHAN¹, GEORGE MARIO SAVVA¹, CAROL BRAYNE¹, JOHN BOND², IAN G MCKEITH³, FIONA E MATTHEWS⁴
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Purpose : Recent research has focused on the transitional state between normal cognitive ageing and dementia, now termed Mild Cognitive Impairment (MCI). Using MCI criteria to diagnose individuals at high risk of dementia for prevention and treatment is controversial. Whether MCI criteria accurately identify individuals who will develop dementia was investigated from a population perspective.

Method : Prospective cohort study: baseline and 2-year follow-up phases. Selection criteria for 7 definitions of MCI commonly used and most relevant to clinical and population-based practice were applied to participants in the Medical Research Council Cognitive Function and Ageing Study (MRC CFAS). For each definition individuals were stratified into 3 dementia risk groups - low, medium and high. The main outcome was incident dementia measured at 2 years. ROC analysis was used to compare the diagnostic accuracy of the different definitions of MCI relative to the risk of dementia.

Result : MCI definitions varied in their ability to predict dementia. No method was able to accurately identify individuals at a high dementia risk. MCI definitions were accurate in identifying individuals at low risk of dementia. Low risk case identification using the Mini Mental State Examination (MMSE) scores alone performed just as well as other methods based on detailed criteria.

Conclusion : As preventative strategies for dementia emerge it will be important to accurately diagnose individuals at high dementia risk for referral and management/treatment. A much stronger evidence base supporting the screening and treatment of MCI cases is needed before active promotion. Current MCI criteria do not accurately identify individuals at high dementia risk. A large subpopulation of those at low risk can be accurately identified who would be unlikely to benefit from intervention. What is considered a sufficient level of accuracy for diagnosis and treatment of individuals at high dementia risk will depend on availability of effective interventions and their safety.



26 March 2009, Wednesday
1030 hrs – 1200 hrs
Room 208

SERVICES AND DEMENTIA CARE

SVC-FP01

THE AIBL STUDY: BASELINE DATA FROM A MULTI-CENTRE, PROSPECTIVE LONGITUDINAL STUDY OF AGEING IN 1100 VOLUNTEERS

DAVID AMES¹, CHRISTOPHER ROWE², COLIN L MASTERS³, RALPH N MASTERS⁴, PETER HUDSON⁵, ANDREW MILNER⁶, LINDSAY BEVEGE⁶, KATHRYN A ELLIS⁷
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Purpose : The Australian Imaging Biomarkers and Lifestyle Flagship Study of Ageing (AIBL) is a three-year prospective longitudinal study of 1,102 volunteers from a cross-section of Australia's elderly population.

Method : The cohort comprises 1102 volunteers aged over 60 years [211 patients with AD] (mean age 78.4 + 8.53 years), 125 patients with MCI (mean age 76.3+ 7.33 years), and 766 healthy volunteers (HV; 70.5 + 7.03 years)]. At baseline, volunteers completed lifestyle questionnaires and underwent comprehensive clinical and neuropsychology assessment. An 80ml blood sample was provided for clinical pathology, biomarker analysis, and storage in liquid nitrogen. 265 participants received a [C-11] PIB-PET scan (a measure of in vivo amyloid) and a MRI scan.

Result : AD patients performed worse on all neuropsychological measures compared to both HV and MCI groups, and MCI patients showed greater impairment than HVs (all p<0.05). Neuroimaging subgroup results revealed a significant difference between groups in the PIB +ve volunteers (98% of AD patients, 64% of MCI patients and 29% of HVs). HVs with an apolipoprotein-E (ApoE) ε4 allele were significantly more likely to be PIB+ve than ApoE ε4 negative HVs (49% compared to 21%, respectively).

Conclusion : Cross sectional analysis of baseline data will reveal links between cognition, brain amyloid burden, structural brain changes, biomarkers, and lifestyle. An 18-month follow-up will reveal risk factors associated with cognitive decline and identify early diagnostic indicators of AD. These findings will assist development of techniques to identify factors which may delay onset of AD, and provide a cohort suitable for early intervention studies.

SVC-FP02

URBAN AND RURAL DIFFERENCES IN NON-COMMUNICABLE DISEASES AND CARE ARRANGEMENTS AMONG ELDERLY CHINESE: A 10/66 DEMENTIA RESEARCH GROUP POPULATION-BASED STUDY

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Purpose : To describe and compare the patterns of recent health service utilisation and care arrangement of urban and rural Chinese.

Method : A one-phase cross-sectional survey of whole elderly (65 years and over) residing in two areas of Beijing, China was conducted by community health workers. Interviews were carried out according to the 10/66 standardised protocol, which comprises questionnaires on participants' socio-demographic characteristics, health status and health behaviours, risk factor exposures and a physical/ neurological examination; as well as care arrangements, impact-economic and practical-and caregiver strain and mental health.

Result : A total of 2162 participants took part into the study, for an overall response rate of 83%. Rural elderly Chinese were younger, less educated, had no pension and lived within larger families. Urban elderly Chinese were more likely to have hypertension and reported more NCDs, and needed more care than the rural ones. People with dementia needed more care than people without dementia. They also needed more supervision and assistance with activities of daily living and were more disabled than those without dementia. Paid care was common in urban China and did not exist in rural China. In rural China nearly 50% of caregivers had to cutback on work to care, while only about 4% had to in urban China. The caregiver strain was higher if the person looked after had dementia. Urban caregivers had more strain of rural ones. 93.9% of rural Chinese had not used any health service in the 3 months preceding the interview. Dementia did not predict the use of any health services.

Conclusion : There are differences between urban and rural elderly in terms of social-demographic characteristics, physical health, health service and social care. Dementia is the predictor of social care, while it does not influence the health service utilisation among the elderly.

SVC-FP03

NEEDS OF FAMILY CAREGIVERS OF PERSONS WITH DEMENTIA IN SINGAPORE

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Purpose : In 2008, there is an estimated 22,000 persons with dementia (PWD) in Singapore and it is projected to increase to 52,600 by 2020. It is vital to support family caregivers as they play a critical role in providing the emotional and practical support of PWD. This study elucidates the expressed needs of family caregivers of PWD in Singapore so that appropriate programs can be implemented to address their needs.

Method : In a cross-sectional survey, caregivers of PWD attending the Geriatric Clinic of Alexandra Hospital or Alzheimer's Disease Association Dementia Day Care Centres between January and June 2008 were interviewed by trained interviewers. During the interview, respondents were asked to rate the importance of 26 needs statements using a 5-point Likert-type scale (1= not important, 2=not so important, 3=not sure, 4=somewhat important and 5=important).

Result : There were 95 female and 30 male family caregivers in the study. Majority of them were children (daughter 58.4%, son 17.1%), followed by spouses (husband 7.2%, wife 4%) of PWDs. The severity of dementia (DSM IIIR) of the PWDs they were caring for were as follows 20% mild, 44% moderate and 36% severe. Of the 26 needs statements, 18 statements had 80% of respondents agreeing to "somewhat important" or "important". The top five expressed needs and the mean score (out of a maximum of 5) were: (1) A safe and supportive home environment for the patient (4.79), (2) Better trained staff caring for patient in care centres, hospitals and nursing homes (4.76), (3) Medical treatment for the patient to control the symptoms of dementia even though there is no cure (4.62), (4) Opportunities to discuss the patient's condition and treatment options in detail with the doctor, and (5) Support from family, relatives & friends to aid in your caregiving role (4.60).

Conclusion : A great proportion of family caregivers expressed a wide variety of needs, both their own needs as well as the needs of the PWD and this provides useful information for planning and developing services for PWD and their family caregivers.

SVC-FP04

A COMPARISON STUDY OF DEMENTIA SERVICES IN SINGAPORE AND NORTHERN IRELAND

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Purpose : Dementia is of global concern affecting around 30 million people worldwide and this is set to increase to more than 100 million by 2050. If longevity is the legacy of the 20th century then living longer while enjoying quality of life will be the challenge for the 21st century. The purpose of this study is to compare the dementia services between Singapore and Northern Ireland. As the complexity and diversity of meeting the needs of people with dementia poses many challenges for healthcare staff, nurses can deal with this by sharing best practice initiatives.

Method : This study, which was supported through a grant from the Health Manpower Development Plan (HMDP), is the culmination of an 8 week placement. A variety of dementia care settings in Northern Ireland was visited to gain an understanding of the healthcare system and compare this to that of Singapore. The study centred on service provision, nurse education and the treatment and management of the non-cognitive symptoms of dementia.

Result : The study highlighted the similarities in the universal difficulties that the behaviour and psychological symptoms of dementia present. However, variation in management is very evident. In the UK, more emphasis is placed on psycho-social approaches as compared to the widespread use of psychotropic medications in Singapore.

Conclusion : This study reveals telling differences in dementia care between Singapore and Northern Ireland. The importance of education in the use of non-pharmacological approaches to facilitate delivery of high quality person centered dementia care has clear implication for practice in Singapore.



SVC-FP05

TRAINING OF PROFESSIONAL CAREGIVERS. THE VENEZUELAN EXPERIENCE AURA TOVAR¹

Instituto de Formación de Recursos Humanos para Personas con Discapacidad (IDIS), Caracas, Venezuela¹

Purpose : Venezuela has 26 inhabitants of whom 2 million are older than 65 years. According to local statistics of the 10/66 research group, 7% of these age-group is affected by Alzheimer's disease; means approximately 140,000 elders need care. Still not even a low percentage of this need can be fulfilled with available caregivers. Responding to this necessity, the "Institute of Human Resources for People with Discapacities" (IDIS) was founded in 2006 with the auspice of the Venezuelan Alzheimer Foundation. IDIS has been specialising in training a new generation of caregivers: Persons who has not been educated as professional nurses but get to know the theoretical and practical knowledge required to attend an adult with Alzheimer's disease. The education program is massive (up to 200 participants at a time) and given for free to the future caregivers. It is financed by private and public institutions with governmental support in terms of tax concessions for the supporters.

Method : The Caregiver Training Program consists of 102 hours of classes (11 subjects) plus 32 hours of internship and it can be attended by persons without High School diploma.

Result : Recently 40% of the participants fulfill the demanded performance level. As a free public service for help seeking families the data of certified caregivers is available in the Venezuelan Alzheimer Foundation. By 2008 IDIS has certified 150 Caregivers in Caracas; All are on duty.

Conclusion : The IDIS caregiver program creates new jobs for persons with low academic level but the sensibility to care for people in need. Furthermore, it sets up a solid base for a private care service, created for families with less economical capacities who need a caregiver but cannot afford professional nurses. The aim of IDIS is to launch this educational program nationwide in order to attend the Venezuelan caregiver's need.

26 March 2009, Wednesday
1345 hrs – 1515 hrs
Room 325

NON-PHARMACOLOGICAL TREATMENT AND INTERVENTION

NON-FP13

THE CHALLENGES AND TRIUMPHS OF INVOLVING RELATIVES IN JOINT TRAINING WITH CARE HOME STAFF

HENRY SIMMONS¹, JENNY HENDERSON¹
Training, Alzheimer Scotland, Edinburgh, Scotland¹

Purpose : 1. To develop current care practice by supporting staff and relatives to meet the palliative care needs of people with dementia in the later stages of dementia (last 24 months) ; 2. Create dementia and palliative care champions in care homes who would be able to disseminate the information throughout the care home.

Method : 1. To provide a comprehensive three-day training for both staff and relatives on all aspects of palliative care as defined by the WHO including: communication with some one in the later stages of the illness and their families, involving relatives, spirituality, management of pain, planning care, ethics and end of life issues and understanding relatives' needs ; 2. To provide staff with further five half-day sessions of supported learning to enable them to implement their learning in practice ; 3. To encourage relatives to put their learning into practice either on an individual level with their family member or by helping staff to implement change.

Result : 1. There are approx 100 dementia champions and 60 relatives who have completed the course; 2. There have been many small but significant changes in care practice instigated by both staff and relatives; 3. There has been an improved understanding of each other's needs and is an example of relationship care in practice ; 4. The needs of people with dementia who are slowly dying of the disease and their relatives has been highlighted; 5. Relatives have found the sessions supportive and empowering because of the knowledge they have gained.

Conclusion : 1. This innovative project demonstrates that difficult topics concerning end of life can be, and should be discussed with relatives ; 2. There are huge opportunities for staff and relatives to learn from each other ; 3. The possibilities for changing care practice are huge and the supported learning sessions has enabled staff to bring about change and involved relatives.

NON-FP14

SMARTPHONE APPLICATION FOR IMPROVING SHORT-TERM MEMORY LOSS IN PATIENTS WITH ALZHEIMER'S DEMENTIA

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Purpose : People with Alzheimer's Dementia suffer from confusion, disorganised thinking, impaired judgment, trouble in expressing themselves and disorientation. In most of the patients, these patterns result in short-term memory loss. So, our main purpose is to assist these people suffering from short-term memory loss in reconciling the memories of their past life for an assuring everyday life.

Method : As the previous research studies determined that external aids can be used to recall the past memories, we have approached the problem by using a smart phone application for remembering their past events, thus improving the quality of life of the people with Alzheimer's Dementia. Since, short-term memory is rich with visions; reviewing images of previous experiences should be helpful in recollecting memories of past life. In this research study, everyday activities are captured with a smart phone worn by the patient with a lanyard. The smart phone will be programmed to take a picture, for every five minutes. These pictures are uploaded to a remote and secure server through the Internet connection available on the smart phone. This is a continuous and automatic process without any involvement or conscious of the patients. The images received will be combined in a slide show and stored into a DVD and mailed to the patient's home once in a week, so that they can be viewed. Caregivers are asked to review the slide show together with the patients. Caregivers will also collect structured data by using a standardised questionnaire.

Result : From the data collected, this study is to determine if the consistent review of earlier events with pictures helps the patient in arousing the memories of past experiences. The project also aims to investigate if the images collected through the smart phone form a complete and rational collection of past events.

Conclusion : Constant retrospection of past life, in this case, through the pictures taken by smartphone certainly helps patients dealing with short-term memory loss in a better way.



26 March 2009, Thursday
1345 hrs – 1515 hrs
Room 208

DEMENTIA CARE - LONG-TERM CARE

LTC-FP01

THE DEMENTIA DIFFERENCE - A 2-DAY WORKSHOP ON CARING FOR PEOPLE DYING WITH DEMENTIA

JANICE ROBINSON¹

Residential Care, The Lodge at Broadmead, Victoria, Canada¹

Purpose : The majority of people who reside in residential care facilities (traditionally called nursing homes) die 'at home' in these same facilities. Large percentages [up to 75%] of these people have a diagnosis of dementia. Although we care for people through to death, the focus in residential care is often on 'living' and dying is not always a privileged topic. In an effort to balance this perspective and continue our quest for best practice dementia care, a search for available education on end-of-life care for people with dementia was conducted. The search yielded very limited options, as most end-of-life education focuses on people with cancer diagnoses. A decision to develop a workshop in-house was made. This oral presentation will describe the current interprofessional educational initiative taking place in a residential care home in Victoria, BC, Canada titled The Dementia Difference: A palliative approach for people with late-stage dementia.

Method : This training program for professional caregivers was developed by a Clinical Nurse Specialist in Dementia Care along with a Registered Nurse consultant with experience and expertise in palliative care and curriculum development. The content of the workshop is based on current evidence in caring for people dying with dementia and includes information that addresses what staff of the care home told the authors were their biggest challenges when caring for people dying with dementia. The goal of The Dementia Difference is: to increase caregivers' capacity to provide excellent care through to death, through the application of palliative principles, specifically focusing on issues that are unique to caring for people dying with dementia. The course curriculum includes information on: ambiguous dying, supporting families, physical comfort and symptom management, making moments meaningful, and care of the caregiver. The focus is on what is different for a person dying with dementia and how best to support them. All team members, no matter what their job description are supported to attend the education.

Result : Initial results of the evaluation of the workshops have been extremely positive. Initial changes that staff report have occurred since delivering the education include: increased acceptance and communication about death, decreased clinical nature of dying, increased knowledge and confidence in caring for people dying with dementia, changes in language and increased confidence in communication with family members. Our next steps include adapting the content for volunteers and family members.

Conclusion : There is growing body of knowledge on best practices at end-of-life for people with dementia and this presentation showcases that information. Developing a workshop for interprofessional staff of a residential care facility provided the authors with a variety of information on care for people dying with dementia to share with conference participants. The author acknowledges Veterans Affairs Canada for support for this project.

NON-FP15

INNOVATIVE APPROACH MULTI SENSORY ACTIVITIES FOR CLIENTS WITH DEMENTIA AND VISUAL IMPAIRMENT

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Residential Division, The Hong Kong Society for the Blind, Hong Kong¹

Purpose : To introduce an innovative multi-sensory activities for client with dementia and visual impairment.

Method :

1. The Hong Kong Society for the Blind established TWO sensory room with the theme related to Chinese traditional culture (e.g. Chado and Chinese beauty care and custom.);
2. Therapist and social worker design different types of sensory activities and treatment modalities in the sensory room which was different from the snoezelen completely;
3. Therapist designed a special sensory assessment form in evaluating the result of multi-sensory stimulation program.

Result : Participant showed a marked improvement in reducing BPSD at the aged home.

Conclusion : Sensory stimulation room program needed to relate to culture and customs. Further research study is needed for proven effectiveness.

NON-FP16

EVALUATION OF A LONG-TERM NON-PHARMACOLOGICAL TREATMENT FOR PATIENTS WITH MILD COGNITIVE IMPAIRMENT (MCI) AND MILD ALZHEIMER'S DISEASE (MILD AD)

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Purpose : Non pharmacological treatment is beneficial for patients with dementia. The aim of the study was the follow up of patients with Mild Cognitive Impairment (MCI) and Mild Alzheimer's Disease (Mild AD) after a long-term participation in non-pharmacological treatment.

Method : Participants were 24 MCI (MMSE 27.5) and 33 Mild AD (MMSE 23.5) patients, 25 experimental and 32 controls, matched in age, gender, and education. Experimental MCI attended non-pharmacological treatment for 3 years and Mild AD for 4 years. Treatment lasted 5-6 months every year, with no treatment for the rest of the months. Neuropsychological assessment was performed at baseline and after 3 years for MCI and after 3 and 4 years for Mild AD.

Result : After 3 years of non-pharmacological treatment, MCI experimental had better performance than controls in memory (p≤ .018), attention (p.008), general cognitive performance (p .014) and daily function (p .006). At the end of 3 years treatment, Mild AD experimental performed better than controls in visual perception (p≤ .014), praxis (p .009), memory (p≤ .018), and executive function (p≤ .009) and after 4 years in executive function (p≤ .009) and memory (p≤ .018). After 3 years of treatment, MCI experimental, in comparison to controls, who remained stable, showed improved performance in attention (p≤ .017), verbal (p .007), and visual memory (p.001). Mild AD experimental after 3 as well as after 4 years stabilised their cognitive and functional performance, while controls showed deterioration in attention (p .000), praxis (p .004), general cognitive function (p≤ .003), daily function (p .008), and memory (p≤ .016).

Conclusion : Long-term non-pharmacological treatment improved cognitive and functional performance and warded off the evolution of MCI to dementia for 3 years; inhibited the progressive impairment of AD patients, characteristic of the disease process, for at least 4 years.



LTC-FP02

A CASE STUDY ON HOW DEMENTIA CARE MAPPING HAS IMPROVED THE QUALITY OF LIFE OF THE DEMENTIA RESIDENTS AND ALSO HELPED TO REDUCE THE COST OF INEFFECTIVE USE OF MANPOWER OF A NURSING HOME IN SINGAPORE

ARIVAZHAGI VARADHAN¹, LINA MA¹

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Purpose : Dementia is prevalent in all environments and affects more than half of those who are residing in nursing home (Mathew & Denning, 2002). Surveys and clinical experience in residential care settings have identified behavioural problems as the most serious difficulty for families and providers alike. Despite various interventions, problematic behaviour remained as common, multiple and complex (Mace, 1990).

Method : Therefore, designing culturally acceptable care approach and adopting effective interventions for the management of behaviour problems have become a concern for nursing homes in Singapore. Dementia care mapping (DCM) training was introduced to Singapore in 2007 and it was implemented in the Lions Home for the Elders as an assessment tool and a guide to person centred care since January 2008.

Result : DCM has transformed the nursing and care staff attitudes and their care practices. It has also helped the staff to identify and avoid triggers that could lead to expressions of ill-being in persons with dementia, thereby created a more favourable environment to achieve well-being, hence improved quality of life of residents with dementia and reduced cost of ineffective use of manpower in the nursing home.

Conclusion : Ultimately, policy makers, service providers and all those who work with dementia residents need to examine their own values and practices. It is time for all long-term care communities to adopt a management strategy that can facilitate residents' full ability and the maintenance of personhood.

References : Mathew, F.E. & Denning, T. (2002). Prevalence of Dementia in Institutional Care. Lancet, 360, 225-226; Mace, N.L. (1990). What is Good Care for People with Dementia? Proceedings of 25th Annual Conference of the Australia Association of Gerontology, pp. 85-87.

LTC-FP03

PERSON CENTERED APPROACH TO CARE GIVING

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Alzheimer's and Related Disorders Society of India, Malabar Harmony Home, Calicut, India¹

Purpose : The approach of "Person Centered Care Giving" is to address the problems of challenging behaviours of people with dementia. It means, providing care to a person after thoroughly studying his behaviour. Otherwise, it becomes extremely difficult to handle the clients and to attend to their personal needs. The clients with violent or aggressive behaviour can be pacified and brought back to some what normal mood, by adopting the method of person centered care giving.

Method : Preparation of case history of the clients by undertaking in depth study of each individual's behavioural attitude is the first step. Thereafter, the care givers are thoroughly briefed regarding the challenging behaviours of each client. For each type of typical behaviour, suitable remedial care method is formulated after deliberations. Once, the care method is finalised it is reduced to writing and maintained along with personal documents of the client. Thus, the caregiver entrusted to take care of the client, will have a very clear picture of the behavioural attitude and the method of care giving.

Result : The result of such an approach is quite encouraging. The client with high temperaments often gets back to somewhat normal mood when taken to reminiscences. The tendency of breaking the lock or bolt is often diverted by opening the door and escorting the client as per his wish. The violent and aggressive nature is lessened by getting into their likes and dislikes. Wandering tendency is reduced by taking the client for a walk.

Conclusion : Our experience shows that the challenging behaviours can be addressed by providing person centered care. The topic will be presented through the case study of three clients of Malabar Harmony Home, with challenging behaviours. Our caregivers are meticulously trained to provide care in this method which is a consolation to both the client and the caregiver.

LTC-FP04

MONITORING PAIN IN SEVERE DEMENTIA BY AUTOMATIC VISION SYSTEM

ERIC TRIAU¹, MAARTJE WILS¹, DANIEL BERCKMANS², PIETER SCHIEPERS², DRAGANA MILJKOVIC², VASILEIOS EXADAKTYLOS², BART VANRUMSTE³, BERT BONROY³, GREET LEYSENS³, LIEVEN DE MAESSCHALCK³

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Purpose : The aim of this research is to set up a vision acquisition system for continuous monitoring of pain in patients with severe dementia and to develop pattern recognition algorithms for automatic detection of pain.

Method : Pain in elderly, and especially in severely ill demented patients, loosening their communication abilities, is a very underestimated reason of discomfort. Facial expression is known as a useful and reliable pain-indicator. However, the interpretation of these facial expressions by caregivers has limitations and is not continuous. Therefore a pilot study was conducted to set up a low-cost vision system that can continually identify pain in real-time by means of facial pattern recognition techniques. Ten patients, admitted in the long-term care facility De Wingerd, were included in this study. All patients suffered severe dementia, corresponding Reisberg's Global Deterioration Scale stage 7. Image acquisition was performed by a new bedside two-camera system, linked to a computerised recording device. To label the facial expressions experienced staff filled in 3 pain-scales (PACSLAC, DS-DAT and FPS-R) on a new developed graphical user interface with touch screen (Digital Pain Labeling Tool or DPLT). All the information is stored in a database, allowing time stamping of recorded events, and aiming to develop pattern recognition algorithms.

Result : First results show the usability of a user-friendly electronic device with a graphic user interface on a touch screen (DPLT) allowing computerised use of pain observational scales in severe dementia.

Conclusion : The presented vision acquisition system and digital pain labeling tool are very promising for a better recognition of pain in severe dementia. Further research will be focused on implementation of the tools in common clinical practice and on developing algorithms for automatic detection of pain.

LTC-FP05

DESIGNING A HOUSING COMPLEX FOR THE ELDERLY WITH DEMENTIA: A CASE STUDY OF A NURSING HOME IN SOUTH URBAN CITY AT TAIWAN

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Purpose : One of main objectives of an architectural designer is to provide most appropriate living environment for people with dementia in their later life. In order to provide a comprehensive service for the elderly with dementia, the perceptive of social welfare and health care should be taken into account in the process of the architectural design.

Method : This research begins with discussing the literature reviews about how the existing health care institutions implement small-scale community development projects, care units, and home group housing to the elderly with dementia in recent years. In addition, the architectural design in this nursing home is developed to ensure that the continuing care including the provision of health care services and a comprehensive living environment are provided for the elderly with dementia.

Result : The results of this research suggest that the comprehensive creation of a housing complex for the elderly with dementia should include the following criteria: 1). a recreational community space, 2). unit care projects for the elderly, 3). multi-levels space design, 4). small-scale and individual care units, 5). spaces for daycare services, and 6). a comprehensive healthy living environment.

Conclusion : In conclusion, the incorporation of the six criteria into the design of a comprehensive housing complex for the elderly with dementia can achieve the aim of age in place.



27 March 2009, Friday
1030 hrs – 1200 hrs
Rooms 208 / 209

CAREGIVERS

LTC-FP06
EVALUATING RESULTS OF A 6-MONTH INTERVENTION PROGRAMME IN A DEMENTIA DAY CARE CENTRE

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Athens Association of Alzheimer's Disease and Related Disorders, Athens, Greece¹;
Athens Association of Alzheimer's Disease and Related Disorders, Athens, Greece²

Purpose : 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. The intervention program for dementia patients includes cognitive training, language stimulation, physical exercise and occupational therapy. A first pilot study conducted from our Center in a small sample showed maintenance of the patients' cognitive abilities. The present study evaluates results of cognitive and physical intervention in a larger sample of people with dementia. To evaluate the impact of a 6-month intervention program on the cognitive abilities of the participants.

Method : 75 subjects (26,2% male and 73,8% female) with mean age 72,63 (±8,49) participated in the program delivered twice a week for 6 months. Participants were divided in 4 groups according to their cognitive and functional level. For the neuropsychological evaluation the following tests were used: MMSE, MOCA, CDT, Verbal & Category Fluency, BNT-15, FAB, Stroop, Simplified Rey Figure, GDS-15, IADL. Subjects were reevaluated with the same tests at the end of the 6-month intervention program.

Result : For group A (MCI and early dementia) significant improvement was contested for MOCA, BNT, Verbal Fluency and Simplified Rey Figure (p<0,05). Subjects in other groups B, C and D (moderate and severe dementia) showed no statistically significant changes on neuropsychological testing.

Conclusion : Results suggest that MCI patients and patients at the first stages of dementia benefit more from the intervention. Although there was no statistically significant improvement in the rest of the groups, patients in the moderate and severe stages of dementia remained stable over a six month period.

CGV-FP01
CAN A HUSBAND BE A CAREGIVER?
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Purpose : Worldwide, the caregivers of patients with dementia are usually women, in particular the wife or the daughter. In the minority of cases it is the husband. Whereas the effect of care giving on the quality of life of female caregivers is well known, much less is known about male caregivers. The purpose of this study was to determine how husbands cope as caregivers.

Method : An in-depth study of 10 husbands caring for their spouses was executed by means of psychological questionnaires and personal interviews. The results of a similar study done on female caregivers provided a basis for comparison.

Result : Although the experiences of male caregivers are in many respects similar to those of women caring for mothers or husbands, unique differences were detected. While males find the restrictions on time for themselves as a major source of stress, they tend to under-report the care giving burden. Spiritual factors as well as practical and emotional support from their children were identified as major sources of strength enabling them to experience their care giving task as more comprehensible, controllable and meaningful. These factors are regarded by Antonovsky as the basic elements of a sense of coherence, which is necessary for resilience in trying circumstances. The traditional format of support groups, focusing on the emotional burden of the care giving, did not appeal to the husbands of this study. They prefer a more formal instructive format. A major finding was that men apparently tend to utilise a more problem-focused approach rather than an emotion-focused approach, which enables them to accept assistance more readily than women.

Conclusion : Husbands can be good care givers – and they are proud of it.

CGV-FP03
CARING FOR THE PERSON WITH DEMENTIA BY THE DOMESTIC HELPER: THE EMPLOYER'S AND DOMESTIC HELPER'S PERSPECTIVES IN SINGAPORE
SITI ZUBAIDAH YUSOFF¹, DENISE CHEN¹, JO HOBMAN², VINCENT LEOW², LIM JIE RU², LIM YI TONG², CHERMAIN TAY², WONG WEI HEEN²
Occupational Therapy, Rehabilitation Department, Alexandra Hospital, Singapore¹;
Occupational Therapy, School of Health Sciences, Nanyang Polytechnic, Singapore²;

Purpose : 1) To explore the employers' expectations of domestic helpers' abilities in caring for persons with dementia; 2) To explore the current acquired abilities of domestic helpers in caring for persons with dementia; 3) To explore the psychosocial coping abilities of domestic helpers in caring for persons with dementia; 4) To recommend guidelines for a future OT service to complement and address any gaps in the present service.

Method : The study will involve dyads consisting of an employer and his/her domestic helper caring for the person with dementia. A series of semi-structured interviews, skills checklists and activity charts will be conducted with the participants respectively. Following which thematic analysis will be carried out to highlight pertinent issues.

Result : Preliminary analysis indicates that domestic helpers often experience tensions between care giving and attending to other domestic duties. Results also highlight a mismatch of expectations of employers and their domestic helpers with respect to caring for persons with dementia.

Conclusion : These preliminary findings suggest that domestic helpers often face stress derived from compounding factors, both emotional and practical. Occupational therapists may have a pivotal role in offering support, education and training to both employers and their domestic helpers to improve the quality of care for persons with dementia. Data collection and analysis will continue in this ongoing study to identify more themes that may emerge.



CGV-FP04
EARLY COGNITIVE CHANGES IN PERSONS WITH ALZHEIMER'S AND THEIR ADULT CHILD CAREGIVERS: DOES SYMPTOM SIMILARITY ADD TO CAREGIVER STRESS?

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Purpose : Research consistently documents threats to well-being posed by caregiving to persons with Alzheimer's disease. Here we examine an additional, neglected threat: cognitive changes experienced by middle-aged caregivers and the similarity of those changes to the early cognitive changes experienced by their parent with Alzheimer's.

Method : As part of a larger study of personal concerns about developing Alzheimer's disease, data were gathered in 2000 from 108 adult children (ages 40-60) with a living parent diagnosed with probable Alzheimer's. We asked if these respondents had experienced any changes in their memory and, if so, the types of changes they experienced (e.g., loses things, forgets words, etc.). Subsequently, respondents were asked about early cognitive symptoms exhibited by the parent with Alzheimer's. The two sets of cognitive changes were paired and an index of the number of similar symptoms created. For the subsamples of adult children who were (n=27) and were not (n=54) the primary caregiver, correlations were run between the index of symptom similarities and stress, life satisfaction, subjective health status, and number of doctor visits.

Result : Among the adult children who were the primary caregiver for the parent with Alzheimer's, physical and psychological well-being was associated with symptom similarities. The greater the number of cognitive changes respondents experienced in common with the parent, the higher their stress (r=.378, p=.052), the lower their life satisfaction (r=.339, p=.083), and the greater the number of doctor visits in the past year (r=.541, p=.004). For the adult children who were not primary caregivers, none of the correlations approached significance.

Conclusion : Stress is common among caregivers to persons with Alzheimer's. Our results suggest an additional source of stress for these caregivers: similarities between cognitive changes they are experiencing in middle age and the symptomatic cognitive changes experienced by their parent early in the Alzheimer's process.

CGV-FP05
IMPROVING HOSPITAL DISCHARGE PREPARATION AND SUPPORT FOR FAMILIES OF PATIENTS WITH DEMENTIA
MICHAEL BAUER¹, LES FITZGERALD², SUSAN KOCH³, SUSAN KING⁵
Division of Nursing & Midwifery/ Australian Centre for Evidence Based Age Care, La Trobe University, Bundoora, Australia¹; Division of Nursing & Midwifery, La Trobe University, Bundoora, Australia²; Division of Nursing & Midwifery/ Australian Centre for Evidence Based Age Care, La Trobe University, Bundoora, Australia³; Division of Nursing & Midwifery, La Trobe University, Bundoora, Australia⁴

Purpose : This study explored whether caregivers, who take the responsibility for caring for a family member with Alzheimer's disease or dementia, receive as part of the hospital discharge planning process, the physical and psychosocial support they need to continue their caring role.

Method : A qualitative constructivist research design was used and twenty three family carers from Victoria were recruited using flyers and by hospital referral. Participant data was collected by interview.

Result : The data suggests that family members frequently perceive the discharge planning in hospital to be ad hoc, and that information, communication and care standards they expect, are often not provided.

Conclusion : The needs of family carers of patients with dementia are not always being met and the discharge practices of health professionals is in need of change. Family carers may hold negative views about the hospitals where their family member was treated as a result of their experience.

CGV-FP06
THE HELP SEEKING BEHAVIOUR AND BURDEN OF INFORMAL CARERS FOR DEMENTED ELDERLY IN HONG KONG

BRENDA HO WAN LI¹, LISA SUM YIP¹, WAI-MAN CHAN¹
Department of Health, Elderly Health Service, Hong Kong SAR¹

Purpose : To identify informal carers' barriers to seeking medical help before formal diagnosis of dementia in elders and explore their subsequent psychological burden upon diagnosis.

Method : Twenty four informal carers, each taking care of a newly diagnosed demented elder, were invited for an in-depth interview. Their barriers to seeking help were explored using a semi-structured questionnaire. Their psychological burden was assessed with the Zarit's Burden Interview (ZBI). The transcripts were analysed independently by an experienced clinical psychologist and a trainee clinical psychologist using content analysis.

Result : Fifteen (62.5%) of the elders being taken care of by the subjects were mildly demented (CDR score=1). The time lag between onset of symptoms and formal diagnosis of dementia ranged from 1 to 6 years. About half of the informal carers (45.8%) were spouse of the demented while one-third of the carers (33.3%) were children of the demented. The average ZBI score of the carers was 15, and the burden was significantly higher for those who were single than those who were married. Barriers to seeking help identified included lack of knowledge on dementia, belief that cognitive decline was part of normal aging, not knowing where to seek help, myths that dementia was incurable, and perception that the elders had not deteriorated over the years. On looking back, some informal carers mentioned that their elders might have benefited by earlier assessment and intervention.

Conclusion : In view of the aging population and the expected increase in number of demented patients in future, more publicity to increase awareness for dementia and greater community support for informal carers would enable them to provide better care for the demented patients and minimise burnout among them.

CGV-FP08
CONNECTIONS AND TALENTS" - ACTIVITIES FOR HEALTH PROGRAMME, BRINGING ACTIVITIES BACK INTO THE HOME
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Psychogeriatric Center, Tel Aviv Medical Center, Tel Aviv, Israel¹; Israel Alzheimer's Association, Ramat Gan, Israel²

Purpose : A majority of those suffering from dementia are living at home with family and/or paid caregivers. Often their days are void of meaningful activity, leaving them bored and frustrated. The caregivers are over stressed and occupied with daily survival. Goals:

- Reconnect the person to self and others
- Stimulate brain and use remaining abilities and talents
- Reconnect caregiver to person by seeing strengths and doing things together
- Integrate activities into daily schedule

Method : The program was developed and implemented by the Alzheimer's Association 10 years ago in partnership and support of social security and various organisations and services. It is presently functioning in twelve locations throughout the country. An activity kit was specially designed for people with dementia including; sensory stimulation and exercise, cognitive stimulation, reminiscence, games, songs, and creative arts. Volunteers trained in dementia care and activities, make 10-12 home visits. They engage the person with dementia in activities from the kit and coach the caregivers in effective communication techniques and implementing activities. The volunteers receive ongoing supervision.

Result : More than 500 families have participated in the program.

Benefits:

- Most participants were more alert, motivated, and stimulated
- Most caregivers were surprised and pleased with the rediscovered abilities and regained hope
- Volunteers were empowered, discovered creative talents, and received great satisfaction

Weakness:

- Participants often cooperate better with volunteer
- Caregiver doesn't always continue the activity program

The program has developed and changed according to needs, such as:

- Create continual supervision and enrichment programs for volunteers and local supervisors
- Adapting program to different locations and populations (rural, ultra religious)
- Redesigning, upgrading, and translating the kit
- Emphasising partnership of caregiver through active involvement to promise success

Conclusion : Engaging in activities at home improves function, interaction, and returns meaning and joy into the home.



27 March 2009, Friday
1345 hrs – 1515 hrs
Room 325

BASIC SCIENCES

BAS-FP01

PROTECTIVE EFFECT OF CURCUMIN, A DIFERULOYLMETHANE AGAINST BEHAVIOURAL AND BIOCHEMICAL ALTERATIONS INDUCED BY CHRONIC ALUMINIUM EXPOSURE IN RATS

ATISH PRAKASH¹, ANIL KUMAR¹, SAMRITA DOGRA¹

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Purpose : Aluminum is a potent neurotoxin and has been associated with Alzheimer's disease causality for decades. Prolonged aluminum exposure induces oxidative stress and increases amyloid beta levels in vivo. Current treatment modalities for AD provide only symptomatic relief thus necessitating the development of new drugs with fewer side effect. The aim of the study was to demonstrate the protective effect of chronic curcumin administration against aluminum-induced cognitive dysfunction and oxidative damage in rats.

Method : Wistar rats of either sex, 2-3 months old (Central Animal House, Panjab University, Chandigarh) and weighing 180-200g at the start of the study were used. Aluminum chloride (100mg/kg, p.o.) was administered to rats daily for 6 weeks. Rats were concomitantly treated with curcumin (per se; 30 and 60 mg/kg, p.o.) daily for a period of 6 weeks. On the 21st and 42nd day of the study behavioural studies to evaluate memory (Morris water maze and elevated plus maze task paradigms) and locomotion (photoactometer) were done. The rats were sacrificed on 43rd day following the last behavioural test and various biochemical tests were performed to assess the extent of oxidative damage.

Result : Chronic aluminum chloride administration resulted in poor retention of memory in Morris water maze, elevated plus maze task paradigms and caused marked oxidative damage. It also caused a significant decrease in the acetylcholinesterase activity. Chronic administration of curcumin significantly improved memory retention in both tasks, attenuated oxidative damage and acetylcholinesterase activity in aluminum treated rats (p<0.05).

Conclusion : Curcumin has neuroprotective effects against aluminum-induced cognitive dysfunction and oxidative damage.

BAS-FP02

PROTECTIVE EFFECT OF NARINGIN, A CITRUS FLAVONOID, AGAINST COGNITIVE IMPAIRMENT AND OXIDATIVE STRESS IN AN ANIMAL MODEL OF SPORADIC DEMENTIA OF ALZHEIMER'S TYPE (SDAT)

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PHARMACOLOGY, UIPS/ PANJAB UNIVERSITY, CHANDIGARH, INDIA¹

Purpose : Alzheimer's disease is a progressive neurodegenerative disorder affecting the elderly. Oxidative stress and neuroinflammation have been implicated in the pathophysiology of AD. Central administration of colchicine, a microtubule disrupting agent, is known to cause cognitive impairment, oxidative stress and neurofibrillary degeneration which simulates the sporadic AD seen in humans. Thus the present study was aimed to evaluate the protective effects of naringin against the colchicine-induced cognitive impairment and oxidative stress in rats.

Method : Male wistar rats were used in the study. Intracerebroventricular cannula was implanted on the lateral ventricles. After one week of surgery, drugs treatment was given and various behavioural (Morris water maze and plus maze test, locomotor activity) and biochemical parameters (lipid peroxidation, nitrite concentration, reduced glutathione, catalase and acetyl cholinesterase levels) were assessed.

Result : Following intracerebroventricular (i.c.v.) administration of colchicine (15µg/5µl), rats exhibited poor retention of memory in Morris water maze, elevated plus maze task paradigms and oxidative stress. Chronic treatment with naringin (per se; 40 and 80 mg/kg, p.o.) daily for a period of 25 days beginning 4 days prior to colchicine administration significantly improved colchicine-induced cognitive impairment. Intracerebroventricular administration of colchicine also resulted in marked oxidative stress as indicated by significant increase in malondialdehyde and nitrite levels and depletion of SOD, catalase, glutathione-s-transferase activity and reduced glutathione levels. It also caused a significant decrease in the acetylcholinesterase activity. Chronic administration of naringin not only caused an improvement in the cognitive dysfunction but also significantly reduced the elevated malondialdehyde, nitrite levels and restored SOD, catalase, glutathione-s-transferase and acetylcholinesterase activity as well as the reduced glutathione levels.

Conclusion : The results of the present study indicated that naringin (per se; 40 and 80 mg/kg, p.o.) treatment has a neuroprotective role against colchicine-induced cognitive impairment and associated oxidative stress.

BAS-FP03

CHYAWANPRASH FOR THE MANAGEMENT OF ALZHEIMER'S DISEASE

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Purpose : Chyawanprash is an Ayurvedic formulation commonly consumed in Indian house hold. The Chyawanprash is a comprehensive herbal tonic, prepared from around 50 herbs employing anwala (Emblica officinalis) as the basic ingredient. The present study was undertaken to explore the beneficial effects of the Chyawanprash (at the dose of 1% and 2% w/w of diet) administered daily for 15 successive days in mice with memory deficits.

Method : A total of 240 mice divided in 40 groups were employed in this study. Water Maze, Hebb-Williams Maze and Elevated Plus Maze served as exteroceptive memory models, whereas scopolamine-induced amnesia and alprazolam-induced amnesia served as interoceptive memory models. The brain acetylcholinesterase activity, brain thiobarbituric acid reactive substances (TBARS) and brain reduced glutathione levels (GSH) were also estimated.

Result : The administration of Chyawanprash for 15 consecutive days significantly protected the animals from developing memory impairment. This Ayurvedic formulation inhibited acetylcholinesterase activity, consequently leading to increased cholinergic transmission in a dose dependent manner. Furthermore, there was a significant decrease in brain TBARS and increase in GSH levels, thereby indicating decreased free radical generation and increased scavenging of free radicals respectively.

Conclusion : Chyawanprash may prove to be a useful remedy for the management of Alzheimer's disease owing to its antioxidant effect, pro-cholinergic action and/or neuroprotective property.

BAS-FP04

THIAMINE DEFICIENCY INCREASES β-SECRETASE ACTIVITY AND ACCUMULATION OF β-AMYLOID PEPTIDES

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Purpose : Thiamine pyrophosphate (TPP) and the activities of thiamine-dependent enzymes are reduced in Alzheimer's disease (AD) patients. In this study, we analysed the relationship between thiamine deficiency (TD) and amyloid precursor protein (APP) processing in both cellular and animal models of TD.

Method : TD was induced both in SH-SY5Y neuroblastoma cells overexpressing APP, and C57BL/6 mice. APP processing in both cellular and animal models of TD were measured.

Result : In SH-SY5Y neuroblastoma cells overexpressing APP, TD promoted maturation of β-site APP cleaving enzyme 1 (BACE1), resulting in elevated β-secretase activity; meanwhile, both secreted and intracellular β-amyloid (Aβ) were elevated following TD. Importantly, thiamine supplementation could rescue the TD-induced alterations. Furthermore, TD treatment caused a significant accumulation of reactive oxygen species (ROS); antioxidants suppressed ROS production and maturation of BACE1, as well as TD-induced Aβ accumulation. On the other hand, exogenous Aβ 1-40 could also enhance TD-induced production of ROS. TD in mice caused the accumulation of Aβ in the brain, which was also reversed by thiamine supplementation.

Conclusion : Taken together, our study suggests that TD could enhance the Aβ generation by promoting β-secretase activity, and the accumulation of Aβ subsequently exacerbated TD-induced oxidative stress.



27 March 2009, Friday
1345 hrs – 1515 hrs
Room 208

DEMENTIA ACTIVITIES AND CAREGIVING

ACT-FP09

WRITING A LIFE STORY FOR A PERSON WITH DEMENTIA: ITS USES AND BENEFITS

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Purpose : This paper will examine why writing a life story for a person with Dementia results in a variety of uses and benefits. Writing a life story for someone with dementia will result in benefits not only for the person concerned, but also for their support people - both family and professional. By encouraging family members, support workers and other staff to understand the benefits and comfort the use of life stories can bring, enthusiasm for commencing the process usually begins. With the assistance of a person's life story we catch a rare glimpse of the texture and richness of their lives. These reminiscences can then be shared when the original memories fade.

Method : We begin the process by reminiscing with the person about the story of his or her life. This process can be through the use of family photos used as prompts, or through places talked about in their stories. The very act of engaging the person in talking and remembering gives the journey of their life some meaning. The person may be frail and even feeling unworthy, but by remembering the value their life has brought to others, we increase their sense of self worth and value to society.

Result : Case Study: A life story was compiled for a client already in a care facility. It pictorially demonstrated many happy times in her life and helped her to focus on positive aspects she had experienced. Her life story assisted staff in understanding the beautiful person she was, and it gave them a tool to combat negative moods before they became a problem.

Conclusion : By enabling a person to keep hold of their life story and to share it with others, we assist in keeping their memories alive whilst the same time leaving behind a journal of family history for generations to come. We are privileged to see behind the person with memory loss, and to understand why their behaviours are so affected by the past whilst focusing on the positive.

BAS-FP05

EARLY STAGES OF PATHOLOGICAL TAU PROTEIN PROCESSING IS CHARACTERISED BY A SPECIFIC SEQUENCE OF PHOSPHORYLATIONS AND TRUNCATIONS IN ALZHEIMER'S DISEASE

RAÚL MENA¹, LUNA-MUÑOZ JOSÉ¹

Dept. of Physiology and Neurosciences, Center of Research and Advanced Studies, Mexico, D.F.¹

Purpose : Hyperphosphorylation and truncation have been proposed as key events in the abnormal tau protein processing leading to the genesis of pair helical filaments (PHFs) in Alzheimer's disease (AD). A recent hypothesis involving conformational changes has been emerging. To date, the majority of studies addressed to understand the genesis of PHFs have been based on the analysis of overt tangles. In addition, all the existing antibodies raised against normal, pathological tau protein are somewhat present in mature tangles. Therefore, it is possible that only those events occurring massively may be detected when observations are restricted to this type of structure, so missing less evident events. In general, it has been difficult to determine early stages of tau processing in AD.

Method : In this study, by the use of selected tau markers and confocal microscopy in double and triple immunolabelling, and the combination with thiazin red, we have been able to determine a morphological model and the underlying molecular mechanism involved in early stages of tau protein abnormal processing.

Result : This molecular mechanism is characterised by a hierarchical sequence of events of phosphorylation and truncation resulting in conformational misfolding along the tau molecule.

Conclusion : In general, these results indicate that those models of tau protein processing which were obtained based upon the study of mature tangles have to be re-evaluated.

This work was supported by CONACyT grant No. 47630.

BAS-FP06

TAU POLYMORPHISM IN INTRON 9 ASSOCIATED WITH ALZHEIMER'S DISEASE

MICHAL NOVAK¹, GABRIELA ROLKOVA¹, MICHAELA NOVAKOVA¹, PETER KOSON¹, ALŽBETA VESELA², MARIA CUNDERLIKOVA²

Institute of Neuroimmunology SAS, Bratislava, Slovak Republic¹; Slovak Alzheimer's Society & Memory Center, Bratislava, Slovak Republic²

Purpose : Tau protein is common denominator for a number of neurodegenerative disorders. Tau mutations associated with dementias have been described in the familial cases of various tauopathies. But till now, there is no evidence of mutation that would possibly affect tau in order to be linked with AD.

Method : Therefore we have set up a continuous screening for detection of tau mutations in genomic DNA isolated from blood samples of patients diagnosed with probable Alzheimer's disease. All examined samples were from Slovak patients of Caucasian origin. Besides in institute, we have set up a continuous screening for detection of mutations associated with familial forms of AD and related neurodegenerative disorders in presenilin 1, presenilin 2 and amyloid precursor protein.

Result : Using sequence analysis of PCR products of relevant parts of tau gene, we have found a novel single nucleotide polymorphism inside of intron 9 of the tau gene. The novel polymorphism G/A was located 176 bp upstream of exon 10 and was found in 57% of all examined samples.

Conclusion : This variation may be important connecting step between nucleotide change, tau pathology and other factors leading to dementias of Alzheimer's type, since single nucleotide polymorphisms found in exons 9, 10, 11, 12 and 13 are linked to frontotemporal dementias with parkinsonism linked to chromosome 17 (FTDP-17) and other tauopathies. The exons 9 to 12 are coding for microtubule binding domains and mutations located in this part of tau gene could modulate the binding ability of tau protein with consequent dementia, since five mutations in FTDP-17, progressive supranuclear palsy (PSP) and corticobasalar degeneration (CBD), located inside of intron 10 in the 5' splice site, modify the ratio between the 3R and 4R tau isoforms.

This project is supported by APVV, grant no. APVV 0603-06 and APVV-0621-07.

ACT-FP10

GAINS IN ALZHEIMER'S CARE INSTRUMENT (GAIN) - A NOVEL SCALE TO ASSESS GAINS IN DEMENTIA CAREGIVING

PHILIP YAP¹, CHIONH HUI LING¹, JENNY GOH¹, LUO NAN³, NG WAI YEE³, SENG BOON KHENG⁴, LEE SOAK MUN², JUNE LIM², THERESA LEE², DONALD YEO²

Geriatric Medicine, Alexandra Hospital, Singapore¹; Alzheimer's Disease Association, Singapore²; Community Occupational and Family Medicine, Yong Loo Lin School of Medicine, National University of Singapore, Singapore³; Social Work, University Singapore Institute of Management, Singapore⁴

Purpose : Much is recognised about the burden of dementia caregiving but gains and positive outcomes are known to occur as well. Gains can moderate carer burden and facilitate better caregiving outcomes. This study aims to develop a new instrument (GAIN) to measure gains in dementia caregiving.

Method : The items in GAIN were derived from themes identified through qualitative study of family carers of PWD using the grounded theory approach. Content validity was established by a group of 10 family carers and a team of dementia experts (geriatrician, nurse, social worker). GAIN was then administered to 115 carers, and evaluated for reliability and validity with standard psychometric analyses. Exploratory factor analysis was performed and construct validity determined by Pearson's correlation with established measures such as Positive Aspects of Caregiving (PAC), General Health Questionnaire (GHQ28) and Zarit Burden Interview (ZBI).

Result : GAIN comprised 10 items that emerged from 3 themes: personal growth, gains in relationships and higher level gains. Mean score was 32.2/40 (SD 6.3). Factor analysis identified a single component (eigen value 5.6) accounting for 55.9% of the variance. Internal consistency by Cronbach's alpha was 0.91 and test-retest reliability by Intraclass Correlation Coefficient (ICC) was 0.73. GAINS correlated strongly with PAC (r = 0.76, p<0.0001), and moderately with GHQ28 (r = 0.42, p<0.0001) and ZBI (r = -0.35, p<0.0002).

Conclusion : GAIN shows promise as a reliable and valid instrument for objective measurement of gains in dementia caregiving and can add a new and important dimension to carer assessment in dementia.



ACT-FP11

ACTIVITY PATTERNS OF PEOPLE WITH DEMENTIA IN RESIDENTIAL NURSING HOME AND HOSTEL IN SINGAPORE: AN ETHNOGRAPHIC STUDY

LUM KAI MUN ABIGAIL¹,NEO CUI FANG JOSEPHINE¹, HONG WEIYIN CHELSEA¹, TAN JIA MAY¹, WONG WAI MAY², SHARON SIM SZE LYN²

School of Health Sciences-Occupational Therapy, Nanyang Polytechnic, Singapore¹; Occupational Therapy, Society for the Physically Disabled, Singapore²

Purpose : The prevalence of dementia in Singapore is expected to increase significantly by 2050. Dementia, being a progressive and debilitating disease, is one of the leading causes of nursing home admission. Whilst nursing home has been the only available option for long-term residential care for people with dementia in Singapore, the first hostel facility was set up in 2006 to provide an additional dimension to long-term residential care. Despite the growing number of research related to providing care for people with dementia, little has been published about institutionalised residents with dementia in Singapore.

Aims : Our ethnographic study aims to discover activity patterns in people with dementia in a Nursing home and Hostel Dementia Unit in Singapore.

Method : Constant Comparative Analysis was adopted to ensure rigour of our study.

Result : The main themes that emerged in the hostel are 1) The power of familiar occupational forms on residents' activity patterns; 2) Opportunities to roam presents opportunities for action; and 3) Maximising engagement through making connections. The main themes that emerged in the nursing home are 1) The power of physical and social milieu on social interaction; 2) Giving choices for action promotes activity initiation; and 3) Staff being the star attraction activates the group.

Conclusion : The present study has attempted to discover activity patterns amongst elderly with dementia in local residential care. It demonstrated that the milieus of the hostel and nursing home were different and they have influenced residents in unique ways. The power of milieu was significant as they influenced residents' activity patterns and behaviour. Our results showed that the milieu in the hostel afforded occupational performance, such that opportunities were provided to enable choice and action. On the other hand, the milieu in the nursing home pressed occupational performance, which provided residents with a single way for action.

ACT-FP12

"A NEW YOU" – A NOVEL PROGRAMME TO INVIGORATE MINDS AND SUSTAIN PERSONHOOD IN PERSONS WITH EARLY COGNITIVE IMPAIRMENT

JENNY GOH¹, KOH SUE ANNE², CHIONH HUI LING³, LISA CHOO³, CATHERINE DONG³, DENISE CHEN³, PHILIP YAP³

Medical Social Service, Alexandra Hospital, Singapore¹; Psychology, Alexandra Hospital, Singapore²; Geriatric Centre, Alexandra Hospital, Singapore³

Purpose : There is a lack of structured interventions to meet the varied needs of persons with early cognitive decline in our country. "A New You" is a novel cognitive stimulation programme that incorporates physical exercise, cognitive training and group therapy in a support group format for persons with Mild Cognitive Impairment (MCI) and early dementia. The programme aims to enrich, enable and empower persons with early cognitive impairment to achieve a greater sense of control and purpose in their lives.

Method : Clients are engaged in a half-day programme once a week conducted by a multidisciplinary team comprising Clinical Psychologist, Medical Social Worker, Specialist Nurse and Occupational Therapist. The exercise part of the programme includes strength, flexibility and mild endurance training. Cognitive training is domain specific and involves memory, reasoning, attention, problem-solving and perceptual organisational tasks. Psychological, emotional and social needs are supported through mutual sharing in a support group and interacting via games and play. Finally, creativity is nourished by way of story telling by the TimeSlips® method.

Result : Feedback from 16 clients via a custom-designed questionnaire showed that all of them felt they enjoyed and benefited from the programme. The reasons included "can exercise the brain" (75%), "can make and meet new friends" (75%), "feel happier" (63%) and "able to think more clearly" (56%). The activities the clients liked best were physical exercises, memory training, reasoning and problem-solving activities (eg. puzzles, Sudoku, mazes), attention/concentration tasks (eg. spotting the difference) as well as psychomotoric exercises. In addition, they enjoyed the social interaction with fellow participants, family members and staff.

Conclusion : The promising feedback provides empiric evidence for the subjective benefits of this programme. A quantitative evaluation will provide more objective information on the value of the intervention.

ACT-FP13

USING SPONTANEOUS ACTIVITY OPPORTUNITIES TO PROMOTE ENGAGEMENT OF PEOPLE WITH BPSD IN RESIDENTIAL CARE

ALISSA WESTPHAL¹, ROBYN ATTOE¹, DANIELLE HARRIS¹, HAZEL SARGEANT¹

St Vincent's Aged Psychiatry Service, St Vincent's Hospital, Kew, Australia¹

Purpose : Up to 90% of people with dementia experience behavioural and psychological symptoms of dementia (BPSD) during the course of their illness. The presence of these symptoms can be due to unmet needs for engagement in meaningful activity. However, with the progression of dementia, engaging in activities can become more difficult and can require significant carer support and intervention. This paper reports on a project that aimed to maximise opportunities for spontaneous activity within a residential care facility that houses people with moderately severe to severe BPSD.

Method : The environment within the 30 bed psychogeriatric residential care facility was modified to incorporate themed activity stations and environmental fixtures. Data was collection on the change in behavioural and psychological symptoms of dementia of the residents and care worker and family satisfaction. Post measures of well-being were also collected.

Result : Practical and achievable examples of how activity opportunities can be incorporated into the environment, the management of associated risks and the manner in which the activities can be utilised and modified will be presented. The responses of residents with dementia, their family/carers and care workers and outcomes associated with changes in BPSD will be discussed.

Conclusion : Spontaneous activity opportunities can assist in modifying some behavioural and psychological symptoms of dementia and assist in continuing the life story of older people with dementia.



27 March 2009, Friday

1345 hrs – 1515 hrs

Room 209

ADDITIONAL TOPICS

OTH-FP01

STRENGTHENING DEMENTIA CARE IN INDIGENOUS COMMUNITIES

MARK J ELLIOTT¹, SCOTT WILSON²

Access and Equity, Alzheimer's Australia Sth Australia, Adelaide, Australia¹; Management, Aboriginal Drug and Alcohol Council Inc., Adelaide, Australia²

Purpose : To raise awareness of brain damage and dementia caused either directly or indirectly through unsafe levels of use of alcohol in the Australian Aboriginal and Torres Strait Islander communities with a particular emphasis on harm reduction within the younger age groups.

Method : Awareness raising by the development of posters, a comic book and various other resources. Advisory groups were formed in the three target areas to guide the project and the development of materials ensuring that they are culturally secure and appropriate for the areas. The messages contained in the posters, etc. is clear, concise and in some cases quite confronting. The Project Officer visits metropolitan and rural communities throughout South Australia to make presentations to Health Professionals and Aboriginal communities to raise awareness off dementia and alcohol related brain injury.

Result : To date three posters, a comic book and various other informational and promotional material has been produced and distributed throughout the state, all of which have recognisable and culturally appropriate artwork. Presentations have been made to Health Professionals, school groups and community groups within South Australia, nationally at conferences and internationally as the only Australian entry to the Mentor Foundation International Awards to receive recognition by being awarded an honourable mention. The project has been widely accepted and now receives many invitations to present to communities.

Conclusion : A two year project funded by the Alcohol Education and Rehabilitation Foundation (AER) and working in partnership with the Aboriginal Drug and Alcohol Council Inc. (ADAC) the Strengthening Dementia Care in Indigenous Communities project is an Alzheimer's Australia South Australia innovation that is raising the awareness of alcohol related dementia and associated issues within Aboriginal communities.

OTH-FP02

NORMS: A NON-INTRUSIVE RESPIRATORY MONITORING SYSTEM

FOO SIANG FOOK VICTOR¹, KNG POH LEONG², MANIYERI JAYACHANDRAN¹, EMILY HAO JIANZHONG¹, AUNG AUNG PHYO WAI¹, JIT BISWAS¹, LIN WEISI², PHILIP YAP LIN KIAT³

Networking Protocols Department, Institute for Infocomm Research, Singapore¹; School of Computer Engineering, Nanyang Technological University, Singapore²; Geriatric Medicine Department, Alexandra Hospital, Singapore³

Purpose : Monitoring of sleep disorders and disordered breathing such as sleep apnea is important in persons with dementia (PWD). Recent studies suggest that treatment of sleep apnea in PWD can bring about benefits in both cognition and behaviour. The current standards for respiratory monitoring are the Respiratory Inductive Plethysmogram (RIP) and the airflow measurement methods. These procedures are not well tolerated by PWD as they are intrusive and the probes worn constraint and restrict movements. The objective is to develop an automated NON-intrusive Respiratory Monitoring System (NORMS) that can continuously monitor breathing in PWD and to detect problems like sleep apnea.

Method : The proposed system uses custom-made and packaged Fiber Bragg Grating (FBG) sensors placed beneath the bed of the subject to obtain indicative spatial-temporal signature of respiratory signals. The "through-bed" monitoring approach is possible due to the extremely sensitive nature of FBG, and it allows continuous respiratory monitoring in a non-intrusive manner as the subjects only need to sleep or lie on the bed. Fourier and wavelet transform-based signal processing techniques are used to separate the respiratory signals from other movement related signals and to calculate the respiratory rate. In an emergency or abnormal situation, the caregiver can be informed promptly via visual or audio alert systems, or through Short Message Service (SMS).

Result : Through trials conducted in the laboratory with a sample group of 10 subjects, NORMS showed near to 100% accuracy with maximum estimated error of ± 2 breaths per minute.

Conclusion : NORMS is an innovative and effective means to provide continuous monitoring of respiration in PWD and obviates the need for intrusive probes. Further trials of NORMS on PWD will help to refine the system.

OTH-FP03

VALIDATION OF THE ZARIT BURDEN INTERVIEW FOR CAREGIVERS OF PERSONS WITH DEMENTIA IN SINGAPORE

SENG BOON KHENG¹, LUO NAN¹, LIM WEI PING JUNE¹, NG WAI YEE¹, PHILIP YAP¹, LEE SOAK MUN¹, THERESA LEE¹, NG LI LING¹, DONALD YEO¹ HDSS, SIM University, Singapore¹

Purpose : Dementia is becoming an increasing problem in Singapore's aging population. The toll is on the caregivers. There is no validated instrument for assessing the burden of caring for dementia patients in Singapore. This study is aimed to validate the Zarit Burden Interview in Singapore.

Method : A convenient sample of 115 caregivers of patients with dementia seen at the Alexandra Hospital and/or attending the New Horizon Centres of the Alzheimer's Disease Association were interviewed using the Zarit Burden Interview together with the Burden Assessment Scale (BAS), the 28-item General Health Questionnaire (GHQ-28), and some other questionnaires. The BAS and GHQ-28 were validated in Singapore in previous studies. The Zarit Burden Interview was administered to 102 of the caregivers again one week after the initial interview. For assessing construct validity, the correlations between the Zarit Burden Interview and other relevant scales were examined by Pearson's correlation coefficient. The internal consistency and test-retest reliability of the Zarit burden score was assessed using Cronbach alpha and intra-class correlation coefficient (ICC), respectively.

Result : The Zarit burden score was highly correlated with the BAS score (correlation coefficient = 0.77, $p < 0.0001$) and the GHQ-28 total score (correlation coefficient = 0.60, $p < 0.0001$). The Zarit burden score was also strongly correlated with patients' dementia symptoms measured by the revised memory and behaviour problems checklist (RMBPC) (correlation coefficient: 0.55, $p < 0.0001$). The correlation coefficient between the Zarit and the care management strategies (CMS) criticism subscale was 0.62 ($p < 0.0001$), suggesting that caregivers reporting higher level of burden tended to criticise their patients more often than those who reported lower level of burden. Similarly, the correlation coefficient between the Zarit and the sense of competence scale was 0.67 ($p < 0.0001$), showing that those caregivers less competent in dealing with their patients experienced higher level of burden. In terms of reliability, the Cronbach alpha of the Zarit Burden Interview items was 0.94; the ICC was 0.87.

Conclusion : The Zarit Burden Interview is a valid and reliable instrument for measuring the burden experienced by caregivers of elderly persons with dementia in Singapore.

OTH-FP04

POPULATION-BASED SURVEY: COGNITIVE PERFORMANCE VS MEMORY COMPLAINTS

SAKKA P¹, NIKOLAOU C², LYMPEROPOULOU O², EFTHYMIU A², MARGIOTI E² Athens Association of Alzheimer's Disease and Related Disorders, Athens, Greece¹; Athens Association of Alzheimer's Disease and Related Disorders, Athens, Greece²

Purpose : On the occasion of the Alzheimer's day 2007 free memory testing was offered to the elderly public. Our objective was to explore the relation between performance in cognitive tests and subjective memory complaints reported by 788 participants.

Method : A group of neurologists and cognitive psychologists interviewed each person. Reason for taking the examination, specific memory dysfunction complaints and demographics were recorded for each participant. Cognitive tests were performed: Mini Mental State Examination, Clock Drawing Test, Verbal Fluency, immediate and delayed recall of simple verbal material and finally the Geriatric Depression Scale. Participants were asked to choose from five types of memory complaint: "forget names", "forget objects position", "forget recent events", "difficulties in word finding", "and difficulties in ADL" (score 0-5). Logistic regression analysis and linear regression analysis were performed to explore collerations between the probability of reporting memory complaints and the cognitive test scores.

Result : 788 people 50+ presented for memory evaluation. 69.4% reported memory dysfunction as the reason for their participation. Logistic Regression results: we found that the probability of reporting at least one memory dysfunction complaint, firstly increases with GDS scores (statistical significance < 0 , 3% level), and secondly does not depend on memory tests' performance. Linear Regression results: when regressing the number of memory complaints reported by each participant against memory tests performance, we found that, firstly, GDS scores have a positive effect (statistical significance < 0 , 1% level) and secondly MMSE scores have a negative effect (statistical significance < 2 , 7% level).

Conclusion : Our results suggest that memory complaints in the elderly are bad predictors for memory deficits confirmed by cognitive tests. These complaints could be interpreted as a sign of depression. Nevertheless, increase in the number of complaints is related to actual memory dysfunction.



OTH-FP05

MANAGING BEHAVIOURAL SYMPTOMS OF FRONTO-TEMPORAL DEMENTIA USING A NON-PHARMACOLOGICAL APPROACH

ROBYN ATTOE¹, ALISSA WESTPHAL¹

St Vincent's Aged Psychiatry Service, St Vincent's Hospital Melbourne, Kew, Victoria, Australia¹

Purpose : Researchers estimate that at least 2% of all people with dementia have fronto-temporal dementia (FTD). Initial symptoms of FTD are primarily associated with changes in personality and behaviour. Whilst there are a number of behavioural variants, ranging from overactive to apathetic behavioural spectrums, people with mild to moderate FTD tend to have intact short term memory. The presence of such behavioural symptoms, for example, emotional and behavioural dysregulation, disinhibition and sexually inappropriateness in the presence of an intact short term memory can result in care workers misinterpreting the degree of impairment and the underlying causes for the behaviours. Consequently, there can be a high degree of care burden due to difficulties managing behavioural symptoms and poor understanding of the same.

Method : A case study approach was used to investigate the impact of non pharmacological interventions in managing behavioural symptoms of FTD for three older people in residential care facilities. The Queen Elizabeth Behavioural Assessment Graphical System and Zarit's modified Care Burden Interview were used to assess behavioural symptoms and care worker stress respectively prior to and following the implementation of a comprehensive individualised behaviour management plan.

Result : Reductions in both behavioural symptoms and care worker stress were achieved and all people were able to remain in their residential care facilities instead of being moved.

Conclusion : Modifying the environment and approach used together with providing appropriate activities and education can assist care workers in more effectively managing behavioural symptoms in people with FTD.

OTH-FP06

THE EFFECTS OF ALZHEIMER'S DISEASE SYMPTOM SEVERITY ON CAREGIVER OUTCOMES

JOAN MACKELL¹, HOWARD FILLIT², HEMA KANNAN³, SUSAN C BOLGE³, MEGAN DEL VALLE⁴, IRINA PIKOVSKAYA⁴, JOSE ALVIR⁴, CHARLES D PETRIE⁴

Alzheimer Disease Management Team, Pfizer, Inc, New York, USA¹; The Alzheimer's Drug Discovery Foundation, New York, USA²; Consumer Health Sciences, Princeton, USA³; Pfizer Inc, New York, USA⁴

Purpose : To quantify effects of Alzheimer's disease (AD) symptom severity on caregiver outcomes.

Method : Data were collected via self-administered questionnaires from 1077 unpaid adult caregivers of AD patients in 2007. Symptom severity was measured using the Revised Memory and Behavioral Problem Checklist (RMBPC). Caregiver outcomes included: Caregiver Burden Scale; diagnosis of anxiety and depression; ER visits, days hospitalised, physician visits, and missed work days in the past 6 months. Linear and logistic regression models were developed to determine the independent effects of AD symptom severity on each outcome. Covariates included caregiver demographics, comorbidity, relationship to patient, living with patient, patient functioning, and interactions of patient severity with other covariates.

Result : Patient severity was a significant (P < .05) predictor of all caregiver outcomes. As a predictor of caregiver burden, severity had a regression coefficient of 0.328, and the interaction of severity and physical comorbidity had a regression coefficient of 0.051. Each unit increase in disease severity resulted in increases of 0.450 ER visits, 0.377 days hospitalised, 0.343 physician visits, and 1.722 missed work days. For each unit increase in RMBPC severity score, caregivers were 1.506 times as likely to be diagnosed with anxiety and 1.811 times as likely to be diagnosed with depression.

Conclusion : Patient symptom severity is a significant predictor of poorer caregiver outcomes, including greater burden, likelihood of anxiety and depression, lost work productivity, and healthcare resource use.

28 March 2009, Saturday
1030 hrs – 1200 hrs
Rooms 208 / 209

AWARENESS AND EDUCATION

EDU-FP01

"ALZHEIMER & YOU" - YOUNG PEOPLE ENGAGED FOR PEOPLE WITH DEMENTIA AND THEIR CAREGIVERS

SABINE JANSEN¹

Deutsche Alzheimer Gesellschaft, Berlin, Germany¹

Purpose : Dementia is usually seen as a problem of old age. But also young people are involved in the disease because their grandparents or even parents have got the disease. Many young people are willing to commit themselves in voluntary projects but too seldom they are active with or for people with dementia.

Method : For these reasons the German Alzheimer Association "Deutsche Alzheimer Gesellschaft" has announced on World Alzheimer's Day 2007 a competition for young people between 14 and 21 years old. The patronage of the competition was taken by the Federal Minister for Family Affairs, Senior Citizens, Women and Youth. A special website has been designed to give accompanying information especially for young people. Sponsors have given attractive prizes like mobile phones, books, games and so on.

Result : Nearly 700 pupils in more than 100 groups had become active and sent documentations of their activities in the field of dementia. A jury with well known prominent figures like a VIVA moderator, a young actress and a snowboarder decided about the winners. They had to choose between pictures, films, photo documentations, songs and other moving documents. In September 2008 prizes were given to single pupils but also to classes for their engaged work.

Conclusion : To use the ideas of the young people a second project step is planned. Materials for school lessons will be developed to motivate more schools and more pupils to think about dementia and to support caregivers but also people with dementia in nursing homes. Co-operations between local Alzheimer Associations and schools should help to raise awareness and develop more understanding for people with dementia and their caregivers.

EDU-FP02

EFFECTIVE MOBILITY MANAGEMENT FOR PEOPLE WITH DEMENTIA

VERONICA HANNA NAUGHTON¹

Occupational Therapy Department, Royal Perth Hospital, Perth, Australia¹

Purpose : To develop an essential training programme to assist health professional staff to implement effective mobility management strategies for people with dementia. The project was motivated by a gap in expertise on this topic and a demand from interested health care personnel. Funding for the project was provided by the Australian Government and administered by the Dementia Study Training Centre at Curtin University. The Independent Living Centre of WA as the successful lead agency collaborated with Alzheimer's WA and McCusker Learning to develop the training programme and learning package.

Method : Two full-day training programmes were developed and delivered by an occupational therapist and two physiotherapists experienced in mobility strategies to two groups of 16 health professionals with an occupational therapy, physiotherapy or nursing background. Topics included theoretical components including benefits of maintaining mobility, barriers to movement and communication strategies to enhance mobility. Practical component including a range of practical techniques using principles of manutention (a method of movement facilitation). A comprehensive training manual with the relevant theory base and practical strategies presented in a photographic format supported the training.

Result : A formal evaluation process was conducted and feedback received from all participants highlighted new learning gained, greater insight into use of techniques and strategies to promote mobility and a desire to transfer knowledge to other health care personnel working in the field of dementia.

Conclusion : A training programme which explores the use of effective mobility strategies for staff working with dementia clients was found to be extremely successful and it has been recommended by all participating, that further training courses of this type be delivered in the future to a wider range of health care personnel including support workers.



EDU-FP03

PLANNING AND PREPARING CULTURALLY APPROPRIATE MATERIALS FOR TRAINING INDIGENOUS COMMUNITIES

LINDA HELEN TAYLOR¹

Education, Alzheimers WA, Perth, Australia¹

Purpose : Provide training to health care workers about dementia in rural and remote Australia poses specific challenges, especially when literacy and numeracy issues prevail. The vast and versatile geography of the north-west of Western Australia can also create challenges within itself. Training which is not context or culturally sensitive often results in lack of completion by participants in obtaining dementia specific credentials. Until recently it has not been widely understood that dementia is a major health problem for Indigenous people in Australia. Recent research in the Kimberley region of Western Australia suggests that the prevalence rates of dementia among remote and rural indigenous people is 4-5 times higher than those in the Australian community more generally. The prevalence of dementia (45 + years) is 12.4 percent, compared to a rate of 2.6 percent in the Australian population.

Method : This presentation explains the process of adapting and presenting a competency unit in Dementia Care to Indigenous and non Indigenous health care workers with limited numeracy and literacy abilities when living and working in a specific remote cultural environment. Cultural concepts of number, time, and space can differ from Western ones. Other factors include the sensitivity of certain personal and family issues together with limited familiarity with Western approaches.

Result : The adaption of the content, flexibility in method of delivery and assessment, as well as trainer-student ratio contributed to the success of this workshop. The enthusiasm and commitment of the student group to the training was a large factor in the success as well. All participants have completed the required assessments and deemed competent.

Conclusion : The purpose of this presentation will demonstrate that cross cultural issues can be successfully and tactfully negotiated when entering other cultures when there is enthusiasm, creativity, encouragement and commitment, despite the lack of resources.

EDU-FP04

"SEIZE THE DAY" A PROJECT BY ALZHEIMER SCOTLAND POSITIVE DEMENTIA GROUP

CHRISTINE MCGREGOR¹

Alzheimer Scotland, Action on Dementia, Edinburgh, UK¹

Purpose : In the summer of 2008, BBC Scotland and the Big Lottery Fund launched an exciting initiative giving six voluntary groups across Scotland the chance to win up to £500,000 each for projects aimed at improving the lives of people over 50 in Scotland. The groups had to participate in making a TV film about their project and compete with others, the winners being chosen by the votes of the viewing public.

Method : Alzheimer Scotland's Positive Dementia Group in Aberdeen applied and having got through the preliminary procedures, were selected to participate. Their film showed the work of their group in the support of people over 50 with a diagnosis of early stage dementia and their carers in their local area. The project they proposed for use of the money, was to design and deliver a programme which would help those with a diagnosis of dementia and their carers to find positive ways of living with this progressive and long-term condition.

Result : Their programme would offer training, education and peer support; helping people to stay involved in their own communities, as well as raising local awareness to improve the day-to-day experiences of people with dementia.

Conclusion : The TV broadcast, Primetime was on 25th August 2008 and the Positive Dementia Group were in competition with two other voluntary groups for the award to be the best project in North East Scotland.

This presentation will describe the making of the film, the competition and will culminate in the short film being shown and of course, reveal the outcome.

EDU-FP05

DEMENTIA : ENGAGING SOCIETIES AROUND THE WORLD

SMT. NIRMALA NARULA¹

Alzheimer's & Related Disorders Society of India (ARDSI), ARDSI - Delhi Chapter, New Delhi, India¹

Purpose : My Chapter in Delhi is deeply involved with these services and in addition is imparting 'training of professional caregivers.'(17) on a regular basis. I will therefore address 1, 4, 5, 6, 8, 9, 14, 17 as follows:

1. Understanding dementia and caring for the victims:
2. Support for family care givers:
3. Alternative (new) drug treatments.

Method : 1. Statistics show that persons above age 60, will be needing services critical to physical and mental problems due to dementia - to maintain dignity and respect in old age and provide a reasonable and, easy access to health services outside of government health services.

2. Information now available world wide on web sites about dementia, its causes and management - must be understood as well as, other relevant aspects of aging and its travails for caregivers, or at the very least - considered. Countries like India, with aging populations have been involved in efforts to influence government for action; involving the U.N. for adoption of the requirements of the aging populations - as well as - protection under Asian Regional Human Rights Law. (Asia has no regional human rights instrument on aging).

3. Under International law, the rights of older people are already protected: e.g., Universal Declaration of Human Rights International Covenant of Civil and Political Right. Intl. covenant on Eco. Soc. & Cultural rights.

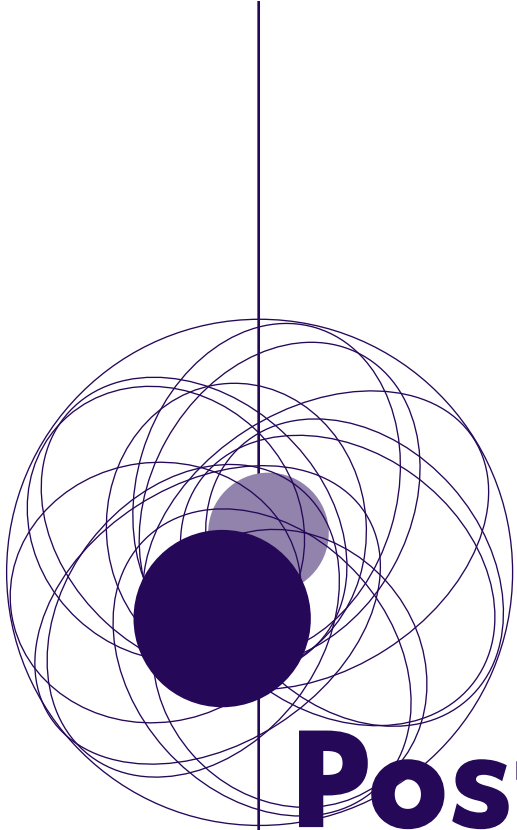
4. Rights of persons with disabilities, which includes inability of ADL.

5. African human rights law, helps the elderly women in every sphere, and

6. Human rights law in the Americas: every one has the right to social security in old age and of taking care of disabilities enabling those unfit mentally or physically to live a decent life in old age. Discussions for improving the world's thinking can go on and on meanwhile, in forums like this one, we can together, make the existing system work better or at least get it in a functional mode.

Result : We are very fortunate that in India there is now in place several policies which benefit the elderly including providing pensions. GOI has also, declared in no uncertain terms that "dementia" is to be considered a leading problem in the health of the fast aging population.

Conclusion : It behooves organisations like yours and ours to work together in this field and show the impact of care giving services so that the government can take over a larger network eventually.



Poster Communications



Poster Communications

26 March 2009, Thursday
1215 hrs – 1345 hrs
Exhibition Area, Ballroom Foyer, Level 2, Suntec Singapore

CROSS-CULTURAL ISSUES IN DEMENTIA CARE

CRC01
DEMENTIA RESEARCH IN SOUTH AFRICA; THE CHALLENGES OF COMMUNITY ACCESS
RICK VANDERPOEL¹
UNIBS, University of the Free State, Bloemfontein, South Africa¹

Purpose : To identify the nature and extent of cultural factors at play in the process of community access in order to conduct a cross-sectional whole population survey on the prevalence of dementia in a black South African community.
Method : 14 Fieldworkers were interviewed during the pilot phase (n=100) of a cross-sectional whole population survey. They responded to a structured questionnaire which elicited responses pertaining to i) informed consent, ii) translated interview schedules, iii) community expectations, iv) cultural biases to research, and v) recruitment.
Result : 1. House-to-house door-knocking could not be initiated without the prior knowledge of all the relevant community counselors; 2. Informed consent was not granted in most cases, unless extended family members were incorporated into the decision-making process; 3. Given South Africa's socio-political history, suspicion was the most significant obstacle to overcome in obtaining informed consent; 4. Long-term benefit to the community was the most important question that needed clarification during negotiations with community counselors; 5. Large sections of professionally translated texts remained culturally alien to most participants, mainly due to illiteracy and the Eurocentric nature of the text, which called for further clarification and simplification on the part of the fieldworker.
Conclusion : African levels of literacy as well as language issues and community cohesion does not allow for easy community access in the case of dementia research. A high level of suspicion still exists regarding the application of 'Eurocentric' research in township communities, resulting in careful negotiations with community counselors and vivid demonstration of the longer term benefit to the community. The right to conduct research is very much a function of continuing effort to maintain sound relations with key community figures. Negative feedback within the community must be avoided at all costs due to heavy reliance on 'word of mouth' within these communities.

CRC02
A RAPID SITUATION ASSESSMENT (RSA) OF THE NEEDS OF ELDERLY PEOPLE IN VARIOUS SETTINGS IN KENYA
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Research, Africa Mental Health Foundation, Nairobi, Kenya²

Purpose : To determine the needs of the elderly (60+ years) and their caregivers in a rural and urban community, homes for the elderly and medical facilities in Kenya.
Method : This was a cross-sectional purposively designed study that was conducted among elderly people and their caregivers in urban and rural community settings. In order to obtain qualitative data, focus group discussions and individual interviews were held with the elderly people and their caregivers. The Community Screening Interview for Dementia (CSI-D) was used to establish the presence of dementia among the elderly.
Result : Out of 290 elderly people who were recruited into the study, 25.5% were male, 76.6% were aged between 60 and 70 years, 87.6% were Christians and 45.5% were widowed. One hundred and ten (37.9%) lived alone, 24.8% lived with a partner while 20.7% lived with a relative. Some of the DSM-IV/ICD-10 diagnoses that were made among the elderly included depression, epilepsy and schizoaffective disorder. At least 36.2% (n = 105) answered in the affirmative during the initial screening for dementia. The caregivers reported being involved in providing all the financial needs, helping with all the household chores and providing support in bodily care.
Conclusion : This study established that elderly people suffer from neuro-psychiatric health problems which need to be attended to. Caregivers play a big role in the management of the needs of the elderly and support from mental health service professionals should be provided for them.

CRC03
EFFECTS OF BODY WEIGHT ON TOLERABILITY OF RIVASTIGMINE TRANSDERMAL PATCH
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Purpose : The rationale for transdermal drug delivery is to provide optimal therapy whilst avoiding adverse events (AEs). Rivastigmine patch is the first skin patch for Alzheimer's disease (AD). This analysis investigates whether an association exists between extreme low body weight and AEs.
Method : Using data from a randomised, 24-week AD trial, AEs were re-evaluated on the basis of extreme low weight (<50 kg; n=82), medium weight (50–80 kg; n=676) and high weight (>80 kg; n=129) at baseline, in patients who received target dose 9.5 mg/24h rivastigmine patch, 12 mg/day rivastigmine capsules, or placebo.
Result : Overall AEs were mostly mild. Among extreme low-weight patients, nausea was reported by 9.1%, 27.3% and 3.7% of patients in the patch, capsule and placebo groups; vomiting was reported by 4.5%, 12.1% and 0.0%, respectively. Among medium-weight patients, 7.6%, 23.4% and 5.6% reported nausea; 6.3%, 18.8% and 4.3% vomiting. Among high-weight patients, 4.4%, 18.6% and 2.4% reported nausea; 6.7%, 11.6% and 0% vomiting. All extreme low-weight patients reached target dose 9.5 mg/24h patch, yet mean capsule dose at Week 24 was only 8.8 mg/day. High-weight patients also all reached target dose 9.5 mg/24h patch, and 11.3 mg/day capsules on average. Efficacy and discontinuations due to AEs were unaffected by weight.
Conclusion : Extreme low-weight patients tended to report more nausea than high-weight patients. This was more marked with capsules than patch. All extreme low-weight patients were able to reach target dose 9.5mg/24h patch. Smooth, continuous delivery with rivastigmine patch allows access to optimal therapeutic doses.

CRC04
BPSD IN NURSING HOME RESIDENTS IN SYDNEY AND SHANGHAI
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Purpose : The aim of the present study was to increase our understanding of the effects of culture on BPSD by comparing the rates of BPSD in nursing home residents across three residential facility types: (1) mainstream nursing homes in Sydney, (2) ethno-specific Chinese nursing homes in Sydney, and (3) a long-term high care facility in Shanghai known as a dementia hospital.
Method : 149 residents and their caregivers voluntarily participated in this study. The rates and levels of BPSD were assessed by interviewing staff members with the Neuropsychiatric Inventory (NPI). Clinical interviews using the Mini-Mental State Examination (MMSE) and Global Deterioration Scale (GDS) were conducted with residents to assess their dementia severity.
Result : The mean NPI score for the sample was 28.5 (SD = 17.2) with no significant differences across the three facility types. Comparison of NPI subscales showed residents from the ethno-specific Chinese group to have lower rates of hallucinations than Shanghai residents (p = 0.003), but not compared to mainstream residents. Shanghai residents had lower frequencies of disinhibition and irritability than ethno-specific Chinese residents (p = 0.003, p = 0.004 respectively), but not when compared with mainstream residents.
Conclusion : The prevalence of BPSD does not appear to be mediated by culture and ethnicity. Differences between groups are likely to be due to the effects of facility environment and consistency of staff reports. Longitudinal studies in different ethnic groups are needed to elucidate the effects of culture on the development and progression of BPSD over time.



CRC05

EFFECTS OF CULTURE ON CAREGIVER BURDEN AMONG AUSTRALIAN AND CHINESE CAREGIVERS

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Primary Dementia Collaborative Research Centre, University of New South Wales, Sydney, Australia¹; Geriatric Psychiatry, Shanghai Mental Health Centre, Jiao Tong University, Shanghai, China²

Purpose : The aim of the present study was to determine the effects of culture on caregiver burden by comparing levels of burden among caregivers of three different populations: (1) Shanghai, (2) Australian-Chinese, and (3) Australian non-Chinese.

Method : Caregivers and residents with dementia were recruited from (1) a dementia hospital in Shanghai, (2) three ethno-specific Chinese nursing homes in Sydney, and (3) four mainstream nursing homes in Sydney. Levels of caregiver burden were assessed using the Geriatric Depression Scale, Mental Health Component (MHC) of the RAND-36 Health Status Inventory, and a guilt scale.

Result : There were no significant differences between the three population groups as measured by the guilt scale and MHC. Shanghai caregivers had higher mean depression scores than Australian-Chinese caregivers ($p < 0.001$), who in turn had higher mean depression scores than Australian non-Chinese caregivers ($p = 0.015$). Depression was found to be associated with the caregiver's education level, physical health status, and frequency of nursing home visits.

Conclusion : Caregiver burden persists following institutionalisation of the person with dementia. Levels of depression in caregivers of institutionalised persons with dementia differ by culture and country of residence. Future studies examining the factors contributing to depression among caregivers of persons with dementia in residential care in different ethnic groups are needed.

CRC06

OFFERING EDUCATION WITHOUT JUDGEMENT TO INDIGENOUS WOMEN IN THE GOLDFIELDS WESTERN AUSTRALIA

RAE BRANGSGROVE¹

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Purpose : This presentation will demonstrate the effectiveness of imparting knowledge to Indigenous women within a prison system, and how this acquired knowledge can be used as a strategy to counteract the effects of lifestyle and clashing cultures on the wellbeing of this cohort. This presentation will also demonstrate the effectiveness of empowerment through education whilst indigenous women are imprisoned – often for minor offences which may occur because of a lack of knowledge.

Method : Fortnightly “yarning” (casual discussion) sessions are held utilising some educational aids with indigenous women who have expressed an interest in participating. These educational aids might include bright and colourful literature, explanatory posters, and various medical models of the body. The approach is to always respond to any questions asked by the women, even if the questions are only vaguely relevant to the subject. This approach assists in building trust with the participants, and a willingness to continue with the program. The presentation will provide feedback from the participants and feature highlights from some of the informal discussions.

Result : The aim of this program is to develop an effective strategy that will initially assist in meeting the dementia-related educational needs of Indigenous women within a prison system. It is anticipated that this strategy will empower participants to access further education for themselves when leaving the prison system. It is also anticipated that it will assist them in becoming effective carers, or teachers in their home environments - be they urban Kalgoorlie or the surrounding “Lands”.

Conclusion : This presentation will demonstrate the effectiveness of an informal educational process on an individual. It will also demonstrate that it is possible to provide education to all Australians, no matter their culture or life experiences, and that intelligence should never be measured and judged by our own misconceptions of other societies.

26 March 2009, Thursday

1215 hrs – 1345 hrs

Exhibition Area, Ballroom Foyer, Level 2, Suntec Singapore

DEMENTIA CARE AND RESEARCH IN ASIAN COUNTRIES

DEM01

CARE PROVIDED BY PROFESSIONAL CAREGIVERS TO RESIDENTS WITH DEMENTIA IN UNIT-TYPE GERIATRIC HEALTH SERVICE FACILITY

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Purpose : The purpose of this study is to clarify the kind of care provided to elderly residents with dementia by professional caregivers in unit-type geriatric health service facilities.

Method : A three-hour focus group interview was conducted with a group of four caregivers. The major topics of the discussion included what individual caregivers consider to be particularly important when providing care to demented residents. The discussion was recorded and transcribed. Statements relating to care services and activities were extracted and coded, then categorised.

Result : As care activities and services, 28 subcategories and 10 “categories” were extracted, from which five [focuses of care] were identified. Caregivers focused their attention on [creating a better environment] by “creating a homely atmosphere such that residents feel as if they were staying in their own home”, “preserving a safe living environment” and “creating an environment that meets the needs of residents and encourages them to use their remaining abilities”. To [help demented elderly residents maintain their normal lives], caregivers “performed normal daily activities together with residents”. Furthermore, to [help maintain and improve the lifestyle of individual residents, each with unique needs], caregivers “assisted residents with daily activities while respecting the pace of each individual”, “helped each resident to create and maintain his/her own rhythm of life” and “provided support to improve residents’ daily living functions”. To [provide support in a way that respects each resident's unique personality], caregivers “paid due attention to individual resident's wishes and desires concerning how he/she wants to spend his/her life”, and to [encourage social interaction with others], caregivers “provided support to enable residents to participate in social life to the extent possible” and “facilitated contact between residents and their families”.

Conclusion : As one of their most important care activities, professional caregivers devoted considerable effort to creating a safe and comfortable living environment for demented residents.

DEM02

PREVALENCE OF POTENTIALLY OVERLOOKED DEMENTIA IN THE COMMUNITY-DWELLING JAPANESE ELDERLY: ASSOCIATION OF COGNITIVE IMPAIRMENT AND MORTALITY DERIVED FROM 6-YEAR SURVIVALS

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Purpose : To clarify the prevalence of potentially overlooked dementia in the elderly in an urban community.

Method : Self-administered questionnaires were mailed in 2001 to all aged 65 years and older living with their spouse and/or child's family, whose response rate was 80.7%, and 13,058 subjects were analysed, among which 12,143 survivals were followed up for 6 years. Those whose family-caregivers responded as proxies due to addressee's dementia or cognitive impairment were defined as the family-recognised demented (FRD), and the others as the non-demented (ND). Cognitive scores were measured by performance of deposits/withdrawals, filling out documents and reading books/newspapers.

Result : The cutoff point determined by receiver operator characteristic curves was 0-1/2-3. The ratio of the lower score cohort (LSC) of FRD was 95.1% (58/61) in men and 96.2% (150/156) in women, and that in ND 6.3% (347/5,475) and 9.3% (570/6,111) respectively. Mortality of 2-, 4-, 6-year in FRD after baseline were 22.2%, 42.9% and 63.5% respectively in men and 20.5%, 40.4% and 54.0% in women, and those in LSC of ND were 27.4%, 43.5% and 55.6% in men and 16.5%, 31.1% and 45.6% in women, while 6-year mortality in the higher score cohort (HSC) of ND was 15.3% in men and 8.1% in women. Average death age of FRD was 85.6 in men and 90.1 in women, and that of LSC of ND 84.6 and 90.2 respectively, while that of ND 79.6 and 80.2.

Conclusion : LSC of ND had clearly high mortality and average death age, which were close to those in FRD. Previous studies report mortality in the demented is higher than in ND. Thus, results suggest that dementia of 6.3% in men and 9.3% in women is potentially overlooked by family-caregivers. It'd be significant to provide some family support system to detect demented status of their loved ones and contribute to their quality life.



DEM03

DEMENTIA SCREENING IN A COMMUNITY SAMPLE IN SINGAPORE

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Purpose : The Community Psychogeriatric Programme (CPGP) in Singapore aims to improve mental health care in older persons through early detection, effective and timely treatment. We share our experience of early detection via a dementia screening exercise for elderly residents of an apartment block. A Neighbourhood Link located within the building was a focal point for information dissemination, a local support network and an emergency activation system.

Method : 60 residents were invited to participate in the screening exercise held at the Neighbourhood Link. Written informed consent was obtained. The Abbreviated Mental Test (AMT) was the screening tool. Participants scoring less than 7 or with a history of memory impairment were reassessed. Reassessment included corroborative history from the participant and caregiver, if available. The following scales were performed: Mini-Mental State Examination (MMSE), Montgomery-Asberg Depression Rating Scale (MADRS), Neuropsychiatric Inventory (NPI) and Zarit Burden Interview (ZBI).

Result : There were 56 participants with a mean age of 73.3 years (SD 7.36); Majority was female (71.4%), Chinese (80.4%) and married (51.8%). Four participants (7.14%) screened positive and on subsequent assessment, 3 (5.35%) were diagnosed with dementia. All were male aged between 73 and 86. Their MMSE scores were 4, 22 and 23. The lower the MMSE score the higher the ZBI and NPI scores. None were depressed. They were referred to a family practitioner for further management but had yet to seek treatment 3 months later. The Neighbourhood Link staff continue to monitor affected individuals and encourage seeking treatment.

Conclusion : Screening for dementia in older persons in the community is effective in picking up disease. Challenges we faced included language and hearing difficulties, and explaining the nature and intent of the screening exercise. Barriers to seeking primary dementia care are present and may include stigma, poor insight and social support, cost and other logistical limitations.

DEM04

CLINICAL PRESENTATION, NUTRITIONAL STATUS AND OUTCOMES OF THE HOSPITALISED DEMENTIA PATIENTS

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Purpose : To describe the clinical presentation, nutritional status and outcomes of dementia patients admitted to an acute geriatric ward.

Method : We prospectively evaluated patients admitted to a geriatric unit in acute hospital in Singapore. Patients were diagnosed as dementia and classified according to its etiology using standardised criteria. We studied the disease presentation at admission (delirium, severity of illness and functional status based on Modified Barthel Index (MBI)) and nutritional status (using subjective global assessment (SGA), anthropometric measurements, serum albumin and total lymphocyte count) and compared them between patients with or without dementia. We also analysed the outcomes of MBI at three and six months post-discharge, falls at 3 months, length of stay (LOS) in the acute hospital and 6-month mortality in relation to diagnosis of dementia, before and after adjustment for age, gender, severity of illness, Charlson Comorbidity Index and admission MBI using regression analysis.

Result : 281 patients aged 61 to 102 years were included. 105 patients have dementia, of which the predominant subtype is vascular dementia (54.2%), followed by Alzheimer's disease (20.0%) and mixed dementia (19.0%). Compared to the non-demented group, patients with dementia were more likely to present with delirium (18.6% vs. 6.8%, $P < 0.01$), have lower severity of illness score ($P = 0.05$) and poorer nutritional status (SGA, body mass index, mean arm circumference and triceps skin fold, all $P < 0.05$). Overall, dementia patients were less likely to exhibit decline in MBI on admission ($P < 0.05$) when compared with their premorbid status; however, when stratified by premorbid MBI, dementia patients with higher premorbid MBI were, in fact, more likely to present with significant decline of 20 or more points ($P = 0.05$). Dementia was predictive of three and six-months MBI (both adjusted $P < 0.05$) and falls at 3 month (adjusted $P = 0.06$), but not LOS or 6-month mortality.

Conclusion : Hospitalised patients with dementia constitute a unique group with distinct disease, functional and nutritional presentations. They are vulnerable to functional decline and falls post-discharge.

DEM05

LOW SOCIOECONOMIC STATUS, SOCIAL ISOLATION AND CHALLENGING BEHAVIOURS ARE RISK FACTORS OF INSTITUTIONALISATION IN DEMENTIA PATIENTS IN AN ACUTE CARE SETTING

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Purpose : The prevalence of dementia in Singapore is projected to increase from 22,000 in 2005 to 187,000 in 2050. Studies have shown that challenging behaviours, caregiver stress and psychosocial issues are possible reasons for institutionalisation in dementia patients. We noted that only 50% of dementia patients referred to medical social worker (MSW) for nursing home (NH) placement eventually resulted in institutionalisation. There is no local data available currently looking at NH placement amongst dementia patients. Hence we wanted to look at specific behavioural and psychosocial factors which might influence the decision for eventual nursing home placement.

Method : We retrospectively reviewed case histories of 40 dementia patients admitted to Geriatric Medicine Department between October 2006 to March 2007. We collected patient demographics, socioeconomic status, behavioural factors and psychosocial issues of these patients. We analysed the findings using chi-squared test and t-test. We grouped reasons for NH placement into specific descriptive themes.

Result : Twenty dementia patients were discharged to nursing home while 20 dementia patients were discharged home or rehabilitation facility. Compared to non-institutionalised patients, those who were institutionalised were significantly older (mean age 84y+ 6.9, $p = 0.035$), widowed (70%, $p = 0.004$), fewer married (10%, $p = 0.006$) and lived apart from family (45%, $p = 0.01$) with no caregiver (25%, $p = 0.08$). They were also staying in 2-room or smaller public housing units (56%, $p = 0.02$). 35% of institutionalised patients presented with significant behavioural disturbances. We identified 6 major descriptive themes: challenging behaviours (55%), distant or strained relationship (55%), financial difficulty (45%), family constraints (40%), caregivers' stress (25%) and patient as caregiver of other family members (5%).

Conclusion : We found that dementia patients living alone with lower socioeconomic status, challenging behaviours, family conflicts and caregiver stress predict eventual NH placement. These should be addressed during interventions to support care of dementia patients in the community.

DEM06

THE PRESENT CONDITIONS OF UNDERSTANDING ON DEMENTIA IN RURAL JAPANESE

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Purpose : The education importance of dementia prevention in a community has been greatly increased by the rapid increase of the elderly population all over the world. However, few studies have investigated the degree of recognition of the signs and symptoms of dementia among residents including young people in a community. The aim of this study was to clarify the actual conditions of understanding on dementia of the people in rural Japan.

Method : The subjects were 2,438 individuals aged from 12 to 81 years living in a town situated in the mountains. The data were collected using a self-administered questionnaire. The response rate was 35.5%. We obtained information on age, gender, marital status, and ability to recognise seven symptoms of dementia with a response of either “Yes” or “No”. We assigned 1 for a “Yes” response and 0 for a “No” response in recognition of the seven symptoms of dementia for which we tested. The total score (0–7) was dichotomised into “high score” (7 points) and “low score” (<7). We used a chi-square test to determine distribution.

Result : The mean age was 57.7±18.4(S.D.) years, and 55.1% of the respondents were women. The proportion of subjects with a high score was greater in women than in men, but was not significant ($p = 0.08$) and was significantly increased with age. The proportion of subjects with a high score was the lowest in men under 65 years of age ($p < 0.001$).

Conclusion : We observed that the proportion of subjects with high recognisability of symptoms of dementia was the lowest in men under 65 years of age. This finding indicates a necessity for education to improve knowledge and recognition of symptoms of dementia from a young age.



DEM07

THE CURRENT CHALLENGE AND MISSION

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Purpose : In China, we are experiencing a demographic revolution. The population is growing fast especially those age 85 years and old (or the oldest – old) and those young – old age 60 years and above. There are 120 million of population whose age are above 60 now. In addition, as the living condition improved, people are living longer, disability rates are declining, too. It is estimated that between 2003 and 2020 those age 60 years and old will double, and by 2030, there will be 400 million of those age 60 years. The incidence of the disorder increases, such that up to 8.7% of those over age 65 in Beijing, while 2.3% of those age 60-69 , 3.97% of those age 70-79, 20-35% of those age over 80 years in China. More than 6 million are believed to suffer from some degree of Alzheimer's disease now. China has 1.3 billion populations with huge number of AD patients, which increases the large number of AD patients in the world. This is a serious challenge to ADI-China.

Method : To deal with this challenge, ADI-China organised many activities to unite hospitals, universities and research institutes, enterprises and pharmaceutical groups to work together. Every year ADI-China conducted the large-scale public scientific activity, invited the famous scientists and socialists from different fields to give lectures, conducted various training classes, and organise broad voluntary clinical diagnosis and consultation, music concerts, 'AD walks' and so on. ADI-China received great feedback from public and press. The activities obtained the government, enterprise and society's great supports.

Result : The article stressed the importance of organising activities of network and research collaboration in national-wide, especially by efforts to increase public awareness.

Conclusion : ADI-China will devote itself to promote advanced research and public education in AD, to encourage international exchange and cooperation network.

DEM08

COGNITIVE IMPAIRMENT AND OSTEOPOROSIS IN THE ELDERLY KOREAN

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Purpose : Little is known about the association between osteoporosis and cognitive impairment in the elderly. The aim of the study was to explore the correlation between the bone mineral density (BMD) and cognitive function in the elderly Korean.

Method : A population-based study was performed for a total of 720 elderly Korean, from the Ansan Geriatric Study (AGE study). Dual-energy x-ray absorptiometry (DXA) was performed on L1~L4 lumbar spine for all cases. The cognitive function was evaluated by the Consortium to Establish a Registry for Alzheimer's Disease (CERAD) neuropsychological battery and the CERAD total score was tested.

Result : The distributions of CERAD total score were 57.86±13.40 in the elderly with osteoporosis, 62.72±12.39 in osteopenia, and 65.10±14.71 in normal (F=13.94, P<0.001). The distribution of MMSE score were 25.19±4.21 in the elderly with osteoporosis, 25.93±3.67 in osteopenia, and 26.34±4.21 in normal. The cognitive dysfunction was correlated with BMD (r=0.159, P<0.01).

Conclusion : Osteoporosis was associated with cognitive impairment in the elderly. Additional studies are needed to confirm this correlation.

DEM09

NOS3 GENE G894T POLYMORPHISM AND LATE-ONSET ALZHEIMER'S DISEASE IN AN IRANIAN POPULATION

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Purpose : Alzheimer's disease (AD) is the most common age-associated neurodegenerative disease caused by complicated interactions between genetic and environmental factors. The presence of the APOE ε4 allele, the only confirmed genetic risk factor for late-onset AD (LOAD), is neither sufficient nor necessary to explain all occurrences of the disease. In order to identify additional genetic factors associated with increased risk of AD, numerous putative genetic variants have been reported. Aberrant expression of the endothelial nitric oxide synthase (NOS3) gene has been demonstrated in degenerating neurons and glial cells in brains with AD. Molecular epidemiological studies have presented contradictory results concerning a potential role of NOS3 gene G894T polymorphism in AD. In this study, to define a possible association of this polymorphism with LOAD in an Iranian population, we conducted a case-control study including a clinically well-defined group of 100 LOAD patients and 100 age-matched controls.

Method : G894T polymorphism in NOS3 gene was determined by polymerase chain reaction-restriction fragment length polymorphisms (PCR-PFLP) assay.

Result : Chi-square analysis showed a significantly increased number of individuals with the G/G genotype in AD patients compared with controls (P < 0.05).

Conclusion : These results demonstrate an association between G894T polymorphism and LOAD in an Iranian sample and the G/G genotype seems to have some effects in the development of AD either alone or through interaction with other risk factors.

DEM10

CORTICAL GRAY MATTER VOLUME CHANGES IN SUBCORTICAL ISCHEMIC VASCULAR DEMENTIA

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Purpose : The importance of cortical gray matter atrophy in dementia was increasingly recognised, and it might show a stronger association with disease progression. Two of the most widely recognised forms of dementia were Alzheimer's Dementia (AD) and subcortical ischemic vascular dementia (SIVD). The prototypical form of "cortical" dementia, AD is associated with pronounced cortical atrophy of the brain. On the other side, the cortical changes in SIVD and their correlations with underlying cognitive deficits are poorly understood. We investigated the structural neuroimaging correlates of Clinical Dementia Rating (CDR) in SIVD patients.

Method : To compare the brain cortical atrophy of SIVD patients, we did global mapping gray matter loss with voxel-based morphometry (VBM). Control and SIVD (Bingswanger type) patients underwent brain magnetic resonance imaging (SPGR). Mapping gray matter loss with VBM (Spatial realignment, normalisation, segmentation into gray matter, smoothing, and hypernormalisation of the gray matter) were carried out based on statistical parametric mapping (SPM 5) algorithm. Analyses were done with contrasting CDR 0.5, 1, and 2 patients with control.

Result : We found significant regional decreases of cortical gray matter volume in the three patient groups compared to age-matched healthy controls in voxel-by-voxel comparisons. The area of cortical volume atrophy in each group of SIVD was significantly correlated with CDR.

Conclusion : SIVD patients showed significant cortical gray matter atrophy that was a different pattern of AD patients. The areas of cortical gray matter volume atrophy correlated with the severity of SIVD.



DEM11

DISCHARGE CONTROL FOR PATIENTS WITH DEMENTIA

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Purpose : The purpose of this study is to deliberate the needs of discharge controlling for the dementia patients in Japan.

Method : The data were collected by interviews (to the dementia patients who were admitting in Hospital, and their families), and from the Physicians' and Nurses' records between April 2005 – March 2007.

Result : Patients: 39 cases (male;8, female;31. Age 65~87yrs.), Living with caregivers;16, Living alone;23. Types of dementia: AD; 21, VD; 4, DLB; 9, PSP; 2, CBD; 2, NPH; 1. MMSE 8~25. Patients Will (when admitted): Wanted to go home; 19, Wanted to go to the Long Term Care Facilities; 7, No Will; 11. Family's Will (when the patients admitted): Home; 7, Long Term Care Facilities; 28. The place where patient went (discharged): Home; 15, Group Home; 12, Short term care facilities; 6, Long Term Care Facilities; 3, Psychiatric Hospital; 3.

Conclusion : 1. Patients who were living with their family before admission and went back to their home after discharged from the hospital were 8 out of 16 cases. Living alone before admission and went back to their home was 8 out of 23 cases. All cases were connected or starting to connect with their "Care manager" and there Home care plans were prepared before going back to their home. 2. Patients who went back to their home after discharged from the hospital even their family wanted them to move in to the Long Term Care facilities, were 6 cases. All the cases did not have BPSD such as agitation or aggressive behaviour. 3. In male patients, there were 6 cases who moved to the "Care facilities" after discharged from the hospital. The problems about the living abilities and the supporting systems must be considered in those "Living alone" male elderly in Japan.

DEM12

SEVERITY OF NEUROPSYCHIATRIC SYMPTOMS AND RELATED CAREGIVER DISTRESS AND NOT CAREGIVER KNOWLEDGE CONTRIBUTE TO CAREGIVER BURDEN IN MILD TO MODERATE DEMENTIA PATIENTS ATTENDING A TERTIARY MEMORY CLINIC: AN ASIAN EXPERIENCE

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Purpose : Caregivers of dementia patients often experience e high stress level and caregiver burden especially if there are attendant behavioural problems. The stress of caregiving may also be related to caregiver knowledge of the disease process and coping strategies. In this study we wanted to find out whether caregiver knowledge, neuropsychiatric symptoms and caregiver distress contributed to caregiver burden in dementia patients.

Method : We recruited consecutive newly diagnosed dementia patients attending a tertiary Memory Clinic. The caregivers had to spend minimum of 15 caregiving hours/week. Caregiver demographics were captured. We administered a caregiver knowledge questionnaire, the Neuropsychiatric Inventory Questionnaire (NPI-Q) and Zarit Burden Interview (ZBI) to caregivers. Descriptive analysis was performed and associations between neuropsychiatric symptoms, ZBI score and caregiver knowledge scores studied using Pearson correlation.

Result : A total of 33 patient - caregiver dyads were studied. Patients had mainly mild (39.4%) and moderate (60.6%) dementia. Majority of caregivers interviewed were the main carer (87.9%) living with the patient (84.8%). Most caregivers spent 58.09 hours/week in caregiving. The total knowledge score was 69.57 % (+11.34). The mean ZBI score was 24.55 (+12.22). The common neuropsychiatric symptoms reported were apathy (45.5%), depression (36.4%), irritability/ liability (36.4%), disinhibition (30.3%) and aberrant motor behaviour (30.3%), of which aberrant motor behaviour had highest symptom severity. Disinhibition caused the most caregiver distress. Significant correlations were found between ZBI score and NPI total caregiver distress score (r= 0.55, p< 0.05) and ZBI score and NPI total severity score (r=0.42, p<0.01).

Conclusion : Our study showed the common neuropsychiatric symptoms in mild to moderate dementia outpatients were apathy, depression, irritability/ liability, disinhibition, and aberrant motor symptoms. Disinhibition caused the most caregiver distress. Caregiver burden was related to severity of the neuropsychiatric symptoms and resultant caregiver distress, evidencing need for good behaviour management.

DEM13

UTILISATION OF DEMENTIA DAYCARE SERVICES BY DEMENTIA PATIENTS ATTENDING A TERTIARY MEMORY CLINIC IN SINGAPORE

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Purpose : Dementia day care centers play an important role in dementia care as they keep the patients active, reduce institutionalisation and alleviate caregiver stress. We wanted to examine daycare utilisation and the reasons for acceptance or refusal of daycare in patients seen at a tertiary Memory Clinic in Singapore.

Method : We studied 100 consecutive newly diagnosed dementia patients in 2007 who underwent nurse counselling after diagnosis. We retrospectively reviewed case histories for patient's demographics, diagnosis and severity of dementia (using clinical dementia rating (CDR)), functional factors (ADL, instrumental ADL), behavioural symptoms (depression, agitation/aggression, anxiety, hallucinations, delusions, suspiciousness /paranoia, quiet/withdrawn, sleep disturbance, wandering, repetition, mood swings, resisting help, sundowning, hoarding) and causal factors of caregiver stress. We reviewed patients' dementia daycare attendance after counselling and possible reasons for accepting/refusing daycare.

Result : We found that only 20% (n=20) of patients attended dementia daycare. Most of the daycare attendees had mild to moderate dementia (90%) with a global CDR score of 1.4-0.72. They had significantly more depressive symptoms, sleep disturbances and mood swings compared to non-daycare attendees (p<0.05). 50% of daycare attendees had no daytime caregiver. 50% of the daycare attendees' carers reported being depressed by patient's care and in need of break, 45% said their own health suffered and 75% expressed frustration with patient's behaviour, which was independent of functional status. Among the non daycare attendees, majority (50%) had mild dementia and reasons given for daycare refusal included ability to cope with care (62.5%) and caregiver preference to have loved ones remain at home (48.8%).

Conclusion : Dementia daycare utilisation has increased from an earlier 2001-2002 study (9%). Behavioural problems, caregiver stress and coping abilities determined dementia daycare utilisation. The lower uptake among mild dementia patients highlight the need for setting up appropriate programmes to cater to this specific group.

DEM14

COGNITIVE, BEHAVIOURAL AND FUNCTIONAL FACTORS INFLUENCE EVENTUAL INSTITUTIONALISATION IN GERIATRIC PATIENTS FOLLOWING ACUTE HOSPITALISATION

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Purpose : Requests for nursing home placement are usually a result of interactions between medical comorbidities, functional impairments and psychosocial factors. We found that only a proportion of geriatric inpatients referred to the medical social worker (MSW) requesting institutionalisation ended up in nursing homes. Hence this study was to examine which medical comorbidities, functional and psychosocial factors predicted eventual institutionalisation in geriatric inpatients requesting nursing home placement.

Method : We retrospectively reviewed case histories of patients admitted to Geriatric Medicine Department between October 2006 to March 2007 referred to the MSW for nursing home placement. We collected demographic data, medical co-morbidities (acute illness, falls, incontinence, delirium, and dementia), illness severity, functional factors (ADLs), caregiver factors (caregiver stress, conflicts), psychosocial factors (prior institutionalisation) and eventual discharge status (nursing home, rehabilitation facility and home). Differences between those eventually institutionalised and those not were analysed using chi-square test and t-test.

Result : 72 geriatric inpatients were assessed for nursing home placement of which 31 (43%) were eventually institutionalised. Medical co-morbidities and illness severity were similar in both groups. Nursing home admissions were significantly older (mean age 84.4 ± 7.1, p=0.008), fewer married (9.7% p=0.01), more were widowed (71.0%, p=0.01) and tended to live apart from family (45.0%, p=0.46). Compared to those discharged home or rehabilitation facility, they were functionally (3 or more ADL impairment) (93.5%, p=0.01) and cognitively more impaired (Abbreviated Mental Test 3.8 ± 2.9, p=0.08). Significant caregiver stress (93.8%, p=0.01) and family conflicts (93.5%, p=0.04) were found in geriatric patients admitted to nursing home whereas no differences were found for behavioural problems (50%,p=1.00).

Conclusion : Geriatric inpatients who were eventually institutionalised were older, widowed, single, more functionally dependent with more cognitive impairment and psychosocial difficulties. Hence cognitive and functional impairments should be addressed as early intervention could possibly reduce institutionalisation and maintain community living.



DEM15

WHAT DO THE ELDERLY RESIDENTS NEED? FROM NURSES' PERSPECTIVES
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Purpose : For providing a better nursing care, the care quality within nursing homes has become an important and urgent issue to study. To meet individual's needs has been a significant element for quality of care. However, after reviewing the literature, the holistic care needs of the elderly residents in the nursing homes are poorly understood. Therefore, this study was to explore the care needs of the elderly residents including dependent and dementia older persons in Taiwanese nursing home from nurses' perspectives.

Method : The qualitative approach was applied in this study. In-depth interviews were undertaken in five nursing homes. Sixteen nurses who were registered nurses, undertook any duties or shifts, and had worked in the nursing homes for over three months were interviewed between 2006 and 2008. All data were transcribed and coded for emerging themes. The rigour of the study was ensured and ethical issues were considered.

Result : Seven care needs which were identified by the participants were skilled care need, personal ADL care needs, emotional support and psychological care, environmental hygiene and safety, social interaction and activities, spiritual care, and economic needs.

Conclusion : The findings fill in an important gap in nursing knowledge about the care needs of the older residents who live in the nursing homes. It can provide the information for nursing practice and education. It also has the potential to influence policy-making in Taiwanese long-term care.

DEM16

THE INFORMANT QUESTIONNAIRE ON COGNITIVE DECLINE IN THE ELDERLY (IQCODE) AS A SCREENING TOOL IN A SINGAPORE POPULATION, AND ITS CORRELATION TO DEMENTIA DIAGNOSIS AND SEVERITY, AND CAREGIVER STRESS

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Purpose : The Informant Questionnaire on Cognitive Decline in the Elderly (IQCODE) has been validated and widely used in different populations to screen for dementia. It was applied to patients in the Memory Clinic in eastern Singapore. Its correlation to the diagnosis of dementia, dementia severity and caregiver stress was assessed.

Method : Data on 59 patients was collected. A short form of the IQCODE was administered to the carers of the patients by trained nurses. Dementia diagnosis was obtained by a physician using DSM IV criteria (gold standard). Dementia severity and caregiver stress were obtained using the Clinical Dementia Rating (CDR) scale and the Zarit Burden scale respectively.

Result : ROC analysis of IQCODE scores was performed in correlation with the DSM IV criteria. This showed inadequate ability of the IQCODE to discriminate between patients with and without dementia (AUC=0.652, CI:0.477-0.872). This was confirmed by the Mann-Whitney U test (p=0.094). Spearman's correlation coefficients were used to evaluate both the association between the IQCODE and CDR score, and between the IQCODE and Zarit Burden scale. In both instances, there was a statistically significant positive correlation between the IQCODE and CDR score (r=0.427, p<0.01) and between the IQCODE and Zarit Burden scale (r=0.386, p<0.01). One way ANOVA showed no significant difference in IQCODE score among different caregiver education levels (p=0.792).

Conclusion : In our study, the IQCODE alone does not appear to be a strong screening tool for the diagnosis of dementia. However, there is a positive correlation with dementia severity as well as caregiver stress. The IQCODE (a subjective tool) was not influenced by the carers' education level. We recommend further studies involving larger sample size in assessing the suitability and accuracy of the IQCODE for use in our population as a screening tool for dementia.

DEM17

VALIDATION OF THE ROUTE MAP MEMORY TEST FOR THE ELDERLY

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Purpose : The Route Map Memory Test (Kuo, et al., 2008) was developed to test the route recall ability of the elderly. This study is to examine the test reliability and validity with people with and without Alzheimer's Disease (AD).

Method : The Route Map Memory Test was administered to the control (n =43, age: 64.26 ± 7.13 y) and the patient groups (n = 29, age: 70.48 ± 7.01 y) together with two subtests of the Wechsler Memory Scale-III—the digit span and the spatial span tasks, and the Trail Making Test. Nineteen people of the control group took the retest after three weeks for the test-retest reliability study. Concurrent validity was examined by Person correlations between the Route Map Memory Test scores and other measures. Discriminative function analysis was used to examine how accurately the Route Map Memory Test predicted group membership for the two groups.

Result : The test-retest reliability of the Route Map Memory Test is .752 (p < 0.01, N=19). There are high correlations between the Route Memory Test scores and the scores in Trail Making A and B (r = .740 and .732 respectively, p's < .01). Correct classification of the participants with Route Map Memory test is 90.7 % in the controls and 60.9 % in the AD group.

Conclusion : The findings support the reliability of the Route Map Memory Test, and the relationship to the frontal lobe function and disease diagnosis. Further research to examine the ecological validity of the test in patients with dementia is warranted.

DEM18

ESTABLISHMENT OF THE PLASMA BIOMARKERS FOR THE PRE-SYMPTOMATIC DETECTION OF AD: AUSTRALIAN IMAGING, BIOMARKER AND LIFESTYLE (AIBL) FLAGSHIP STUDY OF AGEING

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Purpose : Alzheimer's disease (AD) is among the most frightening consequences of old age. The development of valid and reliable biomarkers for AD is essential in recognising the disease in its pre-symptomatic stage. The ideal biomarker for AD should be reliable, reproducible, noninvasive, quick, easy and inexpensive. Amyloid beta (Aβ) and Apolipoprotein E (APOE) have emerged as potential AD biomarkers. Our approach involved the Australian Imaging, Biomarkers and Lifestyle study of ageing (AIBL) volunteers who were categorised into four groups namely non memory complainers (NMC), Memory Complainers (MC), Mild Cognitive impairment individuals (MCI) and Alzheimer's Disease patients (AD).

Method : AIBL participants across two cities in Australia underwent PET amyloid brain imaging and their blood plasma samples were collected and analysed for the levels of APOE and two isoforms Aβ-40 and Aβ-42 using APOE4/PAN APOE ELISA kits and INNO-BIA Aβ detection kits respectively. Neuropsychological assessment data along with the dietary and lifestyle habits of the participants were also monitored which helped to get a complete picture.

Result : MCI showed significantly higher levels of Aβ-42 that subsequently caused the increase of Aβ-42/Aβ-40 ratio when compared with NMC and MC. However, APOE levels appeared to be slightly lower in MCI and AD participants when compared to NMC and MC groups. Interestingly, when these participants were categorised according to their APOE genotypes, the levels of APOE appeared to be least in E4/E4 participants, a known genetic risk factor for AD.

Conclusion : The above results are the outcome of the baseline data which has provided valuable information on links between cognitive function, brain amyloid burden, biomarkers, and lifestyle. An 18-month follow up study on AIBL cohort is expected to provide a better correlation between Aβ, APOE and AD. The future research yield from AIBL cohort involves the development of techniques for early detection of AD and identify lifestyle targets which may delay onset of AD.



26 March 2009, Thursday

1215 hrs – 1345 hrs

Exhibition Area, Ballroom Foyer, Level 2, Suntec Singapore

SUPPORT FOR FAMILY CAREGIVERS

SUP01

A STUDY OF RESTRAINT USAGE BY PRIMARY CAREGIVERS WHO CARE FOR ELDERLY RELATIVES WITH DEMENTIA AT HOME IN A RURAL AREA

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Purpose : The purpose of this study is to assist family caregivers who care for elderly relatives with dementia at home in rural areas by examining the conditions and reasons physical restraints are employed.

Method : Sample: Ten primary family caregivers who care for relatives with dementia at home. Interviews and Troublesome Behavior Scale (TBS) questionnaires were utilised and the frequency of TBS and the condition were analysed. Time was limited to approximately one hour. The interviews were recorded after receiving permission from the families.

Result : There were three stages in the family primary caregivers consideration of physical restraints;

(1) Guarding stage: All family primary care givers tried to avoid physical restraint usage by explaining, following and creativities.

(2) Conflict stage: Physical restraint was utilised only when the primary family caregivers were unable to watch their demented elderly relative closely enough to stop wandering behaviour and be able to live their own lives.

(3) Decision making: Applying physical restraints by isolation and inappropriate use of sleeping pills when the caregivers' time preference comes first. Isolation was employed without Stage 2 when the primary family caregivers sensed their demented elderly relatives were disturbing neighbours.

Conclusion : It is suggested that primary caregivers' needs to be assessed thoroughly, provide information and resources regarding dementia to avoid usage of physical restraints.

SUP02

FAMILY CAREGIVERS' PERCEPTION OF CARE BURDEN AND COPING STRATEGIES IN JAPAN AND KOREA

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Purpose : We attempted a comparative study between Japan and Korea on the characteristics of coping strategies of family caregivers looking after elderly persons with dementia at home in relation to their perception of care burden.

Method : The sample populations were the home caregivers looking after their elderly family members with dementia living in three prefectures in Japan and one city in Korea. The data were collected using a questionnaire employing the Carer's Assessment of Managing Index (CAMI, 38 items) developed by Nolan et al. and the Zarit Caregiver Burden Interview (ZBI). It was distributed through visiting nurses and public health nurses or by mailing to the family caregivers of clients 65 years or older receiving some home services. The Mann-Whitney U-test was used to examine the statistical significance of the relationship between CAMI and ZBI.

Result : The questionnaire was distributed to 292 caregivers, and 198 (67.8%) of them responded. There was no substantial difference in the degree of perceived care burden between the two countries, but the subscale Personal Strain was higher in Korea than in Japan (p<0.05). The CAMI stress coping strategies usually or frequently adopted by more than 70% of respondents were eleven strategies in Japan and two emotional-cognitive strategies in Korea. This indicates a great difference in the variety of coping strategies culturally available for a caregiver. The ZBI significantly related to thirteen CAMI strategies in Japan and to three CAMI strategies in Korea.

Conclusion : The understanding of these similarities and differences between the two countries in caregivers' perception of care burden and related coping styles as well as their cultural background provides us with wider and deeper views to help us develop efficient support programs for family caregivers.

SUP04

SUPPORT FOR BOTH STROKE SURVIVORS AND CAREGIVERS ENHANCES COPING SKILLS AND REDUCES DEPRESSION

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Purpose : A sudden pathological event such as a stroke implies not only direct consequences for the patient but also indirect consequences for family members and, in particular, for the primary caregiver. The long-term fulfilment of this role may lead to disruption of the caregiver's personal psychological equilibrium, increasing the probability of depression. Various studies have brought to light certain characteristics, intrinsic and extrinsic, in the patient and the caregiver whose interaction could influence the onset of symptoms of depression in the patient and/or caregiver.

Method : Patients (n=9; mean age 66 ± 9.167) and their caregivers (n=9; mean age 60.78 ± 10.803) were recruited from the Stroke Unit of the University of Florence. The ad hoc protocol included neurological, neuropsychological, functional and psycho-emotional assessments. The study was structured as a repeated measures design (sub-acute phase, and three- and six-month follow-up) in order to track trends over time in the individual variables considered (dependent samples test of Wilcoxon) and their associations (Phi and V Cramer index and Fisher's exact test). Finally, we made a qualitative description of the individual caregiver-patient pairs in time and in the presence/absence of factors facilitating depression.

Result : Our data suggest a peak improvement in patients of all variables considered at three months after stroke. The psycho-emotional burden remained high over time in caregivers and was associated with cognitive impairment in the patients at three months. Moreover, significant associations were observed between coping skills in caregivers and cognitive impairment and depression in patients at the sub-acute phase. Similar coping strategies in the caregiver-patient pairs emerged at six months.

Conclusion : The employment of active coping strategies on the part of the caregiver and his/her full involvement in the caregiving favour adaptability and help prevent the insurgence of depression in the caregiver. This study is ongoing, however, it has thus far clearly shown the importance of early (sub-acute phase) practical and emotional support not only to patients, but also to caregivers to prepare for assuming the role of caregiver.

SUP05

DIFFICULTIES ENCOUNTERED AND COPING STRATEGIES ADOPTED BY THE HOME CAREGIVERS OF PERSONS WITH DEMENTIA IN SINGAPORE: FAMILY CAREGIVERS AND DOMESTIC WORKERS' PERSPECTIVES

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Purpose : The prevalence of dementia is increasing. The disease extracts its toll not only on the victims but also on the home caregivers. In Singapore, persons with dementia are mostly cared for at home by family members or domestic workers. This study was done to explore the difficulties encountered and coping strategies adopted by these home caregivers.

Method : It was a qualitative, narrative inquiry study with a purposeful sampling consisting of 6 domestic workers and 6 family members, who had at least 1 year experience as main caregivers of persons with dementia. Semi-structured interviews were conducted for data collection. Data from interview transcripts was analysed with the content analysis method.

Result : The difficulties encountered by the home caregivers were: 1) Negative relationship between caregiver and person with dementia; 2) difficulty in understanding the symptoms of dementia; 3) communication; 4) managing challenging behaviours; 5) lack of support and supervision; 6) inappropriate environment and 7) lack of resources. The difficulties were perceived differently by the family caregivers and domestic workers. Different methods of problem solving, seeking various ways for emotional release and withdrawal were 3 coping strategies adopted by the caregivers. Family caregivers and domestic workers exhibited the strategies in different ways. For example, family caregivers tend to withdraw by surrendering the caregiving role, whereas domestic workers tend to adopt a more nonchalant attitude.

Conclusion : The main caregiver of a person with dementia needs to be empowered with the necessary knowledge and skills, and psychosocial and environmental support to facilitate them in their task. Dementia education program should impart knowledge on dementia, such as communication and behavioural management skills. The caregivers, especially those who adopt a negative coping strategy need to be identified and supported in order to prevent premature institutionalisation.



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TECHNOLOGY FOR PEOPLE WITH DEMENTIA

TEC01

STUDYING SLEEP WAKE CIRCADIAN RHYTHM IN PERSONS WITH DEMENTIA USING ACTIGRAPHY BASED SLEEP ACTIVITY PATTERN MONITORING (SAPM)

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Purpose : Advancements in sensor technologies have sprouted the development of accelerometer-based actigraphy sleep activity monitoring systems. However, current actigraphy designs are limited to single subject monitoring, constrained by geographic distance and not real-time. The purpose of this work is to develop and deploy a real time and distance unlimited Sleep Activity Pattern Monitoring (SAPM) system for a group of persons with dementia (PWD).

Method : PWD wear wrist actigraphy for SAPM and a platform is designed to continuously transmit sensor data from multiple subjects to a remote server to process data in real-time and display results on a website. Algorithms are developed to accurately classify sleep activity patterns therein. An open-service oriented achitecture is adopted to enable software re-use, ease of system scaling and integration into existing healthcare systems. Sleep diaries entered manually by a caregiver are maintained for each subject to provide ground verification.

Result : Accurate and reliable SAPM data that is processed and displayed in real-time with graph plots of sleep-activity trends over days/weeks have been achieved for the subjects monitored. The mobile platform allows portability of SAPM system to enable distance unlimited and continuous data collection and display.

Conclusion : It is feasible to obtain SAPM data on PWD from virtually any location in a continuous and timely fashion. Such data provide invaluable information for clinicians to understand and recommend appropriate interventions for PWD.

TEC02

INTELLIGENT CONTINENCE MANAGEMENT SYSTEM (iCMS)

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Purpose : Urinary incontinence and diaper use are prevalent in persons with dementia (PWD) due to a decline in intellect and Activities of Daily Living (ADL). PWD can lie in soiled diapers for prolonged periods, resulting in indignity, skin discomfort, breakdowns and bedsores. As PWD are often unable to indicate they have soiled themselves, carers cannot intervene appropriately. Timely continence management is needed to avert these problems. The goal is to develop an automated and intelligent Continence Management System (iCMS) to detect soiled diapers so that timely diaper change can be effected.

Method : A wetness detector is embedded in the diaper. When the diaper is soiled, a signal is relayed wirelessly through sensor network to a gateway for processing. An alert is subsequently conveyed to the carer, enabling timely diaper change. The alert is customised to the preference of the end-user and can be in the form of audible and visual alarms, or even Short Message Service (SMS) alerts. iCMS was implemented in a nursing home with PWD. Its accuracy in detecting soiled diapers was determined by validating against the actual event of diaper soiling.

Result : iCMS showed modest sensitivity (56%) and high specificity (100%) in detecting soiled diapers. The sensitivity was compromised primarily by sensor malpositioning. This can be improved by ensuring proper sensor placement.

Conclusion : The encouraging results of our pilot trial hold much promise that iCMS enables timely diaper change in PWD, with heightened quality of care and carer satisfaction as its main benefits. It also promotes a shift from manual to automated management in continence care, enhancing quality of life and quality of care in PWD.

TEC03

AUTOMATED AGITATION MONITORING (AAM) WITH THE SCALE FOR OBSERVATION OF AGITATION IN PERSONS WITH DEMENTIA (SOAPD) THROUGH MULTI-MODAL SENSORS

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Purpose : Background: Agitation is a commonly exhibited behaviour among persons with dementia. The Scale for Observation of Agitation in Persons with Dementia (SOAPD) is frequently used by doctors and caregivers in the assessment of agitation among these persons. One of the challenges faced by doctors and caregivers is the detailed and continuous monitoring required in order to accurate carry out agitation rating according to the SOAPD scale. Aim: To collect and analyse data from multi-modal sensors deployed in a geriatric ward in order to automatically rate agitation according to the SOAPD scale.

Method : Modern sensor networking technology, and a system of multi-modal sensors was deployed in a hospital ward in order to carry out system directed observation, without the need of caregivers. Algorithms were developed to automatically recognise patterns of agitated behaviour.

Result : With the use of modern sensor networking technology, and system directed observation, we were able to achieve objective outcomes, without the need of caregivers, thereby freeing manpower and enabling ambient monitoring of elderly patients in non-clinical settings. AMSS showed very good recognition rate of above 92% for some of the items on the SOAPD scale, whereas on other items the recognition rate was a modest 40% to 60%. The false alarm rate can also be reduced by at least 50% with additional sensor modality. For two items on the scale, further research is needed to develop pattern recognition algorithms.

Conclusion : AMSS has good performance in detecting certain attributes of agitated behaviour among persons with dementia, and good potential, with further development to detect other attributes of agitated behaviours among these persons. AMSS permits an objective assessment of agitation level, and one that is without personal bias. It also offloads the time-consuming and tedious task of manual observation of agitation.

TEC04

UNDERSTANDING AND CORRECTION OF ERRONEOUS BEHAVIOR AMONG MILD DEMENTIA PATIENTS (UCEB)

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Purpose : Background: Mild dementia patients have problems with correctly executing plans. As a result, they often tend to have problems with a) initiation or continuity of an activity, b) remembering important intermediate steps in an activity, c) correctly carrying out the ordering of the steps in an activity, and iv) making decisions based on correct judgement. In the absence of caregivers and family, such problems can go undetected and unaided for days and months, leading to other problems such as loss of weight (due to not eating meals), increased risk (due to inappropriate or hazardous behaviour) and further decline of cognitive function due to lack of feedback.

Aim : To employ ambient intelligence technology to monitor and assist the living-alone elderly to detect errors in the execution of planned activities, and guide them back to the proper execution of the planned activities.

Method : To put together a system for Understanding and Correcting Erroneous Behavior (UCEB) among mild dementia patients. To restrict the problem size, we focus on the eating activity within a specific kitchen environment, with a goal of characterising the degree of success with which this activity has been completed. The eating plan is represented hierarchically, and encompasses related sub-plans such as preparing the dining table, preparing utensils, using the fridge, using the microwave, etc. This plan is amplified by artificial intelligence techniques to encompass irrational unrelated plans such as watching TV and answering a phone call. We are also investigating ways of providing memory and cognitive compensation for patients whenever they experience the above-mentioned cognitive problems.

Result : The system is under development at this time and has yet to be assessed in terms of usability and efficacy.

Conclusion : Although the system for erroneous plan detection and correction has not yet been implemented, there is a large body of research in this area, and general consensus that this is a very important problem in ministering to the needs of the mild dementia patients. Benefits of this work are expected to be a) correction of errors in plan execution and assistance in plan execution, b) better safety in the elderly persons' Activities of Daily Living and c) improvement in rate of decline of cognitive function due to prompt intervention.



TEC06

EXPLORING THE USE OF ONLINE TOUCH-SCREEN COMPUTERISED PROGRAMME IN THE ASSESSMENT OF COGNITIVE FUNCTION - A PILOT STUDY SCHWINGER WONG CHI-KIT¹, KENNETH FONG NAI-KUEN²

The Hong Kong Society for the Aged (SAGE), SAGE Dementia Working Group, Hong Kong¹; Rm ST512, Department of Rehabilitation Sciences, Hong Kong Polytechnic University, Hong Kong²

Purpose : Information technology plays a crucial role in modern peoples' lives. We would like to introduce modern technology in cognitive screening assessment for elderly. In this study, we will explore the properties of the Online Cognitive Test and also examine its correlates with other neuropsychological tests.

Method : A total of 151 older people were recruited from residential and community units. A purposive sampling method was used to recruit 44 older person who were diagnosed mild to moderate dementia, 57 older persons who were cognitively intact and live at elderly homes, and 50 healthy elderly from community. The inclusion criteria include 60 - 95 years of age at the time of the study. They must have normal vision (or normal vision using corrective devices), experience no dysfunctions in upper limbs, and do not have any other major brain diseases (i.e. stroke, Parkinson's disease, and head injury) nor any major mood disorders to participate in the study. Prior to the screening tests, subjects are required to play similar computer online games to ensure they have no hesitation in using touch-screen and understand the rules and procedures of different tasks. They will be assessed with CMMSE and collected relevant demographic data including years of education, past major occupation, etc. There are 4 tests in online cognitive function assessment: Memory Test, Modified Chinese Trail Making Test, Response Test, and Calculation Test.

Result : The performance of the 3 groups showed significant difference in all online cognitive tests. The performance is also correlated to the CMMSE scores. 3 tests (Memory Test, Modified Chinese Trail Making Test, and Response test) will be the predictors of have or have not dementia which explains 36% of the total variance.

Conclusion : It is worthwhile to develop online cognitive function assessment for the elderly as a convenient and reliable assessment tool.

26 March 2009, Thursday
1215 hrs – 1345 hrs
Exhibition Area, Ballroom Foyer, Level 2, Suntec Singapore

TRAINING OF PROFESSIONAL CAREGIVERS

TRA02

TRAINING PROGRAMME FOR JAPANESE GROUP HOME STAFFS DEALING WITH END-OF-LIFE CARE FOR ELDERLY WITH DEMENTIA

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Nursing, Hyogo University of Health Sciences, Kobe Japan¹; Nursing, Clinical Research Consulting Center, Office AKI, Nara, Japan²

Purpose : In Japan, there are over 9,000 small nursing homes provide care for fewer than 10 residents per 1 unit called Group Home; GH, and recently number of GHs is rapidly increasing. The purpose of this study was to clarify how GH Staffs changed their recognition for end-of-life care after they underwent newly designed training program.

Method : Eighty-four GH staffs were requested to answer a self-administered questionnaire including "Frommelt attitudes toward care of the dying scale; FATCOD, Form B-J (30 items)" for 4 times such as "before training", "7 days after training", "3 months after training" and "6 months after training". Each member of respondents was 84, 39, 47, 32, respectively. Most likelihood factor analysis was carried out for "before training" responses and factor loadings were extrapolated to calculate factor scores for other 3 sets of responses. Time course changes of 4 sets of factor scores were analysed by repeated ANOVA method. These process were carried out under permission of ethical committee at Aino University.

Result : Four extracted factors were interpreted as "fear to dying care for elders (F1)", "importance of family care (F2)", "mental support for elders and family (F3)" and "role of family(F4)", respectively. In these factor scores, only F1 showed significant time course change (p=0.023). Means of F1 score of each investigating point were 0.025, 0.099, -0.191, 0.362, respectively.

Conclusion : These results show that feeling of "fear to dying care for elders" once decreased after training but it increased again according to repeated experiences of elders' death. So continuous on-the-job training on "death education", "grief care", especially within 3 months after first training, is highly required to relax the negative feeling for dying care for elders.

* This research was supported by the grants-in-aid-for-scientific-research (fundamental research C) in 2008 (No.18592459).

TRA03

EQUIPPING ELDERCARE STAFF WITH KNOWLEDGE AND SKILLS ON AGEING AND MENTAL HEALTH – AN EVALUATION OF THE TRAINING PROVIDED BY THE COMMUNITY PSYCHOGERIATRIC PROGRAMME (CPGP) FOR NURSING HOME STAFF

P'ING-PING JOY LIM¹, DONALD YEO¹, HWAN JING KOH¹, JUNISHA JUMALA¹, SEOK TIN YEO¹, LOLA NG¹, SIN GWEN LI¹, PUI SIM ONG¹, LI LING NG¹

Community Psychogeriatric Programme, Changi General Hospital, Singapore¹

Purpose : The CPGP is an outreach program that aims to empower agencies by improving the knowledge and skills of staff/volunteers in providing quality care to older persons. This study reports the evaluation of a training programme targeted at eldercare staff of a nursing home.

Method : Staff at a 388-bed nursing home participated in a structured training programme between May-August 2008. This programme included 3 four-hour modules consisting of topics on promoting wellbeing in older persons, common mental health problems in older persons, and stress and anger management for eldercare workers. The training involved lectures, interactive sessions, videos, experiential learning and case discussions. Participants completed a training needs analysis survey before, and 6 months after attending the training programme. The survey assessed their level of self-confidence on skill items. A questionnaire was also developed for each module to assess their level of knowledge in specific aspects of ageing and mental health pre-/post-training. Training evaluation data was also collected for each module. Participants were asked to rate the course material, its relevance to their job, training process, trainer(s) effectiveness, and programme overall.

Result : A total of 134 care staff attended the programme. The skill items, with the highest gain after training, were in "knowledge on supporting an older person with dementia" (16%) and "understanding the factors associated with the risk of depression in older persons" (13%). Improvement in participants' pre- and post-training scores on their level of knowledge ranged from 1% to 28%. Participants rated the programme highly on all categories, for all three modules. Main suggestion given is the inclusion of more activities/role play.

Conclusion : Study findings demonstrated a strong impact of the CPGP training programme on improving community knowledge about ageing and mental health among eldercare staff. Future efforts will be directed to refining training content/mode to improve programme delivery.



TRA04

HOW DOES DEMENTIA CARE MAPPING (DCM) PROVIDE AND INTERNATIONAL LANGUAGE TO IMPROVE PERSON CENTERED CARE FOR PEOPLE WITH DEMENTIA

CAROL H FUSEK¹

Strategic Lead Representative, Alzheimer's Disease Association (Singapore), Singapore¹

Purpose : The objective of this presentation is to discuss Dementia Care Mapping (DCM) which is a set of observational measures that were developed by the late Professor Tom Kitwood and colleagues working with the Bradford Dementia Group in the UK. DCM is used in a series of developmental evaluations over time to push forward the quality of organisational practice in person centered care.

Method : Using power point share how DCM has been used since the early 1990's in residential day nursing homes, day care, respite care and hospital wards. Through a process of preparation and feedback, staff are empowered to consider care from the point of view of the service user with dementia. On the basis of these observations, changes are made to care plans and practice. DCM provides an evidence base that can be used to monitor change over time on an individual resident level and organisational level. Since 1998, Bradford Demential Group has developed international Strategic Partnerships with organisations in the USA, Germany, Denmark, Australia, Switzerland, Japan, and Singapore. Individuals from Finland, Spain, Norway, Sweden, Ireland, New Zealand, Canada, Luxembourg, Italy, Belgium, So Korea and Hong Kong have also attended basic DCM courses. During this workshop we will share some of the experiences of mapping in different cultures and how results from our DCM observations can help us enrich the experience of care for people with demential both nationally and internationally.

Result : You will learn the power of observation for identifying improvements in care as well as the universality of the DCM method.

Conclusion : This workshop will be of interest to those who would like to learn more about DCM and explore what lessons can be learned from our observations to improve the experience of care for people with dementia.

26 March 2009, Thursday

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YOUNGER ONSET DEMENTIA

YOU01

CONNEXUS - CONNECTING PEOPLE

KATHRYN CUNNINGHAM¹

Alzheimer's Australia SA Inc, South Australia, Australia¹

Purpose : The Connexus Project was a pilot program funded by the Commonwealth Department of Health and Ageing as a Service Development Grant under the Dementia Community Grants program. The ACH group (an aged care service provider in SA) was a minor partner in this pilot program). The projects overall aim was to increase community involvement, reduce social isolation and improve the health and wellbeing of people with early stage Younger Onset Dementia.

Method : The pilot trialed a framework that provided people with Younger Onset Dementia the opportunity to actively identify their needs around lifestyle and leisure activities and to receive the appropriate assistance to meet their needs.

Result : Whilst the pilot project met its aims the evaluation showed that the major needs for the ongoing program were :

- The Wellness Program be incorporated into the social/recreation program and not promoted as a separate program, which will simplify the model.
- The social/ recreation program be improved by:
 - i. Increasing the number of social activities, particularly those activities that are most popular;
 - ii. Better matching the activities to the skill level of participants;
 - iii. Incorporating more flexibility into the program;
 - v. Offering both social as well as educational sessions; and
 - vi. Organising some activities specifically for carers or participants.
- Opportunities are developed for children of people with Younger Onset Dementia to be involved in educational and social activities.
- When hiring external professionals, regardless of their relevant credentials, their suitability is unable to be assessed until they relate to the participants.

Conclusion : The new Connexus program recognises the benefit of wellness for both the person living with younger onset dementia and the carer as equally important in retaining and maximising quality of life. Increased participation and well being is a result.

27 March 2009, Friday

1215 hrs – 1345 hrs

Exhibition Area, Ballroom Foyer, Level 2, Suntec Singapore

ACTIVITIES FOR PEOPLE WITH DEMENTIA

ACT01

ASSESSMENT OF DAILY ENERGY EXPENDITURE OF ELDERLY WOMEN WITH ALZHEIMER DISEASE LIVING IN NURSING HOME

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Purpose : The aim of the study was to evaluate the daily energy expenditure of the elderly women with Alzheimer disease living in nursing home.

Method : 26 women living in the nursing home with Alzheimer disease participated in the study. The average age of participants was 77,4 +/- 7,5 (75-91). The participants had severe and very severe cognitive decline according to the Global Deterioration Scale for assessment of Primary Degenerative Dementia. Methods: The measurement of height and body mass was taken from all women and Body Mass Index (BMI) was calculated. Daily Energy Expenditure (DEE) and physical activity energy expenditure were collected using SenseWear Pro3 Armband made by BodyMedia. The armband was worn on the backside of the upper right arm (the triceps muscle) touching the skin. It was worn for the minimum period of 24 hours without any breaks. Daily Calorie Needs (DCN) was also calculated using Basal Metabolic Rate (BMR) and physical activity factor. BMR was calculated using Harris-Benedict formula with modification of Department of Health USA. The physical activity was defined as a sedentary life style (factor 1,4). All of the protocols were approved by the Bioethical Commission of Regional Medical Chamber in Warsaw. **Result** :The average BMI for the group of women was 21,5+/-4,2kg/m2 (13,8-31,2) 5 participants had BMI lower then 18,5, 15 women had good state of nutrition (BMI 18,5-25) and 6 were obese (BMI > 25). Based on Armband measurement the average DEE was 1536+/- 246kcal (966-2073 kcal). The mediana of active energy expenditure was 5 kcal (0-358 kcal). The average DCN was 1670+/-173 kcal (1355-2051 kcal).

Conclusion : The daily energy expenditure in the group of women with Alzheimer disease was small.

ACT02

DEMENTIA AS A STRONG INDEPENDENT PREDICTOR OF REHABILITATION EFFICIENCY AND EFFECTIVENESS

GERALD CHOON-HUAT KOH¹, TAN BOON YEOW², FONG NGAN PHOON², CHAN KIN MING³, EDWARD MENON⁴, LEE KOK KENG⁵, CHEONG SENG KWING¹, WONG TECK YEE¹, CHEONG ANGELA¹, DAVID KOH¹

Community, Occupational and Family Medicine Department, Yong Loo Lin School of Medicine, National University of Singapore, Singapore¹; Medical Department, St Luke's Hospital, Singapore²; Medical Department, Ang Mo Kio Thye Hua Kwan Hospital, Singapore³; Medical Department, St Andrew's Community Hospital, Singapore⁴; Medical Department, Bright Vision Hospital, Singapore⁵

Purpose : To study the predictors of rehabilitation efficiency (REy) and effectiveness (REs) among patients in a geriatric rehabilitation hospital.

Method : We manually extracted data from medical records of all first admissions to a geriatric rehabilitation hospital from 1996 to 2005 who received at least 2 weeks of rehabilitation (n=2,322). We collected socio-demographic data, primary diagnosis for admission and medical co-morbidity data. We used multiple linear regression to identify independent predictors of REy and REs.

Result : The overall mean REs was 42.6% (SD = 36.4) and overall mean REy was 14.1 units per 30 days (SD = 28.2). The independent predictors of poorer REs were dementia (beta=-14.10), hemiplegia (beta=-10.30), lower admission BI score (beta=-7.77), peripheral vascular disease (beta=-6.95), older age (beta=-4.54), ischemic heart disease (beta=-3.60), more carers available (beta=-2.02). The independent predictors of poorer REy were a subset of the predictors of REs : dementia (beta=-7.45), peripheral vascular disease (beta=-4.31), admission BI score (beta=-2.80), older age (beta=-2.29).

Conclusion : Dementia is a strong independent predictor of rehabilitation effectiveness and efficiency among patients in a geriatric rehabilitation hospital.



ACT03

BUSY DAYS MAKES HAPPY DAYS FOR PEOPLE WITH DEMENTIA

NATALIE SELL¹

Dementia Activities, Hervey Bay, Australia¹

Purpose : Dementia Activities aims to reduce behaviours of concern in people with dementia and optimise quality of life through the use of pleasureable and purposeful activities which are designed to utilise familiar items in an adapted manner which supports dignity and cognitive function.

Method : Person-centredness was central to all aspects of the design process and guided the identification and development of appropriate resources that could be adapted for use throughout the disease continuum. Sensory stimulation and reminiscence were employed as integral components of design along with the need to allow people with dementia to continue to have access to familiar items rather than unfamiliar and patronising imitation products. Colour theory was also incorporated to stimulate engagement with the resources and aid the use of resources through the application of high contrasts and specific colour selection. Resources were developed to be portable and able to be used by all members of a care team in a variety of care settings.

Result : Dementia Activities products have been used successfully with people with dementia in a variety of settings. These have included:

- A gentleman attending a community day centre who was withdrawn and not engaging in regular activities was provided with a Busy Day Hardware Activity Kit and with minimal encouragement began to interact with the resources in the kit. This resulted in increased engagement between the gentleman and other group members, reduced boredom and staff observations of increased self-esteem;
- A gentleman in a residential care setting was repeatedly exposing himself and undressing in living areas. The gentleman was provided with a Busy Day Activity Apron and ceased the behaviour and instead enjoyed showing others his apron. This resulted in improved quality of life for the gentleman and others sharing his environment as he no longer was receiving negative reinforcement from carers but positive responses to his new apron; and
- A lady living in a residential care setting who was withdrawn and had minimal verbal interaction was provided with a Busy Day Sewing Activity Kit and Busy Day Activity Apron. This lady made connections between the buttons in the kit, on the apron, and her own clothing and expressed this to family members. The lady also initiated engagement with the resources herself and responded to questions put to her about the resources.

Conclusion : In order to engage people with dementia in activities it is crucial to have a variety of easy to use resources available that can be used by any member of the care team without the need for special training. The use of sensory stimulation, reminiscence and genuine, familiar items can offer people with dementia the opportunity to interact at their own level and can aid in developing self-esteem through the ability to experience success and positive reinforcement.

ACT05

PROMOTING ACCESSIBILITY TO APPROPRIATE ACTIVITIES FOR PEOPLE WITH DEMENTIA IN RESIDENTIAL CARE

ALISSA WESTPHAL¹, ROBYN ATTOE¹, DANIELLE HARRIS¹, HAZEL SARGEANT¹

St Vincent's Aged Psychiatry Service, St Vincent's Hospital, Kew, Australia¹

Purpose : The benefits of engaging in activities for people residing in residential care facilities have been extensively documented. Activities provide people with a sense of meaning, identity, role and purpose and act as a medium for communication. For those with dementia, the abilities to initiate, engage and terminate activities of interest can become impaired. Consequently, people with dementia increasingly rely on their carers to adapt activities so they can continue to experience associated benefits. Unfortunately, the range of activities offered within residential care facilities can be limited. Limitations can occur due to lack of monetary funding, creativity, knowledge or the value placed activity provision. This paper explores the development of an innovative program called the Leisure Resource Library. As the first in Australia, this library seeks to address the limitations impacting on the provision of activities for people with dementia in residential care by providing facilities with access to a range of leisure activity resources, education and access to experienced allied health professionals.

Method : Grant funding was obtained to develop the library and it was opened in September 2008. The library provides a range of activity items including : themed reminiscence boxes containing familiar objects, tactile activity boxes, therapeutic dolls and an extensive range of multisensory resources such as fibre optic units, bubble tubes, sensory books and so on. Feedback from residential care facilities was obtained using survey collection methods.

Result : The library's development, outcomes, including feedback from residential care facilities, limitations and future directions will be addressed within this session.

Conclusion : A library service containing leisure activities appropriate for older people with dementia in residential care can address some of the issues regarding accessibility of activity resources and provide opportunities for care workers to expand their knowledge in this regard.

ACT06

ALZHEIMER'S DISEASE AND STIGMA FIGHT IN CROATIA

NINOSLAV MIMICA¹, GORAN SIMIC², MIRA DAJCIC³, MIHOVIL MLADINOV², MORANA TRESCEC-IVICIC⁴, ERNESTINA NOVY-RADONIC⁵, KRASANKA GLAMUZINA⁶

University Department of Psychiatry, Psychiatric Hospital Vrapce, Zagreb, Croatia¹; Croatian Institute for Brain Research, Medical School, University of Zagreb, Zagreb, Croatia²; Alzheimer Disease Societies Croatia, HIIM, Zagreb, Croatia³; General Practitioner Ambulance, Trnje, Zagreb, Croatia⁴; Neuropsychiatric Hospital, "Dr. Ivan Barbot", Popovaca, Croatia⁵; Nursing Home for Older and Incapable People, "Medvescak", Zagreb, Croatia⁶

Purpose : One of priority goals of Alzheimer Disease Societies Croatia (ADSC) is fight against stigma.

Method : ADSC was founded in 1999. We still don't have paid staff, so the whole work is done by volunteers.

Result : In our Counselling centre we have monthly meetings for families of persons with dementia (PWD) and all other interested. The ADSC has published four booklets, and numerous leaflets in large number and we distributed them for free in public places. Till know our members have for many times spoken to media (TV, radio, newspapers) and we have organised numerous lectures, Meetings, Conferences and Congresses. In 2008 on the 4th Croatian Congress on Alzheimer's Disease With International Participation which was held on St. Andrew's Island near Rovinj, Croatia we have had an exhibition of paintings under the name: "Fall of Man – Faces of Dementia" done by our colleague Ljubomir Radovancevic. Every year we celebrate the World Alzheimer's day (September 21st) in public, on most popular squares in Zagreb. We have also organised the humanitarian public happening called "Summer evenings on Zrinjevac" in which we raise money for the ADSC. Our web-site (www.alzheimer.hr) is rebuild and we have now much more visitors. On our help-line we are receiving calls every day, and we are regularly replying to numerous letters coming through e-mail.

Conclusion : With all these activities mentioned above we are fighting stigma in AD, and due to this helping PWD and their caregivers.



ACT07

A TAIWANESE EXPERIENCE OF SCHOOL OF WISDOM

LIYU TANG¹, MING-JANG CHIU², HH KO¹, FL LIN¹, WF CHEN², LJ WONG⁴, MB LEE³, MJ YEY¹

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Purpose : We aimed to develop domestic community services for patients with mild dementia. We examined the efficacy of group intervention in delaying cognitive decline, improving anxiety and depression, promoting quality of life and enhancing awareness and positive attitude toward dementia.

Method : The study design was randomised, single-blinded with no-treatment control. In total, we included 36 dyads of subjects with mild dementia and their caregivers. There were also 20 no-treatment dyads for control. The treatment group received cognitive training, reminiscence therapy, music therapy or art therapy once a week in the first stage and twice a week in the second stage. Each group lasted for 10 weeks. The primary endpoint was the score changes of ADAS-Cog before and after the intervention. Secondary endpoints included quality of life (WHO-QoL), anxiety and depression (Hamilton Anxiety and Depression Scales), ADL/IADL, and problem behaviours (BEHAVE-AD). The family caregivers were also evaluated with WHO-QoL and both Hamilton scales.

Result : There was no significant intra-subject or inter-subject treatment effect on both parties of the dyad in the primary endpoint and secondary endpoints. On the other hand, significant behavioural changes were observed among the four groups between before and after the intervention. After the intervention, the participants showed increased interaction in the group, enriched verbal expression, improved positive mood, and gained self-confidence. In the cognitive training group, they shared a lot with each other of their suffering and adjustment for dementia. In the music therapy group, they shared their emotion and practiced their verbal expression and comprehension through explaining the lyrics. The reminiscence therapy retrieved good old memory and enhanced verbal expression. Art therapy helped gain self-confidence, implement interpersonal cooperation and communication.

Conclusion : Although the conventional assessment tools for clinical trial failed to demonstrate significant efficacy, we observed significant benefits through the programs of the School of Wisdom.

ACT08

CREATIVITY IN CARE FOR PERSONS WITH DEMENTIA

LEE NGA YEE MAGGIE¹, DAVID LK DAI¹, YEE-MING WU², ELSIE OY CHUNG²

Jean Wei Centre, Hong Kong Alzheimer's Disease Association, Hong Kong, China¹; Jean Wei Centre, Hong Kong Alzheimer's Disease Association, Hong Kong, China²

Purpose : Creativity is the ability to produce work that is both novel and appropriate, and is important at both the individual and societal levels. At the individual level, creativity is important for solving problems in daily life; while at the societal level, creativity leads to new scientific findings, movements, inventions and social programmes. (Sternberg et al). To examine the creative elements of the activities of HKADA in clients with dementia, carers and the organisation under the framework of Sternberg.

Method : Focus group discussion and observation of activities.

Result : 1) Persons with dementia: By adding recreational elements, especially those of a traditional Chinese nature which clients are familiar with, such as Chinese Calligraphy, traditional music and Chinese opera, arts and crafts, etc., into different daily programs for clients with dementia at the Day Centre, changes in behaviours and performance could be observed in clients. Client's attention span, motivation, comprehensive and expressive functions were increased. At the same time, some behavioural and mood problems, e.g. wandering, anxiety, repetitive speech, were reduced. The 6 Arts of Chinese intelligence is applied and promoted in therapy and prevention activities.

2) Carers: A series of programs were organised for caregivers, including mentorship support and motivating them to bring out creativity to different leisure activities. These could successfully reduce their carer stress, and rediscover their innate talents. The caregivers were encouraged to voice out their feelings and needs through different channels, such as writing books and articles in the newsletter, and participate in "Voice-on-Line" discussion forum through the internet.

3) Organisation: The creativity model was incorporated into the development of the Association.

- (a) the stimulating environmental design of the new Day Center, such as colourful wall painting;
- (b) collaboration with Brain Health United* to develop a new treatment device, i.e. portable multisensory kit which could bring the snoezelen room into the person's own home; and
- (c) early screening of people in community with memory problems or early dementia symptoms, and collaboration with family physicians to facilitate early intervention.

Conclusion : Dementia care offers a model of multi-dimensional application of creativity on an individual and societal level in solving the many problems relating to disease management, enhancing quality of life, humanity and dignity of a person and advancement of society.

*Note: Brain Health United is a joint venture collaborated by the Centre for Telehealth and Telecare of the Faculty of Health And Social Sciences, The Hong Kong Polytechnic University and Hong Kong Alzheimer's Disease Association.



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ALTERNATIVE DRUG TREATMENTS (TRADITIONAL CHINESE MEDICINE)

TCM01

THE NEW HOPE TO THE OLD DISEASE

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Purpose : It is all known that Alzheimer's disease (AD) is the disorder effected aging people's life quality and is the heavy burden to the economy of our society and families. Currently, there are around 6 million of AD patients in China. Traditional Chinese Medical (TCM) doctors actively deal with this disease based on TCM theory and practice since there is no real cure therapy to this disease so far. In the early time, traditional Chinese medicine recognised dementia and had some therapies. Since Pre-Qin-dynasty, the famous medical book 'Zuo Zhuan' described 'dementia' term. In Han-dynasty and Song dynasty, doctors had used some prescriptions for patients. The mainly syndrome of dementia was characterised by emotion and memory disorder corresponding to heart, brain and kidney deficiency, it is considered the deficiency of spleen and kidney or deficiency of liver and kidney or deficiency of lung and kidney. The treatment was to enhance essence and marrow, to reduce turbidity and toxin.

Method : Based on the characteristic of deficiency, sputum, stagnation of pathologic manifest of senile dementia, this article proposed several approaches of traditional Chinese medicine to Alzheimer's disease. Such as: single components, simple and proven prescription, ready-made-prescription (patent medicine), acupuncture, psychotherapy, etc.

Result : Using statistic analysis to the data collected over thousand of people, it was suggested that the symptom of patients was improved by utilising the above approaches. The article also discussed possible mechanisms for the some herbal formulas.

Conclusion : Using statistic analysis to the data collected over thousand of people, it was suggested that the symptom of patients was improved by utilising the above approaches. The article also discussed possible mechanisms for the some herbal formulas.

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ARTS AND CREATIVITY IN DEMENTIA

ART01

RICHARD MAHONY: THE MISFORTUNES OF YOUNGER ONSET DEMENTIA

BRIAN DRAPER¹

Academic Department for Old Age Psychiatry, University of NSW, Sydney, Australia¹

Purpose : To outline Henry Handel Richardson's 1929 novel 'Ultima Thule', the third volume of 'The Fortunes of Richard Mahony', and demonstrate how it graphically describes the onset and evolution of younger onset dementia in a manner that still provides lessons for practitioners in the 21st Century.

Method : This poster will summarise the key passages from 'Ultima Thule' in order to show how Richardson described the final years of Mahony's failed 19th century colonial venture partly due to the younger onset dementia that was modelled on Richardson's experiences with her father who died of General Paresis of the Insane.

Result : In Ultima Thule, Richardson describes the evolution of younger onset dementia with its early symptoms of depression, subjective and objective memory changes, irritability, and coarsening of personality and their associations with impaired decision-making, marital stresses, reduced capacity to work as a doctor and periods of suicidal despair. As the dementia evolves, the novel depicts the difficulties that families have of understanding behavioural change without a diagnosis and the impact of younger onset dementia on the spouse and young children. As the dementia progresses sections of the novel are written from the perspective of one of Mahony's children, Cuffy, who represents Richardson as a child. The experiences that Mahony has in a 19th Century Victorian asylum where he was treated as a recalcitrant prisoner rather than a person with severe disability provide a stark backdrop to the author's description of humane family based care – an excellent forerunner to person centred care.

Conclusion : Ultima Thule remains relevant for younger onset dementia in the 21st Century as the issues raised by Henry Handel Richardson about early diagnosis, behavioural change, family stress and person centred care remain of central concern.

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CARER QUALITY OF LIFE

CAR01

IMPROVING THE QUALITY OF LIFE MORE ON THE RELATION BETWEEN THE DEGREE OF SATISFACTORY AND LIFE ENVIRONMENTS FOR ELDERLY PERSONS SPENT ALONE AT HOME

SATOKO SASAHARA¹, TETSUYA AKAGI¹

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Purpose : The caring plan made based on Long-Term Care Insurance for the Elderly in Japan is given priority only in the management of the recognised service. As a result, the management of overtime from which service provided is hardly considered. Therefore, neither how do the elderly spend alone at home nor how does the situation influence their daily life have been clarified yet. The purpose of this study is to improve the quality of life in their daily life more by examining the relation between the degree of satisfactory for elderly persons who need caring spent alone at home and their life environments.

Method : Subjects are nine elderly persons "three vascular dementia, one Parkinson's disease with dementia, five non-dementia". They are interviewed about five living environment items "disability and health condition, cost for living, interpersonal relationship, physical environment, regional service" that relate at the time spent alone at home. And, the interview result is evaluated by five stages "satisfaction - dissatisfaction". Moreover, a similar interview is done to their family, and it is compared with the result of elderly persons.

Result : The degree of satisfaction to the time spent alone decreases as the degree of satisfaction to "disability and health condition" and "physical environment" decreases similarly as for elderly persons and their family. The degree of satisfaction at the time spent alone for the family decreases as the physical care of elderly persons increase. And, the family comes to hope for the support of the region strongly as a result. On the other hand, elderly persons persist only in caring by not the region but the family.

Conclusion : Improving the life environment to improve the degree of satisfaction at the time that elderly persons and the family spend alone at home is greatly related to improving the quality of life in their daily life more.

CAR02

CLINICAL AND ECONOMIC PREDICTORS OF QUALITY OF LIFE IN DEMENTIA

FRANZISKA GALLRACH¹, RAY KIRK¹, ANDREW HORNBLow¹, MATTHEW CROUCHER²

Health Sciences Centre, University of Canterbury, Christchurch, New Zealand¹; Psychiatry of Old Age Academic Unit, Psychiatry Service for the Elderly - Canterbury District Health Board, Christchurch School of Medicine and Health Sciences - University of Otago, Christchurch, New Zealand²

Purpose : To measure quality of life (QoL) of persons with dementia and their family-caregivers. In addition, the study aims to find out, what interventions from primary and secondary care in New Zealand are helpful for enhancing quality of life, and what these interventions cost.

Method : Questionnaires are administered to outpatients, recently diagnosed with dementia, and their caregivers at baseline and 12 months follow-up. In addition to QoL measures, the time spent caring, as well as direct and indirect costs are estimated, using questionnaires (CAS/CATS) and diaries.

Result : At baseline 53 patient/caregiver dyads were included. 3MS ranged from 49 to 91; CDR from 0.5 to 3. Patients' QoL was strongly correlated with behavioural problems and caregivers' QoL. Patients' QoL was also negatively associated with their daily functioning, CDR, and cares' burden. Symptoms of depression in patients were (negatively) correlated with their QoL and carers' burden. Difficult behaviours showed association with depression in patients, and carers' burden and QoL. Increased informal care negatively impacts on burden and depression in caregivers. Depression and neuropsychological behaviours in patients increase the level of informal care. Joint income/pension and financial burden of care are negatively correlated with carers' QoL, depression, and burden. The level of cognitive impairment and the level of formal support are not associated with patients' or caregivers' QoL.

Conclusion : Depression in patients and caregivers, each other's quality of life, patients' behaviour and functioning, as well as caregivers' burden, and the level of informal care can predict quality of life in dementia. Reducing the intensity of informal care - by treating depression and difficult behaviours in patients - might reduce caregivers' depressive symptoms and burden. Developing a financial scheme that rewards informal caregivers for their time spent caring could be a key factor in supporting informal caregivers in their role and therefore delaying institutionalisation.



CAR03

A PSYCHO SOCIAL STUDY OF CHALLENGES OF CAREGIVERS IN ALZHEIMER'S DISEASE

MATHEW¹

Clinical, Alzheimer's & Related Disorders Society of India, Kottayam, India¹

Purpose : To study psychosocial aspects of challenges experienced by the caregivers of patients with Alzheimer's disease.

Specific Objectives

1. To assess the level of stress experienced by the care givers.
2. To assess the family interaction patterns in care giving to patients with dementia.
3. To understand the coping skills employed by the caregivers.
4. To identify the existing family and institutional support systems for overcoming the burden.
5. To study the importance of quality care in dementia.

Method : Universe : Primary care givers of patients diagnosed with Alzheimer's disease in Kottayam. Tool Standardised questionnaire and self-made questionnaire. Analysis : Early-onset forms account for only 2 to 7% of cases and are usually due to an inherited genetic mutation. The common form affects persons > 60 yr old, and its incidence increases as age advances. The disease is about twice as common in women as in men (perhaps because women live longer, but female sex may be a risk factor). It accounts for > 65% of the dementias in the about 15% of cases. Statements of the problem : Caregiver is person provides the physical, emotional and social needs of another person who is unable to support himself and herself. Most individuals with Alzheimer's remain at home and are cared by family members for the duration of the disease process. Family members must contend with reduced competencies, the inability to perform activities of daily living and numerous dementia related behaviour such as emotional bursts, wandering, resistance to care and contingency. Because of these characteristics, care giving to Alzheimer's is challenging to the caregivers. This substantial that this study on challenges of care givers of Alzheimer's is a relevant topic. Universe : Primary caregivers of Alzheimer's patients selected from the list of diagnosed cases of Alzheimer's disease of ARDSI Kottayam chapter through Simple Random Sampling. Sampling : Simple Random Sampling.

Result : Cases gives of Alzheimer's patients experiencing higher degrees of stress due to burden of care.

- The family interaction pattern in care giving and support of family members is positive impact on care giving
- The occupational and social function of the primary care give is seriously affected due to the burden of care
- The degree of ventilation of the feeling related to the burden of care is very less and the feeling negatively affected the process of care giving
- The lack of professional support system in care giving is a serious issue in care giving.

Conclusion : Caregiver is person provides the physical, emotional and social needs of another person who is unable to support himself and herself. Most individuals with Alzheimer's remain at home and are cared by family members for the duration of the disease process. Family members must contend with reduced competencies, the inability to perform activities of daily living and numerous dementia related behaviour such as emotional bursts, wandering, resistance to care and contingency. Because of these characteristics, care giving to Alzheimer's is challenging to the caregivers. This substantial that this study on challenges of care givers of Alzheimer's is a relevant topic.

CAR05

ACTIVITIES OF DAILY LIVING THAT MATTER MOST TO CAREGIVERS

DANIEL D. CHRISTENSEN¹, ROBERT GOLDMAN², JOAN A. MACKELL²

University of Utah School of Medicine, Salt Lake City, USA¹; Pfizer Inc, New York, USA²

Purpose : To ascertain the most relevant activities of daily living (ADLs) for caregivers of loved ones with Alzheimer's/memory loss.

Method : Caregivers, recruited from an aggregated master sample pool pulled from magazine and product inserts, direct mail, phone survey opt-ins and Alzheimer's websites, were invited by direct mail and email to participate in an interview. Approximately 40 caregivers were interviewed in each week of August and September 2008. For the interview, caregivers were presented with a list of 11 ADLs and asked to select up to 5 that were the most relevant/important to them currently.

Result : 138 caregivers were interviewed in August and 160 in September. Approximately 75% of the caregivers and two-thirds of the patients were female. On average, 65% of the caregivers were ≥40 years, with the mode (22%) being 55–64 years. Over 80% of patients were ≥65 years, with the mode (45%) being 75–84 years. Disease severity for the majority was rated as mild (56%) or moderate (32%). Of all caregivers, nearly 70% said reminding to take medications and 60% said going out (shopping, social activities, etc) were the most relevant activities, while around the house activities (bathing, walking, eating) were less prominent. For caregivers of loved ones who were (n = 135) or were not (n = 163) treated, reminding to take medications and going out remained the most relevant activities for both, but respondents of treated loved ones were almost twice as likely to report house activities as relevant than were those of untreated loved ones.

Conclusion : Reminding to take medications and going out were the most relevant ADLs to all caregivers. House activities were more relevant to caregivers of treated loved ones. These results have implications to guide pharmacologic and non-pharmacologic interventions that have a meaningful beneficial impact on the patient and caregiver.

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CHALLENGING BEHAVIOURS

CHA01

ARCHIE & ETHEL - A WAY FORWARD - AGGRESSION, DEMENTIA & SINGING

MARY-BARR LE MESSURIER¹

Director, Songsconnect, Gerrards Cross, United Kingdom¹

Purpose : To increase awareness that challenging behaviour can be managed through singing as a form of communicating with those who have advanced dementia.

Method : Advanced Dementia & Singing: Archie & Ethel DVD An introduction for Carers. This DVD is written, directed and produced by Mary-Barr le Messurier, who received an Award this year from UnLtd to enable her to make the DVD. UnLtd is an organisation which helps social entrepreneurs and provides funding for worthwhile projects in the UK. She decided to do an animation instead of filming because she felt that, at the time of filming, those with Advanced Dementia would have been unable to give their permission to be filmed. The DVD is a multimedia package to assist carers who work with those who have Advanced Dementia. It successfully integrates animation, explanatory interviews and workshop notes to convey the theory and practice of using singing as a tool to lessen depression, challenging behaviour and increase wellbeing. The animation graphically illustrates the difficulties two intelligent individuals - Archie & Ethel - face as their dementia progresses and it reveals their desperate sense of isolation. The narration is clear and measured and brings home the poignancy of their situation. Archie & Ethel then begin to enjoy singing with Carers and it is clear that singing benefits them socially, physically and emotionally and they become happier.

Result : The narrative by Mary-Barr le Messurier (singer Molly Dee) to camera describes how to use singing as a positive tool in the Care Home, to reduce anxiety and challenging behaviour. This practical guidance is complemented by theoretical commentary from Dr. Gotell. Particularly interesting was the positive effect singing has on carers as well as those with advanced dementia, facilitating closer engagement and better eye contact between them, leading to improved behaviour between both the carer and those with advanced dementia.

Conclusion : Overcoming the barrier of isolation causing challenging behaviour, forms around those with advanced dementia and is clearly extremely important - and the DVD effectively and creatively guides the carer towards a better understanding of how singing can help to do this.



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DIAGNOSIS AND TREATMENT - ROLE OF GPS

DIA01

DEMENTIA SECONDARY TO A POTENTIALLY TREATABLE CAUSE -- ROLE OF GPS

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Purpose : The purpose of these case reports is to alert the health professionals in detection of "reversible or potentially reversible" cases of dementia that can be treated effectively to restore normal or nearly normal intellectual function.

Method : Observational descriptive clinical epidemiological method- Case report.

Result : Patients 69 year old Malay male and 79 year old Chinese male were brought in hospital Tengku Ampuan Afzan by their families with history of memory impairment and altered behaviour. The former was diagnosed as left frontoparietal extradural mass with possible hemorrhage causing mass effect. The latter was diagnosed as subdural hematoma involving left hemisphere with midline shift. The former underwent craniotomy and exploration, excision of meningioma, and aspiration of a hemorrhagic cyst beneath the tumor. The second patient underwent burr-hole craniotomy with closed-system drainage. Following surgery both patients improved with Mini-Mental State Examination (MMSE) levels of 28/30 and 30/30 respectively and in their follow-up are doing well.

Conclusion : Chronic subdural hematomas and meningiomas are among the known reversible causes of dementia. Presenting symptoms can be subtle and clinical acumen dictates that all patients should be thoroughly investigated to rule out such possibilities.

DIA02

PALLIATIVE CARE FOR PERSONS WITH DEMENTIA

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Irahara Clinic, Matudo, Japan¹; Kajiware Clinic, Tokyo, Japan²; Aozora Clinic, Matudo, Japan³; Kameda Hospital, Kamogawa, Japan⁴; Tokyoku Jiyosi University, Tokyo, Japan⁵; Matunaga Clinic, Chikura, Japan⁶; Confort Garden Clinic, Tokyo, Japan⁷

Purpose : This study was conducted for the purpose of providing guidance for palliative care by retrospectively examining persons receiving home visiting medicine for dementia who subsequently died at home.

Method : The subjects of this study consisted of 62 cases of dementia among 252 non-cancer patients (103 men, 149 women) who received home visiting medicine from seven target clinics and subsequently died from April 2000 to September 2006 assessed for 1) cause of death, 2) presence of suffering warranting palliative care, 3) whether of not palliative care was provided, and 4) medical treatment performed one week prior to death.

Result : 1) 21 cases died of pneumonia (34%), 20 of old age (32%), 11 of kidney or heart failure (18%) and 10 due to an accident of other sudden death (16%). 2) Although symptoms warranting palliative care were present in 80% of the 252 cases, there were only 21 such dementia patients (34%). Symptoms requiring alleviation were not observed in the 21 dementia cases (34%). 3) Palliative care was provided in 29 cases (47%), 4) Medical treatment performed during the final week of life consisted of intravenous infusion in 14 cases (23%), home oxygen therapy in 12 cases (19%), tube feeding in 4 cases (6%), bed sore treatment in 6 cases (10%) and antibiotic administration in 22 cases (35%).

Conclusion : Pneumonia or sudden death accounted for more than half of all deaths among elderly dementia patients incapable of effectively expressing their suffering, while those dying of old age accounted for about 30%. In addition, dementia patients near death tended to complain of suffering less than patients with other illnesses. It is therefore believed that persons with dementia should be examined while keeping this in mind.

DIA03

THIAZIN RED AS A NEUROPATHOLOGICAL TOOL FOR THE RAPID DIAGNOSIS OF ALZHEIMER'S DISEASE USING TISSUE IMPRINTS

JOSÉ LUNA-MUÑOZ¹, JANNETH PERALTA-RAMIREZ², LAURA CHÁVEZ-MACIAS³, CHARLES R. HARRINGTON⁴, CLAUDE M. WISCHIK⁴, RAÚL MENA¹

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Purpose : In recent years, we have used a variety of tau immunological markers combined with the dye Thiazin red (TR), an accurate marker to differentiate the fibrillar from the nonfibrillar state of both amyloid-β and tau in AD.

Method : In this study, we used TR as a potential diagnostic marker of AD in unfixed brain tissue and tissue imprint cytology. Control experiments included the use of Thioflavin-S staining, fixed tissue, and some double-labeled material with TR and selected tau markers, including AT100, MC1, Alz-50, TG-3, Tau-C3, and pT396.

Result : Our results indicate that TR retains its strong affinity for both tangles and plaques in unfixed temporal cortex that had been frozen then thawed prior to tissue imprint cytology.

Conclusion : This indicates the potential for TR as a diagnostic tool for the rapid postmortem diagnosis of AD neuropathology. Tools for the fast postmortem diagnosis of AD are practically nonexistent and this finding will also potentially facilitate clinicopathological correlation studies. In addition, we observed Tau-C3 immunoreactivity in extracellular tangles, suggesting that the Tau-C3 epitope is stable within tangles. Moreover, this study demonstrates that chemical fixation is not necessarily required for tau immunoreactivity on histological sections.

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FUTURE TREATMENTS IN ALZHEIMER'S (MEDICAL)

FUT01

INVOLVEMENT OF PROTEIN TYROSINE PHOSPHATASE IN MEMORY DEFICITS
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Purpose : Protein tyrosine phosphatases (PTPase) constitute a diverse family of intracellular and transmembrane proteins. The involvement of PTPase has been implicated in the pathogenesis of angiogenesis, diabetes mellitus, vascular endothelial dysfunction, hypoxic-ischemic brain injury and stroke. The inhibition of PTPase has been documented to activate Akt, which is known to stimulate nitric oxide synthase (NOS) and reduces oxidative stress. The activation of Akt kinase signaling pathways has potential in the treatment of neurodegenerative disease. Sodium orthovanadate is a competitive inhibitor of PTPase. Therefore the present study has been designed to investigate the possible effect of sodium orthovanadate in the treatment of experimental dementia.
Method : Sodium orthovanadate is administered in two different doses (1.15 mg/kg and 2.3 mg/kg, i.p.) for 7 days. Lipopolysaccharide (50 mcg/mouse, i.p.) and scopolamine (1.4 mg/kg, i.p.) were administered to induce retention deficits. Cognitive performance of mice was tested using three different behavioural models of assessing memory i.e. passive avoidance, Hebb-Williams maze and elevated plus maze paradigms. Further brain thiobarbituric acid reactive species (TBARS) level was measured using Beutler's method.
Result : The chronic administration of sodium orthovanadate significantly attenuated lipopolysaccharide and scopolamine-induced amnesia in mice in a dose dependent manner. Furthermore, both doses of sodium orthovanadate significantly prevented the lipopolysaccharide and scopolamine-induced increase in brain TBARS levels in mice. However, the beneficial effects of sodium orthovanadate is significantly blocked by the preadministration of a NOS inhibitor (N-omega-nitro-L- arginine methylester, L-NAME, 20 mg/kg, i.p.) and a ATP sensitive K⁺-channel blocker (glibenclamide, 5 mg/kg, i.p.).
Conclusion : It may be concluded that sodium orthovanadate induced inhibition of PTPase may open ATP-sensitive K⁺- channels and consequently activate NOS to decrease oxidative stress and subsequently improve memory defects.

FUT02

A SMALL MOLECULE TOXICITY INHIBITOR PREVENTS 7PA2 CELL MEDIUM-INDUCED BEHAVIOURAL EFFECTS IN THE RAT
EUGENE O'HARE¹, JUSTINE GANNON², KELLY NORWOOD², DAVID SCOPES³, MARK TREHERNE³, EUN-MEE KIM²
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Purpose : The purpose of the current study was to evaluate the effect of SEN1269, an analogue of RS-0406, following intracerebroventricular (ICV) injections of 7PA2 cell medium (naturally occurring oligomers of beta-amyloid) on operant behaviour in the rat.
Method : Male Sprague-Dawley rats were trained to respond under an alternating-lever cyclic-ratio schedule (CRS) of food reinforcement. This schedule enabled the measurement of several parameters of operant responding that reflect central effects on learning and memory. When responding showed no trends, subjects were randomly assigned to groups; Group 1 received ICV wild type CHO cell medium (control) and vehicle treatment, all other groups received ICV 7PA2 cell medium and vehicle treatment (Group 2), 100 nM SEN1269 treatment (Group 3), 10 μ M SEN1269 treatment (Group 4), and 1 μ M SEN1269 treatment (Group 5).
Result : A central feature of the current study was to establish that effects reported following intracerebral 7PA2 administrations reflect central effects rather than general malaise. No statistically significant differences (p>0.05) were found in running response rates (RRR) in any of the groups compared to their baseline performance, had malaise been responsible for fluctuations in performance, RRR would have been seen to decline. A second feature of the study was to establish the efficacy of SEN1269 on CRS performance following 7PA2 administration. There were significant overall treatment effects on lever switching errors (p<0.01) and incorrect lever perseverations (p<0.0001), the ICV 7PA2 injected groups treated with SEN1269 demonstrated significantly fewer lever switching errors and incorrect lever perseverations and these effects were dose dependent.
Conclusion : The findings of this study show that the effects recorded following intracerebral 7PA2 cell medium administrations are central, rather due to the induction of sickness or malaise, the results also show that SEN1269 was protective against the development of behavioural deficits following central exposure to 7PA2 cell medium.

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LIFESTYLE INTERVENTION

LIF01

HOW COULD WE BE FAR FROM SENILE DEMENTIA AND LIFE SPAN BE HEALTHILY LONGER?
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Purpose : We live in a great era in which breathtaking transitions in life science are taking place. The most intriguing question exciting people is that "how could we be far from senile dementia and life span be healthily longer"? It is still not clear what causes Alzheimer's disease (AD) occurring. However increasing evidences have shown that risk factors meet the generally accepted epidemiological criteria. The risk factors are: aging, severe trauma, genetic predisposition, others (including virus infection, aluminum, education level, smoking, etc.). In these factors, we could not change our genes or slow down the aging, but we could change our life style to prevent senile dementia.
Method : In this article, we reviewed the life style manners from people whose age was over 100 years. We also evaluated the relationship between the Puer tea drinking and memory disorder, relationship between team or single exercise and memory disorder from those people whose age was over 60 years.
Result : The results suggested that healthy Puer tea drinking and team exercise life style were benefit to keep fine memory. Chinese healthy regimen can still prove useful.
Conclusion : Prevention of Alzheimer's disease should begin at one's earlier aging time. The article stressed the importance of pursuing healthy life style and dietary habits promoting throughout life.

LIF02

MEMORY GROUPS: IMPROVING MEMORY KNOWLEDGE, SATISFACTION AND FUNCTIONING OF HEALTHY ELDERLY
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Athens Association of Alzheimer's Disease and Related Disorders, Athens, Greece¹; Athens Association of Alzheimer's Disease and Related Disorders, Athens, Greece²

Purpose : 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.
Method : To screen out participants with possible memory impairment, brief cognitive testing was conducted. Participants were also excluded if they had medical problems that could affect cognition (neurological diseases, major depression etc). 40 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 4 groups with 9-12 participants in each group.
Result : The goals of the intervention were fully met:
a) general knowledge regarding memory, aging and dementia increased and
b) self-reported day-to-day memory functioning significantly improved. No significant changes were observed in objective memory performance as measured by formal memory testing.
Conclusion : Evidence was obtained for the overall effectiveness of this memory education and intervention program. What remains to be explored is the long-term effectiveness of the gains obtained by the end of the program. In the light of the positive results obtained, the Athens Association of Alzheimer's Disease and Related Disorders will continue the application of the program in larger scale.



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NON-PHARMACOLOGICAL TREATMENT AND INTERVENTION

NON01

IINTEGRATION OF PHARMACOLOGICAL AND NON-PHARMACOLOGICAL TREATMENTS OF DEMENTIA CARE IN A PSYCHIATRIC DAY HOSPITAL
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Purpose : To investigate the integration of pharmacological & non-pharmacological treatments in a psychiatric day hospital.
Method : Evaluate the pharmacological & non-pharmacological treatments in a psychiatric day hospital in Taiwan during May, 2008.
Result : 30 demented people were recruited in this survey. Male/female ratio was 2:3 and average age was 77.5 year-old. 40% of them were diagnosed as Dementia of Alzheimer type, 36.7% were vascular dementia, and 23.3% were other types of dementia. In the use of psychiatric medication, 23.3% of these demented persons did not receive any psychotropic drugs, 56.7% only received one psychotropic drug, and 20% received 2 or more than two psychotropic drugs. Non-pharmacological treatments included behaviour therapy, reminiscence therapy, and art therapy. The use of psychotropic drugs did not have significant difference about their daily activities in the day hospital. Non-pharmacological treatments were likely to reduce the dosage of psychotropic drugs.
Conclusion : Care givers of demented people often suffered from their psychotic and behavioural disturbance rather than cognitive impairments. Except the more & more need of psychotropic drugs, integration of pharmacological & non-pharmacological treatments in the psychiatric day hospital might provide a better therapeutic model in dementia care.

NON02

THE EFFECT OF MUSIC THERAPY AND STRUCTURED ACTIVITIES ON BEHAVIOURAL AND DEPRESSIVE SYMPTOMS IN DEMENTIA
HAN PEI MIN¹, MELANIE KWAN², JENNY GOH³, CHIONH HUI LING⁴, DENISE CHEN¹, SITI ZUBAIDAH¹, LEE GUO ZHANG², PHILIP YAP²
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Purpose : To evaluate the effects of a music therapy cum activity-based programme on behavioural and depressive symptoms in patients with dementia.
Method : Patients with dementia attended a weekly interactive group music therapy and activity based-programme conducted by a qualified music therapist and an occupational therapist for 8 weeks. Two validated scales, the Cornell Scale for Depression in Dementia (CSDD) and the Revised Memory and Behavioural Problems Checklist (RMBPC), were used to measure the change in outcomes of mood and behaviour respectively. Patients were assessed through caregiver reporting at baseline and re-evaluated upon programme completion.
Result : Preliminary analysis of the first 10 patients showed overall reductions in all scores (including subscales) for both scales. Significantly, mean CSDD scores decreased from 9.67 to 5.89 (p = 0.004) and mean RMBPC scores decreased from 67.20 to 36.00 (p = 0.006). Significant reductions in the Caregiver Reaction (p = 0.003) as well as the Memory-Related (p <0.001) subscale scores of the RMBPC were also observed.
Conclusion : These preliminary results suggest that a music therapy cum activity-based programme can ameliorate behavioural problems and depressive symptoms in patients with dementia, which in turn helps to improve quality of life for patients and their caregivers. Further data and results will be obtained from this ongoing study.

NON03

EFFECTS OF AROMATHERAPY & TOUCH ON COGNITIVE FUNCTIONS & AGITATION BEHAVIOUR OF ELDERLY RESIDENTS WITH DEMENTIA
CHOW YEOW LENG¹, LINA MA², ZHANG DI³, DIANNA LIM⁴, CHIA CHOON YEE¹
School of Health Sciences, Nanyang Polytechnic, Singapore¹; Nursing, Lions Home for the Elders, Singapore²; Nursing, Changi General Hospital, Singapore³; AromaART International, Singapore⁴

Purpose : Besides cognitive decline, agitation behaviour is exhibited by more than half of nursing home residents with dementia, managing these patients posted a great challenge to the carers. Other than pharmaceutical interventions, many healthcare professionals are exploring alternative ways to manage dementia patients without compromising their quality of life. This clinical control trial pilot study aims to examine the effects of aromatherapy and touch therapy on cognitive functions and agitation behaviours of a group of elderly residents with dementia.
Method : The sample consisted of purposeful sampling of 27 dementia patients randomised into three groups: 7 participants were enrolled in the control group, 10 participants received essential oil inhalation and 10 were in the touch therapy group. AMT and CMMSE were used to measure participants' cognitive function. CMAI was used to measure the frequencies of participants' 29 observable agitation behaviour. Duration of the study was 4 weeks. Data obtained from the research instruments were taken before and after interventions.
Result : Paired samples t-test and the analysis of covariance (ANCOVA) were used to evaluate whether the population means on the dependent variables. Findings did not show any significant difference in pre-treatment and post-treatment AMT and CMMSE scores in all the 3 groups. However, there was a significant difference in the pre-treatment and post-treatment total CMAI scores in the control group (p=0.021, <0.05) and the touch therapy group (p=0.01, <0.05). No significant difference was found in the inhalation group (p=0.064, > 0.05).
Conclusion : As this is a pilot study with small sample. It is recommended that larger scale study with a longer intervention period be conducted to validate the results.

NON04

INCREASING WELLBEING THROUGH BROKERED SERVICES FOR PEOPLE LIVING WITH DEMENTIA
DEBBIE¹
DBMAS, Alzheimers WA, Perth, WA¹

Purpose : This project aims to evaluate the efficacy of brokered non pharmacological interventions and services for people living with dementia who have accessed the Dementia Behaviour Management Advisory Service (DBMAS).
Method : The DBMAS Behaviour consultant provides clinical assessment and documents the anticipated benefits of providing a specific brokered service related to the individual needs of the person with Dementia. Services brokered to meet individual needs include additional staff resources and therapy services (e.g aromatherapy, art, music, speech pathology and dietary support). The contact person is invited to participate in the evaluation which includes the completion of a brokerage service evaluation form within 3 months of the final brokered service event. The evaluation will elicit key information related to the service that has been provided and the impact that this service has had on the person with the Dementia, the caregiver and any other people involved in their support.
Result : The principal findings indicate a raised awareness of a range of non-pharmacological services that has not been accessed by care givers previously. The evaluation has also identified the limited availability of Australian research as an intervention for responding to changing behaviours for people living with Dementia.
Conclusion : The project evaluation will demonstrate whether non-pharmacological interventions provided by brokered services have improved well being for people living with BPSD, whether the service has been continued and whether it has had ongoing benefits. For people with dementia, their carers and care staff, the project will identify areas for improvement and/or any areas where support may be required.



NON05

THE EFFECTIVENESS OF BRIGHT LIGHT THERAPY AND NUTRITION SUPPORT FOR OLDER ADULT WITH DEMENTIA IN DELIRIUM

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Purpose : We implemented bright light therapy to older adults with dementia in delirium. Then we considered the effects of nutritional support, when improving sargadianrizm rhythm.

Method : Objects : Three older adults with delirium who have difficulty of dietary intake [One older adult who has no dementia, two older adults who have dementia]. Intervention and Evaluation :

1. The older adults received bright light therapy of 2500lx for 1 hour from 10:00 AM to 11:00 AM for 7-8 days.
2. During our evaluation to their awaking level and swallowing level, we supported their eating.
3. We evaluated their cognitive state by Delirium State of Japanese NEECHAM Confusion Scale (J-NCS), Mini Mental State Examination (MMSE) and food intake before and after.

Result : Because of our intervention, all older adults improved J-NCS with bright light therapy. One older adult's MMSE point increased from 9 points to 13 points. However, another had no change of 13 MMSE points. The older adults with dementia began to improve vigilance in 3 to 5 days. When we implemented BLT, they could gradually take normal diet, and had improved their nutritional state. The older adult who doesn't have dementia began to awake in 3 days. After implementing BLT, they could take more water and food, they also improved the irascibility and the nutritional state.

Conclusion : Improving sargadianrizm rhythm by bright light therapy and nutrition support together are possible to improve the older adult's delirium state and nutritional state at early stage. Moreover, the effective way of their nutritional support for older adults with delirium is to confirm their recovery stage from the delirium and offer meals according to their ability to swallow and according to their favor.

NON08

AN OVERVIEW OF THE NON-PHARMACOLOGICAL APPROACHES FOR PATIENTS WITH DEMENTIA

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Purpose : The pharmacological treatments for patients with dementia are with limited effectiveness and the non-pharmacological approaches that consider different aspects of the disease's impact can benefit the patient's overall health. The aim of this study is to review the related literature and compare different non-pharmacological approaches in order to suggest appropriate programs for patients with dementia.

Method : The search criteria for literature review were (1) published in 2001 to 2008; (2) published in English. The key words for the selection of literature included dementia, treatment, intervention, non-pharmacological, cognitive rehabilitation, exercise training, and therapy.

Result : A total of 22 studies meet the criteria and were selected for review. Results showed that cognitive training would improve the cognitive and affective status for the patient with MCI and mild dementia. Rehabilitative program helped the patients to restore adaptive functioning or provide compensatory strategies for patients at different stages, and benefit patients and caregivers for their quality of life. Reminiscence therapy is with inconclusive findings for unspecific treatment outcomes across the studies. Sensory intervention would improve the social, emotional, and behavioural problems for moderate to severe cognitive impaired patients. Exercise training would increases fitness, physical function, cognitive function, and positive behaviour. Other programs, such as art therapy, dance therapy, pet therapy, and horticulture therapy, are with limited research evidence thus more research is warranted to assure their efficacy for the patients.

Conclusion : Researches for the efficacy of the non-pharmacological approaches are limited. To select a promising non-pharmacological intervention for dementia, one should consider the disease severity and the expected outcome of the intervention. We suggest that except the interventions for the patients, their caregivers also need support and education. This study provides an overview of the targeting clinical problems and the applicable approaches for dementia care.

NON09

EFFECT OF COGNITIVE TREATMENT FOR THE ELDERLY WITH MILD TO MODERATE ALZHEIMER'S DISEASE IN THE COGNITIVE FUNCTION AND THE PSYCHOLOGICAL WELL-BEING

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Purpose : For the study of dementia, it is significant to cognitive treatment or cognitive training. Kaeasdhima (2006) demonstrates that utilising simple materials, reading and arithmetic exercises could activate the function of prefrontal lobe. However, there are cultural differences in practical applications of these approaches. In this study, the authors adopted similar approaches according to our cultural background, trying to observe the effectiveness of group cognitive treatment with local social/cultural elements. Moreover, the form of cognitive treatment is group process instead of individual treatment, of which well-being is measured.

Method : Subjects with mildly to moderately severe Alzheimer's disease participated the study. In experiment group, 12 subjects aged between 65 and 85 were enrolled, and 75% of them were illiterate. They received weekly group cognitive treatment for one year. Each session lasted for fifty minutes with utilisation of simple materials, reading simple texts and arithmetic exercises matched with Chinese culture. Another 8 subjects at similar stages were selected as control group. All of patients are assessed with MMSE at baseline, middle and the end of the study. Furthermore, in the measurement of well-being, experiment subjects compare with others - 10 OPD, 8 home care, and 9 nursing home of patients. All they are assessed with Philadelphia Geriatric Center (PGC) Morale Scale (Lawton, 1975), including agitation, attitude toward own aging, lonely dissatisfaction. All data were computed with packed software SPSS for Windows.

Result : Average MMSE scores in the experiment group are higher than control group. The result shows that group of the cognitive treatment is effective in the patient with mild to moderate stages of AD. In addition, PGC morale Scale scores in experiment group, no matter in the scale of agitation, attitude toward own aging, lonely dissatisfaction, are also higher than others.

Conclusion : The study verifies that group cognitive treatment is effective and applicable to the patient with mild to moderate AD. Otherwise, although no assessed the baseline of PGC, the group has more well-being than other kinds of patients after group cognitive treatment. It is accordance with the study of Kaeasdhima (2006) by utilising simple materials could improve cognitive function. In conclusion, group cognitive treatment may have not only protective effect on the cognitive functions but more well-being in the patients with mild to moderate AD.



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