A7 TAIPEI 2013

INTERNATIONAL CONFERENCE
Alzheimer's Disease International

28th International
Conference of Alzheimer's
Disease International
18 - 20 April 2013 Taipei

Abstract Booklet

www.adi2013.org

2002

A7
**Alzheimer's Disease
International**

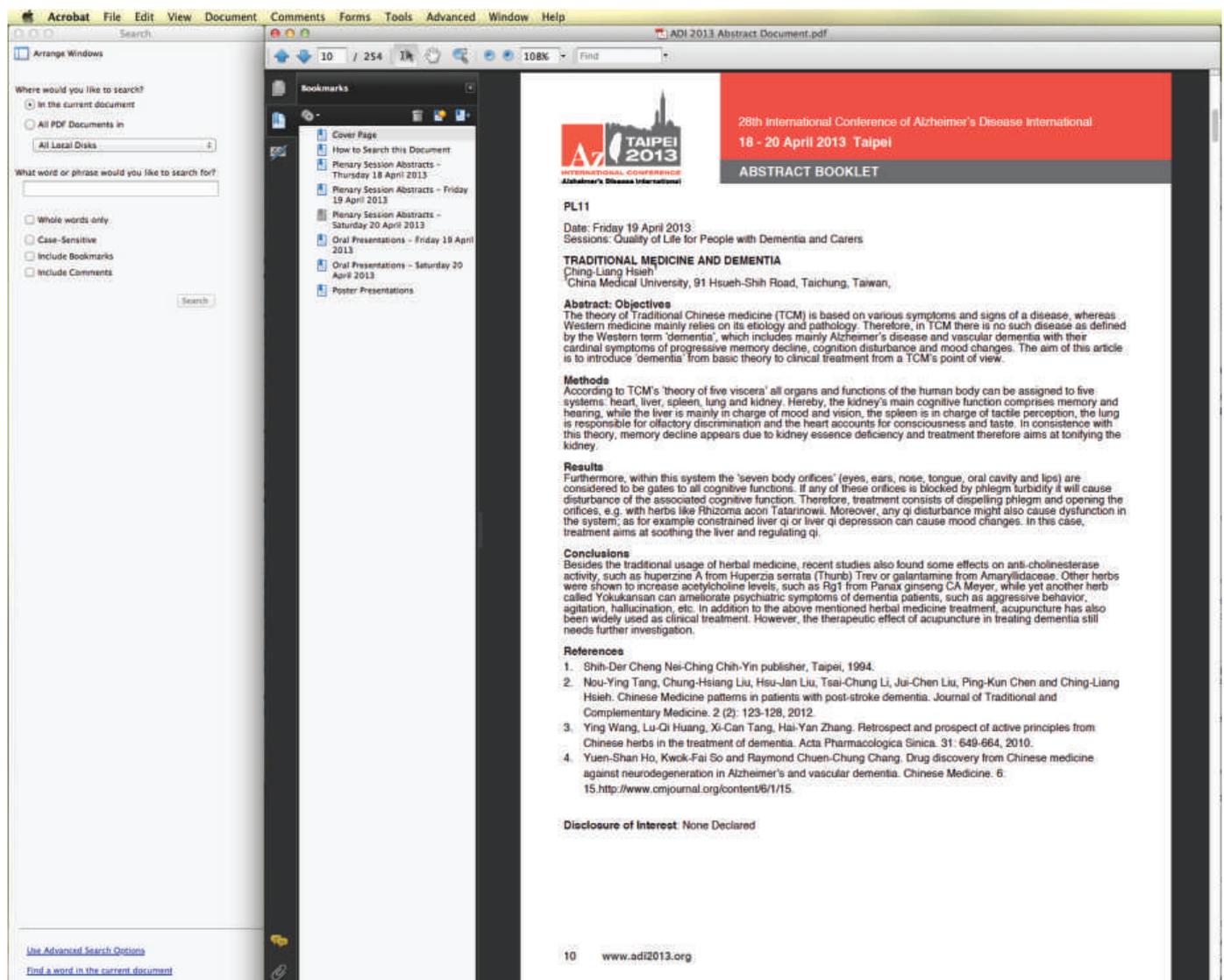# To search this Abstract document:

Click the search button below.

Enter your term in the search box. You can enter full or partial text for a speaker's name, abstract number, category or topic. Clicking the search button will then list all successful matches for the search term, and clicking on any of the results in the list will take you immediately to the appropriate page.

The search window can be shown at any time by selecting "Edit > Search" from the top file menu, or using the following shortcut keys:

"Shift - Control - F" on a Windows operating system
"Shift - Command - F" on an Apple operating system

PL02

Date: Thursday 18 April 2013
Sessions: Challenges for the Global Health System

WORLD HEALTH ORGANIZATION MAKES DEMENTIA A PUBLIC HEALTH PRIORITY
M.Wortmann[1]
[1]Executive Director of Alzheimer's Disease International

Abstract:
The World Health Organization (WHO) and Alzheimer's Disease International (ADI) have launched a report Dementia: A Public Health Priority on April 2012. The report has been made with a group of more than 30 experts from around the world and touches on aetiology, prevalence and incidence data, risk factors, dementia policies, health and social systems, care and caregivers, awareness raising and ethical issues. It concludes with a number of recommendations: with a new case of dementia every four seconds somewhere in the world, governments need to prepare and create national Alzheimer and dementia plans, stimulate dementia friendly communities, improve public and professional attitudes, improve health and social care systems, support caregivers and raise awareness about the disease and increase the priority given to dementia in the public research agenda.

Dr. Margaret Chan, Director-General of the WHO says in the Foreword of the report:
 "The overwhelming number of people whose lives are altered by dementia, combined with the staggering economic burden on families and nations, makes dementia a public health priority. The cost of caring for people with dementia is likely to rise even faster than its prevalence, and thus it is important that societies are prepared to address the social and economic burden caused by dementia."

ADI believes that when the World Health Organization declares dementia a public health priority many countries, especially lower and middle-income countries, will be mobilised to take more action than they used to do.

PL04

Date: Thursday 18 April 2013
Sessions: Challenges for the Global Health System

POSITIONING NON-COMMUNICABLE DISEASES (NCDS) IN THE GLOBAL HEALTH AND DEVELOPMENT AGENDA

C. Adams[1]
Chief Executive Officer of the Union for International Cancer Control (UICC) and the Chair of the NCD Alliance

Abstract: Objectives

To outline the activities of the NCD Alliance has and continues to take to position NCDs in the global health and development agendas.

Highlight the learning to date and the plans which are in place to include NCDs in the post 2015 discussions.

I will specifically cover:
- What is the NCD Alliance?
- UN Summit, where did it come from, advocacy process and the results
- Where we are now with follow up / WHO
- Alzheimer's disease shares most risk factors with cancers, diabetes and cardiovascular disease; how can we work together to the benefit of all those affected by these diseases?
- What could people take away for their own advocacy

Conclusions
Advocacy at the highest level demands good intel, great planning, communication and execution.

References
NCD Alliance materials available on www.NCDAllinace.org
Disclosure of Interest: None Declared

PL05

Date: Thursday 18 April 2013
Sessions: Prevention and Risk Factors in Dementia

THE PROJECTED EFFECT OF RISK FACTOR PREVALENCE ON ALZHEIMER'S DISEASE PREVALENCE

D. E Barnes[1]
University of California, San Francisco, and San Francisco Veterans Affairs Medical Center, San Francisco, California, United States

Abstract: Objectives
The number of people living with Alzheimer's disease (AD) and other forms of dementia is expected to more than triple over the next 40 years, and there are currently no disease modifying treatments or cures. However, many AD risk factors are modifiable, raising the hope that if we could lower the prevalence of AD risk factors, we could potentially lower the prevalence of AD over time. The goal of our study was to project the impact of changes in risk factor prevalence on AD prevalence worldwide.

Methods
We used population attributable risks (PARs) to estimate the proportion of AD cases that are potentially attributable to 7 modifiable risk factors including physical inactivity, low education, smoking, diabetes, midlife hypertension, midlife obesity, and depression. Risk factor prevalence was determined through internet searches and public databases. Relative risks were determined from the most recent and comprehensive published meta-analyses.

Results
Worldwide, low education contributed to the largest proportion of AD cases (nearly 1 in 5). Smoking contributed to 1 in 7 cases, while physical inactivity contributed to 1 in 8 cases and depression contributed to 1 in 10 cases. Medical conditions including diabetes, midlife hypertension and midlife obesity contributed to a smaller proportion of cases due to lower population prevalence levels. Together, the 7 modifiable risk factors examined contributed to approximately half of AD cases worldwide. If the prevalence of all 7 risk factors were 10% lower than current levels, we estimate that there would be 1.1 million fewer cases of AD. In cities such as Taipei, where smoking levels are relatively low (15%) and education levels are relatively high, it is possible that AD prevalence levels will not rise as high as current projections.

Conclusions
Up to half of AD cases worldwide may be attributable to modifiable risk factors. Large-scale public health interventions to encourage healthier lifestyles and public education could potentially mitigate some of the projected rise in AD prevalence over the next 40 years.

References

Barnes DE, Yaffe K. The projected effect of risk factor reduction on Alzheimer's disease prevalence. Lancet Neurol 2011; 10(9): 819-828.

Disclosure of Interest: None Declared

PL06

Date: Thursday 18 April 2013
Sessions: Prevention and Risk Factors in Dementia

RISK FACTORS AND PREVENTION IN DEMENTIA

H Brodaty[1,2,3]
[1] Centre for Healthy Brain Ageing, University of New South Wales, Sydney, Australia.
[2] Dementia Collaborative Research Centre, University of New South Wales, Sydney, Australia.
[3] Aged Care Psychiatry, Prince of Wales Hospital, Randwick, New South Wales, Australia.

Abstract: Objectives
To review risk factors and preventative strategies for dementia, focusing on Alzheimer's disease

Methods
Selective review of literature

Results
Possibly 50% of the population risk of Alzheimer's disease can be attributed to potentially modifiable environmental and lifestyle factors including high blood pressure, obesity and high cholesterol in mid-life, diabetes (type II), high fat diets, head injury, lack of education, lack of exercise, depression, low birth weight for gestational age, social isolation and smaller head circumference. Epidemiological studies report protective effects for physical exercise, education, complex mental activity in mid-life, mental activities, fluids rich in anti-oxidants and polyphenols such as vegetables and fruit juice and wine, (green) tea, fish, anti-cholesterol drugs and hormone replacement therapy.

Evidence for prevention effectiveness has been mixed. Randomised controlled trials with hormone replacement therapy, anti-inflammatory drugs, vitamin E and Ginkgo biloba have proven ineffective. Beneficial effects have been demonstrated for physical exercise, computer cognitive training, and adherence to Mediterranean diet, though not all trials are positive. There is stronger evidence that attention to vascular risk factors may prevent vascular dementia. There is no evidence for any preventative strategy for other neurodegenerative dementias such as Lewy body disease or frontotemporal dementia. Avoidance of heavy alcohol use and use of protective head gear and seat belts will reduce risk of dementia secondary to head injury.

Conclusions
There is no absolute prevention against Alzheimer's disease specifically or dementia in general. Secondly, prevention often means postponement rather than elimination. Thirdly, preventative strategies may be more effective against vascular dementia. Independent replication is required before accepting reports. In any case, recommended lifestyle changes are physically beneficial and not harmful. Public campaigns to about the potential to delay onset of cognitive decline could focus on regular physical exercise, mental activity, blood pressure control, attention to diet and avoidance of obesity and type 2 diabetes.

PL07

Date: Thursday 18 April 2013
Sessions: Prevention and Risk Factors in Dementia

FROM EPIDEMIOLOGICAL STUDIES TO MULTIDOMAIN PREVENTION TRIALS

Sandrine Andrieu[1,2,3,4],

[1] INSERM U 1027, Toulouse, France [2] University of Toulouse III, Toulouse, France [3] Department of Epidemiology and Public Health, Toulouse University Hospital, Toulouse, France [4] Gerontopole, Toulouse University Hospital, Toulouse, France

Abstract: Objectives

In the domain of Alzheimer's disease prevention, various potentially protective factors have been identified in epidemiological studies. Some of these factors are lifestyle-related, for example dietary habits, physical exercise and social activities. Although the results of these observational studies have been relatively consistent, the results of intervention studies remain disappointing.

The aim of this presentation is to review some of large preventive trials in the field of Alzheimer's disease prevention and to propose several alternatives to increase the power of these trials.

Methods

A review from medline and the registry of clinicaltrials.gov was performed to identify preventive trials with the following key words: "dementia" OR "Alzheimer('s) disease") AND "prevention" AND "randomized controlled trials"

Results

In this review, we identified various interventions that have been tested and many methodological problems were highlighted in these large preventive trials in the field of Alzheimer's Disease : selection bias, inadequate power, inadequate level of exposure. Otherwise, trials often test the effectiveness of a single intervention while the origin of the disease is multifactorial.

Conculsions

Several methodological issues could be better explored in the future and due the multifactorial origin of dementia, multidomain interventions could be explored for preventive interventions, but designing such trials remains very challenging for researchers. We will discuss some alternatives to these large trials.

References

ACL-1. Coley N, Andrieu S, Gardette V, Gillette-Guyonnet S, Sanz C, Vellas B, Grand A. Dementia prevention: methodological explanations for inconsistent results. Epidemiol Rev. 2008;30:35-66.

ACL-2. Andrieu S, Coley N, Aisen P, Carrillo M, Dekosky S, Durga J, Fillit H, Frisoni G, Froelich L, Gauthier S, Jones R, Jonsson L, Khachaturian Z, Morris J, Orgogozo Jm, Ousset PJ, Robert P, Salmon E, Sampaio C, Verhey F, Wilcock G, Vellas B. Methodological issues in primary prevention trials for neurodegenerative dementia. J Alzheimers Dis. 2009;16(2):235-70

ACL-3. Aisen P, Andrieu S, Sampaio C, Carrillo M, Khachaturian ZS, Dubois B, Feldman H, Petersen RC, Siemers E, Doody Rs, Hendrix S, Grundman M, Schneider Ls, Schindler Rj, Salmon E, Potter Wz, Thomas Rg, Salmon D, Donohue M, Bednar M, Touchon J, Vellas B. Report of the task force on designing clinical trials in early (pre-dementia) AD. Neurology. 2011;76(3):280-6.

ACL-4. Andrieu S, Aboderin I, Baeyens JP, Beard J, Benetos A, Berrut G, Brainin M, Cha HB, Chen LK, Du P, Forette B, Forette F, Franco A, Fratiglioni L, Gillette-Guyonnet S, Gold G, Gomez F, Guimaraes R, Gustafson D, Khachaturian A, Luchsinger J, Mangialasche F, Mathiex-Fortunet H, Michel Jp, Richard E, Schneider LS, Solomon A, Vellas B. IAGG Workshop: Health Promotion Program on Prevention of Late Onset Dementia. J Nutr Health Aging. 2011;15(7):562-75.

ACL-5. Richard E, Andrieu S, Solomon A, Mangialasche F, Ahtiluoto S, Van Charante EP, Coley N, Fratiglioni L, Neely AS, Vellas B, Van Gool WA, Kivipelto M. Methodological challenges in designing dementia prevention trials - The European Dementia Prevention Initiative (EDPI). J Neurol Sci. 2012;322(1-2): 64-70.

PL09

Date: Friday 19 April 2013
Sessions: Quality of Life for People with Dementia and Carers

INTERNET INTERVENTION FOR FAMILY CARERS

Anne Margriet Pot[1,2]; Marco Blom[3] ; Bernadette Willemse[1]
[1]Netherlands Centre of Expertise on Mental Health and Addiction, Program on Aging, Utrecht, The Netherlands
[2]VU University, Amsterdam, The Netherlands
3Dutch Alzheimer Society, Amersfoort, The Netherlands

Abstract: Objectives

This presentation will be focused on:
1. Developments in e-health support for family carers of people with dementia
2. Content, usability and acceptability of Mastery over Dementia, a guided internet course for family carers in The Netherlands
3. The effectiveness of Mastery over Dementia
4. Implications for research and practice

Methods

In addition to data based on a review of literature, data of a Randomized Controlled Trial (RCT) on the effectiveness of Mastery over Dementia (MoD) will be presented. MoD is an internet intervention for family carers. 'Mastery over dementia' is a preventive intervention with the guidance of a professional counselor, and consists of 8 sessions and a booster session after one month. The intervention consists of interactive learning on how to cope with behavior problems and care-problems and planning what to do in crisis situations (problem solving techniques), changing non-helping thoughts into helping thoughts (cognitive behavioral techniques); relaxation and doing pleasant activities; and learning to become more assertive and mobilizing social support.

In the RCT, MoD has been compared with a comparison condition in which caregivers has received a so-called 'minimal intervention'. The minimal intervention condition consisted of electronic information leaflets. In this condition there was no contact with a coach. Randomization into these two groups took place after an assessment to check if potential participants met all inclusion criteria and after stratification on the basis of two factors (sex and relationship). In both conditions, there were 3 measurements: at baseline, after the fourth lesson or information leaflet, and after six months. Outcomes were depressive symptoms, symptoms of anxiety, sense of mastery, feelings of role overload a.o. The data were analyzed with t-tests and linear regression analysis.

Results

This study shows that MoD in its present form is acceptable and usable for family carers of people with dementia, also for carers with an age beyond 75 years, caring for someone in the beginning stage of dementia or for someone already living in a residential home. MoD has been found to be effective with regard to symptoms of depression and anxiety.

Conclusions

Implications for the development and use of internet interventions for family carers of people with dementia will be discussed. How does this development relate to the development in face-to-face interventions?

References

Marco M Blom, Judith E Bosmans, Pim Cuijpers, Steve H Zarit and Anne Margriet Pot. Effectiveness and cost-effectiveness of an internet intervention for family caregivers of people with dementia: design of a randomized controlled trial. BMC Psychiatry 2013, 13:17.

Disclosure of Interest: None Declared

PL10

Date: Friday 19 April 2013
Sessions: Quality of Life for People with Dementia and Carers

AN ASIAN APPROACH TO DEMENTIA CARE
A Homma[1]
Center for Dementia Care Research in Tokyo, Tokyo, Japan

Abstract:
How to support persons with dementia in the community is a major issue taking into account the rapid increase of the elderly population, especially in Asian countries. After the introduction of the long-term care insurance in 2000 in Japan, various services to support persons with dementia have been developed including the educational program for health professionals. In 2012, the Ministry of Health, Labour and Welfare released the action plan for the elderly with dementia to promote the services. In the presentation, the concept of the action plan, which should be shared in health professionals in Asian countries, will be introduced. Also, a representative dementia care in a group living will be showed by a short movie.

Disclosure of Interest: None Declared

PL11

Date: Friday 19 April 2013
Sessions: Quality of Life for People with Dementia and Carers

TRADITIONAL MEDICINE AND DEMENTIA

Ching-Liang Hsieh[1]
[1]China Medical University, 91 Hsueh-Shih Road, Taichung, Taiwan,

Abstract: Objectives

The theory of Traditional Chinese medicine (TCM) is based on various symptoms and signs of a disease, whereas Western medicine mainly relies on its etiology and pathology. Therefore, in TCM there is no such disease as defined by the Western term 'dementia', which includes mainly Alzheimer's disease and vascular dementia with their cardinal symptoms of progressive memory decline, cognition disturbance and mood changes. The aim of this article is to introduce 'dementia' from basic theory to clinical treatment from a TCM's point of view.

Methods

According to TCM's 'theory of five viscera' all organs and functions of the human body can be assigned to five systems: heart, liver, spleen, lung and kidney. Hereby, the kidney's main cognitive function comprises memory and hearing, while the liver is mainly in charge of mood and vision, the spleen is in charge of tactile perception, the lung is responsible for olfactory discrimination and the heart accounts for consciousness and taste. In consistence with this theory, memory decline appears due to kidney essence deficiency and treatment therefore aims at tonifying the kidney.

Results

Furthermore, within this system the 'seven body orifices' (eyes, ears, nose, tongue, oral cavity and lips) are considered to be gates to all cognitive functions. If any of these orifices is blocked by phlegm turbidity it will cause disturbance of the associated cognitive function. Therefore, treatment consists of dispelling phlegm and opening the orifices, e.g. with herbs like Rhizoma acori Tatarinowii. Moreover, any qi disturbance might also cause dysfunction in the system; as for example constrained liver qi or liver qi depression can cause mood changes. In this case, treatment aims at soothing the liver and regulating qi.

Conclusions

Besides the traditional usage of herbal medicine, recent studies also found some effects on anti-cholinesterase activity, such as huperzine A from Huperzia serrata (Thunb) Trev or galantamine from Amaryllidaceae. Other herbs were shown to increase acetylcholine levels, such as Rg1 from Panax ginseng CA Meyer, while yet another herb called Yokukansan can ameliorate psychiatric symptoms of dementia patients, such as aggressive behavior, agitation, hallucination, etc. In addition to the above mentioned herbal medicine treatment, acupuncture has also been widely used as clinical treatment. However, the therapeutic effect of acupuncture in treating dementia still needs further investigation.

References

1. Shih-Der Cheng Nei-Ching Chih-Yin publisher, Taipei, 1994.
2. Nou-Ying Tang, Chung-Hsiang Liu, Hsu-Jan Liu, Tsai-Chung Li, Jui-Chen Liu, Ping-Kun Chen and Ching-Liang Hsieh. Chinese Medicine patterns in patients with post-stroke dementia. Journal of Traditional and Complementary Medicine. 2 (2): 123-128, 2012.
3. Ying Wang, Lu-Qi Huang, Xi-Can Tang, Hai-Yan Zhang. Retrospect and prospect of active principles from Chinese herbs in the treatment of dementia. Acta Pharmacologica Sinica. 31: 649-664, 2010.
4. Yuen-Shan Ho, Kwok-Fai So and Raymond Chuen-Chung Chang. Drug discovery from Chinese medicine against neurodegeneration in Alzheimer's and vascular dementia. Chinese Medicine. 6: 15.http://www.cmjournal.org/content/6/1/15.

Disclosure of Interest: None Declared

PL12

Date: Saturday 20 April 2013
Sessions: Nutrition and Oral Care in Dementia

EATING BEHAVIOURS IN ALZHEIMER'S DISEASE

Acosta,D[1]

[1]Universidad Nacional Pedro Henríquez Ureña, Santo Domingo, República Dominicana.

Abstract: Objectives
The prevalence of Alzheimers Disease is increasing, with a projection to double every twenty years, to reach 115 million by 2050. 71% of them will live in developing countries.(1)
This illness has a chronic course, with an average of 8-10 years. During this time a series of behaviors develop, related to food selection and intake, which have direct consequences on the nutritional status and the physical health of the patients.(2-3)
It is important for the caretaker to fully understand these changes, to be able to provide an adequate diet throughout the different stages of the illness.(4-5)
In the Latino American culture, the weight and the amount of food eaten by the patient, are perceived as a very important part of a good care, (6),   The development of aversive feeding behaviors, pacing and the weight loss that are part of the illness are frequent causes of increase in paid carers turnover. (6-7).

Methods
With this motivation in mind, we videotaped, observed and detected aversive feeding behaviors, categorized them, and implemented corrective measures in 75 patients, coming from 3 different nursing homes (n=55), in the Dominican Republic and some patients living with their families (n=20). Consent for participation was obtained. The data is basically observational and the measures taken are based on trial and errors. We used measures/devices available in the surroundings without incurring in any extra costs.

Results
85% of our sample responded to simple implemented measures/devices, taken from what we thought were part of the everyday life of the home environment, they were living in.
After the correctives measures were taken, they were sleeping better, eating better, and the staff, expressed more satisfaction with their work. We use the video now, to teach caretakers in different settings.

Conclusions
Simple measures found in the environment of the patient, can help us improve the eating behaviours that patients with AD develop during the course of the illness. Training those who care for them to use these measures can help us to improve the nutritional status of those who suffer from the illness without incurring in further expenses.

References

   (1) ADI, World Alzheimer's Report, 2009.

   (2) Morris CH, Hope RA, and Fairburn CG: Eating habits in dementia. Brit J Psych 1989; 154:801-806.

   (3) Assessing Abnormal Feeding Behaviour In Dementia. G Blandford, L.B Watkins, M.N. Mulvihill, B. Taylor

   4) Protecting The Nutritional Status Of Alzheimer's Disease Patients. A.A Spindler, M.J.Renval, JW.Ramdell. San   Diego State University, CA92182-72513.-

   5) Brodaty, H, Gresgam, M and Luscombe, G (21997). The Prince Hospital dementia caregivers training programme. Int, J. Geriatr. Psychiat. 12,183-192

   6) Acosta, D, lecture AIB, Conference 2010, PR

   7) Rheaume, Y, Riley, ME, Volicer, L. Meeting nutritional needs of Alzheimerer's patients who pace constantly. J, Nutrition for the elderly. 1987;7: 43-52

Disclosure of Interest: None Declared

PL13

Date: Saturday 20 April 2013
Sessions: Nutrition and Oral Care in Dementia

THE IMPLICATIONS OF POOR ORAL HEALTH IN THE ELDERLY
P.Foltyn

Abstract
Hearing and vision impairment, cognitive decline and delirium, frailty, incontinence, falls, medication compliance and pharmacokinetics have long been regarded as geriatric giants; however, the implications of Poor Oral Health in the Elderly have for too long been ignored and are equally important. Mouth pain and discomfort associated with poor oral health can be devastating for the elderly, compound psychosocial problems, frustrate carers and nursing home staff and disrupt family dynamics. As appearance, function and comfort suffer, so may a person's self esteem and confidence. The contributing reasons for poor oral health such as rapid dental decay, acute and chronic periodontal infections, compromised systemic health on a background of a dry mouth, coupled with xerostomia-inducing medications, reduced fine motor function, declining cognition and motivation will not only lead to an increase in both morbidity and mortality but also impact on quality of life.

Disclosure of Interest: None Declared

PL14

Date: Saturday 20 April 2013
Sessions: Nutrition and Oral Care in Dementia

DEMENTIA AND WEIGHT LOSS: AN EPIDEMIOLOGIC OVERVIEW

E Albanese[1] LJ Launer[1], R Stewart[2], MJ Prince[2]

[1] Laboratory of Epidemiology and Social Sciences, National Institute on Aging, National Institutes of Health. Bethesda, MD - USA

[2] Institute of Psychiatry, King's College London, UK

Abstract: Objectives

The relationship between weight loss and dementia has important clinical and public health significance.[1,2] However, mechanisms are poorly understood,[3] and epidemiologic evidence is patchy and scarce from non-western countries.[4] Because weight loss may precede dementia onset by several decades,[5] it is of interest to explore this association across the life course and also considering neurodegenerative MRI markers of brain damage that precede cognitive impairment. Our aim is to provide an epidemiologic overview on the lifelong association of weight loss with dementia and brain damage using data from three large cohort studies on aging conducted in diverse world regions.

Methods

We studied the association between dementia severity (quantified by the Clinical Dementia Rating Scale, CDR)[6] and weight loss across diverse world regions; the association between 10-year memory decline (word list recall) and weight loss in mid-life accounting for cognitive reserve and childhood intelligence; and the life-course weight trajectories by dementia and markers of brain damage using data from three cohort studies: the 10/66 surveys conducted with standardized procedures in Latin America, China and India;[7] the National Survey of Health and Development (NSHD), an UK nationwide representative birth cohort study initiated in 1946;[8] and the AGES-Reykjavik study, a study of aging, a follow-up of the Reykjavik Study initiated in 1967 by the Icelandic Heart Association in Iceland,[9] respectively.

Results

First, there was a gradient effect in the direct association between dementia severity and weight loss (p for trend<0.001), highly homogenous across diverse world regions (10/66 study); second, participants of the NSHD study who lost the most weight in mid-life showed steepest decline in memory between 43 and 53 years (p=0.001) independently of childhood cognitive ability and of midlife cognitive reserve; mid- to late-life weight trajectories differed by late-life dementia (p<0.001), brain atrophy (p<0.001), and cerebrovascular damage (p<0.001) level in participants of the AGES-Reykjavik study, independently of socio-demographic, lifestyle and health characteristics.

Conclusions

This is the broadest set of evidences from community samples to date on the association of cognitive impairment, dementia and brain damage with weight loss and lifelong weight trajectories. Our findings suggest that these associations are somewhat universally strong; that weight loss precedes the onset of dementia by several decades and is already associated with cognitive decline in mid-life independently of cognitive ability in both childhood and adulthood; and that weight trajectories across the life course vary by level of brain atrophy and dementia in late-life. Weight loss should be timely recognized, and may be targeted for primary, secondary and tertiary prevention of dementia. The efficacy of interventions is though yet to be established.

References

1. Aziz NA, van der Marck MA, Pijl H, Olde Rikkert MG, Bloem BR, Roos RA. Weight loss in neurodegenerative disorders. J Neurol 2008;255:1872-1880.
2. Gillette Guyonnet S, Abellan Van Kan G, Alix E, et al. IANA (International Academy on Nutrition and Aging) Expert Group: weight loss and Alzheimer's disease. The journal of nutrition, health & aging 2007;11:38-48.
3. Inelmen EM, Sergi G, Coin A, Girardi A, Manzato E. Open-ended question: Alzheimer's disease and involuntary weight loss: which comes first? - A mini - review. Aging Clin Exp Res 2009.
4. Ogunniyi A, Gao S, Unverzagt FW, et al. Weight loss and incident dementia in elderly Yoruba Nigerians: a 10-year follow-up study. International psychogeriatrics / IPA 2011;23:387-394.
5. Stewart R, Masaki K, Xue QL, et al. A 32-year prospective study of change in body weight and incident dementia: the Honolulu-Asia Aging Study. Archives of neurology 2005;62:55-60.
6. Morris JC. Clinical Dementia Rating: A Reliable and Valid Diagnostic and Staging Measure for Dementia of the Alzheimer Type. International Psychogenatrics 1997;9:173-176.

7. Prince M, Ferri CP, Acosta D, et al. The protocols for the 10/66 dementia research group population-based research programme. BMC Public Health 2007;7:165.

8. Wadsworth M, Kuh D, Richards M, Hardy R. Cohort Profile: The 1946 National Birth Cohort (MRC National Survey of Health and Development). Int J Epidemiol 2006;35:49-54.

9. Harris TB, Launer L, Eiriksdottir G, al. E. Age, Gene/Environment Susceptibility-Reykjavik Study: multidisciplinary applied phenomics. American journal of epidemiology 2007;165:1076-1087.

Disclosure of Interest: None Declared

PL15

Date: Saturday 20 April 2013
Sessions: A Cure for Alzheimer's Disease by 2025? (Debate)

A CURE FOR ALZHEIMER'S DISEASE BY 2025?

C Chen[1]
[1]Memory Aging and Cognition Centre, National University Health System, Singapore

Abstract: Objectives
A number of hypotheses have been proposed to account for the pathogenesis of Alzheimer's Disease (AD). However amyloid, tau, inflammatory, free-radical and cholinergic mechanisms may not be mutually exclusive theories since some initiating event(s) may occur and trigger a cascade in which all of these processes play a part in the pathogenesis of AD. Morever, epidemiological evidence has accumulated to suggest that in addition to age and genetics, vascular risk factors may also contribute to the multifactorial pathogenesis of AD.
Nevertheless, advances in the molecular biology of AD implicate several broad categories of potential therapeutic value. Thus, whilst the mainstay of therapy at this time remains cholinergic or glutaminergic based therapies, other therapeutic approaches that stem from aetiologically directed approaches which are the subject of intensive research efforts, such as decreasing oxidative stress, inflammation and amyloid burden are being developed and hold great promise. The objective of this talk is to review progress of these therapeutic developments.

Results
There has been no effective disease modifying treatments for AD developed in the past decade. This had led to a re-examination of therapeutic strategies. Together with acceptance that pathological processes leading to dementia start many years before symptoms appear, is apprehension that by the time patients are symptomatic, it may be difficult, if not impossible to reverse brain damage, thus disease modifying treatments may only be relevant in early disease which is less easy to diagnose without validated and accessible disease biomarkers.

Conclusions
Translating basic science advances into clinical practice remains a major challenge, especially if these treatments are costly. The continuing challenge of raising awareness of the disease, in the medical community as well as in the general public, will determine the eventual impact new treatment for AD will have on clinical practice.

PL16

Date: Saturday 20 April 2013
Sessions: A Cure for Alzheimer's Disease by 2025? (Debate)

A CURE FOR ALZHEIMER'S DISEASE BY 2025?

H Feldman[1]
[1]S151 University of British Columbia Hospital, 2211 Wesbrook Mall, Vancouver Canada

Abstract
A goal of the National Alzheimer's Project Act (NAPA) is to "Prevent and Effectively Treat Alzheimer's Disease by 2025". Within this debate, Dr. Feldman will take the position that this goal is "not possible". The viewpoint, he will present will be shaped around recent concepts of the pathobiology of the disease as well as the increasing recognition of the multiple comorbid pathologies that occur in the aging brain which render the host susceptible to the clinical expression of disease.

There is emerging data verifying the hypothesis that the disease pathology builds up for as long as decades before clinical symptoms are present. It is also suspected that there is an early cascade of secondary events that may render the pathology irreversible. Furthermore, there are likely to be unique host susceptibilities to the cascade and the number of pathological hits needed to result in the clinical expression of disease. There are also frequently multiple comorbid pathologies in the aging brain that add to the cascade and to host susceptibility. This pathological cascade will make effective treatment challenging from many viewpoints. Interventions will be needed while individuals are asymptomatic and where the risk benefit ratio of treatment may be quite narrow. There will be important issues to consider in risks of treatment and costs over decades. Methodology and clinical trials approaches may need to shift to allow multiple points of intervention and a polytherapy approach which may be challenging. The treatment targets within an individual patient are likely to turn out to be far more complex than is appreciated today where AD is assumed to be a homogeneous disorder. Current evidence of genetic risk factors such as Apo E4 inform us that this assumption of biological homogeneity is also likely incorrect.

Each of these areas will potentially impact our ability to develop effective treatments along this 13 year timeline. Applying conservative estimates, it might be anticipated that phase 3 trials will require treatment periods of 5 years and recruitment periods of several years. This allows that research for an effective treatment to prevent AD by 2025 would need to be in hand within the coming 5 years to reach the goal. It is arguable that such a treatment is currently in hand or on the immediate horizon. In the instance of amyloid lowering treatments which are now being moved in prevention trials, there has been a failure to establish a proof of concept in the treatment of mild to moderate AD. It is unclear if the assumption around earlier intervention will be correct as the explanation for the clinically disappointing results. Other prime candidates beyond amyloid lowering treatments seem still a considerable ways off a 2025 timeline.

Nevertheless effective treatments for AD, continue to represent an enormous unmet need and there is a continued belief that research will be rewarded with progress in treatment and in clinical care before 2025, even if not achieving prevention.

OC001

Date: Friday 19 April 2013
Session: Epidemiology of Dementia

IDENTIFYING DEMENENTIA IN RURAL SOUTH AFRICA

K. E. Borochowitz [1,], S. O. Howell [2, 3]
[1]Medical School, University of Cape Town, [2]Executive Management, Dementia SA, [3]Management, Southern African Media and Gender Institute, Cape Town, South Africa

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: Little is known about the prevalence and impact of Dementia on the elderly living in low income and middle income countries (LAMIC) such as South Africa. The overall goal of this case study is to investigate the prevalence of Dementia in a semi-rural community in South Africa, and to determine the impact of the disease on individuals, carers and communities. The level of awareness and preparedness in LAMIC including South Africa is particularly low and data is limited. Where the disease and associated behavioural symptoms are poorly understood through lack of education, communities may ostracise those who are most vulnerable, thus giving them less support. In rural South Africa it is further complicated by the high prevalence of HIV. The CSI'D' has been designed for use in communities with low education and is not expected to produce floor effects, but data will be controlled for effects of age, gender and education level. The case study will expand on methods to gain informed consent of the elderly who may have cognitive impairment. Informed consent will be taken as described to take into account mental capacity or lack thereof. A certain amount of distress may occur for participants who are unable to answer cognitively-based questions or questions about their mood states, such as depression. The case study will show how researchers can be trained to cope with any distress . The case study investigates the results of the research and the benefit to communities through lobbying opportunities to government to allocate more resources to the older person's sector. The case study will take the form of a step by step approach of a relatively small but very active Non Governmental Organisation partnering with an internationally recognized academic institution of higher education in order to fulfill its mandate. It will also explore the actual partnership, its negotiation process and raising funds for the research to become a reality. Included in the case study will be highlighted the "ownership rights" to the research and the viability of such a partnership for future endeavors. A final note in the case study will include how gender was considered in this research at all platforms.

Disclosure of Interest: None Declared

OC002

Date: Friday 19 April 2013
Session: Epidemiology of Dementia

EPIDEMIOLOGICAL STUDY OF DEMENTIA (INCLUDING MILD COGNITIVE IMPAIRMENT) IN TAIWAN

M.-J. Chiu [1], Y. Sun [2,*], H. J. Lee [3], S. Yang [4], T. Chen [5], K. Lin [6], P. Wang [6], C. Lin [1], L.-Y. Tang [3]
[1]Department of Computer Science and information Engineering, Chang Gung University, [2]Department of Neurology, En Chu Kong Hospital, [3]Taiwan Alzheimer's Disease Association, [4]Taiwan Alzheimer's Disease AssociationTaiwan Alzheimer's Disease Association, [5]Department of Neurology, National Taiwan University Hospital, [6]Department of Neurology, Taipei Veterans General Hospital, Taipei, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Because of the increasing aging population in Taiwan, dementia has become a serious problem in healthcare. Dementia not only causes the handicap of patients but also leads to huge burden on their caregivers. However, reports about the prevalence of dementia in Taiwan in recent decade were limited. In this study, we aimed to investigate the prevalence of dementia and its comorbidities in Taiwan.

Methods: Computerized random sampling on the census data of 19 counties or cities in Taiwan was used to identify the sampling cases. Door-to-door survey was performed from January 2011 to Oct 2012 using structured questionnaire which includes demographic data, socioeconomic status, life style, comorbidities and results of mental tests. We calculated prevalence of patients with dementia or with mild cognitive impairment using Mini-Mental Status Examination and Clinical Dementia Rating as screening tools.

Results: A total of 5094 elderly people aged 65 years or more (mean age 74.65 +/-
 6.71, 52.5% women) were interviewed. Among all the 4891 participants with complete mental tests, the results of MMSE and CDR in 3264 (66.7%) persons were within normal limit, while 240 (5.3%) showed mild cognitive impairment, and 422 (8.6%) were found to be demented including mild dementia stage. The significant associated factors were age (p<0.0001), education (p<0.0001), comorbidities of diabetes (OR 2.1, 95% CI 1.2-3.5), cerebrovascular disease (OR 2.6, 95% CI 1.3-5.3) and gastritis or peptic ulcer (OR 1.5, 95% CI 1.1-1.9), while life style of taking tea habit (OR 0.7, 95% CI 0.5-0.9), regular exercise (OR 0.6, 95% CI 0.5-0.8) and participating social network (OR 0.6, 95% CI 0.4-0.9) were found to have benefit effects.

Conclusion: The preliminary data of this nationwide epidemiological survey showed the prevalence rate of mild cognitive impairment and dementia among the elderly in Taiwan were 5.3
% and 8.6% respectively. Some vascular risk factors might increase risk of mild cognitive impairment and dementia while maintenance of regular exercise and social network seem to have protective effects.

Disclosure of Interest: None Declared

OC003

Date: Friday 19 April 2013
Session: Epidemiology of Dementia

THE 10/66 STUDY AND ITS INFLUENCE IN CHINA
Y. Huang [1,*], Z. Liu [1], S. Li [1], C. Ferri [2], M. Prince [2]
[1]Institute of Mental Health, Peking University, Beijing, China, [2]Institute of Psychiatry, King's College London, London, United Kingdom

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: China, with over 1.3 billion citizens is the world's most populous country. The proportion of Chinese aged 65 and over will increase from 4% in 2000 to 14% by 2025 amounting to 200 million older people. Dementia in China tends to be a hidden problem. It is generally perceived to be part of normal ageing and not a health condition, and families rarely present to health services. Patients are ignorant of most cases in their community.

In recent years, the 10/66 Dementia Research Groups has conducted population-based surveys of dementia prevalence, incidence and impact in several low and middle income countries (LAMICs), and China is one of the project countries. The name "10/66" reflects the fact that about 66% of people with dementia live in LAMICs, while only 10% of the conducted research is based on these populations.

In 2000, a pilot study of the 10/66 project was launched in Beijing, China. In pilot stage, the main instruments of the 10/66 project were tested in Chinese culture and were proved their validity and reliability. Culture sensitive diagnose of dementia was also developed in this stage. From 2003 to 2004, a population-based cross-sectional survey was conducted in urban and rural Beijing, by using of the standardised instruments of the 10/66 project. A novel method of dementia case-finding using trained multi-purpose health workers as key informants was developed and evaluated. The prevalence of dementia was calculated and possible risk factors of dementia were identified. Other chronic conditions of the participants, as well as the information about health services use and informal care were collected in the base line study. A pilot intervention study for caregivers of dementia patients by using the strategies of 'Helping cares to care' was implemented among families with dementia patients. The dissemination of the intervention package is in process. From 2008 to 2009, a follow-up study was carried out to determine the cardiovascular risk, nutrition and dementia incidence in Beijing, China. From 2012 to 2014, a nested case control study has been funded to investigate the economic and social effects of care dependence in later life. A pilot study on 'Cognitive Stimulation Therapy' for dementia patients will be initiated in late 2012.

Findings from the series of 10/66 studies will influence the health policies for older population in China.

Disclosure of Interest: None Declared

OC004

Date: Friday 19 April 2013
Session: Epidemiology of Dementia

PREVALENCE OF MILD COGNITIVE IMPAIRMENT IN ELDERLY POPULATION OF NORTH INDIA

V. B. Singh [1,*], V. dabadghao [1], B. L. meena [1]
[1]geriatric, s.p medical college, bikaner, India

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: The field of ageing and dementia is focusing on the characterization of the earliest stages of cognitive impairment. Recent research has identified a transitional state between the cognitive changes of normal ageing and dementia, known as mild cognitive impairment (MCI)[1]. Prevalence rate of MCI varies between 0.5 and 36% depending on the diagnostic criteria used as well as demographic characteristic of studied population[2,3,4,5,]

Methods: It is a randomized urban population based study conducted in northwest part of India, Bikaner city. Kolkota cognitive test battery [8](based on consortium to establish a registry for Alzheimer's disease and Hindi mental state examination, HMSE) was used to evaluate 270 apparently non demented subjects. CDR scale and GDS scale were used to exclude severe cognitive impairment and dementia respectively.

Results: The total prevalence of MCI was 19.26%, the prevalence of amnestic MCI and multiple domains MCI was 7.78% and 11.48% respectively. The age group wise, sex wise and education group wise break up of prevalence rates of MCI types were not significant. People with memory complaint had aMCI and multiple domain MCI prevalence 20.45% and 25% respectively. In people without memory complaints, prevalence of aMCI and multiple domains MCI was 5.31% and 9.37% respectively.This was found to be statistically significant Prevalence of aMCI and multiple domain MCI in hypertensive elderly was 9.1% and 14.05% respectively,

Conclusion: Advancing age, low education level, hypertension, diabetes mellitus, chronic smoking, low socio–economic status were associated with higher prevalence of MCI in elderly. There was no significant difference in prevalence rates of MCI between sexes in our study.

References: 1. Peterson RC, Doodeg R, Kwiz A et al. Current concepts in mild cognitive impairment. Arch Neurol 2001; 58 : 1985 – 1992
        2. Ritchie K, Artero S, Touchon J. Classification criteria for mild cognitive   impairment: a population-based validation study. Neurology 2001; 56:37-42.
        3. Larrieu S, Letenneur L, Orgogozo JM, et al. Incidence and outcome of mild cognitive impairment in a population-based prospective cohort. Neurology 2002; 59 : 1594–1599.
        4. Ganguli M, Dodge HH, Shen C, DeKosky ST. Mild cognitive impairment, amnestic type. Neurology 2004; 63 : 115–121.
        5. Manly JJ, Bell-McGinty S, Tang MX, Schupf N, Stern Y, Mayeux R.   Implementing diagnostic criteria and estimating frequency of mild cognitive impairment in an urban community. Arch Neurol 2005; 62 : 1739–1746.

Disclosure of Interest: None Declared

OC005

Date: Friday 19 April 2013
Session: Epidemiology of Dementia

TIME PERIOD, BIRTH COHORT AND PREVALENCE OF DEMENTIA IN MAINLAND CHINA, HONG KONG AND TAIWAN

Y.-T. Wu [1,*], C. Brayne [1]
[1]Department of Public Health and Primary Care, University of Cambridge, Cambridge, United Kingdom

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Economic development and the change of social environment affect the living conditions of people and the health of different generations. In East Asia, dramatic societal changes in the last hundred years would be expected to influence the health of populations with important cohort effects. Because of extended life expectancy, the prevalence of dementia is expected to increase with time period as well as vary among different birth cohorts. The aim of this study is to explore the variation of dementia prevalence across different time periods and birth cohorts in mainland China, Hong Kong and Taiwan taking study methods into account.

Methods: 76 prevalence studies of dementia in mainland China, Hong Kong and Taiwan conducted and published since 1980 were identified and categorised into five groups: before 1990, 1990~1994, 1995~1999, 2000~2004 and 2005~2012 based on the year of investigation. The pooled estimates of these groups were calculated by meta-analysis model adjusting for diagnostic criteria and whole study age range. Birth cohort was inferred using the year of investigation and the 5-year age groups and categorised into five birth cohort groups: 1895~1909, 1910~1919, 1920~1929, 1930~1939 and 1940~1950. The corresponding prevalence in the birth cohort groups was extracted to estimate pooled prevalence of each group through meta-analysis. In order to consider the effect of changing diagnostic criteria, the estimation was separated into two groups: older (DSM-III/-III-R, ICD-10, CCMD and mixed) and newer (DSM-IV/-IV-R, 10/66 and GMS-AGECAT) criteria.

Results: After adjusting for diagnostic criteria and whole study age range, the prevalence of dementia fluctuated across 6 time periods and was estimated to older population aged 60 and over as 1.8%, 2.5%, 2.1%, 2.4% and 3.1% without differences reaching significance. With regard to cohort effects, prevalence increased from less recent to recent birth cohorts in the studies which used older diagnostic criteria and wider difference were more apparent in the over 70 age groups (n=49). However, there is no clear difference between birth cohorts which used newer diagnostic criteria (n=27).

Conclusion: These results indicate a potential effect of birth cohort but no clear effect of time period on the prevalence of dementia. Changing use of different diagnostic criteria inhibits examination of true cohort effects. Future patterns of prevalence need to be examined by longitudinal studies with the same survey designs and methods over time.

Disclosure of Interest: None Declared

OC006

Date: Friday 19 April 2013
Session: Epidemiology of Dementia

REGISTRATION OF ALZHEIMER'S DISEASE IN TAIWAN

W.-F. Wang [1], P.-Y. Chiu [2], Y.-T. Lin [3], J.-L. Fuh [4], C.-J. Hu [5], Y.-H. Yang [6,*]
[1]Neurology, Changhua Christian Hospital, Changhua, [2]Neurology, Lin-Shin Hospital, Taichung, [3]Neurology, Kaohsiung Verterans General Hospital, Kaohsiung, [4]Neurology, Taipei Veterans General Hospital, Taipei, [5]Neurology, Shung Ho Hospital, New Taipei, [6]Department of Neurology, Kaohsiung Municipal Ta-Tung Hospital, Kaohsiung, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: The present study attempts to establish a registry data of AD in Taiwan Chinese, using a simplified version of United States UDS (uniform data set). We aim to investigate the basic demographic background and analyze the characteristics and relationship of the caregivers and informant providers. We hope to provide the source of information and some basis for reference and resolve for the dementia care issues that may develop in the future in Taiwan.

Methods: A total of 691 AD patients currently taking cholinesterase inhibitors or NMDA receptor antagonists participated in the present registry study. The study subjects were recruited between October 1, 2010 to January 30, 2012 from seven hospital outpatient clinics in Northern, Central and Southern Taiwan. Data collected included demographic variables of the study subjects and the informants as well as patients' family history. Informed consent was signed by all family of the patients. The diagnosis of dementia was based on the Diagnostic and Statistical Manual of Mental Disorders, edition 4 criteria. All validated data were recruited into statistical analyses.

Results: Eighty-six percents of recruited patients required complete assistance for daily activities, most of the patients (95%) were under home care. The mean age of the AD patients was 80.3 ± 7.7 and education was 6.3 ± 5.1 years. The mean MMSE score was 13.2 ± 11.8. Nearly half of the patients (48%) lived alone or with a spouse. According to our data, the informants in most cases were different from the caregivers, with patients or spouses accounted for only 31% of all informants. For these informants, the mean age of the informants was 58.5 ± 13.7 with 11.8 ± 4.4 years of education, and 63% of the informants were females. The data suggested that the informants were mostly children, with majority of them being daughters or daughter-in-laws.

Conclusion: These are the new and update information of informant and current status of Alzheimer's disease in Taiwan. The information may highlight the direction and provide the information of further care of dementia.

Disclosure of Interest: None Declared

OC007

Date: Friday 19 April 2013
Session: Living with Dementia

LIVING AND SINGING WITH DEMENTIA
H. Terashima

Abstract
Two years have passed since East Japan Great Earthquake, when we appreciated many messages of encouragement from all over the world.

In addition to such a serious circumstance I have a dementia, although, I enjoy singing songs with my friends. The name of our singing group is Tsubasa in Japanese, meaning wings in English.

For seven years we have held meetings for persons with dementia from all over Japan, where we have chances to sing together. From my young days, I like singing, which makes me happy. Especially when I sing with friends, I am encouraged.

This is my first occasion to participate international meeting to meet with persons with dementia from the world. After ADI 2013, I would like to continue communicating with international friends. Singing will be the bridge between us. At the meeting in Taipei, I would like to sing "'O sole mio" for you. I hope singing gives great fun not only to me, but also you all.

OC008

Date: Friday 19 April 2013
Session: Living with Dementia

THE UNIQUE CHALLENGES OF YOUNGER ONSET DEMENTIA

K. Swaffer [1,*]
[1]Student, University of South Australia, Burnside, Australia

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: This presentation outlines the unique challenges of living with younger onset dementia. The inexorable changes incurred are seen by others as deficits or external symptoms, and so they seek only to treat the symptoms, or focus only on the deficits. Through the lens of my personal experience I will outline these challenges and their impact on not only the person diagnosed but the wider community. Usually the person is still in paid employment, they may have young children, their family income often halves as they become a single income family, and their health costs increase significantly. The negative impact, and the physical and emotional cost to their children, partner and older parents, as care givers, is significant. Their self esteem is negatively impacted as their valued roles are diminished or completely negated, which can increase issues such as depression and self esteem. Their travel costs increase. In many countries, there are minimal or no age appropriate services, therefore many of the Aged Care Accreditation Standards are currently being breached in the (Australian) residential aged care setting. The impact of the diagnosis of dementia is treated differently to other fatal diseases, making it a terminal illness without credentials. The most significant thing for people with younger onset dementia is the prescribed disengagement they are given, creating a malignant environment encouraging the person with dementia to give up trying to do things for themselves. Finally, strategies to assist these unique challenges will be defined.

Disclosure of Interest: None Declared

OC009

Date: Friday 19 April 2013
Session: Living with Dementia

MY LIFE WITH DEMENTIA
N. Baláčková

Abstract
Living with early onset dementia has many challenges. I have difficulties remembering things and find it difficult to think logically and plan things. I also get very tired and have lost some of my senses. However I fight to raise awareness about dementia in the Czech Republic and wherever I can.

The Czech Alzheimer Society holds meetings and provides support, however there is a lack of services for people with dementia in the Czech Republic. There are insufficient caregiver support groups and no opportunities for memory or cognitive training. There is a particular lack of facilities for people with younger onset dementia and homes for people with dementia only cater for people over the age of 60 years old. These are challenges that we must fight to overcome.

OC011

Date: Friday 19 April 2013
Session: Living with Dementia

ENUOYING LIFE WITH DEMENTIA
N.Lim, E.Tan

Abstract
Living with people with dementia is always full of surprises, even if that person is our own mother who gave birth and took care of us ...
As her children, we often get confused with her behavior that is always fickle, sometimes she was so cheerful that laughed out loud and sometimes she unusually lazy to get up so she does not wanna go to rest room or her chamois chair to pee and as a result the bed soaked with urine ...

However, we are endeavoring to help our mother on and on.
Mama often do not recognize us as her children, everyone regarded as a maid and called an aunt (bibi), but after chatting a little bit longer and we introduced ourselves then she began to recall her memories and start to connect but a moment later she began to forget again, that is what we are experiencing every days.
Sometimes we are sad to hear the questions coming out of her mouth "who are you? What is your name? Who is your parents?
But our sadness turned to joy by seeing her enjoy watching comedy on television, she can laugh out loud when she saw the funny shows on television.
and she also has another hobby that is eating, sometime for motivating her, we are using food, by showing her food, we are easily to aks her to do the activities we wanted as exercises, coloring or putting sticker on pictures.

OC012

Date: Friday 19 April 2013
Session: Living with Dementia

DEMENTIA AND THE IMPACT OF NOT DRIVING
K. Swaffer [1,*]
[1]Student, University of South Australia, Burnside, Australia

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: This contentious topic affecting people with dementia is discussed candidly in this presentation. It outlines the hidden impacts of not driving, which includes intense feelings of loss and grief, loss of independence and self-sufficiency, loss of mobility, loss of privacy, and feeling needy and burdensome. It causes an inequity in relationships and friendships, isolation, stigma, loneliness, guilt and tensions with others. For many with dementia public transport and taxis are too difficult to negotiate, and this mode of transport places stress on family members when used. The loss of a driver's license means the person with dementia is unable to participate socially at the same level, which negatively impacts their general sense of well being. The general definition of dementia is; "the gradual deterioration of functioning, such as thinking, concentration, memory, and judgment, which affects a person's ability to perform normal daily activities", which surely implies people diagnosed with dementia are not safe to continue to drive. If some days a person with dementia forgets how to make a cup of tea, or loses the car or doesn't know how to use the keys, then driving a 1 -2 ton vehicle that can travel up to 200 kms per hour could be seen as dangerous. Service providers, health professionals and governments must find ways to support, in non- threatening and constructive ways, how to address this issue, and find ways to support alternative transport options. This paper will open up a much needed Pandora's Box for future discussions.

Disclosure of Interest: None Declared

OC013

Date: Friday 19 April 2013
Session: Support and Training for Informal and Professional Carers

U-FIRST! A TRAINING PROGRAM PERSONS CARING FOR PEOPLE WITH ALZHEIMER'S DISEASE OR OTHER DEMENTIAS

C. Conway [1,*]
[1]Quality Management & Education, Alzheimer Society of Ontario, Toronto, Canada

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: When we ask people who work or live with people who have dementia about the number one difficulty they face as a care provider, the answer is always challenging behaviour, such as aggression, wandering, physical resistance or agitation.
We call this behaviour "responsive," because it is not unpredictable, meaningless aggression or agitation but is due to circumstances related to the person's condition or a situation in his or her environment. People with responsive behaviours and their caregivers need high levels of support. One of the changes that many caregivers have difficulty with is a change in the person with dementia's behavior. U-First! is based on an approach where we need to understand the person's behavior. The term "responsive" behaviour helps us to see that the individual is responding to something negative, frustrating, or confusing in the person's environment. It helps us see that the reasons or triggers for challenging behaviours may be external, rather than within, the individual. This approach recognizes that problems in the social or physical environment can be addressed and changed.
U-First! is a proven training program for dementia health-care providers working in community care, acute care and long-term care. It focuses specifically on helping care providers understand and respond to the challenging behaviors often associated with dementia. The number of Canadians with dementia in Canada is projected to triple within a generation. The need for training and education about how to care for people with dementia is escalating daily.U-First! is a proven and effective approach to working with people with dementia. Through dialogue and a case-based approach, learners will have more confidence in working with people with responsive behaviours.Training is especially designed for people working in community care, acute care, and long-term care. U-First! was introduced in Ontario, Canada. To date, almost 8,500 individuals have been trained in the day long U-First! A one-day (6 hours) or two 3-hour workshops will train care providers in U-First! provides the following benefits:
- Increased awareness of the causes of behaviour in people with dementia
- Improved ability to handle situations that arise
- Increased teamwork with other staff
- Increased professionalism
- Increased ability to prevent aggression

Disclosure of Interest: None Declared

OC014

Date: Friday 19 April 2013
Session: Support and Training for Informal and Professional Carers

A PSYCHOSOCIAL CARE MODEL FOR BOTH DEMENTIA PERSONS AND CAREGIVERS

S. M. Kan [1,*]
[1]Heartfelt Care Pte Ltd, Singapore, Singapore

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: Singapore is the world's third fastest aging nation. This means a rapid increase in the number of dementia patients. Currently, there are 22,000 people with dementia in Singapore. By 2020, the number will be double or even more. However, we will need to significantly increase services for these dementia persons as well as their caregivers.

Heartfelt's Psychosocial Care Model caters CARE for both the dementia person and their caregivers. The model includes social and behavioural approaches through meaningful activities with the dementia person and Rapport Building being its key task. Its motto of 4'P's: PASSION - for dementia person & caregivers PERCEPTION - understand & accept dementia condition PATIENCE - for dementia person PERSEVERANCE - in caring & intervention.

This model would help people with dementia to: (a) Tailor their needs, based on their strengths/skills, preferences and maintain independence as much and as long as they can achieve (b) Maintain their dignity, spirit and commitment (c) Enhance their quality of life (d) Delay their institutionalization needs.

This model also aims to help caregivers to:
(a) Increase their awareness and understanding about dementia
(b) Motivate, come to term and accept the dementia persons with positive emotions
(c) Provide respite sitter service so to allow them to run errands or pursue personal commitments
(d) Be equipped with knowledge and skills caring their dementia persons.

In addition, a Psychosocial Assessment will be used to engage and assess the abilities of the dementia persons in areas of social, cognitive and behavioural according to their needs. Quarterly evaluation will be conducted to monitor the progress of the dementia person. A Quarterly Report will be submitted to caregivers with the purpose to keep caregivers updated about the progress of their dementia loved one. There will be initiatives to enhance caregivers in the application of appropriate interventions in caring their dementia loved one.

Singaporeans though not all, are bilingual. Most speak English and another language, most commonly Mandarin, Malay, Tamil. However the older Chinese will speak dialects such as Hokkien, Cantonese etc . There will definitely be challenges for caregivers who are foreign maids in communicating effectively with the dementia persons. Hence, person-centered training is significantly important for these caregivers in their effective caring and training for the dementia persons.

Disclosure of Interest: None Declared

OC015

Date: Friday 19 April 2013
Session: Support and Training for Informal and Professional Carers

EFFECT OF ONLINE COUNSELLING ON CAREGIVERS OF PEOPLE WITH DEMENTIA TO ENHANCE THEIR SELF-EFFICACY AND IMPROVE PATIENT'S BEHAVIORAL AND PSYCHOLOGICAL SYMPTOMS OF DEMENTIA

T. Kwok [1,2] on behalf of Jockey Club Centre for Positive Ageing, A. Au [3], D. Ho [1], I. Ip [1], B. Wong [1,*], V. Mak [1], F. Ho [1]
[1]Jockey Club Centre for Positive Ageing, [2]Department of Medicine & Therapeutics, The Chinese University of Hong Kong, [3]Department of Applied Social Sciences, The Hong Kong Polytechnic University, Hong Kong, Hong Kong

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: An online counseling program 'ADCarer' has been developed specifically for family caregivers of people with dementia who are less accessible to in-person psychoeducational interventions. This pilot study aimed to investigate the benefits of the program on the caregivers in terms of their caregiving self-efficacy and handling patients' behavioral and psychological symptoms of the dementia (BPSD).

Methods: Twenty-six family caregivers of dementia patients participated in the online counseling program 'ADCarer' between January and August 2012. Caregivers went through eight weeks of cognitive behavioral therapy (CBT), during which they could contact a counselor through an online chatroom whenever they would like to seek help. The counselor would reply in 48 hours to provide suggestions and advice to the caregivers in handling BPSD of their care recipient as well as their own emotions.

Outcome measures included two domains of the Revised Scale for Caregiving Self-Efficacy (RSCSE), namely responding to disruptive behaviors (SE-RDB), and controlling upsetting thoughts (SE-CUT). BPSD of patients and caregiver distress were assessed by the Neuropsychiatric Inventory Questionnaire (NPI-Q). The Chinese version of the scales was used. Caregivers completed the assessments before and after the program; Wilcoxon Signed Rank Tests were used to compare the differences between baseline and after intervention.

Results: After participating in the online counseling program, total score in NPI-Q (12-item) reduced significantly ($p = .003$, two-tailed). Similarly, caregiver distress score (12-item) decreased significant ($p = .012$, two-tailed). No significant change was found in caregiving self-efficacy.

Conclusion: An eight-week online counseling program 'ADCarer' for family caregivers of dementia reduced behavioral problems in older people with dementia and family caregiver stress.

Disclosure of Interest: None Declared

OC016

Date: Friday 19 April 2013
Session: Support and Training for Informal and Professional Carers

HOUSE HOLD BURDEN OF DEMENTIA – A JIG-SAW PUZZLE : EXPERIENCE FROM INDIA

S. Bharath [1,], G. rao [2], V. R [3], S. Cyriac [3]
[1]Department of Psychiatry, National Institute of Mental Health & Neurosciences, Bangalore, [2]Deoartment of Epidemiology, NIMHANS , Bangalore , [3]Department of Psychiatry, NIMHANS , Bangalore, India

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: There are more than 3.7 million persons with dementia, in India. Health care and social welfare are not equitable across socioeconomic classes in most LAMIC countries including India. With the rapidly changing demography of the country, the economic burden of this chronic condition of old age gains significant relevance in the present and near future. Hence a study was done to understand the household burden of families with dementia. A study was conducted to understand the   financial burden of a household in caring for a PwD.

Methods: It is a hospital based study from the special clinic of Geriatric Services of the National Institute of Mental Health & Neurosciences (NIMHANS), a premier government run hospital in Southern India. The PCGs of 50 PwDs who were in treatment for dementia for over a year were interviewed in detail about their perception and assessment of the cost of care for dementia.

Results: Among the 50 PwDs 31 were males and 19 were females. The mean age of the PwDs was 65.7 ± 8.4years. PCGs were predominantly spouses, mostly women (82%) including daughter in laws and daughters. Almost all of them were house wives and did not work for a salary outside the house; but spent significant proportion of their day assisting and supervising the daily and instrumental activities of PwD. Only 6 of them (12%) of them received minimal financial assistance as social welfare from the state. Others were dependent on their family and relatives for sustenance and care of the PwD. The care-givers were able to provide medical cost that included consultations and medication. Only 2-3 of them were able to afford professional care givers and could provide care cost. The rest of the care givers had difficulty in understand the concept of 'cost of care', 'opportunity cost' ' willingness to pay' and other economic terms of assessment of financial burden. The PCGs were able to provide the estimate of Loss of Pay on the day of the visit to be INR. 645 ± 493. The cost of the visit including medication was INR 2863 ± 1934

Conclusion: The presentation will focus on the issues the authors had to address for the assessment of the household financial burden of PwD.

References: 1. Institute of Health Economics (2010) The cost of Mental Health and Substance Abuse Services in Canada – A report, Alberta, Canada

Disclosure of Interest: S. Bharath Grant/Research Support from: Research Grant from the Educational Division of Sanofi , G. rao: None Declared, V. R: None Declared, S. Cyriac: None Declared

OC017

Date: Friday 19 April 2013
Session: Support and Training for Informal and Professional Carers

NEW TRAINING PHILOSOPHY IN FINNISH DEMENTIA CARE

S. Aavaluoma [1,], R. Soisalo [1]
[1]The Finnish Institute of Psychology, Helsinki, Finland

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: Objectives
The purpose of this paper is to present a new innovative four level training program for social and healthcare professionals in the Finnish dementia care system. Memory related illnesses have been recognized as illnesses that effect the whole family. Regardless, it is still rare that the social and health care professionals have sufficient knowhow to work with the whole family and assist families with the psychological challenges of dementia. The unmet needs of the families challenge the professionals to achieve a new level of psychosocial skills in every level of professionals.
Methods
The Finnish Institute of Psychology combines the psychosocial methods, psychotherapeutic knowledge and the latest findings in research regarding memory illnesses to a new training program in dementia care. We have developed a training program of four phases.
       1. Basic training : One year training program of memory counselors including 14 theory seminars including preventive work and brain health, the diagnostics and treatment, the latest research, learning the use of tests (Cerad, MNA, MOCA, GDS etc,), the psychological challenges of lethal illnesses, basics of family work, the rehabilitation and the end of life care. This year includes also a lot of reading and litteral work.
       2. One year advanced memory counselors training deepening the themes of the basic training and using the skills in care. This program starting 2013, includes theory seminars, documenting practical training, supervision, exams, tests and writing essays to guaranteeing the level of professional skills and knowledge to those who pass the course.
       3. A four day course for the superior and head nurses. This course includes leadership skills, supporting the staff in challenging questions regarding dementia care and taking the responsibility of developing psychosocial support and the art of good care in their units.
       4. Psychosocial interventions: One year training for professionals who have attended levels 2 or 3. Theory and practice of working with families and groups for patients and caretakers. The process includes theory seminars, supervision, reading literature and writing essays.
Results
Since 2011 we have started 12 training groups in nine Finnish cities. 103 health care professionals are attending the basic program at the moment, 69 have graduated.

Disclosure of Interest: None Declared

OC018

Date: Friday 19 April 2013
Session: Support and Training for Informal and Professional Carers

EARLY PSYCHOSOCIAL INTERVENTION TO DELAY INSTITUTIONALIZATION OF PATIENTS WITH ALZHEIMER'S DISEASE - A RANDOMISED CONTROLLED TRIAL (ALSOVA)

A. Koivisto [1,*], I. Hallikainen [1], T. Hänninen [2], M. von und zu Fraunberg [3], K. Hongisto [1], A. Hiltunen [4], P. Karppi [5], J. Sivenius [1], H. Soininen [1]
[1]Neurology, University of Eastern Finland, [2]Neurology, [3]Neurosurgery, Kuopio University Hospital, Kuopio, [4]Neurology, Joensuu Central Hospital, Joensuu, [5]Geriatry, Mikkeli Central Hospital, Mikkeli, Finland

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: To assess the efficacy of an early psychosocial counseling intervention for outpatients with mild Alzheimer's disease and their caregivers to delay nursing home placement of patients with Alzheimer's disease.

Methods: Totally 240 patient-caregiver dyads living in three municipalities in Finland were recruited to a prospective, randomized, and controlled rehabilitation ALSOVA study. Inclusion criteria for the patients were ≥65 years of age, very mild (clinical dementia rating, CDR 0.5) or mild (CDR 1) Alzheimer's disease, informed consent and a family caregiver. Eligible patient-caregiver pairs were randomized to one of two groups. The intervention group received usual care and additional intensive psychosocial courses during the first 2 years after diagnosis. The other group received only the usual care. A primary outcome was the effect of the intervention on risk of institutionalization during the three years of follow up. In addition, following secondary outcome measures were sociodemographic factors, cognitive function, behavioral symptoms, activities in daily living, specific health conditions, medication, health and social care resource utilization, generic quality of life, and Alzheimer's disease specific quality of life were collected at each interview. Difference in risk of institutionalization between the randomized groups was evaluated by a hazard ratio from a Cox regression model. The research ethics committee of the University of Kuopio and Kuopio University Hospital gave approval to carry out the study.

Results: After 36 months of follow-up totally 18% of patients with AD were dead and around 33% of them were institutionalized. Cox proportional hazard model's log-rank test indicated statistically non-significant (p=0.39) difference between groups in risk of institutionalization.

Conclusion: Intensive psychosocial intervention for patients with mild Alzheimer's disease and their caregivers did not manage to delay time to institutionalization. Even if, the ALSOVA study did not manage to show statistically significant difference between the study groups, it provides the valuable dataset for studying of long-term disease progression and its consequences for patients with Alzheimer's disease and their caregivers.

Disclosure of Interest: None Declared

OC019

Date: Friday 19 April 2013
Session: Quality of Life

THE ASSOCIATION BETWEEN COGNITIVE DOMAINS AND FALL RISK IN THE ELDERLY

H. Fu [1,*], J.-H. Chen [1, 2], Y.-C. Chen [1, 3, 4]
[1]Graduate Institute of Epidemiology and Preventive Medicine, National Taiwan University, [2]Department of Geriatrics and Gerontology, National Taiwan University Hospital, [3]Research Center for Genes, Environment and Human Health, [4]Department of Public Health, National Taiwan University, Taipei, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Previous studies have focused on the physical factors and fall risk in the elderly. However, the cognitive function may affect fall risk via its influence on thinking and behavior. This study was aimed to explore the association between individual cognitive domain and fall risk.

Methods: This is a cross-sectional study and 223 elders have been recruited at National Taiwan University Hospital between September 2011 and August 2012. Elders with a history of dementia, stroke, and terminal illness were excluded. A questionnaire was administered to collect information on demography, fall and disease history, etc. Validated psychological tests were applied to measure various domains of cognitive function, including visuospatial function, verbal fluency, executive function, attention and memory. Among various cognitive domains, time to complete Trail Making Test A (executive function) and number of fish categories named within one minute (verbal fluency) were retained after model selection. In addition, stratification analysis by body mass index (BMI) and hypertension was performed to clarify how these factors modified the association above.

Results: Fifty-two (22.9%) participants had $\geqq 1$ fall events in the past year. Increased time to complete Trail Making Test A was significantly associated with the risk of fall in the past year [adjusted odds ratio (AOR) = 1.02, 95% confidence interval (CI) = 1.01-1.04, p = 0.005). After stratification, this association became more evident (AOR = 3.64, 95% CI =1.10-11.99, p = 0.034) among elderlies with high BMI ($>=24$ kg/m^2) or without hypertension (AOR = 3.17, 95% CI = 1.00-10.01, p=0.050). In contrast, number of fish categories named within one minute was not related to the risk of fall in the past year (AOR = 1.01, 95% CI = 0.99-1.22, p = 0.074). BMI and hypertension status did not modify the association above (p interaction > 0.05).

Conclusion: Elevated executive function was the only cognitive domain significantly associated with decreased risk of fall, especially among elderlies with high BMI or without hypertension. Our findings provide important information on predicting fall risk in the elderlies via using validated cognitive assessment tools.

References: Fabre, J. M., Ellis, R., Kosma, M., & Wood, R. H. (2010). Falls risk factors and a compendium of falls risk screening instruments. *Journal of Geriatric Physical Therapy, 33*, 184–197.
World Health Organization. (2007). *WHO global report on falls prevention in older age*. Geneva, Switzerland: WHO Press.

Disclosure of Interest: None Declared

OC020

EVALUATION AND COMPARISON OF FOUR DIFFERENT CARE-GIVING APPROACHES AND THEIR AFFECT ON DEPRESSION, CARE BURDEN AND GENERAL HEALTH OF DEMENTIA CARE-GIVERS IN IRAN

L. Hafarian [1], A. Hoseinkhan [2], F. Jazayeri [3], M. Salehi [4], F. Farin [5,*]
[1]Head of education and research, [2]Support group facilitator, [3]Social worker, [4]Managing Director, [5] PR Coordinator, Iran Alzheimer Association, Tehran, Iran, Islamic Republic Of

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: The goal was to evaluate and compare four different methods of care and their affect upon depression, care burden and general health of dementia family care-givers using 24 hour care without support, 24 hour care including participation in support groups, having professional help and support and using day centre as means of intervention in care.

Methods: Random selection was made from the list of family care-givers available in IAA. They were asked to complete 4 questionnaires including demographic items, depression (BDI), general health (GHQ-28), care burden (CBI). For data analysis one- Way ANOVA and Scheffe were applied.

Results: There were significant differences between the degree of depression among family care-givers using different approaches ($P<0.05$). The findings showed that the differences were apparent between two groups: family care-givers using 24 hour care including participation in support groups and family care-givers using 24 hour care without support. The former have less depression. In addition, the results showed that there were no significant differences on general health and care burden among the four groups.

Conclusion: The degree of depression, general health and care burden were not affected by interventions being day centre and professional help, Since the care-givers' role continues through 24 hours. The findings, also, showed that coping strategies and information about Alzheimer's disease can reduce depression but participation in support groups had no affect on general health and care burden.

Disclosure of Interest: None Declared

OC021

Date: Friday 19 April 2013
Session: Quality of Life

EXPRESSED EMOTION IN FAMILY CAREGIVERS OF DEMENTIA PATIENTS IN TAIWAN

C.-Y. Li [1,], S.-M. Chao [1]
[1]School of Nursing, Fooyin University, Kaohsiung, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: The purpose of this study was to examine the relationship between Expressed Emotion (EE) and depressed mood in caregivers of elderly persons with dementia in Taiwan. More specific purposes included examining the relationship between different types of family caregivers' depressed mood and EE for elderly persons with dementia.

Methods: 65 primary caregivers of elderly persons with mild to severe dementia were recruited from affiliated institutions in Taiwan and completed the Level of Expressed Emotion (LEE) Scale & the Center for Epidemiologic Studies-Depression Scale (CES-D).

Results: Most of subjects were female (N=47; 72.3%), married (N=58; 89.2%), received a high school education or less (N=43; 65.7%), unemployed (N=48; 73.8%), have the household income of less than NT$ 39,999 per month (N=34; 52.3%) and were taking care their own parents (N=37; 56.9%). Results revealed that EE and depressed mood (r=.518; p<.001) in caregivers were significantly related for the total sample. The greater the caregivers' depressed mood, the higher was their expressed emotion. Sub-analyses by type of caregiver revealed significant relationships between LEE and CES-D for all caregivers except daughters-in-law. There was also a significant relationship between EE and depression by severity of dementia: Caregivers of more demented patients had a significantly higher relationship between LEE and CES-D than caregivers of less demented family members.

Conclusion: More depressed caregivers are at greater risk for verbally or behaviorally lashing out toward their elderly demented family members. This may be particularly true for caregivers of severely demented family members and argues for screening of caregivers' depressed mood and/or EE. Additional research is warranted with a larger sample.

Disclosure of Interest: None Declared

OC022

Date: Friday 19 April 2013
Session: Quality of Life

WEIGHT LOSS IN ALZHEIMER'S DISEASE PATIENT AND THE ZARIT SCORE OF THEIR CAREGIVER.
L. Alouane [1,*] and Ilhem Karoui – Yusra Khalfallah – Hatem Briki
[1]nutrition, national Institute of Nutrition, Tunis, Tunisia

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Alzheimer disease (AD) is a growing health issue, 35 000 people are currently affected in Tunisia. This disease is associated with cognitive and behavioral disorders and, frequently, with nutritional disorders such as weight loss and eating disorders.
In the first part of this study, we describe weight loss in AD and its determinants. In the second part, we evaluated the influence of eating disorder patients on caregiver burden.

Methods: we followed, for two years, a group of 36 patient-caregiver pairs recruited from among the acceding Association Alzheimer Tunisie
All patients underwent a nutritional, neuropsychologic, and functional evaluation. The Zarit scales were used to assess caregiver burden and caregiver reactions to the patients' behavioral and autonomic disorders.

Results: we found weight loss in 73% of patients. According to the MNA (Mini Nutritional Assessment) test, 65% are malnourished. Zarit score at the beginning of the study was on average 36, two years after the score rose to 49. Caregivers who were taking care of a patient with an eating disorder have Zarit score significantly higher. On the other hand, we found that 53% of caregivers have developed health problems and 33% have also lost weight.

Conclusion: program nutritional care for patients and support for caregivers can improve the health of the patient and the caregiver.

Disclosure of Interest: None Declared

OC023

Date: Friday 19 April 2013
Session: Quality of Life

FAMILY CAREGIVERS' LIFE ORIENTATION BASED ON THEIR DIARIES

T. Välimäki [1,*], K. Vehviläinen-Julkunen [1], A.-M. Pietilä [1], A. Koivisto [2]
[1]Nursing Science, University of Eastern Finland, [2]Unit of Nuerology, Institute of Clinical Medicine, Kuopio, Finland

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: We report the study describing the onset of Alzheimer's disease (AD) with regard to the lives of family caregivers. The aim was to describe family caregivers' life orientation and changes in their life orientation during the first year after AD diagnosis. This study is part of a five-year prospective randomized controlled AD rehabilitation study by ALSOVA. The salutogenic approach to health focuses on life orientation, and views life as structured, manageable and meaningful.

Methods: The data were obtained from family caregivers' unstructured diaries (n = 83), which they wrote for six months after the diagnosis, during the period from 2002 to 2004. The data were collected during the first year of the ALSOVA study, before any interventions. The diaries were analyzed using qualitative content analysis.

Results: Family caregivers face challenges in their life orientation after the onset of their family members' AD. Family caregivers face multiple challenges in the process of becoming caregivers. Family caregivers' personal milieu, familial cohesion and conception of the future consequentially change. This process starts before the diagnosis of AD and has an impact on their future.

Conclusion: The process of becoming a caregiver should be recognized as starting before the AD diagnosis. Family caregivers' health should be assessed at the time of AD diagnosis.

Disclosure of Interest: None Declared

OC024

Date: Friday 19 April 2013
Session: Quality of Life

RISK OF DYING FROM ASPIRATION PNEUMONIA IN PATIENTS DIED WITH ALZHEIMER'S DISEASE AND RELATED DEMENTIA IN US AND TAIWAN: AN ANALYSIS OF MULTIPLE-CAUSE MORTALITY FILES

T.-H. Lu [1,*], M.-C. Pai [2]
[1]Department of Public Health, National Cheng Kung University, [2]Department of Neurology and Alzheimer's Disease Research Center, National Cheng Kung University Hospital, Tainan, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Dysphagia is common in patients with Alzheimer's disease and related dementia (ADRD) and will increase risk of aspiration pneumonia (AP) and mortality. The aim of this study was to determine the frequency of reporting AP as a cause of death among death certificate with mention ADRD in US and Taiwan.

Methods: We used multiple-cause mortality files for years 2002-2009 to identify death certificates with mention ADRD (ICD-10 code G30 or F03) and AP (ICD-10 code J69) for analysis. The adjusted odds ratio (OR) and 95% confidence interval (95% CI) of reporting AP by year, sex and age was estimated based on multiple logistic regression models.

Results: The frequency of reporting AP on death certificate with mention ADRD was 6.0% (120,034/2,002,957) in US and 3.6% (330/9143) in Taiwan. The OR (95% CI) of reporting AP in 2008-09 versus 2002-03 was 0.72 (0.70-0.75) in US (5.0% versus 6.9%) and 0.86 (0.63-1.17) in Taiwan (3.5% versus 3.9%). The OR (95% CI) among male deceased versus female deceased was 1.78 (1.76-1.80) in US (8.4% versus 4.8%) and 1.71 (1.36-2.14) in Taiwan (4.5% versus 2.8%). The OR (95% CI) among deceased aged 85 years or above versus deceased aged 65-74 years was 0.84 (0.82-0.86) in US (5.5% versus 7.5%) and 1.27 (0.86-1.89) in Taiwan (3.6% versus 3.2%).

Conclusion: Assume that the underreporting bias did not change during the study period in two countries, the risk of dying from AP in patients with ADRD decreased with years and was higher among males in both countries. Efforts are needed to further reduce the number of deaths from AP, an avoidable cause of death.

Disclosure of Interest: None Declared

OC025

Date: Friday 19 April 2013
Session: New and Future Treatments

SITE-SPECIFIC AMYLOID-BETA VACCINE FOR IMMUNOTHERAPY OF ALZHEIMER'S DISEASE

S. Lynn [1,*], C. Y. Wang [2], C. L. Finstad [2], S.-N. Hsu [1], Y. Kao [1], C.-F. Wu [1], P.-N. Wang [3], M.-J. Chiu [4]
[1]United Biomedical Inc., Asia, Hsinchu, Taiwan, [2]United Biomedical Inc., New York, United States, [3]Department of Neurology, Taipei Veterans General Hospital, [4]Department of Neurology, National Taiwan University Hospital, Taipei, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: To evaluate the safety, tolerability, immunogenicity, and efficacy of UBITh[®] AD Immunotherapeutic Vaccine (UB-311) in patients with mild to moderate AD

Methods: UB-311 contains the N-terminus of amyloid-beta peptide ($A\beta_{1-14}$) synthetically linked to proprietary T helper (Th) epitopes (UBITh[®]), devoid of the toxic effects observed with autologous Th epitopes in patients receiving the AN-1792 vaccine (aggregated $A\beta_{1-42}$, Elan/Wyeth). Nineteen patients with mild to moderate AD were enrolled in a Phase I trial to receive three intramuscular doses of UB-311 at weeks 0, 4, and 12 and followed until week 48. Incidence of adverse events (AEs) and serious AEs was the main safety evaluation parameter. Immunogenicity was assessed by an $A\beta$ enzyme Immunoassay (EIA) while the efficacy by several neuropsychological tests.

Results: UB-311 was found to elicit antibodies with specificity to $A\beta_{1-14}$ in all 19 patients without causing any serious or intolerable adverse events. A subset of older subjects with mild AD (n = 6; age ≥60 years with baseline MMSE ≥ 20) showed both high antibody responses to UB-311 and improved neuropsychological outcomes as indicated by decreased AD Assessment Scale-Cognitive (ADAS-Cog), stabilized Mini-Mental State Exam (MMSE), and improved AD Cooperative Study-Clinical Global Impression of Change (ADCS-CGIC) scores when compared to baseline during the 48-week period.

Conclusion: Active immunotherapy of AD with UB-311 has demonstrated to be safe and well tolerated in patients with mild to moderate AD in the Phase I trial. It elicited and maintained high titers of $A\beta_{1-14}$-specific antibodies in all 19 subjects. Subgroup analyses showed that UB-311 is most effective in older subjects with mild AD. A planned Phase IIa trial will use biomarkers to evaluate whether active immunization with UB-311 can slow the progression of disease in patients with mild AD by increasing and maintaining anti-$A\beta_{1-14}$ antibodies in circulation, presumably to reduce the concentration of toxic $A\beta$ oligomers in brain.

Disclosure of Interest: None Declared

Date: Friday 19 April 2013
Session: New and Future Treatments

LESS EDUCATION PREDICTS ANTICHOLINSTERASE DISCONTINUATION IN RURAL AND REMOTE PATIENTS WITH DEMENTIA

A. Kirk [1,*], S. Saleh [1], D. G. Morgan [2], C. Karunanayake [2]
[1]Neurology, [2]Medicine, University of Saskatchewan, Saskatoon, Canada

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: We investigated patient socio-demographic, clinical and functional factors predicting cholinesterase inhibitor discontinuation by patients presenting to a rural and remote memory clinic in Saskatoon, Saskatchewan.

Methods: Data collection began in March 2004 at the Rural and Remote Memory Clinic where family physicians referred their non-institutionalized patients. Neurological and neuropsychological assessment, patient and caregiver questionnaires provided the socio-demographic, clinical and functional variables. Univariate logistic regression analysis was used to examine possible associations between each independent variable and the binary outcome variable of treatment discontinuation. Multivariate logistic regression was used to determine predictors of cholinesterase inhibitor discontinuation within 6 months of drug initiation.

Results: Our sample consisted of the first 63 patients (60.3% female) for whom we prescribed a cholinesterase inhibitor. The mean age at clinic day was 74.56 years (SD=7.78). We found that years of formal education was the only variable significantly associated with cholinesterase inhibitor discontinuation by 6 months. The more years of formal education, the lower the rate of drug discontinuation by 6 months.

Conclusion: Likelihood of cholinesterase inhibitor discontinuation by 6 months was predicted by fewer years of formal education.

Disclosure of Interest: None Declared

OC027

Date: Friday 19 April 2013
Session: New and Future Treatments

MULTISCALE GENE NETWORK REMODELING IN ALZHEIMER'S DISEASE

B. Zhang [1,*], C. Gaiteri [2], L.-G. Bodea [3], Z. Wang [2], E. Schadt [1], H. Neumann [3], J. Zhu [1], V. Emilsson [4]
[1]Mount Sinai School of Medicine, New York, [2]Sage Bionetworks, Seattle, United States, [3]University of Bonn, Bonn, Germany, [4]Icelandic Heart Association, Kopavogur, Iceland

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: There are no effective therapies available that can halt or reverse late-onset Alzheimer's disease (LOAD), which is in large part due to the complexity and elusiveness of LOAD pathogenesis. Therefore, new approaches are needed to boost the probability of identifying the causal genes and pathways. In light of this, we have developed a multiscale network-based approach to uncover gene modules and single gene targets causally related to LOAD.

Methods: In this study, we conducted an integrative multiscale network-based analysis of DNA and mRNA data in 1647 post-mortem tissues from multiple brain regions of subjects diagnosed with LOAD and normal disease-free controls.

Results: At the coarse level of inter-gene correlation, multi-tissue gene co-expression networks[1-2] were constructed to capture both intra- and inter-tissue gene-gene interactions simultaneously, thus presenting a global picture of the gene-gene interactions in LOAD. A massive remodeling of gene modular structures in LOAD was observed and quantified through a differential network analysis and was then coupled to an integrative network-based analysis to objectively rank order gene modules for relevance to LOAD pathology. At the finer level of gene-gene regulation, we reconstructed causal probabilistic Bayesian networks[3] to identify key causal regulators[2,4] of the differential connectivity we observed. This multiscale network-based analysis reveals that major gene modules enriched for immune response, glutathione transferase activity and nerve ensheathment related categories are the top ranking with respect to LOAD pathology. We further experimentally validated a predicted key driver of the immune response and microglia activation pathways in LOAD by demonstrating its involvement in amyloid-β turnover and neuronal damage as well as its capability of regulating its downstream targets.

Conclusion: Our multiscale human brain transcriptional networks represent the global landscape of the molecular interaction structure and provide a rich platform for objectively identifying key pathways and genes involved in LOAD. In summary, our systems approach offers novel molecular insights into the neurodegenerative processes underlying LOAD.

References:
1 Emilsson, V. et al. Nature 452, 423-428.
2 Wang, I. M. et al. Mol Syst Biol 8, 594.
3 Zhu, J. et al. Nat Genet 40, 854-861.
4 Yang, X. et al. Genome Res 20, 1020-1036.

Disclosure of Interest: None Declared

OC028

Date: Friday 19 April 2013
Session: New and Future Treatments

RATIONALE AND TRIAL DESIGN CONSIDERATIONS FOR ADJUNCTIVE PHASE 3 PROGRAM FOR TAU-BASED DISEASE MODIFYING TREATMENT WITH LMTX(TM) IN CHINA

C. M. Wischik [1, 2,*], J. Hardlund [3]
[1]Chairman, TauRx Therapeutics, [2]University of Aberdeen, [3]Chief Medical Officer, TauRx Therapeutics, Aberdeen, United Kingdom

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: TauRx has initiated a global Phase 3 program targeting the Tau pathology responsible for neurofibrillary degeneration in Alzheimer's disease (AD) using LMTX[TM], an improved version of methylthionine (MT). The studies aim to confirm findings from a large UK / Singapore Phase 2 trial in 321 patients in which MT (138 mg/day) reduced disease progression by 90% over 24 months (ADAS-cog) and eliminated functional decline on brain scans. An analysis of the rationale and design of an adjunctive study is aimed at making Tau-based treatment with LMTX[TM] available in China.

Methods: Age-specific prevalence of brain Tau pathology in China was estimated based on Braak stage transition probabilities. Analysis of power for a disease-modifying treatment requires two random variables: expected rate of placebo decline and anticipated effect size. A meta-analysis of all publically available placebo decline data for ADAS-cog was collected to estimate within-trial and between-trial variance. A repeated measures linear mixed model with unstructured correlation matrix without imputation was applied to the Phase 2 data to derive an estimate of effect size relevant to Phase 3.

Results: 117 million people in China are estimated to be at Braak stage 1 of Tau pathology, with peak age 45 - 60 and risk of further progression leading to dementia. Another 42 million people are at stage 2, 34 million at stage 3, and 18 million at stages 4 – 6 (associated with overt clinical dementia). These numbers will increase by 1.5x (stage 1) – 3.2x (stages 4 – 6) by 2050. Measurement of absolute effect size in the Phase 2 data varies with imputation methodology, severity, duration and placebo decline, but effect size expressed as a percentage of placebo decline ("effect-fraction") and standard error remain relatively constant. It is therefore possible to use integration to calculate the absolute power based on effect-fraction.

Conclusion: Estimates of population prevalence of Tau pathology indicate there is urgent need in China for an available treatment that targets its progression. Plans for a bridging study in China to link to the ongoing global program will be submitted for regulatory review.

Disclosure of Interest: C. Wischik Employee of: TauRx Therapeutics, J. Hardlund Employee of: TauRx Therapeutics

OC029

Date: Friday 19 April 2013
Session: New and Future Treatments

EFFECTIVENESS OF CHOLINESTERASE INHIBITORS IN ALZHEIMER'S DISEASE: EXPERIENCE FROM A ROUTINE MEMORY CLINIC SETTING IN TAIWAN

P.-N. Wang [1, 2], K.-N. Lin [1], C.-Y. Lin [1,*], C.-Y. CHENG [1], T.-B. Chen [1]
[1]Neurology, Taipei Veterans General Hospital, [2]Neurology, National Yang-Ming University, Taipei, Taiwan

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: Cholinesterase inhibitors (ChEIs) have been used to maintain or slow the decline of cognitive status in patients with Alzheimer's disease (AD). The objectives of this study are to evaluate the duration and the effectiveness of ChEIs treatment for AD patients in the clinical practice in Taiwan.

Methods: AD Patients who receiving ChEIs treatment for at least 3 months were enrolled from a memory clinic in Taiwan. Their cognitive function was evaluated by the Mini-mental state examination (MMSE). The annual change of the MMSE score was identified as the effective indicator of the ChEIs treatment. A annual decline of MMSE less than 2 points was recognized as good response of ChEIs. The factors that would influence the treatment effectiveness were examined.

Results: The mean duration of ChEIs medication usage was 2.8±2.1 years. Most of them (42.9%) received ChEIs treatment for 1-3 years and 15% of them adherent to ChEIs more than 5 years. In contrast, 23% of these AD patients discontinued ChEIs in the first year treatment. The average annual change of MMSE of these patients was -0.26±2.0. There were 41.2% AD patients maintaining their cognitive status (annual change of MMSE≥0) during the treatment period of ChEIs. Furthermore, 75.8% of them presented an annual decline of MMSE less than 1 point and 89.1% of them had annual decline of MMSE less than 2 points. Higher baseline MMSE score and older age were associated with a good response of ChEIs treatment.

Conclusion: ChEIs demonstrated their effectiveness in maintaining or slowing the decline of cognition of AD patients in clinical practice. Early diagnosis of dementia in the mild stage and prompt initiation of ChEIs treatment is indicated for a good outcome.

Disclosure of Interest: None Declared

OC030

Date: Friday 19 April 2013
Session: New and Future Treatments

ENHANCEMENT OF NMDA NEUROTRANSMISSION AS A POTENTIAL TREATMENT OF MILD COGNITIVE IMPAIRMENT AND ALZHEIMER'S DISEASE
C.-H. Lin [1,*]
[1]Kaohsiung Chang Gung Memorial Hospital, Kaohsiung, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Dysfunctional glutamatergic neurotransmission, particularly through the N-methyl-D-aspartate (NMDA) receptor, has been reported to play a role in the pathophysiology of Alzheimer's disease (AD). Attenuation of NMDA receptor-mediated neurotransmission can result in impaired neuroplasticity and cognitive deficits in the aging brain. We propose that enhancing glutamatergic neurotransmission via activating the NMDA receptor may be effective in treating the cognitive decline of AD.

Methods: In this 24-week, double-blind, placebo-controlled trial, sodium benzoate, a D-amino acid oxidase inhibitor which can elevate D-serine level, was compared with placebo to see its effects on Mini Mental Status Examination (MMSE), ADAS-cog and functioning in patients with mild cognitive impairment or mild AD.

Results: A total of 60 patients with mild cognitive impairmentor mild AD were recruited. Sodium benzoate 250-750 mg/dayimproves the cognitive function of patients with mild cognitive impairmentor mild AD (assessed by MMSE and ADAS-cog) with good safety and tolerability.

Conclusion: The finding indicates that enhancing NMDA function has potential to be a novel treatment of AD. The results will help in further understanding the pathophysiology of Alzheimer's disease and in developing novel therapies in the future.

Disclosure of Interest: None Declared

OC031

Date: Friday 19 April 2013
Session: Dementia Prevention and Risk

REPRODUCTIVE HORMONES AND COGNITIVE FUNCTION AMONG COMMUNITY-DWELLING OLDER MEN: THE CONCORD HEALTH AND AGEING IN MEN PROJECT

B. Hsu [1, 2,*], R. G. Cumming [1], V. Naganathan [2], F. M. Blyth [2], D. J. Handelsman [3]
[1]School of Public Health, Sydney Medical School, University of Sydney, [2]Centre for Education and Research on Ageing, University of Sydney and Concord Hospital, [3]Anzac Research Institute, University of Sydney, Sydney, Australia

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: The main objective of this study was to examine associations in older men between serum reproductive hormones and changes in cognitive function.

Methods: 1705 men aged 70 years and older from Concord Health and Ageing in Men Project (CHAMP) were assessed at baseline (2005-2007) and 2-yr follow-up (2007-2009). At baseline, testosterone (TT), dihydrotestosterone (DHT), estradiol (E2), and estrone (E1) were measured by liquid chromatography-tandem mass spectrometry, and sex hormone-binding globulin (SHBG), luteinizing hormone (LH), and follicle-stimulating hormone (FSH) were measured by immunoassay. Dementia diagnoses were obtained at baseline by clinical assessment and review by a specialist panel. Cognitive function was measured by the Mini Mental State Examinations (MMSE), which were conducted at baseline and follow-up. The reliable change index (RCI) was used to identify significant changes in MMSE scores.

Results: Higher levels of serum estradiol were significantly associated with cognitive decline over time. Men in the highest E2 quartile were 3.53-fold (95% confidence interval 1.07-11.63) more likely to exhibit cognitive decline compared to the lowest E2 quartile. There was a significant linear trend ($p<0.01$) across quartiles of E2 in association with cognitive impairment. Adjustment for age, education, body mass index, smoking, and depression in a multivariable model did not affect the strength of association. There was no consistent association between any reproductive hormone and diagnosed dementia at baseline.

Conclusion: Cross-sectional studies in men of the relationship between estradiol and cognitive function have produced conflicting results. In this longitudinal study high levels of estradiol were associated with a decline in cognitive function. Whether this is cause or effect remains to be established. This finding is consistent with some, but not all, prospective and intervention studies conducted in post-menopausal women which have also suggested that serum estradiol and estrogen treatment have no or deleterious effects on cognitive function.

Disclosure of Interest: None Declared

OC033

Date: Friday 19 April 2013
Session: Dementia Prevention and Risk

META-ANALYSIS: SMOKING AS A RISK FACTOR FOR ALZHEIMER'S DISEASE AND VASCULAR DEMENTIA

P.-H. Weng [1, 2, *], J.-H. Chen [2, 3], P.-K. Yip [4], Y. Sun [5], L.-L. Wen [6], Y.-M. Chu [7], T.-F. Chen [8], Y.-C. Chen [2, 9, 10]
[1]Family Medicine Department, Taiwan Adventist Hospital, [2]Institute of Epidemiology and Preventive Medicine, National Taiwan University, [3]Department of Geriatrics and Gerontology, Taiwan University Hospital, [4]Department of Neurology, Cardinal Tien Hospital, [5]Department of Neurology, [6]Department of Laboratory Medicine, En Chu Kong Hospital, [7]Department of Laboratory Medicine, Cardinal Tien Hospital, [8]Department of Neurology, [9]Department of Public Health, [10]Research Center for Genes,Environment and Human Health,College of Public Health, National Taiwan University, Taipei, Taiwan

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: Previous meta-analysis on the association between smoking and Alzheimer's disease (AD) revealed much unexplained heterogeneity across studies. Meanwhile, the effect of smoking on vascular dementia (VaD) is not conclusive. This meta-analysis aims to examine the effect of smoking on incident AD and VaD in prospective cohort studies and explore potential sources of heterogeneity.

Methods: Ovid-Medline and PsycINFO databases were systematically searched until October 2012, supplemented by manual search. The random-effects model was used to pool the results if significant heterogeneity presents (I^2 greater than 50%).Meta-regression and subgroup analyses were performed to explore heterogeneity.

Results: A total of 13 studies of current smoking on incident AD yielded a pooled odds ratio (OR) of 1.64(95% confidence interval=1.31-2.06). Meta-regression revealed that the heterogeneity (I^2=61.3%) could be well explained by the median follow-up duration of studies (residual I^2=0%).Studies with longer follow-up duration tended to report a smaller risk of smoking. Subgroup analysis found that studies examining midlife smoking (age at study entry less than 65 years-old) reported a smaller risk of smoking on incident AD (OR=1.15[0.95-1.38],I^2=0%) as compared with those of late life smoking (OR=1.83[1.51-2.20],I^2=6.1%). High possibility of publication bias was found by Egger's study (p=0.001). A total of 4 studies reported current smoking on VaD risk (pooled OR=1.45[1.27-1.65],I^2=33.6%).The pooled effects of past or ever smoking on AD and VaD risk were statistically insignificant.

Conclusion: Smoking significantly increases risk for AD and VaD. Most of the heterogeneity can be explained by follow-up duration. Because dementia usually onsets at an old age, loss of susceptible patients over long term follow-up due to competing deaths should be taken into consideration while interpreting such studies.

Disclosure of Interest: None Declared

OC034

Date: Friday 19 April 2013
Session: Dementia Prevention and Risk

PSYCHOTROPIC DRUGS, HEALTH SERVICES AND MILD COGNITIVE IMPAIRMENT IN THE COMMUNITY – FINDINGS FROM THE SYDNEY MEMORY AND AGEING STUDY

B. Draper [1,*], Z. Liu [1], M. Slavin [1], D. Lipnicki [1], P. Sachdev [1], H. Brodaty [1], J. Trollor [1], S. Reppermund [1], N. Kochan [1]
[1] University of NSW, Sydney, Australia

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: To determine the relationships between categories of psychotropic drug use, Medicare funded services and mild cognitive impairment (MCI) in older community dwelling people without dementia

Methods: The sample consisted of 791 community-living participants from the Sydney Memory and Ageing Study aged 70-90 and without dementia at baseline. They were assessed with a comprehensive cognitive and medical assessment. Data were also obtained from the Medicare Benefits Schedule (MBS) for Medicare services and the Pharmaceutical Benefits Scheme (PBS) regarding PBS psychotropic drug utilisation for the 2 years before and after baseline assessments. The extent to which categories of psychotropic drugs and Medicare funded services were associated with mild cognitive impairment at baseline was determined.

Results: At baseline 354 participants (44.8%) were taking psychotropic drugs, which was non-significantly higher in participants with MCI (48.2% vs 42.9%). Overall, participants prescribed psychotropics had higher use of MBS services than those not prescribed psychotropics. Mean MBS services use was significantly higher in MCI participants prescribed psychotropics when compared with normal participants (NCI) prescribed psychotropics (mean 23 vs 17 services). When compared with normal participants, higher rates of drug prescription were recorded in each category of psychotropic drugs in participants with MCI (antidepressants 23.2% vs 20.2%, antipsychotics 1.8% vs 0.6%, sedative/hypnotics 41.4% vs 34.4%). Only the sedative/hypnotics, which mainly comprised of benzodiazepines, were prescribed at a significantly higher rate in MCI participants. Mean MBS service use was significantly higher in MCI when compared with NCI participants prescribed antipsychotics and sedative/hypnotics but not those prescribed antidepressants.

Conclusion: Sedative/hypnotic, mainly benzodiazepine, drugs are associated with MCI and increased use of medical services in community dwelling older people. Further investigation is required to determine the extent to which these drugs are prescribed to treat the symptoms of cognitive impairment or are the cause of cognitive impairment

Disclosure of Interest: None Declared

OC035

Date: Friday 19 April 2013
Session: Dementia Prevention and Risk

ASSOCIATION BETWEEN TAIWANESE ETHNIC GROUPS AND THE RISK OF LATE-ONSET ALZHEIMER'S DISEASE

S. E. Yang [1,*], T.-F. Chen [2], J.-H. Chen [3], Y.-C. Chen [4]
[1]College of Public Health, National Taiwan University, [2]Neurology, National Taiwan Univeristiy Hospital, [3]Geriatrics and Gerontology, National Taiwan Univerisity Hospital, [4]College of Public Health, National Taiwan Universiity, Taipei, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: This study was aimed to explore the association between Taiwanese ethnic groups (includes Mainlander, Hakka, and Minnan) and the risk of Alzheimer's disease (AD). We further evaluated how Apolipoprotein E e4 (*ApoE e4*) status and other confounding factors affected the association above accordingly

Methods: This is a hospital-based case-control study. A total of 209 late-onset (age 60 or older) AD patients were recruited from National Taiwan University Hospital between 2007 and 2010. Healthy controls (n =497) with the same age of cases were recruited from the health checkup and volunteers of the hospital during the same period of time. A self-reported questionnaire was administered to collect information on demography, parental ethnicity (Hakka, Minnan, and Mainlander), and lifestyle. Logistic regression model was used to assess the association between Taiwanese ethnic groups and AD risk, and how *ApoE e4* status, and lifestyle factors modified this association.

Results: Mainlander had a significantly decreased risk of AD [adjusted odds ratio (AOR) = 0.22, 95% confidence interval (CI) =0.12–0.40] as compared with that of Minnan. Gender and religious affiliation significantly modified the association between Taiwanese ethnic groups and AD risk (p interaction=0.02 and 0.04, respectively). After stratification, Mainlander had a decreased risk of AD in *ApoE e4* non-carriers (AOR=0.19, 95% CI=0.09-0.40) as compared with Minnan. Similar findings were observed for participants with lower education level (≤6 years, AOR=0.17, 95% CI=0.04-0.78; 7-12 years, AOR=0.27, 95% CI=0.10-0.67) and high frequency of physical activity (AOR=0.17, 95% CI=0.08-0.37).

Conclusion: Mainlander had a decreased risk of AD. Gender and religious affiliation significantly modified this association.

References: 1.Mehta, K. M., K. Yaffe, et al. (2008). "Race/ethnic differences in AD survival in US Alzheimer's Disease Centers." Neurology**70**(14): 1163-1170 2.Williams, D. R. (1997).
2. "Race and health: basic questions, emerging directions." Ann Epidemiol**7**(5): 322-333

Disclosure of Interest: None Declared

OC037

Date: Friday 19 April 2013
Session: Public Health Initiatives

ECONOMIC COSTS OF DEMENTIA IN LOW AND MIDDLE INCOME COUNTRIES

Z. Liu [1,2,*], P. McCrone [2], Y. Huang [1], E. Albanese [2], C. Ferri [2], M. Prince [2] and 10/66 Dementia Working Group
[1]Institute of Mental Health, Peking University, Beijing, China, [2]Institute of Psychiatry, King's College London, London, United Kingdom

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: The aim of the study is to assess the impact of dementia in low and middle income countries (LAMICs) on service and family costs and to assess the impact of dependency and other factors on costs.

Methods: A prevalence-based bottom up cost-of-illness study was carried out using the database of the 10/66 dementia project in seven LAMICs (11sites, n=15,022). The total cost was divided into cost of medical care, informal care and paid home care. The perspective of costs included both the public and private level. Cost of medical care at the private level was the out-of-pocket expenses. At the public level, health service use was valued according to country specific unit cost based on UK unit costs and WHO-CHOICE ratios. Cost of informal care at the private level was valued based on real salary loss and on average wages at the public level. Regression models were used to identify predictors of cost and attributable costs of dementia.

Results: The results showed that the average total costs for people with dementia were I$1887 at the private level and I$6750 at the public level. At the public level, 94% of total costs were due to social care, and 90.4% of social care costs were due to informal care. Physical impairment and Behavioural and psychological symptoms of dementia (BPSD) led to higher costs of informal care, but not for medical care. Average attributable costs of dementia were I$5164, and were higher than for depression and other chronic diseases. Costs increased with dementia severity.

Conclusion: Estimates of total dementia costs are substantial and most of the care is due to support from unpaid family members. Interventions should be introduced both for dementia patients and their carers in the early stages of the condition dementia, so as to decrease the cost as well as improving quality of life.

Disclosure of Interest: None Declared

OC038

Date: Friday 19 April 2013
Session: Public Health Initiatives

THE MENTAL FIRST AID KIT: ADDRESSING THE MENTAL HEALTH NEEDS OF OLDER ADULTS IN SINGAPOREAN

R. Hartman [1,*], D. S. I. Koek [1], Y. L. Sng [1]
[1]Centre of Excellence for Healthy Mind, Health Promotion Board , Singapore, Singapore

Are you submitting a scientific or non scientific abstract? Non-Scientific

Abstract: With an aging population and the projected rise in the number of seniors living with Dementia, increased focus has been directed to potential interventions to promote brain health and reduce vulnerability to cognitive decline and dementia. Whilst the risk factors associated with Dementia have been frequently explored, the protective and preventative health factors are less understood. This paper outlines the development of the Mental First Aid Kit (MFAK), a mental health programme for adults aged 50 and above. Developed by the Singapore Health Promotion Board, MFAK aims to empower seniors to optimise their mental health, develop their mental wellbeing capacities and acquire knowledge and skills to stay socially engaged and mentally active. Through these programme outcomes risk reducing strategies are promoted to decrease vulnerability to mental health conditions including dementia. MFAK is a modular programme including psychosocial education, cognitive skills training and arts for mental wellbeing. Incorporating elements of mental health literacy, mental wellbeing and preventative mental health, MFAK has been developed with an emphasis on skills and capacities that support enhanced mental health and functional outcomes for older adults. The programme illustrates how science, innovation and collaboration has shaped the development of an evidence informed, interactive and fun mental health initiative that is tailored to the multi-lingual and ethnic composition of the target population. The programme development lifecycle, from conceptualisation to evaluation, will be discussed.
Evaluation of programme effectiveness has indicated that participant's self reported mental wellbeing, as measured by the Singapore Mental Wellbeing Scale, increased by 5.6% post-programme. Further, participants completing the cognitive skills training module reported an increased confidence in their cognitive skills following the course; increased confidence in memory, reasoning skills and speed of processing was reported by 96%, 92% and 89% of participants, respectively. All participants reported that they were utilising the skills taught and intended to continue doing so.

Disclosure of Interest: None Declared

OC039

Date: Friday 19 April 2013
Session: Public Health Initiatives

MORE PARTICIPATION FOR PEOPLE WITH DEMENTIA

S. Jansen [1,]
[1]Deutsche Alzheimer Gesellschaft e.V., Berlin, Germany

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: During the last years the German Alzheimer Association has run some projects to support participation and inclusion of people with dementia.

The first project cooperated with community houses ("Mehrgenerationenhäuser") that offer different acitivities for all generations. The German Alzheimer Association has supported those houses to start new activities which improve the inclusion of people with dementia and their caregivers. Examples were Alzheimer Dance Cafés, common activities of children and old people, mixed activities for everybody and special proposals for people with dementia and/or caregivers.

A second project started in September 2012. Main aims are to increase the number of groups for people with early dementia and to improve communication between them. These groups may participate in the activities of Alzheimer Association and support their public relations activities with (political) statements, presentations on conferences etc. Additionally information material will be developed in easier languages that are better understandable for people with dementia.

Disclosure of Interest: None Declared

OC040

THE USE OF CREATIVE VOLUNTEER MANAGEMENT AND REACH-OUT STRATEGIES IN AWARENESS, PREVENTION AND EARLY DETECTION OF COGNITIVE IMPAIRMENT PROJECT

Y. Y. T. Leung [1,*], R. T. H. Chan [1], E. S. H. Lee [1], N. S. T. Chan [1]
[1]Hong Kong Sheng Kung Hui Welfare Council, Hong Kong, Hong Kong

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: In Hong Kong, about 90% people with dementia (PWD) are not aware of the disease, and around 15% people with mild cognitive impairment (MCI) will eventually develop dementia. Effective public education on dementia and preventive interventions are therefore necessary. The Hong Kong Sheng Kung Hui Welfare Council, with the funding support from the Simon K. Y. Lee Elderly Fund, developed two periods of 'Awareness, Prevention and Early Detection of Cognitive Impairment' Project for 36 months. Diversified services for PWD and people with MCI were launched, including community education, promotional campaigns, mobile screening center, one-year intervention groups for seniors with MCI etc.

In order to maintain the quality of the services with sufficient manpower, more than 250 volunteers were recruited. In order to stabilize the volunteers, the conceptual framework of Volunteer Quotient (VQ) was adopted, which categorized volunteer management into 1. Cognitive Learning, 2. Affective Learning and 3.Experiential Learning (Table 1).

Consequently, through creatively management of the volunteer network with the VQ framework, the effectiveness of various services on dementia and MCI was largely enhanced.

Table 1
Implementation of VQ

Component	Purpose	Implementation
Cognitive Learning	- Increase knowledge on volunteering	Various training on knowledge on dementia, communication skills, use of screening tools etc Around 98% volunteer found the training useful.
Affective Learning	- Positive change of values and motivations on caring	Role play and case sharing during training, and de-briefing on touching moments and new insights after large events
	- Volunteers feeling being respected and supported - Higher cohesion among volunteers	Formal and informal recognition Close contacts with volunteers through diversified media, such as facebook, blog, email, telephone contact
Experiential Learning	- To act out volunteer skills and value - To arrange services according to their interest and strengths	Allowing them to choose services, e.g. screening assessment, promotional campaigns, home visits, intervention groups
	- To consolidate their learning - To follow up their suggestions for service improvement	Evaluation forms, de-briefing after every program, supervision on provision of services

OC041

Date: Friday 19 April 2013
Session: Public Health Initiatives

AN INTEGRATED PUBLIC EDUCATION PLAN FOR DEMENTIA: RAISING KNOWLEDGE, UNDERSTANDING AND EMPATHY

Y. L. Sng [1,*], D. Koek [1]
[1]CENTRE OF EXCELLENCE FOR HEALTHY MIND, HEALTH PROMOTION BOARD SINGAPORE, SINGAPORE, Singapore

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: An Integrated Public Education Plan for Dementia: Raising knowledge, understanding and empathy

With the advent of the silver tsunami and Singapore being one of the fastest greying nations in the world, there is a sense of urgency to develop and manage services for the aging population. Besides building the environment and facilities to cater to these needs, it is essential to raise the general population's literacy of mental health challenges affecting older persons.

This paper outlines the strategy, success factors and learnings of Health Promotion Board's (HPB) 5-year phased public education plan for Dementia. It describes the whole of nation approach adopted, the planning and management of an integrated plan with a multi-faceted strategy that comprised tactics to reach out to both mass and targeted population segments, and strategic partnership with community stakeholders

The Ministry of Health initiated formation of a National Dementia Network represented by stakeholders from various sectors to advise on strategies to develop an integrated model of care and services to support persons with dementia and their families to live an optimum quality of life. HPB is responsible for raising public awareness and understanding of Dementia, promote community support, encourage early detection, a healthy lifestyle to reduce risk, and intervention for better management.

Print and outdoor advertisements, television, radio and online platforms are mass media tactics used to reach out to the masses. Resources providing information and a directory to help resources are distributed widely via various channels to specific segments of the population such as caregivers and ethnic-language groups.   Award winning videos and a commissioned short film were streamed online and watched by more than 80 000 to date. Community engagement took the form of an 8-week programme which has been attended by some 2000 seniors, and community road shows and public forums in partnership with NGOs (e.g. Alzheimer's Disease Association) were also well-attended. Pre and post campaign surveys conducted showed 100% recall of at least 1 warning sign of dementia, and an estimated 51% surveyed were able to recall 3; a public hospital memory clinic reported an estimated 25% increase in number of outpatients seeking diagnosis during the campaign period. Qualitative feedback reported the film and videos to be emotionally appealing, and the print resources were rated highly informative and useful.

Disclosure of Interest: None Declared

OC042

Date: Friday 19 April 2013
Session: Public Health Initiatives

DEVELOPING A NEW SYSTEM OF CARE THROUGH CROSS- SECTORAL COLLABORATION: A KNOWLEDGE EXCHANGE APPROACH

F. white [1], G. carey [2,*]
[1]Knowledge Broker, Alzheimer Knowledge Exchange, [2]CEO, Alzheimer Society Ontario, Toronto, Canada

Are you submitting a scientific or non scientific abstract? Non-Scientific

Abstract: Older adults with cognitive impairments due to mental health challenges, addictions, dementia, or other neurological conditions can exhibit responsive behaviours that impact both the person as well as formal and informal caregivers. In 2010, the Ministry of Health and Long-Term Care (MOHLTC) funded the Behavioural Supports Ontario Project (BSO) to create a framework to improve personal and system-wide outcomes.

Over the last two years, the BSO project has lead to collaboration across sectors within the health care field and communities across Ontario, Canada's largest province. Knowledge Exchange was implemented in order to provide opportunities to create, share and apply best practices related to responsive behaviours. The Alzheimer Knowledge Exchange (AKE) supports the work of those developing best practices in BSO and the 600 new staff hired for specialized care by:
- ·   Providing communication tools
- ·   Building a collection of needed resources and online presence
- ·   Facilitating online and in person knowledge exchange events and connection to larger community

The AKE will continue to support those experiencing responsive behaviours through resource sharing and online communication tools.

Knowledge exchange has enabled creation, sharing and successful application of best practices between individuals that did not have a means to connect prior to BSO which has lead to large scale system redesign.

This presentation will provide an overview of the knowledge exchange approach to building a network of support and collaborative efforts across a wide and intricate sector. Learn how you can facilitate knowledge exchange to enable successful collaborations.

Disclosure of Interest: None Declared

OC043

Date: Friday 19 April 2013
Session: Person Centered Care

"TEMASEK CARES – ICOMMUNITY@NORTH" - AN INTEGRATED COMMUNITY MENTAL HEALTH AND DEMENTIA SUPPORT NETWORK IN SINGAPORE

Y. T. See [1,*], W. T. Choo [1], W. M. Tan [1]
[1]Community Mental Health Division, Agency for Integrated Care Pte Ltd, Singapore, Singapore

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: This paper describes establishing an integrated **"Temasek Cares – iCommunity@North"** network in Singapore.
The prevalence rate for dementia is 6%[1] and 5.7%[2] for depression amongst seniors in Singapore. There is a shift from institution-based mental health (MH) services towards community-based which are more accessible and responsive to clients' needs. Good CMH care is associated with higher self-reported quality of life and service satisfaction ratings.With limited number of CMH service providers that provides fragmented care, we want to build a **person-centred, integrated network**.
Temasek Care-iCommunity@North is a pilot community-based MH care network that integrates MH with social and medical systems so that PWDs are supported to continue to stay at home with loved ones. The pilot targets seniors who are diagnosed with or at risk of dementia or mental illness, staying in the north. Established in January'12, the Network consists of these services:**i)**
i) Community Resources and Support Engagement Team (CREST) provided by Thye Hwa Kuan Moral Charities social service staff provides vital link between residents and MH support networks. Their roles are outreach and education, recognising seniors with dementia to link them with the right service for diagnosis and treatment, providing them with basic emotional support. **ii)Community Intervention Team (COMIT)** piloted by O'Joy Care Services provides counselling to PWDs and their caregivers, and develop coping strategies to manage dementia. COMIT counsellors develop individualised plans and monitor the senior, with referring him to appropriate health or social services. To date, COMIT and CREST services have benefited **47 and 25** clients, and their families respectively. Khoo Teck Puat Hospital (KTPH) multi-disciplinary dementia team manage PWDs in the hospital; and provides resource expertise and builds capability of CREST and COMIT teams through training, case discussions and conferences**.** Regular communication platforms allow timely escalation to address care issues, and knowledge sharing between the partners. Preliminary result is encouraging and shows that the network addresses the needs of PWDs and caregivers - realizing the vision of **integrated community living and aging in place**.
[1]MOH(2011).Extending Medisave Use to Bipolar Disorder and Dementia [2]Kua, E.H., et al(1997). Epidemiology of depression in elderly Chinese living in Singapore. Journal of the American Medical Association,13: 29-32

Disclosure of Interest: None Declared

OC044

Date: Friday 19 April 2013
Session: Person Centered Care

THE ENVIRONMENTAL EVALUATION OF CARE UNIT FOR DEMENTIA PATIENTS IN TAIWAN BY THE PROFESSIONAL ENVIRONMENTAL ASSESSMENT PROTOCOL (PEAP) OF JAPAN

P. T. Chen [1,*], L. F. Liu [2], M. S. Wu [2]
[1]Institute of Gerontology / Department of Neurology and Alzheimer's Disease Research Center, NATIONAL CHENG KUNG UNIVERSITY/ NATIONAL CHENG KUNG UNIVERSITY HOSPITAL, [2]Institute of Gerontology, NATIONAL CHENG KUNG UNIVERSITY, Tainan City , Taiwan

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: The concept of care unit is an important foundationfor Dementia patients to acquire individualized care and to manage their personal lives. It is also necessary to design care units in institutional dementia specialized care districts and Dementia group homes in Taiwan. The aim of this research is to help care providers evaluate whether their care services match the core value of care units regarding the physical and social environment design in the Dementia care facility. The result can be used as a reference for improving environment and services of care units in the future.

Methods: Through the test of expert validity and the correction of the focus groups, the Professional Environmental Assessment Protocol (PEAP) of Japan was revised and translated into a Chinese version in Taiwan. The research interviewed 60 proprietors and care service providers in total from a dementia specialized care district with 7 care units and 4 group homes in Taiwan as subjects of the research to conduct the questionnaire.

Results: The results showed that the environment of both the dementia specialized care district and the group homes have reached a good standard. However, group homes are not furnished with individual bathroom because they are subject to the environmental limits of existing buildings and yield to the building regulations. The laws and building regulations should be amended in the future. On the other hand, the care service providers of group home had relatively low recognition to PEAP. It is necessary to strengthen the education and training of the care service providers so that patients can receive better care services. The physical environment and the management of the environment in the dementia specialized care district have carried out the patterns of unit care. In the future, the dementia specialized care district can be combined with the group homes to strengthen the professionalism of care service providers, and the government has to establish professional certification system for dementia care services.

Conclusion: In summary, the establishment of environmental assessment for dementia care units helps designers, care providers, and proprietors to understand and handle the indicators and interactions of between physical environment, social interactive environment, and management environment. Moreover, the establishment of care units in good standard for Dementia patients will further assists patients in managing their personal lives and expanding the local community lives.

Disclosure of Interest: None Declared

OC045

Date: Friday 19 April 2013
Session: Person Centered Care

SATISFACTIONS AND PERCEPTIONS OF HOME REHABILITATION: COMPARISONS BETWEEN DISABLED OLDER ADULTS WITH OR WITHOUT COGNITIVE IMPAIRMENTS

P.-Y. Chen [1, 2, *], N.-C. Tan [3], J.-Y. Hsu [4], J. Wang [4], L.-H. Chang [1, 2]
[1]Department of Occupational Therapy, National Cheng Kung University, College of Medicine, [2]Department of Neurology and Alzheimer's Disease Research Center, National Cheng Kung University Hospital, [3]Director of Care Service Management Center, [4]Department of Health Care Administration, Chang Jung Christian University, Tainan, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Since 2006, Taiwan has offered home rehabilitation to older adults with activities of daily living dependence. A majority of the recipients also suffer from cognitive impairments. To date, few studies have explored their satisfaction and perceptions of home rehabilitation. This study is to examine these two issues, particularly the differences between those with or without cognitive impairment in (1) various domains of home rehabilitation satisfaction measures, 2) the correlates of various satisfaction domains, and 3) perceptions and expectations with home rehabilitation.

Methods: A home rehabilitation satisfaction questionnaire was developed based on Ware's model of patient satisfaction and expert opinions. The survey instrument included 16 questions on 8 domains of home rehabilitation satisfaction, 3 questions on utilization history of home rehabilitation, and 3 open-ended questions about experiences with home rehabilitation.
247 older adults received home rehabilitation between January and August, 2012 in a city in Southern Taiwan. We stratified the sample by age and gender. 120 potential participants were randomly selected. Interviews were conducted with computer-assisted telephone interview system (CATI). All responses were taped recorded and transcribed.
Data is analyzed with a mixed method approach. Correlates of satisfaction will be analyzed with multiple linear regressions. Constant comparison of the transcripts will be used to analyze and categorize the responses to better understand the perceptions of home rehabilitation from the interviewee's perspectives.

Results: 62 respondents completed the survey with a response rate of 51.6%. Overall, 72.83% were "very satisfied" or "satisfied" with the home rehabilitation they received. Preliminary qualitative analysis revealed the receivers' perceptions of home therapy and reasons for their satisfaction and dissatisfaction. We will continue our analyses with particular attention to how cognitive impairment affects satisfaction of and expectation towards home rehabilitation.

Conclusion: Results from this study will help us improve the quality of care provided to this vulnerable population. Better satisfaction surveys can also be developed to better measure level of satisfaction with long-term care services for this population.

Disclosure of Interest: None Declared

OC046

Date: Friday 19 April 2013
Session: Person Centered Care

IMPROVING PERSON-CENTERED CARE FOR PEOPLE WITH DEMENTIA LIVING IN RESIDENTIAL HOMES THROUGH PERSON-CENTERED CARE SERVICE AUDITS IN HONG KONG

T. H. Chan [1], K. S. Y. Ng [1,*], E. S. H. Lee [1], E. W. Y. Lo [1]
[1]Hong Kong Sheng Kung Hui Welfare Council, Hong Kong, Hong Kong

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: Providing person-centered care is critical to improving the well-being and retaining the various aspects of people with dementia (PWD). Comprehensive improvement of person centered care targets at both professional staff and frontline staff in the areas of knowledge, attitude, skills and resources. The current service improvement project aimed to evaluate a series of interventions targeted at both staff levels in the residential homes and day care centers.

Methods: Two waves of assessments together with 6 months of interventions in-between the assessments were undergone in 6 residential homes and 6 day care centers under Hong Kong Sheng Kung Hui Welfare Council. The five intervention components included: 1) delivery of first round assessment results, 2) facilitating the units to formulate quality improvement projects based on the assessment results; 3) a series of staff training; 4) provision of resources training kits to enhance variety of activities; and 5) consultation and follow up contacts. Dementia Care Mapping (DCM) was adopted as the assessment tool in the service audits, which includes observation activities (percentage of time spent in High Potential Behavioural Category Codes [BCC]), emotional well-being (group well/ill-being [WIB] score), and the way staff interact with PWD (Personal Enhancer [PE] and Personal Detraction [PD]).

Results: Paired t-test reported that the group WIB score improved significantly in 145 matched residents in the residential homes and 34 matched members in day care centers. Wilcoxon signed rank tests revealed that the total number of PDs in the homes decreased significantly, while the total number of PEs in the centers increased significantly.

	Residential homes (n=145)			Day care centers (n=34)		
	T_1	T_2	*t* /z	T_1	T_2	*t* /z
% of time spent on high potential BCC	60.1%	60.7%	0.31	73.0%	76.2%	1.58
Group WIB score	+1.04	+1.22	7.11***	+1.09	+1.31	5.02***
Personal Enhancer	132	177	1.37	35	59	2.06*
Personal Detraction	154	47	-2.0*	12	4	-1.46

Conclusion: The interventions targeting at knowledge, attitude, skill and resources of professional and frontline staff were effective in improving the person-centered care. Regular person-centered care service audit could facilitate continuous service improvement.

OC047

Date: Friday 19 April 2013
Session: Person Centered Care

THE RESEARCH OF THE IMPROVEMENT IN THE MEDICAL CARE FOR DEMENTIA PATIENTS AND AGED-FRIENDLY HOSPITALS—CASE STUDY: JIANN-REN HOSPITAL

I. C. Lee [1,*], P. T. Chen [2]
[1]Department of Strategy Planning, Jiannren Hospital, Kaohsiung, [2]Institute of Gerontology, National Cheng Kung University, Tainan, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Due to the trend of aging population, the elderly patients with Dementia have increasingly chosen to be hospitalized for the medical care, and the aged-friendly medical environment has also become the basic requirement in Taiwan. Deeper discussion about the fine medical-care environment for the aged Dementia patients is the primary topic in this research.

Methods: Taking the development of aged-friendly hospital as a threshold, this research is focused on the dementia patients and further scrutinizes the needs for improving the medical care environment during hospitalization. Furthermore, this research also takes the project of aged-friendly hospital, promoted by Jiann-Ren Hospital in Kaohsiung City, as an object of study, and carries out one-year participant observation and research to probe into the points that need to be actively improved for the elderly dementia patients.

Results: The research result shows that the following peculiarities should be greatly valued in order to provide the dementia patients with fine medical-care environment: (1) to plan and arrange a safe and relieving specific area for the patients; (2) To assure the patients of private ward; (3) To reinforce the identifiable and recognizable spatial atmosphere and indicator; (4) To control the appropriate environment stimulus inside out the ward in response to each different case; (5) To provide the facilities and rehabilitation places for the patients to self-manage their basic life; (6) To provide the space for the patients to freely stay and rest within the line of care sight range; (7) To set up the unit that can provide the family members with rest places and enough information; (8) To actively consider introducing the units for the community groups to help create interaction with patients in the future.

Conclusion: To sum up, the medical institution that tends to provide the dementia patients with friendly care environment must take patient's original life needs into consideration in many aspects, and assists the patients in getting ready to their original home and community life during their medical care, by which the patients can minimize the damage to their living function and efficiently reach the goal of health medical care.

Disclosure of Interest: None Declared

OC048

Date: Friday 19 April 2013
Session: Person Centered Care

HOME INTERVENTIONS ENCOMPASSING PERSON-CENTERED DEMENTIA CARE CONCEPTS: TWO CASE REPORTS OF PERSONS WITH ALZHEIMER'S DEMENTIA

J. Y. Eng [1,*], T. Tsoi [2], C. L. E. Ho [2]
[1]Rehabilitation Centre, [2]Psychological Medicine , NUH, Singapore, Singapore

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Person-centered dementia care is about valuing the unique individual and their carers and creating the best social and physical environment to support them. This research presents two case reports describing the application of person-centered care through a community home intervention program developed by a hospital in Singapore.

Methods: Patients who were diagnosed with dementia, living at home with their caregivers and presenting with challenging behaviours were seen by the psychiatrist and referred for the community home intervention program. A detailed assessment was carried out by an occupational therapist at the patients' home with their caregivers present. The outcome measures were the Mini Mental State Examination (MMSE), Modified Barthel Index (MBI), Neuropsychiatric Inventory with Caregiver Distress Scale (NPI-D) and Zarit Burden Interview. The occupational therapist planned and carried out an individualized care plan. Home intervention sessions focused on tailored activities scheduling that tapped on patients' existing skills and past interests. Functional behavioural analysis was conducted to identify triggers of challenging behaviours and caregivers were educated on non-pharmacological strategies. Two case reports on Mr A and Mdm C, who were in the late and moderate stages of dementia, were presented. They were followed-up for six and three months respectively and discharged when the presenting challenges were resolved and upon discussion with their referring doctors. Any unplanned psychiatric hospital admission were tracked too.

Results: There was marked decrease in Mr A's dependency level as reflected in his improvement in MBI scores at 6 months post-program. Moreover, the sedative used for his night-time challenging behaviours could be stopped through behavioural management interventions. Distress experienced by Mr A's caregiver, as reflected in the Zarit Burden Interview, had also decreased. For Mdm C, her caregiver had decreased scores in the Zarit Burden Interview and in the carer distress scores in NPI-D at 3 months after the program. Both Mr A and Mdm C had no hospital admission during the period and their MMSE scores remained unchanged.

Conclusion: Through a community home intervention program, this study demonstrates the application of person-centered care approaches in the home settings for persons with Alzheimer's dementia to maximize their quality of life and help their caregivers to manage challenging behaviours.

Disclosure of Interest: None Declared

OC049

Date: Friday 19 April 2013
Session: How Animal Models Help Human Studies / Other Dementias

PROTECTIVE EFFECT OF EXOGENOUS HYDROGEN SULFIDE AND DONEPEZIL IN PC12 CELLS DAMAGED BY AB 25 TO 35

Y. Yan [1, 1,*], F. Zhao [1], X. Chen [1], X. He [1], M. Wen [1], H. Zhang [1]
[1]Neurology, The First Affiliated Hospital of Chongqing Medical University, Chongqing, China

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: To observe the protective effect of exogenous hydrogen sulfide (H_2S) and Donepezil in pheochromocytoma cells (PC12 cells) damaged by beta amyloid peptide 25 to 35($A\beta25$-35).

Methods: PC12 cells were cultured in vitro and sulfur hydrogenated sodium (sodium hydrosulfide, NaHS) were provided as exogenous H_2S donor.The studywere devided into six groups : control group, $A\beta25$-35 group, NaHS group, NaHS plus $A\beta25$-35 group, donepezil group, donepezil plus $A\beta25$-35 group.The NaHS group was again devided into seven groups as concentration of NaHS : 10, 25, 50, 100, 200, 500, 1000μmol/L respectively. Donepezil was 20 μmol/L. After treatment of PC12 with the different group for 24h, the cell survival rates were measured by (3-(4,5)-dimethylthiahiazo(z-y1)-3,5-diphenytetrazoliumromide, MTT).

Results: 1. H_2S increase significantly the survival rate of PC12 cells in vitro: The control group was 95.61%, the different concentration (10-200μmol/L) of NaHS groups were respectively 97.27%,103.24%,108.18%,116.50% and 112.22%($P< 0.05$). The optimal concentration for cells grow is 100μmol/L. However, 500 and 1000μmol/L NaHS groups were toxic to PC12 cells, the survival rate of PC12 cells were 75.29%, 45.71% respectively vs 95.61% of control group, $P< 0.05$). 2. Donepezil increase significantly also the survival rate of PC12 cells in vitro(119.43% vs 95.61%, $P< 0.01$). 3.$A\beta25$-35 significantly reduces the PC12 cell survival rate (46.55% vs 95.74% of control group,$P<0.05$); After treatment with different concentrations of NaHS, 10 μmol/L of NaHS did not affect the PC12 cell survival rate (51.55%vs 46.55%,$P>0.05$), 25μmol/L~200μmol/L of NaHS improves the survival rate of PC12 cell (58.96%,62.03%,68.56%,64.23% vs 46.55%, respectively ,$P<0.05$). Moreover, the toxicity of PC12 cell induced by $A\beta25$-35 were concentration-dependently inhibited by NaHS from 10μmol/L~200μmol/L and significantly improve the survival rate ($P<0.05$) of PC12. However, 500 and 1000μmol/L NaHS is toxic to PC12 cells (30.05%,18.91% vs 46.55%,$P>0.05$); 4. Donepezil reduces the toxic effect of $A\beta25$ to 35 in PC12 cells and increases the survival rate of PC12 cells (72.15% vs 46.55%,$P<0.05$).

Conclusion: H_2S and Donepezil may increase the survival rate of PC12 cells and have protctive effect on PC12 cells damage induced by $A\beta25$ to 35. The 100μmol/L ofNaHSis optimal concentration for cells cultured in vitro.

References: cancel

Disclosure of Interest: None Declared

OC050

Date: Friday 19 April 2013
Session: How Animal Models Help Human Studies / Other Dementias

IN VIVO EFFECTS OF A NEUROPROTECTIVE COMPOUND A2 IN TAU P301L MUTANT MICE

S. Ansar [1, 2,*] and M Michaeis
[1]CLS, KingSaud University, Riyadh, Saudi Arabia, [2]P&T, Kansas University, Lawrence, United States

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: Most drug discovery efforts for Alzheimer's disease (AD) focus on preventing or clearing oligomers and aggregates of amyloid peptides (Aβ), though some efforts now target Tau neurofibrillary pathology. Aβ peptides lead to hyper-phosphorylation of Tau, disruption of the cytoskeletal network, and formation of dystrophic neurites. We previously reported that a small compound designated 'A2' was very potent in protecting primary neurons against the toxic peptides. A2 is derived from a compound reported to have microtubule (MT)-stabilizing properties; however, our earlier studies indicated that A2 acts somewhat differently from paclitaxel, the classic MT-stabilizing drug. Although the molecular mechanisms underlying the neuroprotective activity are not yet clear, the *in vitro* results with primary neurons supported efforts to assess potential *in vivo* activity in a mouse model of neurofibrillary pathology.

Methods: Given the evidence supporting food restriction in reducing oxidative stress in aging brain, mutant Tau (P301L) mice were maintained on mild food-restriction. Mice were also treated chronically with A2 or vehicle, and the brains and spinal cords recovered for biochemical and immunohistochemical analyses of abnormal Tau.

Results: As expected, mild food restriction alone markedly decreased insoluble Tau, and A2 treatment led to a further statistically significant reduction in both brain and spinal cord.

Conclusion: The results suggest that this small, brain permeable compound may provide a lead structure for development of new therapeutic approaches to neurofibrillary pathology.

Disclosure of Interest: None Declared

OC051

Date: Friday 19 April 2013
Session: How Animal Models Help Human Studies / Other Dementias

N-TERMINAL REGION OF MYELIN BASIC PROTEIN REDUCES FIBRILLAR AMYLOID BETA IN AN ALZHEIMER'S DISEASE MOUSE MODEL

M.-H. Ou-Yang [1,*] and F. Xu, J. Davis, J. K. Robinson, W. E. Van Nostrand
[1]Department of Neurological Surgery, Stony Brook University, Stony Brook, United States

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: Aggregation of amyloid beta (Aβ) plays a central role in the pathogenesis of Alzheimer's disease (AD). Treatments that disturb the aggregating pathway were shown to result in Aβ clearance and cognitive improvement in AD mouse models. Myelin basic protein, a major structural protein in myelin sheaths, has been known to inhibit Aβ fibrillization *in vitro (1)*. The N-terminus 64 amino acids of MBP (MBP1) was identified to harbor the Aβ binding and fibril inhibiting site (2). The purpose of this study is to investigate the effects of MBP1on Aβ pathology and cognitive performance *in vivo*.

Methods: Mice expressing an active MBP1 fusion protein MBP1eGFP (denoted TgMBP1eGFP) were bred to a mouse model of Alzheimer's disease, 5XFAD mice. Age matched bigenic mice and control mice were tested for behavior at 6 months old and sacrificed at conclusion of the testing. Brains were PBS perfused and cut along mid-sagital axis. One hemisphere was fixed for histological analysis and the other half frozen for biochemical analysis.

Results: We have generated transgenic mice that express neuronal MBP1eGFP. In brain regions where Aβ is predominantly deposited approximately 80-90% of neurons express MBP1eGFP.
In Barnes maze task of spatial learning memory, TgMBP1eGFP mice performed similarly to wild-type mice. The bigenic 5XFAD/TgMBP1eGFP mice performed significantly better than 5XFAD mice.
Intraneuronal levels of Aβ were similar in 5XFAD/TgMBP1eGFP mice and 5XFAD mice. There was no difference in the numbers or size of Aβ immuno-positive plaques, but there was a significant 30-50% reduction in the size of thioflavinS-positive plaques in 5XFAD/TgMBP1eGFP mice. This reduction in thioflavin S-positive plaques was in agreement with the reduction of detergent insoluble brain Aβ detected by enzyme-linked immunosorbent assay (ELISA).

Conclusion: Neuronal expression of MBP1eGFP in the brain significantly reduced thioflavin S-positive fibrillar Aβ and improved the spatial memory deficit in 5XFAD mice. In conclusion, we have presented data for the potential role of MBP1, a potent fibril inhibitor, to regulate the pathogenic Aβ deposition. The continuous study will provide insights into the process of Aβ aggregation, deposition and pathogenesis *in vivo*.

References: 1. Hoos, M. D., Ahmed, M., Smith, S. O., and Van Nostrand, W. E. (2007) *J Biol Chem* **282**, 9952-9961
2. Liao, M. C., Hoos, M. D., Aucoin, D., Ahmed, M., Davis, J., Smith, S. O., and Van Nostrand, W. E. (2010) *J Biol Chem* **285**, 35590-35598

Disclosure of Interest: None Declared

OC052

COMPARE COMRBID PHYSICAL ILLNESS IN PATIENTS WITH VASCULAR DEMENTIAS AND OTHERS IN THE DAYCARE OF A GENERAL HOSPITAL IN TAIWAN

S.-J. Chen [1,*], H.-M. Lee [2], S.-T. Chen [2], H.-J. Tsai [2]
[1]Department of Psychiatry, Yuli Veterans Hospital, Yuli Mental Research Cente, [2]Department of Psychiatry, Tzu Chi General Hospital, Hualien, Taiwan

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: To investigate the category of comorbid physical illness between the demented patients with Alzheimer's disease, vascular dementia and other types of dementia.

Methods: Evaluate the category difference of comorbid physical illness between the patients between the demented patients with Alzheimer's disease, vascular dementia and other types of dementia in dementia daycare in Taiwan during Sep., 2012

Results: In this survey, 25 dementia patients were recruited from day hospital. Male/female ratio was 11:14 and Alzheimer's disease /vascular dementia /others was 14:8:3. In total comorbid physical illness, 87.5% of vascular dementia patients in the day care have 3 comorbid physical illness and only 14.3% and 33.3% in the groups of Alzheimer's disease and others. We compare single comorbid illness in each group. 75.0% vascular dementia suffered from **hypertension** in the contrast to 78.6% and 33.3% in the groups of Alzheimer's disease and others. 100.0% vascular dementia suffered from **cardiovascular diseases** in the contrast to 42.9% and 33.3% in the groups of Alzheimer's disease and others. 37.5% vascular dementia suffered from **DM** in the contrast to 14.3.9% and 0.0% in the groups of Alzheimer's disease and others. 75.0% vascular dementia suffered from **storke** in the contrast to 0.0% and 33.3% in the groups of Alzheimer's disease and others. We also collect the data of MMSE, CDR, ADL and NPI of these clients. Psychotropic medications data were gathered.

Conclusion: We could notice that patients with vascular dementia to have more comorbid physical illness than Alzheimer's Disease and others. The further detail among different types of dementias warrant further analyses and are to be presented.

Disclosure of Interest: None Declared

OC054

Date: Friday 19 April 2013
Session: How Animal Models Help Human Studies / Other Dementias

SIGNALING PATHWAYS INVOLVED IN EXOGENOUS HYDROGEN SULFIDE AND DONEPEZIL REGULATION OF APP ALPHA METABOLISM

Y. Yan [1,*], F. Zhao [1], X. Chen [1], X. He [1], H. Zhang [1]
[1]Neurology, The First Affiliated Hospital of Chongqing Medical University, Chongqing, China

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: To observe the effects of PI3-K, MAPKs and JNK on α- secretase pathway of APP treated with exogenous hydrogen sulfide (H_2S) and Donepezil in PC12 cell.

Methods: PC12 cells were cultured in vitro. Then add to NaHS (100μM)- exogenous H2S donor, Donepezil (20μM) respectively; Next, Cells were treated with SP600125 (SP, JNK inhibitor) 20μM, LY294002(LY, PI3-K inhibitor) 20μM Or SB203580 (SB, MAPK inhibitor) 30μM, respectively; Final, NaHS,Donepezil was added in the medium of 3 inhibitors groups respectively.24 hours later, Aβ 40, Aβ42, sAPPa, sAPPß protein levels were measured by ELISA. The APP, ADAM10, ADAM17 protein were measured by Western blotting.

Results: (1) The APP protein level is not changed by SP, LY, SB, H2S and Donepezil (P>0.05). However, SP and LY inhibit ADAM10 and ADAM17 protein expression. (2) SB has no obvious effect on Aβ40, Aβ42, sAPPβ, sAPPα protein expression (P>0.05), whereas LY and SP enhance Aβ40, Aβ42, sAPPβ protein level and reduce sAPPα protein expression (P<0.01). (3) Compared with control, SP and LY reduce H_2S enhancement of ADAM10; SB, SP and LY reduce Donepezil modulation of ADAM10 and ADAM17.(4) Compared with control, SP and LY inhibit H_2S reduction of Aβ40, Aβ42, sAPPβ protein expression(P<0.01); SB, SP and LY reduce Donepezil enhancement of Aβ40, Aβ42, sAPPβ protein expression (P<0.01). (5) Compared with control, SP and LY inhibit H_2S enhancement of sAPPα protein expression (P<0.01); SB, SP and LY reduce Donepezil effect on sAPPα protein expression (P<0.01).

Conclusion: 1.The APP protein level isn't changed by treated with exogenous H2S, Donepezil, inhibitor of PI3K, MAPK and JNK in PC12 cell (P>0.05).
2.Exogenous H2S significantly inhibited the β-secretase pathway of APP(obvious decreased the levels of Aβ40、Aβ42 and sAPPβ), and distinct activated α-secretase pathway of APP (increased the levels of sAPPα、ADAM10 and ADAM17 protein) (P< 0.05 or P<0.001).
3. The role of H2S can be abated by cell signaling pathway inhibitor of PI3K and JNK, such as the ADAM10, ADAM17 and sAPPα significantly decreased, and the Aβ40, 42 and sAPPβ distinct increased. It confirmed that H2S activated α-secretase pathway of APP by PI3K and JNK, but not the MAPK.
4.Donepezil has a same role on modulating the metabolism of APP. This add to a new target and mechanism of Donepezil treat AD.

References: cancel

Disclosure of Interest: None Declared

OC055

Date: Friday 19 April 2013
Session: Policy and Campaigning

THE GLOBAL PREVALENCE OF ALZHEIMER'S DISEASE: A SPATIAL ANALYSIS

H. Robertson [1,*], N. Nicholas [2]
[1]Australian Insitute of Health Innovation, University of NSW, Sydney, [2]Ageing Research Centre, Prince of Wales Hospital, Randwick, Australia

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: The World Health Organisation projects that the number of people with Alzheimer's disease (AD) will exceed 115 million by the middle of this century (WHO, 2012). More important still is the fact that the majority of these people will live in what are currently low to middle income countries (LMIC). It is also the case that comprehensive population data also remains poor for many of these countries as the required resources for data collection and analysis exceed their current capacity. Current research, such as the ADI 10/66 project, indicates that we still have a very limited understanding of the dementias in those countries and knowledge in this area should grow rapidly in the coming decades.

Methods: Several projects are underway that attempt to accurately estimate population size and composition at the global level. One of these is the LandScan project based in the United States. The LandScan data provides data at a very fine level of resolution permitting estimates at the one by one kilometre scale. In this research project, we took Land Scan data for the 60+ population at the global level and estimated the size and distribution of this age cohort including measures for AD prevalence based on WHO and ADI estimate data.

Results: We mapped the resulting data to produce a two-dimensional picture of the distribution of AD at the global level. The final task was to produce a global surface map (topography) of AD for the whole planet. The result is a spatial analysis and visualisation of the scope of AD in a consistent format that shows, in particular, high and low points for estimated AD prevalence.

Conclusion: In the absence of accurate global population and AD data, this project extends our current research program and contributes to a better understanding of the probably pattern of AD at the global level, with a particular focus on low resource environments.

Disclosure of Interest: None Declared

OC056

Date: Friday 19 April 2013
Session: Policy and Campaigning

COSTS OF MEDICAL CARE FOR DEMENTIA PATIENTS IN TAIWAN: A POPULATION-BASED STUDY

L.-J. E. Ku [1,*], T.-H. Lu [1], S.-L. Wu [1], M.-C. Pai [2]
[1]Institute of Public Health, National Cheng Kung Univ, [2]Department of Neurology and Alzheimer's Disease Research Center, National Cheng Kung Univ Hospital, Tainan, Taiwan

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: Pharmaceutical therapy for dementia patients such as cholinesterase inhibitors (ChE-I) and NMDA antagonist is covered by Taiwan's National Health Insurance system but only with strict payment rules. The objectives of this study were: (1) To estimate medical costs for elderly patients with dementia in Taiwan; (2) To estimate the proportions of ChE-I and NMDA medication costs to the medical costs of dementia in Taiwan.

Methods: From the one million persons selected in the Longitudinal Health Insurance Database of 2005, our study sample included 3603 older adults (65 years and older) who had at least one outpatient or inpatient claim with a principal diagnosis of ICD-9-CM 290 or 331.0 during the year 2008. We used the prevalence-based approach to calculate the gross medical costs of dementia for seniors in Taiwan using the population-based National Health Insurance Research Database. Drug reimbursement data on ChE-I (donepezil, rivastigmine, or galantamine) and NMDA (memantine) were also analyzed to estimate costs of anti-dementia medications.

Results: In 2008, the annual medical costs of dementia in Taiwan were US$4246 (NT$123,127) per patient, of which US$1165 (NT$ 33,787) were paid on drug reimbursement. While these amounts were calculated for dementia patients including all treatments and prescription drug use, the annual costs of ChE-I and NMDA were US$754 and US$359 per drug user, respectively. The costs of those two anti-dementia drugs together accounted for less than 2% of the medical costs for elderly patients with dementia, and only 5.5% of the patients were on either medication.

Conclusion: Given that Taiwan's mean health expenditures per capita in 2008 were $US1129, we found the medical costs for dementia patients to be three times higher than the mean. However, the use of anti-dementia medications was limited both in dollars and in the number of patients, suggesting that the strict insurance payment rules in Taiwan may have prevented greater utilization of pharmaceutical therapy for dementia.

Disclosure of Interest: None Declared

OC057

Date: Friday 19 April 2013
Session: Policy and Campaigning

A NEW DEMENTIA "BILL OF RIGHTS"
D. Troxel [1,*], V. Bell [2]
[1]BEST FRIENDS, Sacramento, [2]BEST FRIENDS, Lexington, United States

Are you submitting a scientific or non scientific abstract? Non-Scientific

Abstract: The New Dementia "Bill of Rights"
Almost twenty years ago, co-authors Virginia Bell and David Troxel published an article in the *American Journal of Alzheimer's Disease and Related Disorders & Research* (1994 September/October issue) called "An Alzheimer's Disease Bill of Rights." This groundbreaking article was the first to frame dementia care as a human rights concern. The Bill of Rights was widely reprinted (including in the ADI newsletter) and adopted by various local and national Alzheimer's societies. The Bill of Rights covered key topics such as telling the person his or her diagnosis (not always done 20 years ago), reducing psychotropic drugs, and giving the person maximum autonomy.
Today we have persons with dementia writing books and serving as advocates and the field of dementia care has grown tremendously. To mark this, the authors have revised their original Bill of Rights to broadly encompass contemporary dementia care (vs. Alzheimer's disease 20 years ago). This workshop will describe the new document and explain why updates and changes were made. The authors will encourage individuals and organizations to embrace the new document as a statement and expression of human rights today for persons with dementia. The new Dementia Bill of Rights includes principles from the authors own Best Friends philosophy of dementia care. The document is listed below.
Every person diagnosed with Alzheimer's disease or other dementia deserves:
To be informed of one's diagnosis.
To have appropriate, ongoing medical care
To be treated as an adult, listened to, and afforded respect for one's feelings and point of view
To be with individuals who know one's life story, including cultural and spiritual traditions
To experience meaningful engagement throughout the day
To live in a safe, structured and stimulating environment with opportunities for physical exercise
To be outdoors on a regular basis
To be free from psychotropic medications
To have welcomed physical contact, including hugging, caressing and handholding
To be an advocate for oneself and for others
To be part of a local, global or online community
To have care partners well trained in dementia care.
The Bill of Rights will be released [in English and Mandarin] at ADI Taiwan to mark its global impact as a document expressing the need for ongoing basic rights for persons with dementia.

Disclosure of Interest: None Declared

OC058

Date: Friday 19 April 2013
Session: Policy and Campaigning

DEMENTIA AND COMORBID CONDITIONS: ADVOCATING FOR INTEGRATED CARE

G. Carey [1,*], P. Caffery [1], D. Harvey [1]
[1]Alzheimer Society of Ontario, Toronto, Canada

Are you submitting a scientific or non scientific abstract? Non-Scientific

Abstract: Despite the fact that dementia is recognized as a main diagnosis driving up rates of alternate level of care (ALC) hospitalizations in Ontario, the high incidence of comorbid conditions among people with dementia remains largely unaddressed in health-care policy or planning at either a regional or provincial level. The absence of an integrated dementia-care strategy, including specialized training for health care professionals, improved care coordination and integration with community services, and increased supports for self-management of general health and chronic medical conditions, has resulted in non-optimal use of health-care resources and reduced health outcomes for people with dementia.

This session will describe an advocacy initiative targeting regional policy makers in an effort to draw attention to the complex care needs of people with dementia. The Alzheimer Society of Ontario prepared a series of short reports comprising data from scientific literature together with epidemiological evidence for each of Ontario's 14 regional Local Health Integration Networks (LHINs). The documents were delivered to the LHINs by local Alzheimer Societies, who arranged in-person meetings to follow up with LHIN leaders and advocate for the inclusion of improved dementia care as part of the LHINs' new Integrated Health Service Plans. With this initiative, local Alzheimer Societies are broadening the scope of their message by placing a greater emphasis on chronic disease management for older adults and the need to address cognitive impairment at all points and stages of care, as part of an integrated care strategy that will lead to improved health-system planning and ultimately improved care.

References:
Dementia Evidence Brief: Ontario (http://www.alzheimer.ca/en/on/Get-involved/Raise-your-voice/Dementia-evidence-brief-Ontario)

Dementia Evidence Brief: Regional (http://www.alzheimer.ca/en/on/Get-involved/Raise-your-voice/Dementia-evidence-brief-Ontario/Regional-evidence-briefs)

Disclosure of Interest: G. Carey Employee of: CEO, P. Caffery Employee of: Research and Policy Analyst, D. Harvey Employee of: Chief, Public Policy and Program Initiatives

OC060

Date: Friday 19 April 2013
Session: Policy and Campaigning

GLOBAL DISEASE REGIME: THE CASE OF ALZHEIMER'S DISEASE MOVEMENT IN TAIWAN
C.-S. Hong [1,]
[1]Graduate Institute of Sociology, National Taiwan University, Taipei City, Taiwan

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: 1. To investigate the trajectory of Alzheimer's disease movement in Taiwan.
2. To analyze the local characteristic of dementia policy in the global context.
3. To explore the emergence and transformation of "dementia" concept in Taiwan since 1980s by using socio-historical approach.

Methods: We collect government documents, academic research, national statistics, and newspaper databanks to analyze the trajectory of social movement organizations, government policies, and professional's personal and collective activities. We also interview some key participants related to this historical process.

Results: 1. In the first period (1980-1990), there were no social organizations toward dementia. However, professionals from medical appealed government to take dementia as a social problem because of the aging population. They also used "vegetative" as rhetoric to depict patient's image to invoke the concern. Taiwan government amended the Welfare Law for Handicapped Persons and included people with dementia (PWD).
2. In the second period (1990-1998), some social organizations emerged to serve PWD and their caregivers. The disability manual became an important proof of identity to get government and social resources. In global context, such as American ex-president Ronald Wilson Reagan, affected the awareness of dementia in Taiwan, resulting to the renamed movement. The patient's image transferred to "wanderers" in this period.
3. In the third period (1998-2012), regime of dementia used more strategies to perform PWD and their caregivers, including mass education, World Alzheimer's Month, movies, and policy advocacy. Nevertheless, the long-term care policies excluded the PWD because of the restricted measurement tool. To response to the crisis, Taiwan's Alzheimer's disease movement tried to ally with Alzheimer's Disease International (ADI) to change the policy agenda.

Conclusion: By exploring the case of Alzheimer's disease movement in Taiwan, we found the professionals from medical, social organizations, and People with Disabilities Rights Protection Act are the main social actors in regime of dementia, while the long-term care policies exclude people with dementia. The patients' image has transferred in different historical periods, but PWD have not advocated for themselves until now. The Alzheimer's disease movement in Taiwan is a disembodied health movement.

Disclosure of Interest: None Declared

OC061

Date: Friday 19 April 2013
Session: Dementia Care and Technology

ATIT (ALZHEIMER'S THERAPY AIDED BY INSTRUCTIONAL DESIGN AND TECHNOLOGY)

H.-W. Chien [1,]
[1]Department of Senior Citizen Service Management, Minghsin University of Science & Technology, Hsin-Chu, Taiwan

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: With life expectancy rising of the ageing "Babyboomers", Alzheimer's is also on the rise being the major cause of dementia. I propose to examine the formation of a heuristic instructional design approach to the development and use of Cognitive Training (CT) strategies. Current literature reveals that CT can at best utilise the cognitive reserve of those afflicted with Alzheimer's to allow them to hold onto their Activities of Daily Living (ADLs) before a more rapid cognitive decline.
With a plethora of commercialised CT programmes and the availability of affordable touch screen mobile computering, now is the time to harness that power through a targeted epistemology aided by instructional design principles. From Dr. Kawashima's (2005) "Brain Age" on the Nintendo DS game console to current mobile offerings such as Lumosity, PositScience and Smartbrain they are shorter-termed courseware that are not designed as customisable cognitive stimulation engines. The issues of motivation and maintaining interest of the user over the progression of their Alzheimer's experiment (ten year or so) is limited to graded levels and generic content where I propose content that is directly related to maintaining the user's ADLs (IADLs) and being personally relevant to them within a residential care setting.
CIRCA (Computer Interactive Reminiscence and Conversation Aid) comes close with its use of a friendly program interface that utilizes an updateable database of content on a large touch screen platform. However it appears to lack a courseware engine could track the user's exploration to reveal the state of their Alzheimer's as the Ipad app "CANTABmobile" can do and that this data could be anonymously sent to researchers for evaluation. This type of courseware would also be Tin Can-, SCORM- compliant as it woud be embedded within a learning management system (LMS) as well as being compliant to useability standards.
A key feature would be that this CT engine would be an "Open Sourced" platform allowing free collaborative programing development within an initial amorphous paradigm following the philosophy of Mozilla's Firefox and Thunderbird whilst attracting the development of a content archive as was the case of Wikimedia that hosts Wikipedia.
Finally this presentation will enable delegates to grasp the synergy of instructional design principles and its at present unrealized potential aimed towards harnessing technology to aid our elderly travelling along the Alzheimer's path.

Disclosure of Interest: None Declared

OC062

TELEVISION AND DEMENTIA, THE CAVEATS

L. Liss [1,*]
[1]Neurology, Ohio State University, Columbus, United States

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: To prevent harm and enhance quality of life of patients with dementia

Methods: Material: Patient population of over 2,000 which were followed in the Cognitive Disordes Clinic (1978-2010) and in the Columbus Alzheimer Care Center (1991-2012) Investigation of reactions to various TV progreming and detemination of causal relationship between the specific TV program and and any undesired reaction.

Results: The investigation of the various reactions to different types of programing revealed a variety of responses. The gamut of TV induced reactions ranged from benign/humorous to severely stressful whith severe psychlogical trauma and events of actual or potential physical harm. An extensive educationis needed for the caregivers of patients at home. The barriers to eliminate access to unfiltered TV programs in long term cere faces to main obsacle. 1.Thefamily tries on admission to provide maximal comfort and frequently consider a TV set as an indespensible item 2. Corporate mentality driven by marketing strategies will encourage appeasment of families, rather than engage in appropriate education and explain the strategies to enhance quality of life

Conclusion: Under no circumstances patients suffering from dementia should be exposed to unsuprvised TV programing. The only beneficial utilization of audiovisual entertainment/stimulation is the use of a monitor to project appropriate DVD's. The type of programming should be tailored to individual preferences.

OC063

Date: Friday 19 April 2013
Session: Dementia Care and Technology

DEVELOPING GUIDANCE FOR USING INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) TO IMPROVE THE WELL-BEING OF PEOPLE WITH DEMENTIA

B. Hicks [1,*], L. Miller [2]
[1]Bournemouth University Dementia Institute, Bournemouth, [2]Institute for Employment Studies, Brighton, United Kingdom

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: The Get Connected grant distributed through the Social Care Institute for Excellence (SCIE) provided 1,245 social care organisations in England with grants to buy and/or upgrade online information and communication technologies. Feedback from the Get Connected evaluation revealed that some managers and staff struggled to help service users with dementia make full use of the technology. SCIE commissioned research to inform the development of guidance to support people in care homes and other care settings use Information and Communication Technology (ICT) to improve the well-being of people with dementia.

Methods: Development of the guidance involved 1) a literature and website review to identify activities currently being used with people with dementia and any resources and/or guidance already available; 2) a total of 17 in-depth telephone interviews were conducted with dementia experts and care home managers; 3) an expert advisory group reviewed the information to be included in the guidance 4) a first draft of the documentation was circulated to the advisory group and revised following feedback; 5) second stage evaluation involved field-testing using focus groups and interviews in nine care organisations with varying experience in using ICT.

Results: The research identified a range of technologies and activities that are being used to support and improve the well-being of people with dementia. These served to enhance communication, provide entertainment and mental stimulation and support reminiscence. The guidance outlines good practice when implementing ICT within care settings and using the technology with people with dementia. Barriers are also noted and recommendations to overcome these are suggested.

Conclusion: ICT is improving on traditional methods that carers adopt when working with people with dementia, and evidence suggests this may be beneficial for both parties. The guidance provides comprehensible and easy to follow information on implementing and using ICT within a care environment and avoiding potential pitfalls. It is envisaged that this will encourage more care settings to invest in ICT to improve the well-being of their residents.

Disclosure of Interest: None Declared

OC064

Date: Friday 19 April 2013
Session: Dementia Care and Technology

COMPARING LAY AND PROFESSIONAL PERSPECTIVES AND ACCEPTANCE OF COMPUTERIZED ASSESSMENTS IN COGNITIVE SCREENING

C. K. Lai [1,*], R. Y. Kwan [1], L. S. Yap [1], S. Ting [1], S. K. Lo [1], T. B. Tsien-Wong [2], E. O. Chung [3], Y.-M. Wu [4]
[1]School of Nursing, [2]Department of Applied Social Sciences, The Hong Kong Polytechnic University, [3]The Hong Kong Alzheimer's Association, [4]The Haven of Hope Hospital, Hospital Authority, Hong Kong, Hong Kong SAR, Hong Kong

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: This project aims to compare the utility of the cognitive screening programs provided by the Integrated Health Clinic (IHC), SN (hereafter known as HeCAS), and the Hong Kong Alzheimer's Disease Association (HKADA). HeCAS was developed based upon the Early Detection Program of the HKADA. Both programs have an almost identical cognitive assessment segment. The HKADA uses a paper and pencil assessment format, while the HeCAS team has been developing a digitalized format since April 2011. This presentation compares lay and professional perspectives and acceptance of computerized assessments in cognitive screening.

Methods: An in-depth literature review was conducted to identify aspects of a good computerized assessment system. Content validity testing was conducted for the questionnaire developed from the literature review by the project team. Both the HeCAS and HKADA service users were invited to complete the validated questionnaire.

Results: Twenty clients and 56 family caregivers, and 13 health professionals (doctors, nurses, social workers, and occupational therapists) completed the questionnaire. The majority of the clients were older (over age 70) and most of the family caregivers and the professionals were younger (below age 49). The sample comprised more women than men. The mean number of years of experience in cognitive assessment of the professionals was 4.4 years, and the mean number of years of their work experience since graduation from their own profession was 17.8. While more professionals were sympathetic towards digitalized assessment systems, the clients and their families were less inclined to be as positive.

Conclusion: Computerization is the way of the future. Computerizing the health assessment system has many merits, being more accurate, less time consuming, and offering easier data retrieval. Such systems should also be designed or customized to fit the needs of clients/lay users. Health professionals need to find a way to help their clients and patients accept what informational communication technology has to offer for health services delivery to date.

Disclosure of Interest: None Declared

OC065

Date: Friday 19 April 2013
Session: Dementia Care and Technology

SOCIABLE - NEXT GENERATION COGNITIVE TRAINING USING MULTI-TOUCH SURFACE COMPUTERS

P. Sakka [1,*], S. Pantelopoulos [2], O. Lymperopoulou [1], G. Papakyriakopoulos [2], M. Foteinou [2]
[1]Neurodegenerative Diseases Dpt - Memory Clinic, Hygeia Hospital, Marousi, Athens, [2]European Projects Department, Singular Logic S.A., Nea Ionia, Athens, Greece

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: SOCIABLE introduces a radical approach to cognitive training with emphasis on the execution of ergonomically pleasant and motivating play activities over multi-touch computers. The main objectives are:
- · to train and improve the cognitive functions of cognitively intact elderly, elderly with Mild Cognitive Impairment (MCI) and patients with mild Alzheimer's Disease (AD) through the use of an innovative ICT-assisted service
- · to improve the quality of life of both the elderly and their families by enhancing their functional abilities and mood
- · to integrate human support and care services offered by care centers, health professionals, specialized medical experts, with state-of-the-art ICT infrastructure

Methods: The study population was comprised by 350 cognitively intact elderly, elderly with MCI and mild AD patients, all over 65 years old. Subjects were randomized to initiate SOCIABLE sessions either immediately or with a 3-month delay. The delayed intervention group served as "control" for the immediate intervention group. The elderly participated in 24 hourly twice-weekly computerized cognitive training sessions. In order to assess the efficacy of the program, cognitive, affective, functional assessment was performed pre and post-intervention and 3 months after the end of the program.
Specialized software corresponding to Cognitive Training Activities based on a multi-touch surface table, Tablet PCs with multi-touch screens, a back-office application facilitating Medical Experts to monitor the evolution of the patients and relational databases for managing cognitive training data is a sample of how SOCIABLE service leverages both legacy and emerging ICT technologies

Results: The preliminary results show that the intervention has a clear positive effect on cognitive and functional abilities of both cognitively intact elderly and patients with mild to moderate cognitive impairments.These results are expected to be further supported by the final statistical analysis which will be performed on all the data gathered from the 350 elderly who participated in the pilot phase

Conclusion: Up to date SOCIABLE services have been deployed across 7 pilot sites (including hospitals, care and day centers) in four European countries (Greece, Italy, Norway, Spain). These pilot sites are supported by medical and technical partners in terms of medical and ICT aspects respectively. The final evaluation cycle of these end-user partners will evince the correlation between surface computing and cognitive training

Disclosure of Interest: None Declared

OC066

Date: Friday 19 April 2013
Session: Dementia Care and Technology

IMPROVING THE QUALITY OF LATER LIFE OF OLDER PEOPLE WITH DEMENTIA BY USING UNIT CARE MODE

H. J. Chien [1,*], F. W. Tsai [2]
[1]Department of Senior Citizen Service Management, Minghsin University of Science and Technology, Xinfeng,
[2]Shuang-Lien Care Center, New Taipei City, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Dementia is a progressive cognitive disorder, as a result of which, those affected gradually lose the ability to carry out normal, everyday tasks. This progression will vary from person to person and each will experience dementia in a different way (Bonner & Idris, 2012). The aim of this project is to improving the quality of later life of older people with dementia by using unit care mode in the Shuang-Lien care center, New Taipei city Taiwan.

Methods: In the Taiwan today, approximately 170,000 people have illness generically known as dementia. Shuang-Lien care center started to construct a social welfare park since 1993. The goal of this park is to proving a "diversification, multi-level and continuity" care service model. In 2010, Shuang-Lien care center expanded its long-term care service to older people with dementia by using unit care mode. There are 8-10 older people with dementia as a unit which provides a family-like circumstance including living room, kitchen and healing garden etc.

Results: The project results revealed that older people with dementia feel more comfortable, both in interpersonal interaction and social participation. It is also indicated that self-care ability has increased and elderly autonomous features is upgraded, such as participation dining prepared, room cleaning and folding clothes etc.

Conclusion: Improving the quality of later life of older people with dementia is a critical factor by using unit care mode. The authors' survey results revealed that the majority of respondents 'strongly agree' or 'agree' that unit care mode could improve the quality of later life of older people with dementia. Therefore, unit care mode is providing a customised long-term care service, building a family-like environment and another 'warm home' with love.

References: Bonner, S. & Idris, T. (2012), '*Assistive Technology as a Means of Supporting People with Dementia: A Review*', Housing Learning & Improvement Network, available from www.housinglin.org.uk

Disclosure of Interest: None Declared

OC067

Date: Friday 19 April 2013
Session: Dementia Friendly Communities

EFFECT OF THE SERVICE OF FAMILY OF WISDOM FOR PEOPLE WITH DEMENTIA AND THEIR CAREGIVER

L.-Y. Tang [1,*], P.-C. Wu [2], H.-J. Lee [2], T.-C. Wen [2], M.-J. Chiu [3]
[1]non, [2]Taiwan Alzheimer's Disease Association, [3]Department of Neurology, National Taiwan University Hospital, Taipei, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Family of Wisdom is a community service for people with dementia and their caregivers to receive mutual support from other people with dementia and caregivers. This study examined the efficacy of Family of Wisdom in delaying cognitive decline, improving depression and caregiver burden, and enhancing awareness and positive attitude toward dementia.

Methods: "Family of Wisdom (FOW)" is a home-like, dementia-friendly environment for people with dementia (PWD) and their caregivers. A same group of PWD and their carers came to FOW in the day time two or three times a week with a maximum of 15 families at the same time. In FOW, PWD interacted with each other and participated voluntarily in activities including playing mahjong, singing karaoke, painting, writing calligraphy, watching old movies, planting, playing chess, etc. The carers helped each others to take care of people with dementia. They shared their experience in care-giving, participated in Yoga group and artwork together.
This was a quasi-experimentation study. We included 20 dyads of subjects with dementia and their caregivers. People with dementia were evaluated with ADAS-Cog, and problem behaviors (BEHAVE-AD) before using FOW and six month later. The family caregivers were also evaluated with caregiver burden and depression (Beck Depression Scales) in the same time interval.

Results: Our preliminary study revealed high satisfaction among participants of the FOW program. Data collection of this study will be ended in December, 2012. Our data will be coded and analyzed. Demiographic data will be analyzed with descriptive statistic. The pre- and post- evaluation will be analyzed by non-parametric test such as Wilcoxon rank-sum test.

Conclusion: The results will be discussed for whether the data support our hypotheses. We will compare our results to other management methods reported in the literature. Future implications and directions of future research will also be discussed.

Disclosure of Interest: None Declared

OC068

Date: Friday 19 April 2013
Session: Dementia Friendly Communities

THE ROCKY ROAD TO A RURAL DEMENTIA FRIENDLY COMMUNITY

A. Pascoe [1,*] on behalf of Dementia Friendly Communities CIC and Dementia Friendly Communities CIC
[1]Dementia Friendly Communities CIC, Golspie, Scotland, United Kingdom

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: To show how one passionate campaigner can make a rural community aware of the fact that there is a government dementia strategy which can be brought down to grass roots and used to embrace the challenges a life with dementia presents to the families affected. Also how this lone voice inspired a group of like-minded people to turn that community from one with little support to one that is fast becoming a beacon of dementia excellence.
How the concept was taken to a new level and a Dementia Friendly Communities Social Enterprise (non-profit company) was established with profits to be reinvested into the community for the benefit of dementia families.
How the Community Interest Company's work was informed by the people they set out to help and how they worked in partnership with businesses, service providers, voluntary groups and individuals who shared their ambition to create a dementia friendly community by:
- Developing awareness programmes for stakeholders to help local communities become friendly and fulfilling places for people with dementia and their families
- Developing projects to increase local opportunities for people with dementia so that they can take part in their chosen activities of life for as long as they wish
- Increasing empathy and support for caregivers by speaking out about the practical and emotional challenges they face
- Challenging the myths and stigma associated with dementia by developing a series of websites to combat this
- Overcoming funding challenges to achieve this

Disclosure of Interest: None Declared

OC069

Date: Friday 19 April 2013
Session: Dementia Friendly Communities

IMPROVING DEMENTIA CARE IN ACUTE HOSPITALS - FINDINGS FROM THE HOSPITAL DEMENTIA SERVICES PROJECT

B. Draper [1,*], D. Gibson [2], A. Peut [3], R. Karmel [3], P. Anderson [3], L. Grealish [2], K. Bail [2], C. Hudson [3], N. Chan [3]
[1]University of NSW, Sydney, [2]University of Canberra, [3]Australian Institute of Health and Welfare, Canberra, Australia

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: People with dementia have worse outcomes of hospitalisation than people without dementia. We aimed to identify features of hospital services that are associated with better outcomes of hospitalised people with dementia.

Methods: The Hospital Dementia Services project includes people aged 50 years and over who had at least one overnight stay in a public hospital in the state of New South Wales, Australia, that ended in the year to June 2007 (N=252,719). Data from four sources were integrated to provide information about each patient and their first hospital stay. For demographic and clinical information, data were extracted from the NSW Admitted Patient Data Collection. Data about the availability of hospital-based aged care and dementia services and staff were obtained through a survey of NSW public hospitals (n =163, response rate 82%). Regional provision levels of community-based care and residential care were extracted from the Aged and Community Care Management Information System. These were supplemented with data from site visits to 20 hospitals where interviews with key staff were conducted to gather information about the operational characteristics of their services. Analyses included multiple linear and logistic regressions to determine factors associated with mortality, length of stay (LOS) and new placement into residential aged care facilities.

Results: Access to specialist aged care staff, policies on the management of delirium and higher provision levels of community packages were associated with shorter LOS across the state. Having access to specialist aged care nursing staff and policies on the management of delirium were associated with lower risk of mortality. Placement into residential care was less likely if delirium policies were present and if there was a lower regional provision of residential care. In the site visits, the importance of adequate staff training, access to specialist knowledge, willingness to work collaboratively with community services, and willingness to work pragmatically to overcome challenges due to resource deficiencies were noted.

Conclusion: Specialist aged care staff, the presence of dementia and delirium policies and higher regional provision levels of residential and community aged care services are associated with better outcomes of hospitalisation for people with dementia. Staff training, attitudes and knowledge about dementia care are key factors in improving outcomes in the face of resource challenges.

Disclosure of Interest: None Declared

OC070

Date: Friday 19 April 2013
Session: Dementia Friendly Communities

END OF LIFE CARE RECEIVED BY PATIENTS WITH ADVANCED DEMENTIA IN THEIR FINAL DAYS OF LIFE

P.-T. Lam[1,*], K. Y. SHA[1], C. C. CHAN[1], T. K. YIM[1], S. Y. FUNG[1], T. C. SIM[1], W. Y. CHEUNG[1], W. K. WONG[1], C. Y. YUNG[1]
[1]Department of Medicine & Geriatrics, United Christian Hospital, Hong Kong Special Administrative Region, Hong Kong

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Unlike advanced cancer, patients with advanced dementia usually experience poor end of life (EOL) care in Hong Kong. They are usually admitted to the hospitals with acute or intercurrent illnesses in their final days and often experience a high level of symptoms without adequate attention and appropriate care planning. Our objective is to study the EOL care received by advanced dementia patients during the last episode of hospitalization.

Methods: This was a retrospective chart review of advanced dementia patients who passed away in the acute geriatric wards of United Christian Hospital. All deaths with age 65 or above from the Department of Medicine and Geriatrics during the period 1/9/2010 – 30/6/2011 were generated from the computer data system and screened. Those with a diagnosis of advanced dementia of any aetiology (i.e. FAST 7C or above, or its equivalent) were recruited into the study for analysis.

Results: A total of 173 patients (30 % of total death within the same period) with mean age 86.8 (SD 7.2) years were recruited. Ninety-two percent lived in residential care home for the elderly. The median survival was 16.8 months (inter-quartile range 6.8-33.7) and the mean number of co-morbidities were 2.2 (SD 1.1). The mean number of hospitalizations in the preceding year was 4.2 (SD 2.7).The average length of hospital stay for the death episode was 5.5 (SD 5.4) days. Pneumonia accounted for 76 % of acute events during hospitalization, followed by septicaemia (25%) and cardiovascular events (19%). Parenteral fluid, oxygen and antibiotics were prescribed in 95 %, 89 % and 80 % patients respectively. About 14% were given inotropic infusion, 10% were given ventilation, either non-invasive or invasive and 8% were initiated tube feeding at the final days of life. CPR was performed in 16%. The mean number of symptom documented was only 1.4 (SD1.0), in which the most common one was dyspnoea (56%), followed by hypoactive delirium (27%) and anorexia (12%). Medication discontinuation was made in 41% before death. Both sedatives and anti-secretary agents were prescribed only in 2% while physical restrainer was applied in 19%. Palliative care specialist and bereavement care professional were involved in 3% respectively.

Conclusion: The needs of patients with advanced dementia at their final days of life should be addressed. EOL care in hospital should also be strengthened for these patients.

Disclosure of Interest: None Declared

OC071

Date: Friday 19 April 2013
Session: Dementia Friendly Communities

NON-PROFIT ORGANIZATION FOR DEMENTIA PATIENTS IN PROMOTING FRIENDLY COMMUNITY CARE- A CASE STUDY OF ZEELANDIA DEMENTIA ASSOCIATION IN TAINAN CITY

H.-C. Yu [1,*], P.-T. Chen [1] on behalf of Institute of Gerontology / Department of Neurology and Alzheimer's Disease Research Center, and Zeelandia Dementia Association
[1]Zeelandia Dementia Association, Tainan, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: The consensus and development direction of promoting dementia care services is that dementia patients should receive care services in communities and thus continue their community life. The purpose of this research is to explore how Non-governmental organizations for Alzheimer's disease help the masses and community residents understand and accept dementia patients.

Methods: This research used professionalism, resource connection, and service diversity of non-profit organizations as dimensions of observation and adopted participation and in-depth interview methods to conduct the research. Zeelandia Dementia Association had promoted a program of interdisciplinary dementia local community care services from August 2010 to October 2012. The research adopted this program as the subject to discuss the meaning and connotation of non-profit organizations promoting dementia community care services.

Results: The research results showed that the following characteristics should be demonstrated in the promotion of dementia community care services: 1. the characteristic of professional training combining with knowledge of basic care services 2. the characteristic of assisting patients in acquiring disease information, interacting, and maintaining community life style 3. the characteristic of assisting community organizations in training volunteers in order to establish the foundation of community care services 4. the characteristic of assisting patients' family in using social resources in order to relieve the burden of taking care of the patients 5 the characteristic of combining mass media with promotion of healthy activities in order to help masses understand and care about dementia issues 6.the characteristic of collecting and responding issues related to community care services in order to help governments amend policies related to dementia care services 7. the characteristic of participating in community care service programs in order to build up professional knowledge of local community services 8.the characteristic of integrating information with community service programs flexibly in order to provide patients and their family individualized care services.

Conclusion: To sum up, the professional workings of non-profit organizations for dementia facilitate the connections between resources effectively. These organizations also help dementia patients acquire friendly care services and life support by utilizing the flexible and various approaches of providing services.

Disclosure of Interest: H.-C. Yu Conflict with: president, P.-T. Chen Conflict with: Assistant Professor

OC072

Date: Friday 19 April 2013
Session: Dementia Friendly Communities

DEMENTIA FRIENDLY COMMUNITIES THAT UNDERSTAND HOW TO HELP
J. Hughes [1,*]
[1]CEO Office, Alzheimer's Society UK, London, United Kingdom

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: What is the role of banks, shops and transport companies in making life better for people affected by dementia? In the United Kingdom the Prime Minister has asked the UK Alzheimer's Society to lead work on creating dementia friendly communites. The Uk Society has created a Dementia Action Alliance of over 140 organisations who have each signed up to a National Dementia Declaration and have published action plans explaining what they will do to improve life for people affected by dementia. Under the Prime Minister's Challenge Jeremy Hughes and broadcaster Angela Rippon have chaired an action group of businesses to look at what organisations can do within particular sectors to become more dementia friendly. As a result banks are creating a dementia financial services charter, bus companies are training their drivers about dementia and schools are creating lessons for children about dementia too. The UK Alzheimer's Society is launching a programme to educate 1 million dementia friends by 2015 and is also working to create a system to recognise places and organisations committed to developing dementia friendly communities.

Disclosure of Interest: None Declared

OC073

Date: Saturday 20 April 2013
Session: Dementia Diagnosis

RE-EVALUATION OF PSYCHOMETRIC PROPERTIES OF CANTONESE MINI-MENTAL STATE EXAMINATION (C-MMSE) IN HONG KONG CHINESE

J. Leung [1,*], L. Wong [1], R. Chan [2]
[1]Psychiatry, [2]Medicine & Geriatrics, United Christian Hospital, Hong Kong, Hong Kong

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: The C-MMSE has been validated locally as the standard measure to screen for dementia for two decades. However, the results might not be generalized to persons with mild cognitive impairment (MCI) or mild dementia because the study sample consisted only of moderate-to-severe dementia and normal controls (Chiu et al, 1994). Besides, the cut-off scores for different education level were arbitrarily set due to insufficient number of subjects for analysis. This study aimed to examine the psychometric properties of CMMSE in detecting MCI and mild dementia in older population.

Methods: A total of 147 subjects were examined, divided into three groups: dementia (n=54), MCI (n=50) and normal controls (NC, n=43). C-MMSE was validated against an expert diagnosis according to *DSM-IV* criteria for dementia and *Petersen*'s criteria for MCI. Statistical analysis was performed using the receiver operating characteristic method and regression analyses.

Results: The mean scores of C-MMSE of dementia group was 16.4, MCI group was 21.6 and NC was 27.3. The optimal cutoff scores to differentiate dementia and MCI from NC were 25/26 and 26/27, respectively. The area under curve (AUC) for C-MMSE to detect dementia from NC was 0.97 (unadjusted) and 0.99 (adjusted for education level), giving sensitivity of 0.96 and specificity of 0.88; AUC to identify MCI was 0.85 (unadjusted) and 0.63 (adjusted for education level), giving sensitivity of 0.76 and specificity of 0.81. The AUC for C-MMSE in differentiation between MCI and NC was significantly impaired after adjustment of education (p=0.00).

Conclusion: The C-MMSE is a valid tool to detect dementia but not MCI after adjustment of education level in people aged 60 or above. In contrary to the findings by Chiu *et al* (cut-off score=19/20), a higher cut-off score at 25/26 is suggested as indication for further evaluation of cognitive impairment.

Disclosure of Interest: None Declared

OC074

Date: Saturday 20 April 2013
Session: Dementia Diagnosis

RISK EVALUATION FOR ALZHEIMER'S DISEASE BY ASSAYING BIOMARKERS IN PLASMA USING IMMUNOMAGNETIC REDUCTION

S.-Y. Yang [1,*], T.-F. Chen [2], H.-E. Horng [3], H.-C. Yang [4], C. Yang [3], J. Chieh [3], M.-J. Chiu [5]
[1]MagQu Co., Ltd., New Taipei City, [2]National Taiwan University Hospital, [3]National Taiwan Normal University, [4]National Taiwan University, [5]National Taiwan University/Hospital, Taipei, Taiwan

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: In order to reduce the diagnostic risk for Alzheimer's Disease, a high-sensitivity immunoassay is developed to quantitatively detect bio-markers in plasma instead of cerebrospinal fluid. The core technology for the immunoassay is so-called immunomagnetic reduction, in which antibodies functionalized magnetic nanoparticles are used as labeling markers to bio-markers such as Aβ-40, Aβ-42, and tau protein. By measuring the reduction in the magnetic signal due to the associations between magnetic nanoparticles and bio-markers, the concentrations of bio-markers can be detected. The low-detection limit of assaying these bio-markers is 1-10 pg/ml. The feasibilities of daignosing Alzheimer's Disease using immunomagnetic reduction is investigated.

Methods: More than 50 plasma samples from normal persons and more than 40 plasma samples from patients with Alzheimer's Disease are used for the assays of these bio-markers via immunomagnetic reduction. In addition, 21 plasma samples from patients with mild cognitive impairment are used for the same assays.

Results: It was found that there is no significant difference in the concentrations of Aβ-40 and Aβ-42 between normal group and Alzheimer's Disease/mild cognitive impairment. However, once the concentration ratio of Aβ-42 to Aβ-40 of each plasma sample is analyzed, the clinic sensitivity and specificity can be 88 % and 92 %, respectively. According to the ROC curve, the threshold for the concentration ratio is 0.357. As to the concentration of tau protein, the threshold was found to be 23 pg/ml, and the clinic accuracy was 90 %.

Conclusion: Via assaying the concentrations of bio-markers in plasma using immunomagnetic reduction, a high-sensitivity and high-accuracy in-vitro diagnosis for Alzheimer's Disease is developed. The results show the promising applications of this assay technology in high-through, safe, low-cost, comfortable examinations for Alzheimer's Disease.

References: 1. M.J. Chiu, S.Y. Yang, T.F. Chen, J.J. Chieh, T.Z. Huang, P.K. Yip, H.C. Yang, T.W. Cheng, Y.F. Chen, M.S. Hua, and H.E. Hong, Curr. Alzheimer Res. **9** (2012).
2. Che-Chuan Yang, Shieh-Yueh Yang, Jen-Jie Chieh, Herng-Er Horng, Chin-Yih Hong, Hong-Chang Yang, K. H. Chen, B. Y. Shih, Ta-Fu Chen, and Ming-Jang Chiu, *ACS Chem. Neurosci.* **2**, 500 (2011).
3. M. J. Chiu, H. E. Horng, J. J. Chieh, S. H. Liao, C. H. Chen, B. Y. Shih, C. C. Yang, C. L. Lee, T. F. Chen, S. Y. Yang, C. Y. Hong, and H. C. Yang, IEEE Trans. Appl. Supercond., **21**, 477 (2011).

Disclosure of Interest: None Declared

OC075

Date: Saturday 20 April 2013
Session: Dementia Diagnosis

MIXED DEMENTIA: A COMPARATIVE FOLLOW-UP STUDY

N. Mikhaylova [1,*], D. Tukhvatullina [2]
[1]Alzheimer's Disease Department, Mental Health Research Center Russian Academy of Medical Sciences,
[2]Alzheimer's Diseases Department, Mental Health Research Center Russian Academy of Medical Sciencies,
Moscow, Russian Federation

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: To study follow-up and survival in mixed dementia (AD with cerebrovascular disease, CVD) compared to "pure" Alzheimer's disease (AD) and vascular dementia (VaD) due to psychopharmacological intervention (neurotransmitter, neuroprotective, vasoactive medication, psychotropic and somatic therapy).

Methods: A cohort of 283 patients with dementia first time admitted to the psychogeriatric unit in 2005-2009 was followed-up 3 to 9 years. Survived patients were examined at home, out-patient and in-patient units, nursing homes and asiles using the same multidisciplinary approach (clinical, neuroimaging, psychometrical and somatoneurological assessments) as at their first admission.

Results: Follow-up data was obtained in 93.6% of mixed dementia cases, in 83.5% of "pure" AD and in 85.4% of VaD cases. During the follow-up period 55.7% of patients with mixed dementia died; among them 32.9% within 1-3 years, 17.0% - 4-6 years and 5.7% - 7-9 years after the first admission. The follow-up mortality of patients with "pure" AD was 45.3% (17.9%; 24.2% and 3.1%, resp.) whereas withdrawal due to the death in the group of VaD was 53.1% (26.6%; 17.2% and 9.4% resp.). Antidementia treatment was given at the first admission in 93.6% of mixed dementia cases, in 98.2% of AD and in 86.7% of VaD. Standard intervention included IChE (galantamine, rivastigmine, ipidacrine, donepezil), memantine as well as neuroprotective (cerebrolysine) and vasoactive drugs. The duration of drug therapy was 1-3 years in 71.9% of mixed dementia cases compared to 69.0% of AD and 25.0% of VaD patients. Cessation and withdrawal occurred as a rule during the second year of course of treatment. On the second period of observation (4-6 years) only 44.7% of survived AD patients continued taking antidementia treatment compared to 78.4% of patients with mixed dementia and 26.1% of VaD cases. On the third follow-up period (7-9 years) antidementia therapy followed 54.5% of survived AD patients; 41.2% of mixed dementia and 30.8% of VaD patients.

Conclusion: The mortality data revealed that number of patients with mixed dementia and VaD was largest at the early follow-up period (1-3 years) compared with "pure" AD. The study shows that overlong treatment was associated with the highest survival rate of patients with dementia.

Disclosure of Interest: None Declared

OC076

AMNESTIC MILD COGNITIVE IMPAIRMENT: BEYOND MEMORY

R. Balachandar [1,*], R. Tripati [2], S. Bharath [1], P. T. Sivakumar [1], K. Kumar [2], S. Loganathan [1], S. R. Chandra [3], M. Vargese [1]
[1]Psychiatry, [2]Clinical Psychology, [3]Neurology, National Institute of Mental Health And Neuroscience, Bangalore, India

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: Amnestic Mild cognitive impairment (aMCI) is currently considered as a prodromal of Alzheimer Dementia. Though aMCI is classified as single domain aMCI (memory alone) and multi domain aMCI (memory, executive function, language, attention or visuo-spatial skills), earlier studies (1) have reported that isolated aMCI is a rare variant. As human brain is a complex association of networks, isolated loss of single cognitive domain is a rare variant. Here we try to explore the nature of cognitive deficits in aMCI including memory and non-memory domains of cognition.

Methods: aMCI patients (N=34,F=9) visiting geriatric clinic, NIMHANS, India, from March2011-September2012, diagnosed according to Peterson, 2004 criteria and CDR = 0.05 (3) were assessed for cognitive deficits. Age, gender, education and occupation matched cognitively normal controls (cNC) (N=37, F=8) were also assessed with the same battery of tests. This battery of tests assessed memory (logical memory tests, design memory tests, word list) attention (digit span, spatial span), executive functions (category fluency tests) and working memory (spatial span & digit span - reverse). Appropriate statistical analyses were performed using R-statistics.

Results: cNC group performed significantly better than the aMCI group on logical memory, design memory (delayed recall, word list (Delayed recall) category fluency (animals and vegetables) ($p<0.0001$) Spatial span ($p<0.05$). Though cNC performed better than aMCI group on digit span, word list - delayed recognition and 1st trial of word list test, but they were statistically insignificant ($p<0.05$).

Conclusion: In this study we have explored the cognitive domains that are affected in aMCI. This study has shown that aMCI have associated cognitive dysfunction in the attention, executive functions & language along with the memory when compared to the matched cNC. Hence this finding supports the earlier notion that isolated single domain aMCI is rare variant and whether such an entity exists is questionable. However further study from multiple locations with larger sample is required for validation.

References: 1.Lenzi D, Serra L, Perri R, Pantano P, Lenzi GL, Paulesu E, et al. Single domain amnestic MCI:a multiple cognitive domains fMRI investigation. Neurobiol Aging. 2011 Sep;32(9):1542-57.
2.Petersen RC. Mild cognitive impairment as a diagnostic entity. J Intern Med. 2004 Sep;256(3):183-94.
3.Morris JC. The Clinical Dementia Rating(CDR): current version and scoring rules. Neurology. 1993 Nov;43(11):2412-4.

Disclosure of Interest: R. Balachandar: None Declared, R. Tripati: None Declared, S. Bharath Employee of: National Institute of Mental Health And Neuroscience, P. Sivakumar Employee of: National Institute of Mental Health And Neuroscience, K. Kumar Employee of: National Institute of Mental Health And Neuroscience, S. Loganathan Employee of: National Institute of Mental Health And Neuroscience, S. Chandra Employee of: National Institute of Mental Health And Neuroscience, M. Vargese Employee of: National Institute of Mental Health And Neuroscience

OC077

Date: Saturday 20 April 2013
Session: Dementia Diagnosis

LEPTIN AND THE RISK OF PROGRESSION TO ALZHEIMER'S DISEASE AMONG CHINESE OLDER ADULTS WITH AMNESTIC MILD COGNITIVE IMPAIRMENT.

L.-W. Chu [1,*]
[1]Department of Medicine, Queen Mary Hospital, THE UNIVERSITY OF HONG KONG, Hong Kong, Hong Kong

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Previous cross-sectional studies have shown that Alzheimer's disease (AD) patients have lower circulating leptin levels than non-demented older adults. There is a paucity of data on the risk of leptin and subsequent AD development in older adults with mild cognitive impairment. In this study we investigated the relationship of the serum leptin level to subsequent risk of progression to AD among Chinese older adults with amnestic MCI (aMCI).

Methods: *Design:*A one-year prospective cohort study; *Setting:* Ambulatory setting. *Subjects:* Chinese older adults, aged
55 to 93 years old, with aMCI by the Petersen's criteria. *Measurements:* Baseline demographic, clinical factors, and serum leptin level. All subjects were followed for one year. AD was diagnosed by the NINCDS-ADRDA criteria for probable AD.

Results: 131 Chinese older adults with aMCI were recruited and follow-up for one year. 13.7% (n=18) of them progressed to Alzheimer's disease by the end of one year. Older adults who progressed to AD had significantly a lower mean serum leptin level than that of stable MCI subjects (mean ±SD leptin levels= 5.18 ±7.40 versus 9.72±8.04 ug/L, respectively).

Conclusion: In Chinese older adults with amnestic MCI, having a low baseline serum leptin level predicts an increased risk of progression to Alzheimer's disease.

Disclosure of Interest: None Declared

OC079

Date: Saturday 20 April 2013
Session: Behaviour and Psychology of Dementia

CONFRONTATION NAMING ERRORS IN ALZHEIMER'S DISEASE

C.-Y. Lin [1, 2, *], T.-B. Chen [1, 2], K.-N. Lin [1, 3], Y.-C. Yeh [2, 4], W.-T. Chen [1, 2], P.-N. Wang [1, 2]
[1]Department of Neurology, Neurological Institute, Taipei Veterans General Hospital, [2]Department of Neurology, National Yang-Ming University School of Medicine, [3]Department of Psychology, Soo-Chow University, [4]Division of Neurology, Department of Internal Medicine, Far-Eastern Memorial Hospital, Taipei, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Naming difficulty has been found in the early stage of Alzheimer's disease (AD).[1] The naming errors detected in the Boston Naming Test (BNT) may result from impairment in visual interpretation, semantic conception, or word retrieval. We analyzed the error patterns presented in the BNT to investigate the possible cognitive mechanism for the naming difficulty in AD.

Methods: Totally, 115 normal controls (NC) and 104 mild to moderate AD patients were enrolled. The Chinese version of 30-item Boston Naming Test (BNT-30) was performed. Independent t test was used to examine the between group differences of demographic data. To control the effect of age and education on the performance, analysis of covariance (ANCOVA) was used to examine the differences of the BNT-30 scores and frequency of error patterns between the AD and NC groups. Accurate rates after semantic cues and phonemic cues were analyzed to investigate the efficacy of different types of cues. The errors of incorrect answers were classified into 7 different error patterns. The frequencies of the 7 types of error patterns noted in the AD and NC groups were compared. Partial correlation was performed to assess the association between the MMSE and the BNT-30 in the AD patients.

Results: Phonemic cues were more helpful than semantic cues to the naming performance in both of the AD patients (accurate rate after phonemic cues=0.25±0.20, accurate rate after semantic cues=0.11±0.12) and NC subjects (accurate rate after phonemic cues=0.30±0.26, accurate rate after semantic cues=0.19±0.24). The accurate rate after semantic cues was significantly lower in the AD patients than the NC subjects (AD vs. NC = 0.11±0.12 vs. 0.19±0.24,$p<0.05$). The AD group apparently made more errors in each error pattern, especially in non-response errors whose total number (n=806) obviously exceeded the NC group (n=382). However, no significant differences were observed on the distribution of the error pattern.

Conclusion: Naming difficulty in AD might be attributed to progressive semantic knowledge degradation. AD and NC differs quantitatively on the error numbers but not qualitatively on the error patterns.

References: 1.Hodges JR, Salmon DP, Butters N. The nature of
the naming deficit in Alzheimer's and Huntington's disease. Brain. 1991 Aug; 114 (Pt 4):1547-58.

Disclosure of Interest: None Declared

OC080

Date: Saturday 20 April 2013
Session: Behaviour and Psychology of Dementia

LEARNED INSIGHT OF AMNESIA VANISHING LATER THAN SELF AWARENESS IN LATE ALZHEIMER'S DISEASE (AD)

J.-L. ?. Chan / 詹 [1,*]

[1]Neurology, Taipei City Hospital, Yangming branch/台北市立聯合醫院陽明院區, Taipei/台北市, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific
Objectives: To see what happens to the insight of amnesia while self awareness is vanishing in late AD

Methods: Fifty-nine patients (M:F= 18:41), aged 59~102, with dementia of AD were grouped by MMSE (mini-mental status exam) scores into 4 (early: >/=21, n=15; mild: 16-20, n= 12; moderate: 11-15, n= 19; severe: </=10, n= 13). Each group was tested with 1) self awareness by asking each individual's name, age, birthday and children number, 2) confrontation naming by asking to name 3 objects of pencil, comb, and key, and 3) insight of amnesia by asking whether or not they have memory problems. Only completing right answers to all items in each test is counted correct response (CR). Numbers of CR in each test were collected for each group.

Results: 1) A concordant tendency was noted between the severity of AD and test results. 2) In moderate AD, when self awareness vanished (CR= 0%), the insight of amnesia remained to a significant degree (CR= 58%). 3) In early AD, four patients denied they had memory problems. 4) The test result of confrontation naming ran closer to that of insight of amnesia.

Conclusion: Insight of amnesia in AD patients is learned. The four patients in early AD, denying they had memory problems, do not learn from environmental feedback. The learned insight of amnesia through daily reminding stay longer than self awareness in late AD. Insight of amnesia having closer test results to confrontation naming may suggest that it be a cortical learning process of language. The potential of learning, i.e., cortical learning, in AD patients sheds light on rehabilitation in mild and moderate AD.

Disclosure of Interest: None Declared

OC081

Date: Saturday 20 April 2013
Session: Behavior and Psychology of Dementia

ART THERAPY FOR DEMENTIA PATIENTS: DRAWING WITH REFLECTION AND DEEP FEELINGS

C.-L. Yang [1,*]
[1] RN, Department of Nursing, Beitou branch, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: Mme A is a 92-year-old woman with mild degree Alzheimer's disease living in a dementia care center. Her sypmtoms include memory impairment, disorentation, congnitive impairment and declining language and communication capacities.

This paper explores the application of personalized art therapy strategy, based on the patient's personal character, motor capacity, background, life experience and attitude towards art activities. A "drawing with deep feelings and wanting" is proposed to Mme A: she has to feel herself deeply and search in her mind for "what she wants to do" for the subject of drawing. Then, she thinks about the composition of this picture, the arrangement of colors, etc. In the process, the therapist holds a conversation with her to understand her thought. At the end of drawing, the patient makes an auto-evaluation of her emotions and her art work.

During the start-up stage (of session), Mme A needs to overcome the anxiety coming from « empty mind », « feeling nothing », « nothing in my brain». The encouragement from the therapist plays an important part in helping her to reach her deep feelings. The duration of the start-up stage is short, and her anxiety decreases as she undergoes more therapy sessions.

In the following session, the therapist asks her to comment on her « artwork » (her drawing). Mme A couldn't recognize her own drawing and denied her ability to achieve such a beautiful work. The statement of her judgment about the artist's will, the image, the composition, the utilisation of color is similar to what she said in the art making process, except for a few images which she drew without reflection.

In the courses, Mme A's concentration is getting better and she can explain that she obtained a sense of pleasure and self-satisfaction in the art activities.

The findings of this case study indicate that art helps people to re-feel themselves and express more. As a caregiver, we can probably use art as a tool for communication to better understand the patient's mind and improve the care quality.

Disclosure of Interest: None Declared

OC082

Date: Saturday 20 April 2013
Session: Behaviour and Psychology of Dementia

ART AND DEMENTIA: EXPERIENTIAL MUSIC THERAPY GROUP IN DEMENTIA CARE

Y.-E. Huang [1,]
[1]Suang Lien Elderly Center, New Taipei City, Taiwan

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: Music therapy is relatively a new intervention in Taiwan which developed approximately a decade. It is seen as an alternative medicine, similar to what Chinese medicine was considered in the past.Additionally,Music Therapy has not widely acknowledged by local people, whereas music therapists have recognised as the professions in the UK and the States. The author is a HPC(Health Professions Council,UK)registered music therapist, receiving her training in Britain.She has worked in a large elderly centre just over a year and found out a number of residents, who are not demented, have few connections with other people living here, though they regularly attend activities organized by the centre.The phenomenon can also be found among those who are diagnosed with dementia, and the cold, indifferent atmosphere is much stronger in the special care units for dementia elderly. Therefore, the author (the music therapist in the following context) though of running a music therapy group for dementia residents to encourage them to be aware of others. Besides, the group is aimed to make these demented ones' later life living well.This essay is a half-way case study in relation to an experiential six-month music therapy group with five clients. One of them is demented due to alcohol abuse and the others are suffering from Alzheimer's disease. This is also a piece of co-operative work that music therapist is working with an evangelist. This is because the elderly centre was founded by a local century-old Presbyterian church. In the sessions, in addition to interactive music making,adapted Bible stories are used to do storytelling and conversational talks are strongly encouraged. The group has been gathered once a week for three months until now. Some facts were discovered as follows. Group members easily resonated with adapted stories and they carefully performed music making followed by the therapist's suggestion.However,the vocal dialogues were usually between the therapist and one of the individuals only. Not very often they talked to each other. They would knock their head to one and another while entering the room and very few interactions between clients happened.This group will continue for another three months.It is unrealistic to expect the clients to start the sessions but hopefully to see their increase of awareness of the external world and through interactive music making,they may share their life stories to share the feelings of being an Alzheimer's sufferers.

Disclosure of Interest: None Declared

OC083

Date: Saturday 20 April 2013
Session: Behaviour and Psychology of Dementia

A PILOT STUDY OF EMOTION RECOGNITION IMPAIRMENT IN OLDER PEOPLE WITH EARLY DEMENTIA
I. Ip [1], T. Kwok [1, 2,*] on behalf of Department of Medicine & Therapeutics, The Chinese University of Hong Kong, Hong Kong, Hong Kong, China, B. Wong [1], F. Ho [1]
[1]Jockey Club Centre for Positive Ageing, [2]Department of Medicine & Therapeutics, The Chinese University of Hong Kong, Hong Kong, Hong Kong

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: A pilot study about emotion recognition was conducted to people with early dementia (PwD). Emotion recognition has been shown to be impaired in people with early Alzheimer disease. This impairment may lead to social dysfunction and psychological stress to their caregivers. This pilot study serves to guide further studies on the association of emotion recognition with social functioning and behavioral problems of PwD, and stress in family caregivers.

Methods: This study focused on four major emotions: happy, sad, angry, frightened. Those with mini mental state examination score <15 out of 30, significant dysphasia, visual or hearing impairment were excluded. Screening was done with Ekman photos of the four emotions paired with a photo of the same person with neutral emotion to exclude those failing to select the photo exhibiting the stated emotion. 20 PwD of a day care centre were screened and 17 fulfilled the criteria and participated in this study.
They were asked to view four short video clips, the target person demonstrating one of the four emotions. The subjects were then asked to identify the emotion by selecting one out of four previously shown Ekman photos labeled by the Chinese term for the emotion both in writing and verbally. Each video clip was broadcast twice, once with sound and once without. The verbal content was emotionally neutral. The sequences of emotion and videos with or without sound output were randomly assigned. Wilcoxon Signed Rank Test was used to compare the differences between tested variables.

Results: The average composite emotion recognition score was 4.88 (max. 8) sd 1.32. Analysis showed no statistically significant difference in scores in the first and second sets of videos (Z=-.58, p=.57), suggesting no significant practice effect. 94% of the subjects were able to identify happy emotion, while only 18%, 35% and 47% were able to do so for sadness, anger and fright respectively; statistically significant difference was observed between emotion recognition of happiness vs. sadness (Z=-3.11, p<.01), vs. anger (Z=-2.81, p<.01), vs. fright (Z=-2.37, p<.05), and vs. sadness, anger, fright as a group named "negative emotion" (Z=-3.20, p=.001). There was no significant difference in the total scores of videos with or without sound (Z=-.58, p=.57), suggesting that additional clue from emotionally neutral sound was not helpful to emotion recognition.

Conclusion: Older people with early dementia had significant impairment in the recognition of negative emotions.

Disclosure of Interest: None Declared

OC085

Date: Saturday 20 April 2013
Session: Support, Training and Education

THE CHALLENGE OF LANGUAGE IN EFFECTIVE COMMUNICATION / CAREGIVING FOR PEOPLE WITH DEMENTIA IN THE SINGAPORE CONTEXT

S. M. Kan [1,*]
[1]Heartfelt Care Pte Ltd, Singapore, Singapore

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: The Challenge of LANGUAGE in effective communication / caregiving for people with dementia in the Singapore Context
Singapore is the world's third fastest aging nation. This means a rapid increase in the number of dementia persons over the years. Currently, there are 22,000 people with dementia in Singapore. By 2020, the number will be doubled or even more. Singapore is also a multiracial society. There are four official languages in Singapore: English, Malay, Mandarin and Tamil. The last generations of Singaporeans were immigrants from China, India, and Peninsular Malaysia; speaking mainly Chinese dialects (eg Hokkien, Teochew, Cantonese, Hainanese and Hakka), Indian dialects (eg Tamil) and Malay, as shown in the table below. They are getting old and some would suffer from dementia. The younger generations are educated in English, and also learn their respective mother tongues. Many do not speak dialects as the use of these was not encouraged.
Table: Language most frequently spoken at home (%)

Language	1990	2000	2010
English	18.8	23	32.3
Mandarin	23.7	35	35.6
Chinese Dialects	39.6	23.8	14.3
Malay	14.3	14.1	12.2
Tamil (Indian dialect)	2.9	3.2	3.3

As the dementia people are mainly the older generations, it is important that the caregivers understand and are able to handle the language and media the elderly are comfortable in. There are already language gaps between the older and the young Singaporeans as the former do not speak English and the latter do not speak dialects. In Singapore, double income has become a culture to raise families. Younger couples are struggling to manage both family and work every day. Hence many middle class Singaporean households employ a foreign domestic helper to work as stay-in maid to care for the elderly, besides the household chores. As the maid is a significant part of dementia care, a major challenge is to train the maids in understanding and managing dementia persons of different race, culture, language and dialects. The challenge here would be the impaired communication between these maids and the dementia elderly. It is important to demonstrate effective communication with the dementia person to establish rapport to better understand their needs, and through using Validation Therapy and Reminiscence to reassure and minimize their distress. Such challenge would also affect the care professionals and care institutions such as Day Centres, Nursing Homes and Hospital for dementia patients. Therefore, training is essential for these foreign workers.

Disclosure of Interest: None Declared

OC086

Date: Saturday 20 April 2013
Session: Support, Training and Education

THE INTER-RATER RELIABILITY OF CLINICAL DEMENTIA RATING USED SEMI-STRUCTURED QUESTIONNAIRE IN CHANG GUNG DEMENTIA CENTER.
C.-C. Yeh [1,*], W.-C. Hsu [1], Y.-C. Chu [1], Y.-P. Hsu [1], C.-N. Lee [1], H.-J. Chi [1], Y.-H. Lin [1]
[1]Dementia Center, Chang Gung Memorial Hospital, Taoyuan, Taiwan

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: Clinical Dementia Rating (CDR) is a global rating scale in assessing the severity of dementia. However, the accuracy of the scale depends on clinical judgment, a special instance of perception in which the clinician attempts to use whatever sources are available to create accurate descriptions of the client. Since judgment may vary from one rater to another, it may be important to assess the extent to which reliability might be affected. The aim of this study was to evaluate the reliability of CDR used Semi-structured questionnaire in Chang Gung Dementia Center.

Methods: Eighteen subjects aged 65 years or older were selected from Chang Gung Dementia Center in a medical center in Northern Taiwan. They included 7 males, and 11 females. Severity of dementia was normal=1, questionable/very mild=6, mild=8, moderate=2, and severe=1 among them. Four raters participated in this study. Measure: Information to rate each domain in CDR is obtained by semi-structured clinical interview questionnaire with caregiver. The semi-structured interview questionnaire, divided into six parts corresponding to the six domains of the CDR, was developed in Chang Gung Dementia Center.
Procedure: One of the four raters alternately reported cases, including basic data, tests results and results of interview in the fixed meeting since May of 2012. The rest of the raters independently scored the CDR in accordance with the contents of the report. Statistical analyses were performed by SPSS version 20. The inter-rater reliability for each domain and the global score of the Clinical Rating Scales was evaluated by Kendall's W.

Results: The agreement for each domains, and global CDR were high (the Kendall's W range: .915~.967).

Conclusion: This study found that the inter rater reliability in Chang Gung Dementia Center is high, and comparable with
published reliability in the literatures.

Disclosure of Interest: None Declared

OC087

Date: Saturday 20 April 2013
Session: Support, Training and Education

DEMENTIA ACTIVITIES AND CARE TOOLKIT (DEMACT) PROGRAMME – EFFECTIVENESS AND BENEFITS OF THE PROGRAMME

Y. C. Kuo [1,*], M. S. L. Tan [1], X. H. Tan [2], S. Cai [3], P. L. Toh [3], H. J. Koh [1]
[1]Community Psychogeriatric Programme , [2]Singapore Changi General Hospital , [3]Alzheimer's Disease Association, Singapore , Singapore

Are you submitting a scientific or non scientific abstract? Non-Scientific

Abstract: Objectives
With funding support from the Singapore Health Promotion Board and collaborating with the Alzheimer's Disease Association (ADA) Eldersit Programme, the DemACT programme provides training to eldersitter (ES) on the use of an Activity Toolkit to engage persons with dementia (PWD) in activities. This study aims to evaluate the effectiveness and benefits of the programme to ES and PWD.

Methods
From Sep 2011 to March 2012, twelve ES completed 18 hours of classroom training, seven of them completed 6 hours on-the-job (OJT) training and were assessed as competent in engaging PWD by occupational therapistsfrom Changi General Hospital.The training focused on person-centred care practices, facilitating activities with PWD and the use of the DemACT toolkit. Attitude to Dementia Questionnaire (ADQ) and Confidence in Activities Scale (CAS) were administered to ES to evaluatethe changes after the training. Recruitment of PWD involved social work assessment and intervention by ADA. The Individualised Care Plan, Barthel Index, Revised Memory and Behavioural Problem Checklist, Caregiver Strain Index and Pool Activity Levels Checklist were administered to guide activity planning. Quality of Life-AD (caregiver's version), Wellbeing Profiling Tool (WBP), and questionnaire were administered to examine effectiveness and benefits of the programme.

Results
Results showedsignificant differences in CAS (n=6, $p<.05$) in ES after OJT .Twenty-eight PWD were enrolled and 421 visits (782.5 hours) were conducted. The frequency, length, and time of visits were arranged depending on the preferences of the PWD and their caregivers (CGs). The ES used the DemACT toolkit to engage the PWD in activities, which included cognitive games, creative arts activities, physical exercise, reminiscence, and sensory stimulation. The PWD showed increasing signs of wellbeing during the sessions in 2 months (n=13, $p<.05$). Ten CGs viewed the most beneficial aspects were providing social interaction/companionship, mental stimulation, and respite and 1-2 hour session would be appropriate for the PWD.

Conclusions
Findings from the study suggested that the DemACT programme was beneficial in enhancing the confidence and skills of ES in engaging PWD in activities and PWD enrolled into the Eldersit Programme benefited from the use of the DemACT toolkit. Further evaluation with a larger sample is needed to explore the effectiveness of the DemACT Toolkit in promoting wellbeing and quality of life in PWD.

Disclosure of Interest: None Declared

OC088

THE ASSOCIATION BETWEEN INTERVENTIONS IMPROVING PERSON-CENTERED CARE FOR PEOPLE WITH DEMENTIA LIVING IN RESIDENTIAL HOMES AND THE EMOTIONAL WELL-BEING OF RESIDENTIAL HOME STAFF IN HONG KONG

T. H. Chan [1,*], E. S. H. Lee [1], K. S. Y. Ng [1], E. W. Y. Lo [1]
[1]Hong Kong Sheng Kung Hui Welfare Council, Hong Kong, Hong Kong

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: Person-centered care is an emotion-intensive work. The emotional well-being of both professional and frontline staff is critical to quality dementia care services. To ensure continuous service improvement after large scale dementia care service improvement project, monitoring the changes in emotional well-being of the staff is necessary. The current study aimed to evaluate the impact of interventions improving dementia care service in residential homes on staff burnout.

Methods: Two waves of assessments were undergone in 6 residential homes under Hong Kong Sheng Kung Hui Welfare Council before and after 6 months of person-centered care interventions. The direction of the interventions was to facilitate delivering person-centered care through small but significant efforts. In each wave, the staff filled questionnaires containing all three subscales of Copenhagen Burnout Inventory (CBI), which was used to assess their emotional exhaustion and demographics anonymously. The average scores of each home were taken. The levels of burnout across the time points and its relationship to the number of Personal Enhancers (PEs) and Personal Detractions (PDs) per observed participant in the homes were tested.

Results: In time 1 and time 2, 240 and 183 staff filled in the questionnaires respectively. Changes in all three burnout subscales were not significant. Spearman correlation revealed that the decreases in the number of PDs was significantly associated with decreases in work burnout ($r = 1.00$).

Table 1
Descriptives of CBI and correlation with PE and PD

	T_1 M (SD)	T_2 M (SD)	z	Correlation between change in subscale and change in PE	Correlation between change in subscale and change in PD
Personal Burnout	44.6 (23.9)	41.9 (21.2)	1.4	.66	.37
Work Burnout	37.8 (20.4)	35.9 (18.2)	1.2	.03	1.00***
Client Burnout	27.5 (19.9)	25.5 (17.8)	1.2	.70	.32

Conclusion: Improving person-centered care did not seem to contradict with the emotional well-being of the staff. The finding of the association between decrease in PD and decrease in work burnout suggested that successful intervention targeted at person-centered care might actually reduce the burnout of the staff. The benefit to the staff would reinforce the future development of person-centered care.

OC089

Date: Saturday 20 April 2013
Session: Support, Training and Education

WHAT CAN PROGRAMME ACTIVITY WORKERS CONTRIBUTE TO PERSON WITH COGNITIVE IMPAIRMENT IN HONG KONG? – AN EXPLORATORY APPROACH

O. S.-K. Sin [1], G. K. Wong [2,*], W. K. Lui [3]
[1]Kin Chi Dementia Care Support Service Centre, St. James' Settlment, Hong Kong, [2] College of Life Sciences and, HKU SPACE, HK, [3]WCDECC, St. James' Settlement, Hong Kong, Hong Kong

Are you submitting a scientific or non scientific abstract? Non-Scientific

Abstract: Caring for Persons with cognitive impairment requires a multidisciplinary model of care but the team is often comprised of professionals from medical to allied health professionals. There is often under reported on low grade workers such as programme workers and their contributions to care of persons with cognitive impairment.
A range of non-pharmacological interventions have been developed over the past decades such as reminiscence, reality orientation, and storytelling However, the cost for hiring professional workers to deliver the therapeutic interventions is high. Such cost would eventually go to the service users. In order to enable the delivery of the interventions, programme activity workers have been recruited and trained to work at Dementia Day Care Centre. It is believed that the programme activity workers after receiving the tailor made training would take up the job of serving the Persons with cognitive impairment.
It has been a year since the introduction of programme activity workers into Dementia day care centre. The outcome is that the programme workers were able to support the professional staff by implementing the activity programmes effectively. They were well received by the clients with cognitive impairment such as forming a good relationship and trust between them. Family caregivers have praised the professional standard of the programme activity workers.
Qualitative data will be collected via focus group interview to understand the job description as a programme worker working in Dementia Care. Themes will be identified such as the roles and functions and contributions to meet needs of the Persons with different stages of cognitive impairment.

Key words: Programme Activity Worker, Persons with Cognitive Impairment and the tailor main training programme

Disclosure of Interest: None Declared

OC090

Date: Saturday 20 April 2013
Session: Support, Training and Education

SETTING UP OF THE MADRAS MEMORY CLINIC – AN INTEGRATED MODEL

P. S [1], S. R [2,*]
[1]Faculty Head , RGNIYD, RGNIYD, [2]Psychiatry, SRI RAMACHANDRA UNIVERSITY, Chennai, India

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: Role of Specialist Memory clinic to identify memory deficits in terms of day-to-day activities and early identification of conditions of Dementia- A Sharing of Madras Memory clinic experiences.

Methods: Some elderly individuals, exhibit significant memory deficits but their general intellect is preserved and they
have no impairments in everyday activities. These symptoms are often a precursor to Alzheimer disease (AD), but sometimes dementia does not occur, even after many years of observation. To address these conditions, Specialist Memory Clinics have a vital role to play, complementing community services which reach out to older people with mental health problems.
 The Madras Memory clinic provides integrated multidisciplinary diagnostic approach for dementia to enable a prompt and accurate management. The Memory clinic also offers pharmaceutical and psycho-social interventions
  for dementia   patients .The staff carry out on-going evaluations of the effectiveness of these treatments whilst also offering information and support to service users and carers.

Results: The paper will give a holistic perspective of the diagnostic approaches, viz, use of   psycho-diagnostic scales (MMSE, ADAS- Cog, CANTAB. Clock Draw Test, and NPI), New Imaging Methods such as F 18 Flurodeoxyglucose- PET (FDG-PET) and PET amyloid imaging

Conclusion: With the above method discussed, the Memory clinic demonstrates early detection and allows preparation of accurate management practices ensuring better living conditions of People living with Dementia in identifying better Psychosocial interventions, right innovative technologies and imaging methods.

References: A self experience on patients attending the clinic and papers shared during National Conference of ARDSI at Sri Ramachandra University, Chennai

Disclosure of Interest: None Declared

OC091

Date: Saturday 20 April 2013
Session: Imaging and Biomarkers

CEREBROSPINAL FLUID BIOMARKERS IN CHINESE ALZHEIMER'S DISEASE PATIENTS

L.-W. Chu [1,], Y. F. Shea [1], L. Zhou [1]
[1]Department of Medicine, Queen Mary Hospital, THE UNIVERSITY OF HONG KONG, Hong Kong, Hong Kong

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: There is a paucity of data on the validity of cerebrospinal fluid (CSF) tau, phosphorylated tau 181 (p-tau), amyloid beta (Aβ) 42, and Aβ oligomers proteins in diagnosing Alzheimer's disease (AD) in Chinese patients. In this study, we investigated the levels of CSF tau, p-tau, Aβ42 and Aβ oligomers proteins in Alzheimer's disease (AD) patients.

Methods: We recruited 14 patients with AD and 8 patients with non-AD conditions from the Memory Clinic of Queen Mary Hospital. CSF samples collection by lumbar puncture and cognitive assessment were done at baseline. We did CSF tau, p-tau, Aβ42, and Aβ oligomers proteins assays with commercial ELISA kits.

Results: We found AD patients had higher levels of CSF tau and p-tau, but lower levels of Aβ42 level than non-AD patients ($p=0.014$, 0.003, 0.034, respectively; Mann-Whitney U test). Moreover, AD patients had lower Aβ42/tau and Aβ42/p-tau181 ratios than non-AD patients ($p=0.001$ for both). High CSF Aβ oligomers levels (> 1.98 pmol/L) were more common in AD than non-AD patients (35.7% versus 0 %; $p=0.021$, Chi-square statistics). In ROC curve analyses, the area-under-curve (AUC) of CSF levels of Aβ42, tau, p-tau181, Aβ42/ tau and Aβ42/ p-tau ratios ranged from 0.777 to 0.929. For the diagnosis of AD, the ratio of Aβ42/ tau had high sensitivity and specificity of 86% and 88%, respectively. The Aβ42/ p-tau ratio was the most specific for the diagnosis of AD (100% specificity), while retaining a good sensitivity of 79%.

Conclusion: In conclusion, the Aβ42/ tau and Aβ42/ p-tau ratios were sensitive and specific diagnostic biomarkers of AD in our Chinese population.

Disclosure of Interest: None Declared

OC092

Date: Saturday 20 April 2013
Session: Imaging and Biomarkers

DOSE PLASMA TELL ABOUT ALZHEIMER'S DISEASE -- A NEUROIMAING AND NEUROPSYCOLOGICAL ASSOCIATION STUDY

M.-J. Chiu [1, 2, 3, 4,*], Y.-F. Chen [5], K.-Y. Tzen [6], T.-F. Chen [1], S.-Y. Yang [7, 8], F.-P. G. Yang [9], T.-W. Tseng [1], J.-J. Chieh [10], J.-C. R. Chen [1], M.-S. Hua [1, 3]
[1]Neurology, National Taiwan University Hospital , [2]Institute of Brain and Mind Sciences, College of Medicine, National Taiwan University, [3]Psychology, [4]Graduate Institute of Biomedical Engineering and Bio-informatics, Molecular Imaging Center, National Taiwan University, [5]Medical Imaging, [6]Nuclear Medicine, National Taiwan University Hospital, [7]Institute of Electro-optical Science and Technology, National Taiwan Normal University, Taipei, [8]MagQu Co., Ltd, Sindian City, New Taipei City, [9]Foreign Languages and Literature, National Tsing Hua University, Hsinchu, [10]Institute of Electro-optical Science and Technology, National Taiwan Normal University, Taipei, Taiwan

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: Recent advance in biomarkers provides possible early or preclinical diagnosis of AD which implements treating patients at early Alzheimer's pathology. Decreased Aβ42 and increased tau proteins in CSF are considered reliable biomarkers for AD while the issue of plasma tau and amyloid proteins remains unsolved. We aimed to investigate the potential of using plasma biomarkers for AD and to explore relation to neuroimaging and neuropsychological test.

Methods: We used immunomagnetic reduction assay to measure amyloid Aβ40, Aβ42 and tau proteins in 20 subjects with MCI, 10 subjects with early AD and 30 controls. All subjects underwent 3D MR and DTI studies and received a same set of neuropsychological tests assessing memory, executive, attention and visuospatial functions; 28 subjects received amyloid PIB-PET scans.

Results: There were significant group differences for plasma tau, Aβ42 and Aβ42/40 (all $p < .01$). Spearman correlation showed that in the patient group plasma tau levels were negatively associated with scores of Logical Memory (r =-.485, $p < .01$) and Visual Reproduction (r = -.425, $p < .05$); and were associated positively with Trail-Making B (r= .454, $p < .05$). Plasma Aβ42/40 were negatively associated with completed categories of WCST (r = -.473, $p < .01$) and Trail-Making B (r = .476, $p < .01$). Plasma Aβ42/40 correlated positively with the right frontal lobe PIB-PET retention (r =.539, $p < .05$) in the patient group while with the right temporal lobe (r = .622, p < .05) in the control group. In the VBM study, plasma Aβ42/40 correlated negatively with middle frontal (r = -.423, p < .05), inferior frontal (r = -.380, p < .05), precuneus (r = -.637, p < .01) and supramarginal gyrus (r = -.404, p < .05) while plasma Aβ40 levels correlated positively with middle frontal (r = .383, p < .05), precuneus (r = .716, p < .001) and supramarginal gyrus (r = .520, p < .01) in the patient group. In the DTI study, plasma Aβ42/40 correlated positively with TBSS-MD at forceps minor (r = .426, p < .05) and right inferior fronto-occipital fasciculus (r = .429, p < .05).

Conclusion: The plasma amyloid and tau proteins are useful biomarkers for MCI and AD. Plasma tau levels and Aβ42/40 negatively associated with cognitive functions. Gray matter densities show negative relation with plasma Aβ42/40 in precuneus, supramarginal gyrus, middle and inferior frontal gyrus, all are areas for Alzheimer's early pathology. White matter integrity also has some relationship with the plasma biomarkers.

Disclosure of Interest: None Declared

OC093

Date: Saturday 20 April 2013
Session: Imaging and Biomarkers

STRUCTURAL INTEGRITY OF THE CINGULUM BUNDLE AND ITS RELATIONSHIP WITH EXECUTIVE FUNCTION IN PATIENTS WITH MILD COGNITIVE IMPAIRMENT AND PATIENTS WITH MILD ALZHEIMER'S DISEASE

Y.-C. Lin [1,*], P.-F. Tang [2], M.-J. Chiu [3], W.-Y. I. Tseng [4], Y.-H. Chu [5]
[1]Department of Physical Medicine and Rehabilitation, China Medical University Hospital, Taichung, [2]School and Graduate Institute of Physical Therapy, National Taiwan University, [3]Department of Neurology, National Taiwan University Hospital, [4]Center for Optoelectronic Biomedicine, National Taiwan University, Taipei, [5]Department of Physical Therapy, China Medical University, Taichung, Taiwan

Are you submitting a scientific or non scientific abstract? Scientific

Objectives:
This study was aimed to: (1) compare differences in structural integrity of the cingulum bundle (CB) among patients with mild cognitive impairment (MCI), patients with mild Alzheimer's Disease (AD), and healthy controls using diffusion spectrum imaging (DSI) of the brain; and (2) investigate the relationship between executive function and structural integrity of the CB in patients with MCI and mild AD.

Methods:
We recruited 8 MCI (73 ± 8 years), 9 mild AD (74 ± 8 years), and 15 age-matched healthy controls (71 ± 7 years). All subjects underwent a DSI MR scan of the brain and three neuropsychological tests, including the Parts A and B of the Color Trails Test (CTT-A and CTT-B, respectively) and the Nelson's Modified Card Sorting Test (MCST), for assessing executive function. We used tract-specific analysis of the DSI data to calculate the generalized fractional anisotropy (GFA) values of the entire CB and the anterior (aCB), middle (mCB), and posterior (pCB) segments of the CB of each hemisphere. Greater GFA values indicate better integrity of CB. We used the Kruskal-Wallis analysis of variance by ranks test to compare group differences in GFA values and executive function; and used the Spearman's rank correlation coefficients to investigate the relationships between executive function and structural integrity of the CB indexed by the GFA values.

Results:
The mild AD group performed significantly poorer than the healthy group on CTT-A, CTT-B, and the number of completed sets and perseverative errors of the MCST test ($p < 0.05$). The mild AD group also presented significantly smaller GFA values of the entire left entire CB and left pCB than the healthy group ($p < 0.01$). The correlation analyses showed that for the two patient groups, the time to complete the CTT-B was highly correlated with the GFA values of the left entire CB, left pCB, and right mCB ($r = -0.62$, -0.61 and -0.48, respectively, $p < 0.05$). In addition, the number of non-perseverative errors on the MCST was significantly correlated with the GFA value of the right mCB ($r = -0.50$, $p < 0.05$).

Conclusion:
These findings suggest that the structural integrity of the CB, particularly the left entire CB, left pCB, and right mCB, analyzed by using the tract-specific method, could reveal early degeneration of the CB fiber integrity that is associated with early decline in executive function.

Disclosure of Interest: None Declared

OC094

Date: Saturday 20 April 2013
Session: Imaging and Biomarkers

A PRELIMINARY EXPERIENCE USING C-11 PIB FOR THE DIAGNOSIS OF AD IN TAIWAN

K.-Y. Tzen [1,*], C.-Y. Chou [2], C.-Y. Shiue [1], T.-F. Chen [3], Y.-F. Chen [4], T.-W. Tseng [3], M.-J. Chiu [3, 5]
[1]Nuclear Medicine, National Taiwan University Hospital, [2]Department of Bio-Industrial Mechatronics Engineering, National Taiwan University, [3]Neurology, [4]Medical Imaging, National Taiwan University Hospital, [5]Neurology, National Taiwan University, Taipei, Taiwan

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: The purpose of this study is to test the feasibility of applying ^{11}C-PiB (Pittsburgh Compound B) PET scan in the healthy aging controls (HC) and those who were suspicious of MCI (mild cognitive impairment)/very early AD (Alzheimer's disease) or mild AD.

Methods: We collected 15 HC, 10 MCI/very early AD and 5 mild AD subjects for ^{11}C-PiB PET scan. All the subjects are at the age 50-90 and physically healthy without depression (the Geriatric Depression Scale less than 8). The 15 HC were sub-divided into low risk (5) and high risk (10). The former showed negative on all of APOE ε4, APOEε4/ε4 and TOMM40 long T and the latter showed positive on any one of APOE ε4, APOEε4/ε4 or TOMM40 long T. All normal controls had Clinical Dementia Rating (CDR) 0, MCI/very early AD with CDR 0.5 and mild AD with CDR 0.5 or 1 and fulfill the NINCDS-ADRDA criteria.
The ^{11}C-PiB was produced by the PET Center of the Department of Nuclear Medicine of the National Taiwan University Hospital. All the subjects were given 10-15 mCi of ^{11}C-PiB intravenously. The scan was done 40-70 min. post injection. ^{11}C-PiB accumulates in the cerebral cortical areas was classified as abnormal. Both 2D PET slices and 3D volume rendered images by NeuroGam (GE Healthcare) were used for interpretation. Quantitative measurements of the uptake ratios of ^{11}C-PiB at frontal, precuneus, parietal and temporal cortices to cerebellar (cereb) cortices were calculated.

Results: We found that in HC, 13% (2/15) was positive with all 5 low risk group negative and 2 of 10 high risk group positive. In MCI/very early AD, 50% (5/10) was positive and in mild AD, 100% (5/5) were all positive for ^{11}C-PiB PET scan. There is a tendency of increased uptake ratios of PiB in the cerebral to cerebellar cortices in Mild AD than MCI/very early AD than normal controls.

	Low risk HC (n=5)	High risk HCl(n=10)	MCI/very early AD(n=10)	Mild AD(n=5)
Frontal/cereb	1.26 ± 0.30	$1.08 + 0.24$	1.59 ± 0.37	1.95 ± 0.30
Precuneus/cereb	1.08 ± 0.08	$1.10 + 0.14$	1.52 ± 0.38	1.86 ± 0.24
Parietal/cereb	1.11 ± 0.05	$1.13 + 0.16$	1.39 ± 0.30	1.78 ± 0.25
Temporal/cereb	1.18 ± 0.13	$1.09 + 0.24$	1.43 ± 0.33	1.78 ± 0.30

Conclusion: This is the first trial of ^{11}C-PiB PET scan for the diagnosis of possible AD in Taiwan. In this preliminary study with limited cases, we found that both qualitative imaging study and quantitative analyses may separate low risk HC from mild AD. The positive findings of 2 high risk HC and 5 MCI needs further follow up. In order to prove its clinical efficacy, we need further study with more subjects involved in the future.

Disclosure of Interest: None Declared

OC095

Date: Saturday 20 April 2013
Session: Imaging and Biomarkers

IN VIVO QUANTIFICATION OF BETA-AMYLOID PLAQUE DEPOSITION BY [18F]AV-45 DYNAMIC PET IMAGING IN APP/PS1 TRANSGENIC MICE

K.-T. Chao[1,*], T.-C. Yen[1], H.-H. Tsao[1], W.-C. Chang[1], I.-J. Chen[1], Y. Yang[2], I.-T. Hsiao[1], S.-P. Wey[1], M.-P. Kung[3], K.-J. Lin[1]
[1]Chang Gung Memorial Hospital, Taoyuan, [2]Taipei Medical University, Taipei , Taiwan, [3]University of Pennsylvania, Philadelphia, United States

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: Alzheimer's disease (AD) is a common neurodegenerative disorder related to age and characterized by the deposition of beta-amyloid plaque. Currently, in vivo imaging and quantification of beta-amyloid plaque deposition in small animal-models is a valuable tool for translational and longitudinal research. In this study, we evaluated a feasible protocol for in vivo quantification. Dynamic PET studies using [18F]AV-45 were performed in APP/PS1 transgenic mice and normal mice to find the optimal imaging time window.

Methods: Dynamic PET images were acquired for 60 minutes in 8-month (n=5), 12-month (n=5), 16-month (n=5) APP/PS1 mice and normal C57BL6 mice (n=5). CT and MRI images were performed for image co-registration and normalization. Standard uptake value ratio (SUVR) and Logan reference distribution volume ratio (DVR) of regions of interest (i.e., cortex, hippocampus, thalamus, cerebellum and midbrain) were used for finding the optimal imaging time. The reproducibility of [18F]AV-45 PET imaging was evaluated by performing a test–retest study within 1 week. In vivo results were validated by ex vivo autoradiography and fluorescent staining.

Results: [18F]AV-45 uptake increased in APP/PS1 mice associated with age (SUVR 8-mo:1.14 ± 0.01, 12-mo:1.17 ± 0.05, 16-mo:1.20 ± 0.08) at cortex as compared with normal mice (1.04 ± 0.03)(midbrain as reference region). Consistent higher correlations (r=0.88) of SUVRs to DVR were observed at 40–50 min. [18F]AV-45 PET SUVRs and DVR displayed a steady test–retest stability. The distribution of [18F]AV-45 PET and autoradiography were consistent with thioflavin-S staining.

Conclusion: The scanning time of 40-50 min is considered as the optimal time window for SUVR quantification. The test-retest study demonstrates that [18F]AV-45 microPET imaging is reproducible and stable in living mouse brain. The results provide the reliable data of in vivo quantification for beta-amyloid plaque deposition by using [18F]AV-45 PET imaging.

Disclosure of Interest: None Declared

OC096

Topic: Dementia Imaging and Biomarkers

G72 AS A PERIPHERAL BLOOD BIOMARKER FOR SCHIZOPHRENIA

H.-Y. Lane [1,*]
[1]China Medical University Hospital, Taichung, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Dysfunctional glutamatergic neurotransmission, particularly through the N-methyl-D-aspartate (NMDA) receptor, has been implicated in the pathophysiology of aging. Attenuation of NMDA receptor-mediated neurotransmission can result in impaired neuroplasticity and cognitive deficits in the aging brain. The enzyme serine racemase (SRR) generates d-serine, an endogenous co-agonist of the NMDA receptor. We propose that SRR gene expression deteriorates with age, particularly in the middle and old age population.

Methods: A cross-sectional study design in healthy individuals with ages between 18 and 83 years old was conducted. SRR gene expression in peripheral leukocytes was measured by Quantitative real-time RT-PCR analysis. Cycle threshold value (Ct) was used for subsequent analysis. Ct value of SRR mRNA was normalized by subtracting the mean of the combination of 3 reference genes. The analysis of relative gene expression was performed using the $2^{-\Delta\Delta Ct}$ method.

Results: A total of 132 healthy individuals were recruited. SRR gene expression was not correlated with age in the cohort. However, in the subgroup of those older than 40 years old (N=28), SRR gene expression was negatively correlated with
age (p=0.005).

Conclusion: The finding suggests that SRR gene expression deteriorates with age after 40 years old in healthy individuals. If confirmed by further studies, SRR gene expression might have potential to serve as a peripheral biomarker of aging.

Disclosure of Interest: None Declared

OC097

Date: Saturday 20 April 2013
Session: Non Pharmacological Interventions

COMPARISON OF EFFECTS OF TAI CHI CHUAN AND WESTERN EXERCISES ON COGNITIVE FUNCTIONS IN OLDER ADULTS: SYSTEMATIC REVIEW AND META-ANALYSIS

M.-T. Wu [1,2,*], P.-F. Tang [1,3], K.-Y. Lin [1]
[1]School and Graduate Institute of Physical Therapy, National Taiwan University, [2]Physical Therapy Center, Cardinal Tien Hospital Yonghe Branch, [3]Graduate Institute of Brain and Mind Sciences, National Taiwan University, Taipei City, Taiwan

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: Evidence has indicated that both Western exercises (WE), including mainly aerobic exercises and strengthening exercises, as well as Tai Chi Chuan (TCC), one form of commonly practiced Eastern Exercises, have beneficial effects on improving physical fitness and cognitive functions in older adults. However, it remains unknown whether practicing WE and TCC involves different mental processes, and thereby causing differential effects on different domains of cognitive functions in older adults. Therefore, we sought to investigate whether practicing WE versus TCC result in differential beneficial effects on different cognitive functions in older adults, using systematic review and meta-analysis.

Methods: A systematic search of literature published between January 2000 and August 2012 in the MEDLINE, PubMed, CINAHL, CENTRAL, PsycINFO, SPORTDiscus, CEPES databases was performed. The key words used for literature search included Tai Chi, Tai Chi Chuan, aerobic exercise, western exercise, strength training, cognition, and cognitive function. The literature inclusion criteria were that the study participants had to be at least 65 years old and that both TCC and WE interventions were used in the study and were assigned to either the experimental or control group, and the quality of study was at least moderate, as determined by ≥ 4 on the Physiotherapy Evidence Database scale.

Results: Eighteen studies were searched, among which only three randomized controlled trials (total number of subjects= 202) met the established criteria and were retained and included in this meta-analysis. The results showed that practicing TCC or WE could significantly improve multiple domains of cognitive functions in community-dwelling sedentary older adults and older adults with mild cognitive impairment ($p< 0.05$). TCC and WE had comparable positive training effects on verbal fluency ($p= 0.35$), forward digit span ($p= 1.00$), and backward digit span ($p= 0.14$) performance. However, practicing TCC showed greater beneficial effects on the Trail Making Test, Part B (TMT-B) ($p= 0.03$) performance than practicing WE.

Conclusion: Both WE and TCC can improve verbal fluency and working memory in older adults. The finding that compared to WE, TCC led to greater improvement in cognitive flexibility and task-switching ability in older adults suggests that practicing WE and TCC may potentially involve different cognitive processing. However, more clinical trials and exercise-related neural mechanism studies are needed.

Disclosure of Interest: None Declared

OC098

Date: Saturday 20 April 2013
Session: Non Pharmacological Interventions

THE EFFECTIVENESS OF ACUPUNCTURE ON SLEEP QUALITY OF ELDERLY WITH DEMENTIA

T. Kwok [1, 2,*] on behalf of Department of Medicine & Therapeutics, The Chinese University of Hong Kong, Hong Kong, Hong Kong, China, P. Leung [1], I. Ip [2], D. Ho [2], W. Wong [1], B. Wong [2], F. Ho [2]
[1]Department of Medicine & Therapeutics, The Chinese University of Hong Kong, [2]Jockey Club Centre for Positive Ageing, Hong Kong, Hong Kong

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: A within-subjects study with acupuncture as treatment was conducted to elderly with dementia who had sleep complaint (defined as having trouble falling asleep and maintaining sleep at any given time). The study aimed to investigate the effectiveness of acupuncture on sleep quality of elderly with dementia. Acupuncture was chosen as treatment because it has been shown to improve sleep quality by causing an increase in melatonin secretion and reducing the agitated behaviour exhibited in dementia patients, but there was limited discussion about its effect to elderly with dementia in Hong Kong.

Methods: N=19 older people, out of 22 recruits, successfully completed the treatment (successful rate: 86%) during March 2011 to August 2012. The treatment was offered on one-on-one basis, carried out by a registered Chinese medicine doctor with clinical experience in acupuncture. The subjects went through a 6-week wait-list control period, followed by a 6-week treatment period in which they received 12 sessions of 30-minute-treatment. Treatment was applied on six acupoints, namely: GV20 Baihui (百會), EX-HN3 Yintang (印堂), Anmian (安眠), HT7 Shenmen (神門), ST36 Zusanli (足三里), SP6 Sanyinjiao (三陰交).

The outcome measures included bed time (time when the subject went to bed with the intent to sleep), sleep time (total time within rest intervals actually spent sleeping), sleep efficiency (percentage of time in bed actually spent sleeping), sleep onset latency, and wake time after sleep onset, recorded by Actiwatch 2; disease progression was monitored by Alzheimer's Disease Assessment Scale - Cognitive (ADAS-Cog). Wilcoxon Signed Rank Tests were used to compare the differences between baseline and after treatment.

Results: The mean change in bed time of subjects was -45.21 minutes during control period and 42.05 minutes during treatment period; the mean change in sleep time of subjects was -32.95 minutes during control period and 42.02 minutes during treatment period. Analysis showed that the subjects gained more bed time (Z = -2.05, $p < .05$) and total sleep time (Z = -2.21, $p < .05$) in treatment period than in control period. Trend for improvement in sleep efficiency (Z = -1.57, $p = .117$), though not statistically significant, was also observed.

Conclusion: The findings provide preliminary evidence on the effectiveness of acupuncture, as an alternative to pharmaceutical treatment for sleep regulation, on improving sleep quality of elderly with dementia.

Disclosure of Interest: None Declared

OC099

Date: Saturday 20 April 2013
Session: Non Pharmacological Interventions

PEARL PROJECT: INTRODUCING EXCELLENCE IN DEMENTIA CARE HOMES

C. Baker [1,*]
[1]Dementia Services, Four Seasons Health Care, Burntwood, United Kingdom

Are you submitting a scientific or non scientific abstract? Non-Scientific

Abstract: The PEARL programme began as a pilot project back in 2008 with 10 care homes to establish whether, with a fixed set of evidenced/research based criteria, training and support, we could move homes that were providing good 'fundamental' care to providing excellent specialised Dementia Care.
The original project was based around 100 criteria and (now has 150 criteria) that was known to improve well-being for people living with dementia either from experience or from research that I had reviewed.
The programme takes each home approximately 12 months to complete and once they feel they have achieved the required standard, members of the Dementia Services Team will visit the home to score against the criteria to establish if the home have achieved PEARL status.
The validation is unannounced and carried out by experienced clinicians in dementia care who observe practice through Dementia Care Mapping (DCM), talk to residents, relatives and staff and review documentation to ensure pro-active approaches are being taken and residents are being accurately assessed.
A major outcome of this initial pilot was that an average 52% reduction in anti-psychotic medication was achieved across 8 homes that were validated. A study of Phase 2 of the project revealed a 48% reduction. We have also seen reduction in falls and distress as well as increases in weight and pain relief
There are now 55 validated PEARL homes and a further 60 undertaking the programme at various stages with the remainder of the homes on a planned rollout.
We anticipate that we should have most of our homes through the project by 2014.

Disclosure of Interest: None Declared

OC100

Date: Saturday 20 April 2013
Session: Non Pharmacological Interventions

EFFECT OF TWO YEARS ACTIVITY PROGRAMS FOR PEOPLE WITH MILD DEMENTIA

L.-Y. Tang [1,*], H.-J. Lee [2], C.-Y. Chen [2], Y.-C. Chen [2], W.-H. Chiu [2], D.-W. Yu [2], M.-J. Chiu [3]
[1]non, [2]Taiwan Alzheimer's Disease Association, [3]Department of Neurology, National Taiwan University Hospital, Taipei, Taiwan

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: Taiwan Alzheimer's Disease Association had developed School of Wisdom for eight years. This study examined the efficacy of group intervention in School of Wisdom in cognitive functions, psychological and behavioral problems in people of dementia, depression, caregiver burden, awareness and attitude toward dementia in their family caregivers.

Methods: This was a quasi-experimentation study. We included 40 dyads of subjects with mild dementia and their caregivers. People with dementia received group intervention of cognitive training, reminiscence therapy, music therapy, art therapy, exercise and choir once a week. Each group lasted for 12 weeks. The group size was between 8-12 members. People with dementia were evaluated with ADAS-Cog, and problem behaviors (BEHAVE-AD) before and after the intervention. The family caregivers were also evaluated with knowledge and attitude toward dementia, caregiver burden and Beck depression scale.

Results: Data collection of this study will be completed in the end of December, 2012. Demographic data will be analyzed will descriptive statistics. Comparisons of the above mentioned scales before and after each activity will be done by non-parametric test such as Wilcoxon rank sum test. We will also evaluate the kinds of activity or groups of activities which achieved the best result in delaying the cognitive decline or improving BPSD of people of dementia and relieved the caregiving burden among carers.
Conclusion: The results of the study will be discussed according to the goals of our study. We will discuss the possible causes of differences among different activities. Future implications and directions of future research will be mentioned.

Disclosure of Interest: None Declared

OC101

Date: Saturday 20 April 2013
Session: Non Pharmacological Interventions

EFFECT OF INTERGENERATIONAL PROGRAM FOR THE DEMENTIA ELDERLY IN DAY CARE CENTER

M-F. Li [1,*], M-Y, L [2], L-C, Lien [2]
[1] Director, Gerontology Research Center, Associate Professor, Department of Family study and child development, Shi-Chien University, Taipei, Taiwan
[2] Mei-Yin,Li, Li-Chu, Lien
Taipei Nangang Seniors Service Center, Taiwan
(Entrusted by Department of Social Welfare, Taipei City Government Executed by The Private Jen-Sun Nursing Home For Old Folks)

(請回答以下問題)

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: The purpose of the study is to examine the effect of the intergenerational program for the elderly in the Nangang day care center and for the kids in the Nangang kindergarten. Nangang day care center has been developed intergenerational program for almost one year. Both facilities organized by two different agencies but under same building and share outdoor playground space. Hence, The elderly day care center created shared-site intergenerational program to invited kindergarten kids to come over doing group exercise with the dementia elderly once per week. Small group art activity was also conducted for both kids and dementia elderly. This study examined the effect of intergenerational group intervention in cognitive functions, psychological and behavioral problems, and social interaction for the dementia elderly.

Methods: The study was applied a mixed quantitative and qualitative research design. A small group quasi-experimental study was conducted. Eight dyads of dementia elderly and kindergarten kids participated the art group activity for 8 times. The dementia elderly also participated other small group activity without kids as usual. The social interaction frequencies and smiling indicators have been observed and counted in both group activities. The qualitative research design was conducted content analysis by reviewing patient charts for cognitive functions and psychological and behavioral problems.

Results: Small Art group activity did improve social interaction ability for the dementia elderly compared to the normal group activity. Kids' nature promoted elderly participate the small group activity with more smile faces. The elderly have higher expectation to attend the intergenerational program than the other group activity when reminded. Although, cognitive functions did not changed before and after the intervention, the psychological and behavioral problems were partially reduced in certain way.

Conclusion: Shared site intergenerational program is win-win for both the elderly and kids. Particularly, the program can improve the dementia elderly social participation during the group activity with more smiling. Larger groups of elderly-kids art group activity can be promoted in the elderly day care center. The precise indicators for evaluation should be further developed.

Disclosure of Interest: None Declared

OC102

MEMORY LANE PROJECT – HONG KONG HERBAL TEA SHOP
C. Woo [1,]
[1]Castle Peak Hospital, Hong Kong, Hong Kong

Are you submitting a scientific or non scientific abstract? Non-Scientific

Abstract: The Herbal Tea Shop - 養心堂 - was established in Department of Old Age Psychiatry (OAP), Castle Peak Hospital since Jan 2012. The mission is to enhance psychosocial interventions and social entertainment for OAP in-patients through establishing a reminiscence corner with main theme of a 1960-1970's local herbal tea shop. In 1960s, Hong Kong herbal tea shops were places for people to have entrainment, dating, watching TV and listening to radio. Most of the antique items in the Herbal Tea Shop were collected through the staff donation exercise. Around 30% in-patients were suffered from dementia in OAP. Reminiscence work improved communication and built relationships with people with dementia by adapting and using reminiscence skills. In OAP, apart from dementia cases, reminiscence work was also conducted to other types of psychogeriatric in-patients. Reminiscence work conducted to OAP in-patients individually or in group of 3 to 8 patients with sessions of 30 minutes each. 4 sessions of activity per week were arranged in OAP in-patient service. Total attendance for OAP herbal tea shop was over 800 from Jan 2012 to Nov 2012. Three reminiscence special events had been organized in Herbal Tea Shop which include: OAP Herbal Tea Shop Grand Opening, Chinese New Year Music Appreciation and Mid-Autumn Music and Lantern Appreciation. By establishing the OAP Herbal Tea Shop, care practices for OAP in-patients enhanced through promoting non-pharmacological approaches; service users' wellbeing enhanced through meaningful activities; staff satisfaction increased ; and Herbal Tea Shop provided a good practice venue for nurse learners to put theory into practice.

Disclosure of Interest: None Declared

OC103

Date: Saturday 20 April 2013
Session: Voices of People with Dementia and Families

THE POWER OF THE WEBSITE VOICE

A. Pascoe [1,], P. Armstrong [1], A. Dodson [2]
[1]Dementia Friendly Communities CIC, Golspie, Scotland, United Kingdom, [2]Dementia Friendly Communities CIC, Dubrovnik , Croatia

Are you submitting a scientific or non scientific abstract? Non-Scientific

Abstract: To show how, with the power of the website, one lone caregiver voice - living in the rural Highlands of Scotland – helped changed her world from a place with little dementia support to one that is more socially inclusive and supportive.
To explain how her work was complemented by creating a series of online resources and virtual meeting places to bring together the voices of experience, views and sources of support for families affected by dementia:
·   www.adementiafriendlycommunities.comas the flagship website highlighting progress towards a vision of living well with dementia in and beyond the Highlands of Scotland.
·   www.acarersvoice.comfocussing on how speaking out can be viewed as a support intervention for caregivers;
·   www.acarehomevoice.cominviting care staff, residents and families to help share best practice and innovative ideas in speaking out about residential dementia care;
·   www.adementiavoice.com completing the series by offering a dedicated platform and peer support for people with dementia to use blogging not only as a creative intervention, but also to be able to tell the true 'inside story'.
          Extracts from each website will be examined to demonstrate how we worked in partnership with families and service providers to identify not only people willing to participate in blogging online, but also how training programmes were developed to assist people, particularly those with dementia, to increase their well-being by being able to blog.
          Timeline pathways will be defined and statistics will be offered to confirm the effect of the website voices.

Disclosure of Interest: None Declared

OC104

Date: Saturday 20 April 2013
Session: Voices of People with Dementia and Families

LIVING WITH PEOPLE WITH ALZHEIMER'S: POINT OF VIEW OF THE MEMBER OF A FAMILY

M.-Y. T. Chiu [1,*]
[1]Graduate Institute of Rehabilitation Counseling, National Taiwan Normal University, Taipei, Taiwan

Are you submitting a scientific or non scientific abstract? Non-Scientific

Abstract: OBJECTIVES
Ten years ago, we had a family reunion in Japan. One night, while we had dinner, mother went to lady's room. A few minutes later, she got lost. Since that, mom forgot things all the time. Finally, we knew that mom got Alzheimer's disease (AD). For a while, all families got shocked and depression. Being a worker in the rehabilitation counseling field, it was still a challenge. We kept learning from the experiences (e.g., mom's memory loss, changes in personality, etc.). Ten years passed, thank God! She did not degrade much. I would like to share the following experiences with people living with Alzheimer's.
(1) Medicine intervention as soon as possible. My mother took medicine at the very early period. (2)We let our mother know that we accepted what her like; she always said that she was old and useless though. (3)She was encouraged to keep her interests, such as reading, planting, singing, praying etc.,(4)We registered for her to join the senior citizens' programs.(5)We tried to let her stayed with the environment and people her got familiar with. When we moved to another area of Taipei Metropolitan, we still attended mass at the same church every Sunday, although it took us more time. (6) We appreciated what her talk to others, although she has problems to remember important things sometimes. (7) We brought her everywhere, such as travels, social events, even business trips sometimes. (8) We let her do what she can do such as doing laundry, and assist her to finish, if necessary. (9) Crutches helped her to feel more independent and comfortable recently.
Reviewed what the families did, that seemed to me that verified the International Classification of Functioning, Disability and Health **(**ICF**)** model's point of view. For Alzheimer's supports, communication, social relationship, and recreation and leisure were very important elements, just like the factors of medicine, product and technology.

Disclosure of Interest: None Declared

OC105

Date: Saturday 20 April 2013
Session: Voices of People with Dementia and Families

WE DEMAND REHABILITATION! - THE VOICES OF THE PEOPLE FOR THE FINNISH MEMORY PROGRAM

H. Härmä [1,*], H. Nikumaa [1], J. Juosila [1]
[1]THE ALZHEIMER SOCIETY OF FINLAND, Helsinki, Finland

Are you submitting a scientific or non scientific abstract? Non-Scientific

Abstract: Finnish Ministry of Social Affairs and Health compiled the Finnish Memory Program in May 2012. Its objective is memory-friendly Finland by the year 2020. The Alzheimer Society of Finland acted as a representative for people with memory disorders in the working group.
To forward genuine messages from the people, the Alzheimer Society of Finland gathers a national forum for people with memory-related diseases and their caregivers every other year. For the last two times introductions and discussion has been about Finnish Memory Program.
On October 2010 the program was still being planned. The forum concluded then that there is no rehabilitation even though it is greatly needed. Participants insisted the disease to be taken and treated seriously. The lack of rehabilitation was also noticed in Memory Barometer 2010 (Alzheimer Society of Finland 2010) and in various other studies in Finland.
The need for rehabilitation was documented in the Finnish Memory Program.
On September 2012 the group sessions dealt again with what the participants need from the society to live a meaningful life. One of the pleads was to get the sufficient rehabilitation and information needed to support the ability to function and the wellbeing of both the person with the illness and their families. Apparently the realism has not changed in two years. The participants demanded rehabilitation plans, peer support, adaptation training and more diverse day rehabilitation, to name a few.
An official announcement was made and presented to policy-makers. The execution plan for the Memory Program is in progress in the Ministry of Social Affairs and Health. The participants of the forum and the Alzheimer Society of Finland as their representative demand that the voices of the people have to be strongly taken into account.
The Alzheimer Society of Finland has been promoting rehabilitation for people with memory-related diseases for years now. The adequate allocation of the resources is important, as we already know that timely services and support can substantially save money compared to long-term care.
Also the attitudes towards people with memory-related diseases are significant – as long as we see memory-related diseases primarily as death sentences, we cannot provide rehabilitation that supports the quality of life for people with the diseases and their families. Rehabilitation is also a strong message: diagnosis is not the end of the world, there is still hope!

Disclosure of Interest: None Declared

OC106

Date: Saturday 20 April 2013
Session: Voices of People with Dementia and Families

DIAGNOSIS IS NOT THE END
H. Nikumaa [1,], K. Juva [2]
[1]Alzheimer Society of Finland, Tampere, [2]Alzheimer Society of Finland, Helsinki, Finland

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: The aim of the REPEAT (Regular and structural support of memory patient) study was to examine the experiences of recently diagnosed memory patients and their family members in their first year after the diagnosis.

Methods: Total 580 persons took part in the study. 60 geriatricians from all over Finland recruited 290 memory patients with their caregivers. Comprehensive questionnaires for both the patient and the caregiver were sent 1, 3, 6 and 12 months from the diagnosis. These contained questions about experiences of getting the diagnosis, need and availability of support and rehabilitation and also the influences the disease has had in the everyday life of the family. The study was executed in 2010-2012. Novartis Finland Oy sponsored the collection and the analysis of data of this study.

Results: 98 % of the patients had mild Alzheimer's disease when they were recruited. 48 % of the caregivers were spouses and 41 % children.
One month after the diagnosis over 80 % of the patients reported neutral or hopeful expectations for the future. This didn't change much during the first year: even 12 months later still 70 % of the patients had neutral or hopeful expectations.
After three months from the diagnosis only 5 % of the patients and less than 10 % of the caregivers were not satisfied with their lives. After six months 90 % and after 12 months 84 % of both the patients and the caregivers felt their spirit to be optimistic, good or neutral. Less than 10 % of the patients and the caregivers had felt shame during the first six months. Over 80 % felt happiness, joy and satisfaction either fairly, quite much or plenty through the whole year after diagnosis.
Both the patients and the caregivers assessed their quality of life and functional capacity to be best supported by domestic work, physical rehabilitation and meeting friends during the first year after the diagnosis.

Conclusion: In Finland both the patients and the caregivers seem to experience their first year after diagnosis rather positively when the disease is diagnosed at an early state. Their life doesn't end with a diagnosis of a memory disease. They feel confident about their future. Doing usual tasks of daily living, physical exercise and meeting friends support their rehabilitation and maintaining good function.

Disclosure of Interest: None Declared

OC108

Date: Saturday 20 April 2013
Session: Voices of People with Dementia and Families

"I WANT THEM TO REMEMBER THEIR FATHER, NOT THE DEMENTIA": THE PERSON AT HOME HIDING THE EFFECTS OF DEMENTIA ON THEIR SPOUSE FROM THEIR CHILDREN AFTER ADMISSION TO AN AGED CARE FACILITY.

L. Hee [1,*], A. Barnard [2], K. Theobald [2]
[1]University of Technology, Brisbane, [2]University of Technology, Queensland, Australia

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: Carers play a substantial role in terms of physical, social and economic needs for the current and future ageing population of Australia. In 2003 there were 2.5 million Australian carers of whom 18 % (452,300) were aged 65 years and over (Australian Bureau of Statistics, 2008) and 83% of older carers are caring for a spouse (ABS, 2008). Many of these carers face a time when their spouse is admitted to long term aged care, frequently when their spouse has dementia. This is part of a study that aimed to identify the lived experiences of the carer after their spouse's admission for permanent care.

Methods: Ethics approval was given by the University and the recruitment facilities. Using a longitudinal phenomenological approach in depth interviews were used up to three times per participant after the admission and many aspects were revealed. This presentation concentrates on one of these, "hiding the dementia" from the family.

Results: Many participants did not inform their adult children of the difficulties they were facing at home with their spouse who was suffering from progressive dementia. Many of the children knew their mother or father had dementia but the spousal carer was reluctant to tell the children of the difficulties they were facing, particularly in the areas of incontinence and aggressive behaviour. One of the participants, for example, stated she wanted her children to "remember their father, not the disease". As a result participants whose spouse had been admitted into an aged care facility due to dementia often faced a lack of understanding and support from their children.

Conclusion: Many aged care staff assume that adult children provide support for their parent at home after the parent with dementia has been admitted to an aged care facility. This is frequently not the case as the parent tries to maintain the identity of their spouse prior to any effects of dementia. This has implications for staff, policy makers, carers and their families.

Disclosure of Interest: None Declared

OC109

Date: Saturday 20 April 2013
Session: 華人失智照護之思維與實踐 Dementia Care in Chinese Culture: Thought and Practice In Mandarin Only - Mandarin

現行三種簡易施測工具用於早期失智症篩檢之敏感性及精確性

S. H. Tang [1], Y. C. Liu [2], O. I. Chio [1,], L. H. Chen [1], L. C. Lin [3], P. C. Wang [4], P. K. Yip [2]
[1]Taiwan Catholic Foundation of Alzheimer's Disease and Related Dementia, Taipei, [2]Cardinal Tien Hospital, New Taipei, [3]School of Nursing, National Yang Ming University, Taipei, [4]Department of Clincial Psychology, Fu Jen Catholic University, New Taipei, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives:
有效的失智症篩檢為降低目前國內失智症診斷不足的程度的重要環節，本研究的目的為驗證三種能快速施測的失智症篩檢工具 - Mini-Cog、SPMSQ、及AD-8 - 於基層醫療場所使用之敏感度及精確度，以建立國內失智症篩檢工具適用性之參考實證。

Methods:
於新北市一所區域教學醫院之神經內科及記憶門診徵求有記憶障礙及診斷為輕度失智症之參與者，由經訓練之測驗人員進行三份篩檢問卷之測驗，照顧者則針對參與者之狀況完成由另一名測驗人員進行之AD-8量表施測。資料分析以CDR=0為非失智組，CDR=0.5及CDR=1為輕度智能障礙及輕度失智組，各自比對Mini-Cog、SPMSQ、及AD-8在其切分點下之敏感度及精確度，亦就個案及照顧者報告之AD-8結果進行Spearman等級相關性分析（Spearman rank correlation），並計算篩檢所需之平均時間。

Results:
目前參與者人數為43名，平均年齡為77.3歲（SD = 9.1），男女百分比分別為65.1%及34.9%，平均教育程度為8.3年（SD = 6.0）；其中非失智組參與者8名，輕度智能障礙及輕度失智組35名（25名CDR=0.5，10名CDR=1）。
表一呈現三種量表於其已發表之切分點（published cut-off points）之敏感度及精確度分析結果，當中敏感度排序為照顧者報告之AD8（0.89）> Mini-Cog（0.69）> SPMSQ（0.66）> 個案報告之AD8（0.60），精確度排序則為Mini-Cog（0.88）及SPMSQ（0.88）> 個案報告之AD8（0.75）> 照顧者報告之AD8（0.25）；陽性概似比代表篩檢陽性結果能增加確定為MCI或確診失智症之機率的效果，Mini-Cog及SPMSQ達中度效果（moderate shift and usually important, 5~10），個案報告之AD-8為輕度（small shift and sometimes important, 2~5），照顧者報告則為極輕度（very small and usually unimportant, 1~2）。AD-8照顧者報告與個案報告結果之Spearman等級相關係數為0.34，屬輕度相關。另外，平均施測時間為以SPMSQ（3.5分鐘）及Mini-Cog（3.6分鐘）較短，照顧者報告之AD-8（5.5分鐘）及個案報告之AD-8（5.6分鐘）較長（表一）。

表一 三種工具之失智症篩檢之敏感度、精確度、陽性概似比、及施測時間

篩檢工具 (切分點)	敏感度	精確度	陽性概似比	平均施測時間 (分鐘)
Mini-Cog (得分≦2)	0.69	0.88	5.49	3.5
SPMSQ (錯誤≧2)	0.66	0.88	5.26	3.6
AD-8 照顧者報告 (改變≧2)	0.89	0.25	1.18	5.5
AD-8 個案報告 (改變≧2)	0.60	0.75	2.40	5.6

Conclusion: 目前結果顯示照顧者報告之AD-

8篩檢早期失智狀況的敏感度最佳，能發現約九成之陽性個案，但其精確度及陽性概似比不佳，且若因無照顧者陪伴進

行篩檢而需由個案自述回答時，其敏感度則大大減少至六成；臨床使用時需考慮與精確度較佳之Mini-

Cog及SPMSQ相互配搭，更能達到篩檢的效果。此外，Mini-Cog及SPMSQ之施測時間與AD-

8施測時間相差約2分鐘，亦為選擇篩檢工具時的考量。本研究仍在持續收案至明年中，期能增加樣本數並作更深入的

分析。

References: Borson, S., Scanlan, J., Brush, M., Vitaliano, P., & Dokmak, A. (2000). The Mini-Cog: A cognitive "vital signs" measure for dementia screening in multi-lingual elderly. *International Journal of Geriatric Psychiatry, 15*, 1021-1027.

Erkinjuntti, T., Sulkava, R., Wikstrom, J., & Autio, L. (1987). Short Portable Mental Status Questionnaire as a screening test for dementia and delirium among the elderly. *Journal of the American Geriatrics Society, 31*, 607-612.

Galvin, J. E., Roe, C. M., Coats, M. A., & Morris, J. C. (2007). Patient's rating of cognitive ability: Using the AD8, a brief informant interview, as a self-rating tool to detect dementia. *Archives of Neurology, 64*, 725-730.

Ismail, Z., Rajji, T. K., Shulman, K. I. (2010). Brief cognitive screening instruments: An update. *International Journal of Geriatric Psychiatry, 25*, 111–120

Disclosure of Interest: None Declared

OC110

Date: Saturday 20 April 2013
Session: 華人失智照護之思維與實踐 Dementia Care in Chinese Culture: Thought and Practice In Mandarin Only - Mandarin

台灣本土化的生活單位型照護模式(UNIT CARE) 實踐過程---以私立雙連安養中心失智症專區為例

S. M. Hu [1,], K. Lee [2]
[1]Suang-Lian Elderly Center, New Taipei City, [2]National Taipei University of Nursing and Health Scienses, Taipei City, Taiwan

Are you submitting a scientific or non scientific abstract?: Non-Scientific
Abstract: 機構照護的服務內容通常以吃飯、排泄、洗澡清潔衛生、睡覺休息、基本復健等維持生命之必須項目照護為主，較少關注入住長者的內心世界。尤其是針對失智症者，由於不容易與對方溝通或因患者溝通表達障礙，患者的需要常被忽視，甚至為了便於管理，於是輕易地約束、限制行動自由等較不當之照護行為。就形式上來說，老人照護機構應該是日常起居的生活場所，而非集體安置生活無法自理者的收容場所；就實質內容而言，機構可謂是「住家」的延長線，而非家屬託付「應付問題、處理問題的避難場所」。過去，入住機構的老人常予人「集體畫一、沒有表情、沒有樂趣」的刻板印象，本中心響應政府推動在地老化、以及多層級連續性照顧服務規劃、中心以長者為尊、以服務為榮，共服務432位長者有，並於2010年3月成立失智症照護專區、並試圖一改大型機構集體化、齊一化的照護模式，特別將66床失智症老人機構照護專區的設計是採『生活單位型失智症照護 (unit care)』的照護模式為硬體設計主軸、劃分為7個家庭單位的生活區域。，為長者的生活注入情趣、讓長者開心歡笑。家庭是最小的集體生活單位，因此稱之為「生活單位型照護模式(unit care)本專區除環境上營造9-10人的生活單位外,7個家庭單位的生活區域、而且每一樓層、具有安全性的治療性花園及各單元間有交誼活動區、生活區域各有本土文化背景之支持性環境之佈置。最重要者、照護團隊生活單位型失智症照護(unit care)的照護理念、以長者為中心、尊重長者的獨特自主性與需求、維持尊嚴與價值創造多元的公共空間、提供一個熟悉而穩重的環境及提供完整性的照護服務、生活即復健，發揮長者最大的生活能力、讓專區長者維持一個很固定且有結構性的日常生活作息、並在生活中長者依其『所能』能自然且輕鬆參與溶入日常生活活動環境中，讓他們猶如生活在自己的家那樣的溫馨、安心，有自信。失智症長者因為疾病所致使患者智能尚失包括記憶力，判斷力、計算能力、抽象思考以及精神行為問題（BPSD），在照護過程中需要失智症照護團隊成員、發揮更多的愛心並站在長者立場角度去了解他的內心世界及行為背後問題、並用接納的態度、及多一份熱心與細心照護、使失智症長者能有良好生活品質及家屬能放心與安心將長者受託照護團隊。基於「尊重長者的主體性、延續長者過去的生活習慣、激發長者的潛在能力、增添生活樂趣」的照護理念，實踐個別化的生活照護，長者的生活內涵也以迎合台灣本土的習慣及偏好為旨趣。
Disclosure of Interest: None Declared

OC111

Date: Saturday 20 April 2013
Session: 華人失智照護之思維與實踐 Dementia Care in Chinese Culture: Thought and Practice In Mandarin Only - Mandarin

失智症患者的非藥物療法效果----以私立雙連安養中心系列化的園藝照護為例

M. H. Cai [1,], K. Lee [2]
[1]Suang-Lian Elderly Center, New Taipei City, [2]National Taipei University of Nursing and Health Sciences, Taipei City, Taiwan

Are you submitting a scientific or non scientific abstract?: Non-Scientific
Abstract:

根據過去的研究文獻報告，指出患者和植物接觸或培養植物，可安穩患者的情緒，並且恢復自信；而園栽、盆栽等園藝作業亦有助於刺激失智症老人腦的血流量，活化腦功能。本中心照護團隊嘗試將園藝實務工作融為例行照護中、由工作人員執行介入並導入帶領失智症長者園藝療法。

非藥物療法乃是除了藥物治療外、由專業人員介入協助或引導方法失智症長者因在白天活動增加之下、幫助長者在生活適應、情緒穩定、問題行為減少、

非藥物療法範圍廣、主要內容大致有營造適切人文環境、提供無障礙與支持性環境、照護人員利用各種媒介創造並帶出有意義的活動。

新入住專區失智症長者、因疾病因素所以對於陌生環境與周邊不熟悉照護者、在適應新生活環境中失智症長者會比別人較辛苦、照護者要如何協助他們能夠在安全又有信任的環境生活是非常重要。

失智症者精神行為的誘發--環境因素、身心需求未獲滿足、內科問題或藥物

避免負面的態度及語氣、不要直接修正病患行為。致於非藥物治療、

通常是用在第一線治療原則、避免過度使用藥物及四肢約束病患、避免在病患面前耳語，爭辯，避免對病患有過度期望、不要責罵或驚嚇到病患。

長者入住前會煩躁不安、漫無目的的遊走、收擊東西、藏匿東西、不當的吐痰。，敲打或推擠太太、負向語言對太太，個案在家時會與人磨擦或衝突、有時會---

也因為此長者對太太有（攻擊）及言語暴力因而被送醫治療、剛入住而情緒不穩、抗拒、語言怒罵、攻擊工作人員、一直吵著要回家等激烈行為的住民，擬定一系列的照護計畫，照護內容不著痕跡地融入生活當中，並為其建立規律充實的生活。平均而言，大約經過2個星期，住民逐漸與其他住民以及工作人員互動轉好，每天早晚一定會先去花園裡給花花草草澆水，然後協助推餐車，白天主動參與日常活動，工作人員也會不定時地抽空陪同到園區散步。結果發現，經過園藝照護計畫的住民們的憂鬱情緒減少，極少暴怒行為及語言，不理性的要求也減少，抽菸量由過去每日一包-減為每2天抽菸一次（乃滿足於個人心理需求）、情緒穩定-不再有踢電梯或梯門動作

雖然偶而乃會期待與太太同住、但很快長者就會告訴自己舊屋改建中，

現在更多樂於參予多項團體活動、並主動參於協助單元內-

生活支援活動，並和家人的關係比以前更融洽、尤其令人開心的事，他們經常掛在嘴裡:「我好像已經漸漸喜歡這裡了」以及「住在這裡真好」。

與失智症者共處照護與陪伴、雖然在這過程中會有發生許多令照護團隊驚喜、或累、淚水，但我們相信它是一個具有意義深遠的與人關係之服事。

尤其看見失智障長者的笑容更是為照護團隊帶來更多服務的動力。

Disclosure of Interest: None Declared

OC113

Date: Saturday 20 April 2013
Session: 華人失智照護之思維與實踐 Dementia Care in Chinese Culture: Thought and Practice In Mandarin Only - Mandarin

CALLIGRAPHY IN THE TREATMENT OF DEMENTIA: IMPROVING COGNITION THROUGH BRUSHES, FINGER & THE TOUCH-PAD*

Henry S. Kao[1], 2, Stewart P.Lam3, David L. K. Dai4, Manlin Zhang5, An An Chao3

1 University of Hong Kong, Hong Kong
2 Fu Jen Catholic University, Taipei
3 International Society of Calligraphy Therapy, Hong Kong
4 Hong Kong Alzheimer's Association, Hong Kong
4 Sun Yat-Sen University, Guangzhou

Calligraphic handwriting facilitates cognitive functions, sharpens perceptual abilities, calms down emotions and improves behavioral and clinical conditions in the normal or disordered elderly (Kao 2000, 2010)

This paper outlines the foundations that underlie such positive outcomes from the perspectives of cognitive neuroscience, neuro-linguistics, experimental psychology and behavioral medicine. A theory of calligraphy writing and therapy will be briefly presented along with its associated research and clinical applications in the general, normal elderly and people with MCI or the Alzheimer's disease.

The development of treatment methods has been a major interest of this line of calligraphy investigation. This presentation will highlight several evidence-based systems of interventions for the like user populations. It includes motor writing with a brush, pen, finger and the iPad as well as some effective cognitive, motor and mental strategies.

The advent of the touch-pad technologies has revolutionized the conventional system of handwriting by bypassing the brush, pens and paper, and narrowing the motor operation directly to the use of a single finger. This development opens up vast possibilities of application for calligraphy therapy for brain health and clinical treatments of the elderly.

書法於失智症治療之運用:
通過毛筆、手指 與 觸控板提高認知功能

高尚仁1, 2 林秉華3, 戴樂群4 張曼琳5 , 趙安安3
1 香港大學, 香港
2 輔仁大學, 台北
3 國際書法治療學會, 香港
4 香港認知障礙症協會, 香港
5中山大學, 廣州

手寫書法可以促進正常或身心失調老人的認知功能、 銳化知覺能力、 平靜情緒與改善行為和臨床的健康狀態 (高尚仁, 2000, 2010)。

本文從認知神經科學、 神經語言學、 實驗心理學和循證行為醫學的觀點和依據、
概述了這種積極的成果。並對一般的、正常老年人和輕度認知功能障礙患者 (MCI) 或阿爾茨海默病,者
、以書法書寫和治療的基礎理論, 沿著與其相關的研究和臨床應用作一簡要的介紹。

治療方法的發展一直是我門研究書法的主要興趣。此演示文稿對類似的使用者,
介紹幾種循證為本的干預系統。這包括以毛筆、硬筆、 手指和 iPad在肌動書寫的操作。.此外, 另加一些認知, 動作
,和心理操作的技能。

觸控板技術革新了傳統的手寫系統, 繞過使用毛筆、
硬筆和紙, 並縮窄在小範圍內使用單一的手指作肌動書寫。這一發展開闢了書法治療在老年人的腦健康和臨床治療上
廣大的可能的應用性。

OC114

Date: Saturday 20 April 2013
Session: 華人失智照護之思維與實踐 Dementia Care in Chinese Culture: Thought and Practice In Mandarin Only - Mandarin

UNRECOGNIZED THE CONCEPT OF END-STAGE DEMENTIA: DEMENTIA HOSPICE CARE IN TAIWAN

Jong-Ling Fuh
Department of Neurology, Neurological Institute and Department of Psychiatry, Taipei Veterans General Hospital and Faculty of Medicine, National Yang-Ming University School of Medicine, Taipei, Taiwan

Abstract:
Dementia is a disease with persistent deterioration which will eventually progress to "terminal stage". It is still impossible to cure the disease. All we can do now is to treat symptomatically and try to slow down its clinical progression. Due to chronic and devastating characteristics of the disease, caregivers usually suffer great stress. The subject with dementia will gradually lost the ability of communication and thus make the medical decision more and more difficult.

We conducted a study in Taiwan to understand the attitude towards hospice and the management of end-stage dementia in Taiwan. We recruited 84 family caregivers of dementia from Taipei Veterans General Hospital, a medical center in Taiwan. The adult children of subjects with dementia are the most common medical decision makers in this survey (N=44, 52.4%). More than half of the family caregivers (63.1%) considered they understood the progression of dementia. Only 35.7% of the caregivers considered nasogastric tube insertion for their families with dementia, 25% for cardiopulmonary resuscitation and 14.3% for tracheostomy. Most caregivers did not discuss with the subjects with dementia about these issues when the subjects with dementia still had the ability to express their willingness. Most caregivers (66.7%) did not think about these terminal issues before this questionnaire survey. The acceptance of hospice service was high infamily caregivers (77.4%). The caregivers prefer to receive hospice service at home or hospital rather than the nursing home or other chronic institutes.

Compared with the prior survey 10 years ago, our current study showed most family caregivers did not prefer aggressive treatment for the subjects with dementia. The medical stuffs should discuss the medical problems in the end-stage dementia with the caregivers and subjects with dementia.

:

我們於台北榮民總醫院神經內科和精神科調查失智症家屬對於　　　　　　　　　　　　84
　　　　　　　　　　(N=44, 52.4%)。超過一半以上的家屬(63.1%)
認為他們了解失智症會逐盡惡化。只有35.7% 的家屬想讓病人插鼻胃管，25%
同意心肺復甦術，和14.3%　　　　　　　　　　　　　　　　　　(66.7%)
於此次調查前也未曾想過這些問題。失智家屬對於　　　　　(77.4%)，他們希望安寧療護可以於家中或是醫院進行，而非安養機構。

和十年前的調查相比，我們的研究發現目前失智症照顧者傾向於不接受侵犯性的治療。醫療照顧者應和病人及家屬討論他們於疾病末期可能會面對的醫療問題。

SS2

DEMENTIA COLLABORATIVE RESEARCH CENTRE AND CENTRE FOR HEALTHY BRAIN AGEING

H.Brodaty
University of New South Wales, Sydney, Australia

Abstract
Old age is core business for hospitals and dementia is at the heart of ageing. In the developed world, more than half the admissions of adults going into hospital are over 65 or 70 years old of whom at least 30% will have cognitive impairment, mainly dementia or delirium or both. Patients with dementia have longer lengths of stay, more behavioural problems, more falls, a higher incidence of delirium, more complications and a higher mortality. Their cost of care is greater than for cognitively intact age matched patients with similar medical conditions.

In general, hospital nurses and doctors are not trained to consider the complexity of dealing with dementia in addition to the illness (be it cardiac, respiratory or orthopaedic) for which the patient was admitted. All too often, attitudes towards older people are negative, cognition is not routinely tested, dementia and delirium are under-diagnosed or ignored, and discharge planning is deficient. The design of hospitals is confusing to the cognitively impaired patients, especially busy emergency departments. Families are not consulted in diagnosis or involved in management.

The outcomes of acutely ill patients with dementia can be improved by strategies to prevent admission, e.g. hospital in the home and advance care directives; education programs for hospital staff to change attitudes, improve diagnosis and management; and better discharge planning. Innovative approaches are use of a Cognitive Impairment Identifier on bedheads of patients (similar to infectious disease identifier); appointment of a special nurse within Emergency Departments dedicated to assessment and triage of older confused patients; and greater involvement of families during the patient's hospital stay.

Failure to attend to the challenge of dementia in hospitals will be lose-lose; tackling the challenge can be win-win by helping patients and reducing hospital costs.

SS3

Date: Saturday 20 April 2013
Session: Acute Care for Older Persons with Dementia

THE ACUTE CARE NEEDS AND SYSTEM FOR DEMENTIA PATIENTS IN JAPAN

K. Toba
Director, Hospital of National Center for Geriatrics and Gerontology Japan
Director, Center for Comprehensive Care and Research on Memory Disorders

Abstract
I will focus Medical Center for Dementia in Japan. These centers were distributed in 170 cities so far. Evaluation for these centers was finished. From these evaluations, we draw the fruits and lessons. These centers have to manage acute care for dementia including care for BPSD and critical diseases such as pneumonia, cardiac failure and consciousness disturbance, paying attention to geriatric syndromes. The mean hospital days in Medical Center for Dementia were significantly different between general hospital-based Centers and psychiatric hospital-based Centers.It is unclear whether long hospitalization is due to the different level of BPSD or lack of power for discharge planning.

SS4

Date: Saturday 20 April 2013
Session: Acute Care for Older Persons with Dementia

ACUTE HOSPITAL CARE FOR OLDER PERSONS WITH DEMENTIA IN TAIWAN: A NATIONWIDE COHORT STUDY

Li-Ning Peng[1,2], Liang-Yu Chen[1,2], Ming-Hsien Lin [1,2], Li-Kuo Liu [1,2], Liang-Kung Chen [1,2], Fei-Yuan Hsiao[3,*]

[1]Aging and Health Research Center, National Yang Ming University, Taipei, Taiwan
[2]Center for Geriatrics and Gerontology, Taipei Veterans General Hospital, Taipei, Taiwan
[3]Institute of Clinical Pharmacology, National Taiwan University, Taipei, Taiwan

Abstract
Dementia is a complex condition that needs various health care services and living support. Acute medical conditions may trigger further functional decline of people with dementia if no specific approach has been taken. However, the management of acute medical conditions for persons with dementia is always difficult because of the complex interaction of acute medical conditions and psychiatric conditions. In Psychiatric settings, acute medical condition may not be sufficiently managed due to the limitation of equipments and facilities. On the other hand, medical wards may not be sufficiently equipped and refurbished to manage psychiatric conditions. The aim of this study was to evaluate the general medical utilization of older people with dementia in Taiwan to explore the acute care needs for these persons, so to develop better model of health care services for them.

This is a retrospective cohort study using the claim data of Taiwan's National Health Insurance 2000 to 2009. The original sample was a population representative cohort with three million persons. Amongst, data of 33,864 newly diagnosed dementia older people were retrieved (no diagnosis of dementia in the preceding year). Within the first year of follow-up after the diagnosis was made, they made the median of 9 outpatient visits, which was much lower than the general elderly Taiwanese. Over a half of them made no more than 10 outpatient visit a year. The leading diagnoses of outpatient visits included hypertension, diabetes, cerebrovascular diseases and non-specific general complaints. On the other hand, 21% of them have been admitted in the first year with the median hospital length of stay for 8 days. The main causes of acute medical admissions included pneumonia, urinary tract infections, septicemia, and pulmonary disease. More in-depth discussion regarding to the medication utilization, anticholinergic burden and utilization of psychotropic agents will be provided.

SS5

Date: Saturday 20 April 2013
Session: Acute Care for Older Persons with Dementia

QUALITY OF ACUTE CARE FOR OLDER PERSONS WITH DEMENTIA: A HOSPITAL-BASED STUDY

Chien-Liang Liu[1,2], Liang-Yu Chen[1,2], Ming-Hsien Lin [1,2], Li-Ning Peng [1,2], Li-Kuo Liu [1,2], Liang-Kung Chen [1,2,*]

1. Aging and Health Research Center, National Yang Ming University, Taipei, Taiwan
2. Center for Geriatrics and Gerontology, Taipei Veterans General Hospital, Taipei, Taiwan

Abstract

Dementia is a disease with cognitive decline due to damage of their brain, which poses them vulnerable to many environmental factors, care process and mediation. This study retrospectively compared the quality of care for older persons with dementia by Geriatric Evaluation and Management Unit (GEMU) and acute wards of other medical specialties. A random sample of 100 patient records of year 2012 were retrieved from Taipei Veterans General Hospital, a tertiary referral center in Taiwan, half from the GEMU and another half from medical wards of other medical specialties. The main causes of acute hospital admissions included pneumonia, urinary tract infections or delirium. The GEMU developed several special designs and services for the needs of dementia, but not usual medical wards. Also, comprehensive geriatric assessment, including physical function, mental function, mood, nutritional status and other domains was performed for all patients with dementia. In usual medical wards, usual medical assessments were performed for every admitted patient, which also covered certain functional assessment but not routinely assess mental function for these patients.

Overall, 16 quality indicators about inpatient care, including regular cognitive evaluation, medication review, mobility examination and intervention, delirium screening, nutritional assessment, medication discussion, risk factor management, caregiver support and patient safety, management of behavioral and psychological symptoms, restraints and advanced care plan were used to compare the performance of GEMU and medical wards. Generally speaking, the GEMU provided better quality of care for people with dementia. In particular, medications adjustment and comprehensive assessment were the key strengths of the GEMU. Further study is needed to compare the long-term outcomes of these patients being admitted to GEMU or usual medical wards.

SS6

Date: Saturday 20 April 2013
Session: Acute Care for Older Persons with Dementia

DEMENTIA-FRIENDLY ACUTE CARE: A GREEN CHANNEL FOR DEMENTIA CARE HOME RESIDENTS

Yu-The Lin[1,2,3], Chih-Kuang Liang[1,2,3], Ming-Yueh Chou[1,3], Yuk-Keung Lo[1,2,3,*]

[1]Geriatric Medicine Center; [2]Division of Neurology, Department of Medicine, Kaohsiung Veterans General Hospital, Kaohsiung, Taiwan
[3]National Yang Ming University School of Medicine

Abstract

Rapidly increasing the population of elderly dementia is encountered worldwide and also in Taiwan. Patients with dementia have higher incidence of delirium, exacerbated behavioral problems, more urinary incontinence, more falls, longer length of hospital stay and even higher mortality rate in acute hospital. Under the project of Veterans Affairs for elderly veterans with dementia, we integrate the medical and caring resources between Kaohsiung Veterans General Hospital, Tainan Veterans Hospital and Jia-Li Veterans Home and try to provide the optimal and dementia-friendly acute care from emergence department to acute ward care. We have established a multidisciplianry team, including geriatrician, neurologist, psychiatrist, specially trained nurse, dietitian, pharmacist, social worker, physical therapist and occupational therapist to provide comprehensive care. Intermediate care will be arranged if reversible functional decline is encounter. We established the green channel for dementia-friendly acute care and need further analysis of cost-effectiveness in the future.

P001

Topic: Younger Onset Dementia

AN ELDERLY DAY CAREB CENTER'S ATTEMPT TO PROMOTE A TEAM APPROACH IN THE CARE OF FRONT TEMPORAL DEMENTIA PRE-SENILE PATIENTS

A. Sakuma [1,*], K. Takahashi [1], K. Watanabe [1], R. Rokkaku [2]
[1]Dementia care institute, mito, [2]Tokyo University of Technology, Tokyo, Japan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Front   Temporal Dementia is considered outstanding for its tendency to afflict pre-senile individuals and for the anxiety it causes in their caregivers and family. We will report on a particular case, where small day care service supported a couple maintain their independent lifestyle. The wife, Mrs. A, is 62 and suffers from FTD-specific language disabilty and emotional distress. It was difficult to continue day care services, particularly due to the burder on her husband from caring for her.

Methods: 1)   The period wasone year, from April 2011 to March 2012.
2)   Based onthe team approach, team members were a medical specialist, outpatient nurses, care managers, day care service staff,   and the family. We discuss   and share their imformation, and practises.
3)   With the two goals of (1) ensuring the fullness of the couple's time and (2) reducing the emotional distress related to the illness, Mrs.A became an outpatient of the day care facility, visiting twice a week.

Results: Mrs. A was unable to utilize the day care services for a term of 3 months. 1) Eventually, she was able to go twice a week. 2) In conversation, short sentences were used with gestures, pictures, or looking at the actual objects. She increasingly replied to. 3).Her husbandhad moreopportunity to talk about trouble than before and to understand thesymptoms ofdementia. They have now decided on a comfortable rhythm of life in their home.

Conclusion: The coordinationteam demonstrated the role of the family and multidisciplinary expertise, while day care services helped to achieve continuity both in treatment and in the continuation of the life of a couple.

Disclosure of Interest: None Declared

P002

Topic: Other Dementias

ALZHEIMER DISEASE OR CREUTZFELDT-JACOB DISEASE?

Y.-C. Hsiao [1,*], M.-C. Pai [1]
[1]Department of Neurology & Alzheimer's Disease Research Center, National Cheng Kung University Hospital, Tainan City, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Mr. Lai, a 77 year-old retired pharmacist, had education for 6 years. He first visited our Dementia Clinic on 26 Aug 2011. Episodic memory impairment, repetitive queries, misplacement, spatial navigational impairment, executive dysfunction, change in sense of taste, and stealing delusions were noted by his family for 2 more years, and deteriorated in recent few months. His basic activities of daily livings were all independent. Apart from the aforementioned symptoms, there was no sleep deprivation, REM sleep behavioral disorders, daytime hypersomnolence, visual hallucinations, cognitive fluctuation, unexplained falls, startle response or myoclonus. He had also no family history of dementia or Creutzfeldt-Jacob disease (CJD), and no surgery history or received blood donation before. Besides, he had no history of traveling abroad in his life.
The CASI test in August 2011 was 57/ 100 and the MMSE was 17/ 30. Brain MRI showed cortical ribbon sign on DWI and FLAIR over bilateral fronto-temporo-parietal lobes, and a diagnosis of CJD or encephalitis was suspected. EEG revealed diffused intermittent theta activities in August, 2011. In January, 2012, his CASI was 52/100 and MMSE was 17/30, and was admitted to our hospital in March.

Methods: After admission, The CSF studies showed no evidence of CNS infection but 14-3-3 protein was positive. After discharge, his cognitive impairment progressed to CASI 38/100 and MMSE 11/30 in August, 2012. Both brain MRI and EEG was followed in June and August, 2012. The result of each study was all stationary without progression compared to previous studies.

Results: Alzheimer disease (AD) or CJD?

Conclusion: Our patient's clinical presentation was in favor of AD instead of CJD. However, clinically, the deterioration of our patient's cognition was more rapid than typical AD, but, on the other hand, much slower than CJD is. Additionally, according to Y Shiga et al. in Neurology 2011, the sensitivity and specificity of cortical hyperintensity restricted to the cortex ("cortical ribbon sign"), striatum, or both in DWI and FLAIR is 92% and 94%, respectively. CSF 14-3-3 protein testing for CJD in recent studies also shows specificity 48% and specificity 65%. Our patient has both cortical ribbon sign and positive14-3-3 protein. However, no family history, no blood transfusion history and no traveling abroad history make familial CJD or variant CJD unlikely. AD or CJD or even a new variant disease is a diagnostic challenge.

Disclosure of Interest: None Declared

P003

Topic: New and Future Treatments

TREATMENT OF LATE-STAGE ALZHEIMER'S DISEASE WITH FOLATE DERIVATIVES IN 3XTG-AD MICE

T.-F. Chen [1, 2,*], H.-C. Shu [3], M.-J. Chiu [4], R.-F. S. Huang [3, 5]
[1]Neurology, National Taiwan University Hospital, [2]College of Medicine, National Taiwan University, Taipei, [3]Nutritional Science, Fu-Jen University, Hsin-Chuang, [4]Neurobiology and Cognitive Science Center, National Taiwan University, Taipei, [5]Ph.D. program in Nutrition and Food Sciences, Fu-Jen University, Hsin-Chuang, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: We have previously reported that folic acid potentiated effects of Alzheimer's disease (AD) drug on neuronal protection in early-stage AD development. In this study, the treatment of late-stage AD with folate derivatives in 3xTg-AD transgenic mice was investigated.

Methods: Forty 3xTg-AD mice at 16 month-old were divided into three groups fed with the diet in the absence (Control) or presence of folic acid (FA) and folinic acid (FN) supplements (12 mg/kg/day by force feeding). Cognitive function was assayed by water-maze test before mice were sacrificed at 19 month-old.

Results: The data revealed that FA and FN groups had significantly higher levels of serum folate than the controls after 3 month supplementation ($P < 0.05$). The AD neuropathological markers of Aβ40, Aβ42 or tau levels were significantly lower in the brains of FA and FN groups as compared with the controls ($P < 0.05$). Although these reduced brain pathological severity by FA or FN supplement were not associated with cognition improvement, survival rates of FA (69%) and FN groups (86%) was 1.6 fold- increased in relative to the controls (54%) at 19 month-old.

Conclusion: Taken together, the data demonstrated that FA and FN treatments may alleviate pathological severity of late-stage Alzheimer's disease associated with increased survival rate of 3xTg-AD mice.

Disclosure of Interest: None Declared

P004

Topic: New and Future Treatments

NEUROPROTECTIVE ROLE OF S-ADENOSYLMETHIONINE (SAM) IN NEURON CELLS

M.-L. Tsai [1,], Y.-H. Yang [2], Y. Jian [1], C.-H. Chen [2], S.-J. Wu [1]
[1]Department of Medical Laboratory Science and Biotechnology, [2]Department of Neurology, Kaohsiung Medical University, Kaohsiung, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Alzheimer's disease (AD) is a complex disorder of the central nervous system that affects an increasing number of people worldwide. In particular, in the late-onset forms of AD, epigenetic alterations might play an important role in the pathophysiology of this disorder. The sulfur compound and dietary supplement S-adenosylmethionine (SAM) has been reported to have cytoprotective and antioxidant properties in the treatment of AD. However, the underlying mechanisms that may explain the cellular protective effects are not fully understood.

Methods: H_2O_2-induced neuronal toxicity was characterized in SH-SY5Y human neuroblastoma cells by the decrease of cell viability using PrestoBlue™ assay (Invitrogen) and by the increase of intracellular reactive oxygen species (ROS) level using DCFH-DA (2', 7'-dichlorodihydrofluorescin diacetate) assays. Heme oxygenase-1 mRNA expression was assayed by RT-PCR. The immunoblotting analysis is implicated for detecting phosphor-c-Jun, phosphor-AKT, and
phosphor-ERK 1/2 expression to check if the anti-apoptotic signal pathways could be activated by H_2O_2 medium.

Results: Pretreatment with 0.01 mg/ml SAM significantly suppressed the H_2O_2-induced elevation of intracellular reactive oxygen species (ROS) level by 100% and increased the cell viability by 10% after 24 hours treatment of H_2O_2 adding. Heme oxygenase-1 (HO-1) gene was up-regulated but phosphor-AKT was inhibited by pretreatment of 0.01 mg/ml SAM.

Conclusion: *Our results indicated that* SAM may activate HO-1 gene expression to perform the protective effect on neuron through the signal of modulating the pospholation of AKT pathway. The epigenetic alterations on gene expression of SAM treatment may explain that provide an dietary supplement of SAM will be an important part of the interface between the environment and the regulation of gene expression in neuron protection.

Disclosure of Interest: None Declared

P005

Topic: New and Future Treatments

THE UTILIZATION OF AMBULATORY CARE BEFORE DIAGNOSIS OF ALZHEIMER'S DISEASE IN TAIWAN.

C. Li [1,*], W.-H. Tsai [2], S.-C. Hou [3], C.-C. Yang [4]

[1]Family Medicine Department, National Taiwan University Hospital, Bei-Hu Branch, 台北市, [2]Department of Health Care management, National Taipei University of Nursing and Health Sciences, [3]Health Promotion Division, , Department of Health, Taipei City Government, [4]Secretary office, Taipei City Hospital, Taipei city, Taiwan

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: To assess if ambulatory care utilization within three years before diagnosis of Alzheimer's disease patients is significantly different to non-Alzheimer's patients.

Methods: The data were drawn from 2005 National Health Insurance Research Database (NHIRD, 2005) from 1996 to 2007. A case-control design was employed. 845 patients treated with Alzheimer's disease medicine (cholinesterase inhibitor and NMDA receptor antagonist) were case group. The other 1,677 patients who randomly matched with age, sex, and Charlson index were control group. Ambulatory care utilization of case group within three consecutive years before diagnosis was explored and compared to that of the control group.

Results: Alzheimer's disease patients significantly used more ambulatory care (neurology and psychiatry clinics, diagnosis fee, drug fee, treatment fee) than control group within the first year before diagnosis. Especially, drug fees within three consecutive years before diagnosis were all higher than the fees of control group significantly.

Conclusion: Alzheimer's disease patients significantly use more ambulatory care than non-Alzheimer's patients before diagnosis.

Disclosure of Interest: None Declared

P006

Topic: New and Future Treatments

LOVASTATIN ATTENUATES NMDA INDUCED EXCITOTOXICITY BY BLOCKING ACTIVITY ON CALPAIN AND CDK5 OVER-ACTIVATION

T. Ma [1,], Y. N. Kong [1], X. J. Lu [1]
[1]Department of Neurology, Wuxi the Second People's Hospital, wuxi, China

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Increasing studies support that statins, a class of cholesterol-lowering drugs, are beneficial as a therapy for neurodegenerative diseases including Alzheimer's disease. Excitotoxicity is involved in several neurodegenerative diseases. In present study, we observe the effect of lovastatin on NMDA induced excitotoxicity in rat cortical neurons and investigate underlying mechanism.

Methods: Cortical neurons were prepared from E17 rat. Cell viability was evaluated with trypan blue dye exclusion test, the morphology and number of neurons was assessed with MAP-2 immunofluorescence staining, and the level of protein was measured with Western blotting assay.

Results: Trypan blue staining demonstrated that 500nmol/L lovastatin pre-treatment 3d significantly protected neurons against NMDA induced excitotoxicity ($P < 0.001$ vs NMDA). Immunofluorescence staining demonstrated the number of MAP-2 positive neurons decreased and survival neurons showed a loss of MAP-2 positive dendrites after NMDA treatment ($P < 0.001$ vs untreated), which were not visible after lovastatin pre-treatment ($P < 0.001$ vs NMDA). Excitotoxicity is mediated in part by the Calpain over-activation and the subsequent protein truncation events on Calpain substrate, CDK5 co-activator P35 to P25 cleavage. Lovastatin pretreatment remarkably suppressed Calpain over-activation and the conversion from P35 to P25 in response to NMDA exposure as detected by Western blotting analysis
($P < 0.001$ vs NMDA).

Conclusion: Lovastatin significantly attenuated NMDA induced excitotoxicity. The neuroprotection of lovastatin was mediated by blocking activity on Calpain and CDK5 over-activation, which provides more evidence to support the therapeutic use of statins in Alzheimer's disease.

References: Abe K, Takeichi M. NMDA-receptor activation induces calpain-mediated beta-catenin cleavages for triggering gene expression[J]. Neuron, 2007, 53(3): 387-397.
Wang Y, White MG, Akay C, et al. Activation of cyclin-dependent kinase 5 by calpains contributes to human immunodeficiency virus-induced neurotoxicity[J]. J Neurochem, 2007, 103(2): 439-455.
O'Hare MJ, Kushwaha N, Zhang Y, et al. Differential roles of nuclear and cytoplasmic cyclin-dependent kinase 5 in apoptotic and excitotoxic neuronal death[J]. J Neurosci, 2005, 25(39): 8954-8966.

Disclosure of Interest: None Declared

P007

Topic: New and Future Treatments

NEUROLEPTIC THERAPY IN MULTI MORBIDITY IN GERONTOLOGY INSTITUTE, SKOPJE

O. Bundaleska [1,*], L. neloska [2], B. kostov [2]
[1]Psychiatry, [2]Gerontology Institute, Gerontology Institute, Skopje, Macedonia, The Former Yugoslav Republic Of

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: Gerontology Institute of existence over 50 years stationed patients with multi morbidity and with Alzheimer or vascular demention.These patients initially placed because of their insomnia, low mood, poor appetite, lack of interest in the happenings around them, their forgetfulness and often beyond recognition relatives. By accommodating receive data about their somatic condition that usually corresponds to the presence of: high blood pressure, diabetes, anemia, cardiomyopathy, dechidrataion.In long years follow-up of these patients showed necessary use neuroleptic therapy to cover their symptomatology that ranged from halucination moments to psychotic.
Attempts their insomnia resolved with benzodiazepines proved unsuccessful so in that regard it was necessary giving neuroleptic therapy.(tbl. haldol) in low doses.
Methods: The methods for monitoring their somatic health in treatment with low doses neuroleptichtherapy: TA control blood counts, ECG,enzymes status, blood glucose degradation products. In these patients once a month during the subsequent six months control these parameters.
The aim of this article is to show that despite the multi morbidity low dose neuroleptic therapy tbl.haldol do not give change hp, glucose, enzymes, degradation products, ECG, TA.   Also the goal was to show that with low doses neuroleptic therapy quality of life of patients improved.

Disclosure of Interest: None Declared

P008

Topic: New and Future Treatments

COMPARISON OF THE CHARACTERISTICS OF PATIENTS WITH MILD ALZHEIMER'S DISEASE IN TWO RANDOMIZED CONTROLLED TRIALS AND AN OBSERVATIONAL STUDY

C. Reed [1], G. Dell'Agnello [2], K. Kahle-Wrobleski [3], M. Belger [1], G. Sethuraman [3], J. Raskin [3,*]
[1]Eli Lilly and Company Limited, Windlesham, United Kingdom, [2]Eli Lilly and Company Limited, Florence, Italy, [3]Eli Lilly and Company, Indianapolis, United States

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Patient populations from randomized controlled trials (RCT) are usually considered not representative of those in routine care due to restrictive enrolment criteria. The objective of this analysis is to describe the baseline characteristics of patients with mild Alzheimer's disease (AD) participating in two identical phase 3 RCT's and an observational study.

Methods: EXPEDITION I and II were randomized, double-blind placebo-controlled trials of solanezumab in AD patients receiving standard of care treatments. Pooled RCT data is used for this analysis. The GERAS study is a prospective, non-interventional, cohort study of patients presenting within the normal course of care. Mild AD severity was defined as mini-mental state examination (MMSE) scores 26-20 in the RCTs and 26-21 in the observational study. Data collected in both studies included demographic characteristics, medical history, cholinesterase inhibitor (AChE) and memantine use and measures of cognition (ADAS-cog), function (ADCS-ADL), behaviour (NPI) and health-related quality of life (HRQoL – EQ-5D) of the patient.

Results: Patients in the pooled RCT populations (n=1322) were slightly younger (74 vs 77 years) than patients in the observational study (n=567) with more females in the RCT (54% vs 48%). Time since diagnosis was similar in both populations (1.9 vs 1.7 years). Patients in the RCT had a similar usage rate of AChE and/or memantine (88% vs 86%). Performance was similar on the cognitive scales, though patients in the observational study had slightly poorer functional and behavioural status and lower HRQoL.

Conclusion: Patient demographics and disease characteristics of these two mild AD populations demonstrate some differences; however these differences are not as pronounced as potentially expected. These results suggest that RCT's and observational studies can provide complementary data to assess outcomes in AD.
These studies are sponsored and funded by Eli Lilly and Company Limited.

P010

Topic: New and Future Treatments

THE INFLUENCE OF PEGANUM HARMALA L. ON BEHAVIOURAL, BIOCHEMICAL AND DNA FRAGMENTATION STUDIES IN COGNITIVE DEFICIT MICE

H. K. Joshi [1, 2, *], S. biradar [3]
[1]neuropharmacology, sarada vilas college of pharmacy, [2]division of natural products, saradavilas college of pharmcy, mysore, [3]neuropharmacology, SET college of pharmcy, dharwad, India

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: To investigate the influences of P. harmala in cognitive impairments in mice.

Methods: The seeds of *Peganum harmala* obtained from Gadghil shop, a traditional herbal product supplier, Belgaum, Karnataka, India.The processed dry seeds of Syrian rue 100g were grinded and then were extracted with 80% ethanol for 24 hrs in a continuous extraction using Soxhalet apparatus. The extract (PHE) was filtered, and ethanol was evaporated on a rotator evaporator under vacuum at a temperature of 45^0C to a reduced solid state yielding a 10.51 g of extract. Effect of PHE on motor coordination and Neurotoxicity was assesed using Rota-rod Apparatus, Effect of PHE for Psychoactive and CNS stimulant activity was done using Actophotometer, Effect of PHE on Sodium nitrite intoxication was done using Special two chambered water cage box, Effect of PHE on Ethanol induced Neurodegeneration was inviestigated emplying elevated plus maze and passive avoidance apparatus. whole brain acetyl cholinesterase was measured, Levels of GSH, TBARS, MAO-A were measured and DNA Fragmentation studies of frontotemporal cortex of Brain were conducted.

Results: T PHE (5, 2.5 and 1.25 mg/kg p.o) significantly ($P < 0.001$) protected the mice from Sodium nitrite induced memory impairment by decreasing the time require to find the water bottle in special water bottle case model. PHE showed improved acquisition and retention memory significantly ($P < 0.001$) by decreasing the Transverse Latency time (TLT) and increasing the step down latency (SDL) respectively in dose dependent manner. PHE inhibited the Acetylcholinestrase ($P < 0.01$) activity, increased the GSH ($P < 0.001$) level and decreased the TBARS ($P < 0.001$) level of whole brain. Moreover PHE reduced the Monoamine oxidase-A (MAO-A) which may delay the metabolism of epinephrine, 5-HT and other monoamines and enhances the action of these neurotransmitters indirectly; this adrenergic system plays an important role in learning and memory. Furthermore PHE (5mg/kg) protect the DNA fragmentation of frontotemporal cortex of the brain from hypoxic effect induced by sodium nitrite in Gel Electrophoresis studies.

Conclusion: Hence the seeds of *Peganum harmala* (PHE) seems to be potential enough to utilize in the management of Neurodegenerative disorders especially Alzheimer's disease.
References:

Disclosure of Interest: None Declared

P011

Topic: New and Future Treatments

THE EFFECTS OF EXOGENOUS HYDROGEN SULFIDE ON THE CATABOLISM OF BACE-1 ENZYME IN PRIMARY CULTURE NEURON

X. Chen [1,*], Y. Yan [1]
[1]neurology, the first affilated hospital of Chongqing Medical University, Chongqing, China

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: To investigate the exogenous Hydrogen Sulfide（H2S）on the toxicity of neuron and catabolism of BACE-1.

Methods: NaHS was used as H2S donor，different concentration of NaHS was added to primary cortical neurons,cell variability and apoptosis was measured by MTT and Hoechest33258 statining，Aβ1-42 level was measured by ELISA，the expression of BACE-1 mRNA and protein level was measured by quantitive real-time（Q RT-PCR）and Western blot.

Results: the concentration of 50uM NaHS，the viability of neuron was significantly decreased（$P<0.05$）；in the concentration of 20 to 30uM NaHS，the apoptosis was significantly induced（$P<0.05$）；in the concentration of 50uM NaHS,Aβ1-42 concentration was decreased sharply.BACE-1 mRNA and protein expression was siginifantly decreased in the concentration of 20 to 30uM（$P<0.05$）. The BACE-1 protein level was concentration-dependently decreased by NaHS（$P<0.05$）.

Conclusion: In the low concentration，NaHS has no obvious effect on the viability and apoptosis of on primary culture neuron and decrease the BACE-1 mRNA and protein level.

Disclosure of Interest: None Declared

P012

Topic: Traditional Chinese Medicine and Dementia

ETHANOL EXTRACT OF ZIZIPHI SPINOSAE PROTECTS DIFFERENTIATED PC12 CELL FROM AMYLOID BETA PROTEIN INDUCED NEUROTOXICITY

C. L. Chen [1,*], Y. J. Chen [1], T. M. Pan [1]
[1]Department of Biochemical Science and Technology, National Taiwan University, Taipei, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: The development of anti-aging foods is an important task for health food industry. The purpose of this research is to develop functional foods for the counteraction Alzheimer's disease (AD).*Ziziphi spinosae* is a traditional medicinal herb with high Fe^{2+} ion chelating activity, which decreases amyloid beta protein (Aβ) deposition in the brain; aggregated Aβ-induced oxidative stress is the triggering factor in the pathogenesis of AD.

Methods: We chose the *Ziziphi spinosae* extracts to study the reasond of the protection of differentiated PC12 cells againt $Aβ_{1-40}$ neurotoxicity.The main manifestation of AD is accumulation of senile plaques, primarily comprising Aβ, around brain nerve cells. The major cytotoxic sequence within Aβ appears to be between residues 25 and 35. Moreover, we analyze the major compound of *Ziziphi spinosae* and find jujuboside A to test differentiated PC12 cells from $Aβ_{25-35}$ induced neurotoxicity.

Results: We show that PC12 cells recovery increased from 64% after treatment with aggregated $Aβ_{1-40}$ to approximately 89% after treatment with 50 μg/mL *Ziziphi spinosae* at 24 h., The major compound jujuboside A can protect differentiated PC12 cells from $Aβ_{25-35}$ and $Aβ_{1-40}$ induced neurotoxicity.

Conclusion: These findings reveal the basic mechanism for the protective effect of *Ziziphi spinosae* in AD and emphasize the potential therapeutic and preventive value of *Ziziphi spinosae* in the treatment of AD.

Disclosure of Interest: None Declared

P013

Topic: Traditional Chinese Medicine and Dementia

A SYSTEMATIC REVIEW OF THE EFFECTIVENESS OF ACUPRESSURE FOR DECREASING AGITATED BEHAVIOR IN DEMENTIA

L. Hsieh [1,*]
[1]Ditmanson Medical Foundation Chia-Yi Christian Hospital, Chia-yi City , Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: The objective of this systematic review is to summarize and critically evaluate the evidence available from clinical trials designed to evaluate the effects of acupressure on agitated behavior in patients with dementia.

Methods: The search strategy is designed to identify published and unpublished studies that limited to English and Chinese language reports. Studies reviewed included randomized and non-randomized controlled trials which comparing acupressure with routine care or other intervention of decreasing agitation in dementia. Databases searched included the Cochrane library, PubMed, CINAHL, MEDLINE, and the Chinese Electronic Periodical Services (CEPS). The methodological quality of included studies was assessed by using the Jadad scale.

Results: Two cross-over trials were included and one was RCT that allocated participants randomly to acupressure or Montessori methods or routine care. Another trial assessed the effectiveness of acupressure on agitation compared with routine care. All took place in long-term care facilities. The acupressure points chosen as Fengchi (GB.20), Baihui (Du.20), Shenmen (He.7), Niguan (Pe.6), and Sanyinjiao (Sp.6) were the same in two trials. And the acupressure protocol was similarlyexcept forthe frequency of acupressure times and days per week. The acupressure protocol in RCT was done once daily, 6 days per week, for 4 weeks. Another trial protocol was carried out twice daily, 5 days per week, for 4 weeks. The agitated behaviors were reduced in the acupressure compared with routine care in time 1 intervention period, however, there was significant heterogeneity (WMD -0.87, 95% CI -1.24 to -0.50, two trials, n=114), in time 2 and time 3 intervention period (WMD-3.26, 95% CI -5.19 to -1.33, WMD -0.48, 95% CI -2.16 to 1.20, respectively, one RCT, n=81, 91,respectively).

Conclusion: These findings showed that acupressure may have a role with reducing agitated behaviors. However, there are too few data available to make definitive suggestions. More adequately designed RCTs with a larger number of dementia patientsare required to confirm this results in further research.

References: Yang, M. H., S. C. Wu, et al. (2007). "The efficacy of acupressure for decreasing agitated behaviour in dementia: a pilot study." J Clin Nurs 16(2): 308-315.
Lin, L. C., M. H. Yang, et al. (2009). "Using acupressure and Montessori-based activities to decrease agitation for residents with dementia: a cross-over trial." J Am Geriatr Soc 57(6): 1022-1029.

Disclosure of Interest: None Declared

P014

Topic: Dementia Prevention and Risk Factors

HEARING LOSS AND ALZHEIMER DISEASE: A SURVEY FROM AN ALZHEIMER DISEASE CENTER

M. T. Hsieh [1,*]
[1]Department of Neurology and Alzheimer's disease research center, National Cheng Kung University Hospital, Tainan, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: To investigate the prevalence of hearing loss in the patients with AD.

Methods: The subjects were those who underwent the Cognitive Ability Screening Instrument (CASI) during the period from 1st January 2011 to 28th November 2011. Hearing impairment was impressed by the psychologist's observation when CASI was done

Results: We surveyed 908 subjects, including 535 patients with AD, 117 with Dementia with Lewy bodies/Parkinson disease with dementia (DLB/PDD) and 256 others. Hearing impairment is more prevalent in AD (46 or 8.6%) compared with DLB (3 or 2.6%) or others (3 or 1.2%). In the patients with AD, those with hearing loss, (83 years old) were older than those without (77 years old). To the view of age, the proportions of hearing loss in patients with AD increase remarkably in older age group.

Conclusion: The preliminary results demonstrate that the hearing loss is more prevalent in patients with AD than other kinds of dementia. The incidence of hearing loss in AD increased in older age. The prevalence of hearing loss in AD patients might be underestimated. We defined the hearing loss by clinical observation. The minor, even the moderate degree of hearing impairment is hard to notice by observation. We need further examinations to make a clear definition of hearing loss, such as pure tone audiometry or brainstem auditory evoke potential, etc. We believed that aging plays an important role in the hearing impairment, so does AD. We make a hypothesis that hearing impairment may be an early sign in those with AD. Moreover, Should we diagnose early AD by detecting hearing impairment earlier? Further study is needed to make the underlying mechanisms more clear.

References: 1. Frank R. Lin, E. Jeffrey Metter, Richard J. O'Brien, Susan M. Resnick, Alan B. Zonderman, Luigi Ferrucci. Hearing Loss and Incident Dementia. Arch Neurol. *2011;68(2):214-220.*
        2. U.S. National Center for Health Statistics 1994. National Health Interview Survey.
        3. Gates GA, Mills J. Presbycusis. *Lancet.* 2005;366:1111–20.
        4. Dalton DS, Cruickshanks KJ, Klein BE, Klein R, Wiley TL, Nondahl DM. The impact of hearing loss on quality of life in older adults. Gerontologist. 2003;43:661–8.

Disclosure of Interest: None Declared

P015

Topic: Dementia Prevention and Risk Factors

THE BRAIN MRI AND MRA FINDINGS OF PATIENTS VISITED TO A GENERAL HOSPITAL MEMORY DISORDER CLINIC

J.-H. Heo [1,], J.-H. Lee [1], J.-Y. Ahn [1]
[1]Department of Neurology, Seoul medical center, Seoul, Korea, Republic Of

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: With the ageing population, number of dementia patients is increasing, as well as the public interest. Due to these circumstances, it is only logical to assume that the population who would visit memory clinic will also increase. Magnetic resonance image (MRI) and magnetic resonance angiography (MRA) of the brain is a commonly used tool to evaluate the arenchymal lesions and vascular abnormality of the cerebral vessels. The authors tried to validate the usefulness of those in patients with memory decline.

Methods: The study included patients who visited the memory clinic in Seoul medical center, went through the neuropsychiatric test and had both brain MRI and MRA taken for one year. In brain MRI, severities of white matter hyperintensities and presence of cerebral infarction were evaluated. In brain MRA, intra- and extra-cranial arterial stenosis and presence of aneurysm were noted.

Results: Total of 173 patients was included, and it consisted of 64 men. The mean age was 71±9.4 years, and the mean education period was 7±5.2 years. In brain MRI, white matter hyperintensities were observed in 113 patients (65.3%), and cerebral infarction was found in 57 patients (32.9%). In brain MRA, 88 (50.9%) patients were found to have more than one stenotic segment in intracranial vessel or proximal ICA and 6 patients (3.5%) were diagnosed with unruptured aneurysm.

Conclusion: Considering that the patients who visit the memory clinic with complaint of memory decline are mostly old-aged and have various vascular risk factors, the likelihood of them having white matter hyperintensities or stenosis of cerebral vessels is also very high. Therefore, brain MRI and MRA should be included in the examination for dementia in patients who are old aged and have multiple vascular risk factors. The findings would helpful in making treatment decisions and reventing possible cerebrovascular accident.

Disclosure of Interest: None Declared

P016

Topic: Dementia Prevention and Risk Factors

DEMENTIA RESEARCH MAPPING: THE DEVELOPMENT OF A DEMENTIA RESEARCH FRAMEWORK TO IDENTIFY RESEARCH GAPS AND FUTURE HEALTH SERVICE NEEDS.

A. Mavrodaris [1,], S. Kelly [2], L. LaFortune [2], C. Brayne [2]
[1]University of Warwick, Warwick, [2]University of Cambridge, Cambridge, United Kingdom

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Dementia is one of the biggest public health challenges of the 21st century. It is clear that further research and evidence-based services for people with dementia are urgently required. Our objectives were to create an evidence-based theoretical framework covering all fields of dementia research across the lifecourse that reflects existing healthcare services within public health categories. The framework will be used to identify gaps in research and service provision.

Methods: We used evidence derived from systematic reviews, RCT's and cohort studies to develop broad public health categories and research areas. Additionally, qualitative evidence was used from a stakeholder survey (n= 1563) that aimed to identify where future research in the field of dementia should be targeted. The framework was further developed and refined through a structured consultation process among experts in the field.

Results: Research categories were divided to focus on potential interventions from primary, secondary and tertiary care perspectives along a progression of time and disease. To reflect the complex interaction of factors associated with dementia progression, research fields are presented conceptually within a rainbow structure. Research categories identified as risk factors in the development of dementia included constitutional factors (genetics, age, sex, other demographics); cognitive development and reserve, education and employment, lifestyle and behaviour, socioeconomic and environmental factors; and pathophysiological risk factors. These factors provide information necessary for the development of primary preventative interventions. Research categories amenable to secondary and tertiary prevention included features of care (carers, health and social care professionals, care settings and environment and society, policy and economics) and clinical, prognostic and quality of life features. All features influence both secondary and tertiary prevention, thus end of life is represented across each preventative field. Ultimately, research relevant to each research area will be categorised and recorded to enable the identification of research gaps.

Conclusion: It is fundamental that future resources are arranged to support those interventions that are evidence-based with the potential to yield significant benefit, and that research is targeted into areas currently poorly understood. This work provides an important framework to inform future research and service provision.

Disclosure of Interest: None Declared

P017

Topic: Dementia Prevention and Risk Factors

THE PSYCHOLOGICAL INTERVENTION OF ALZHEIMER'S PATIENTS
S. Pan [1,], S. Dong [1] and Snile Dementia Institute of Zhengzhou Wanqing, Zhengzhou City , China
[1]Snile Dementia Institute of Zhengzhou Wanqing, Zhengzhou City , China

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: Analysis the causes of symptoms of Alzheimer's patients by understanding their major life events and past history,explore the psychological interventions for the patients who suffering from the disease.

Methods: Over the past ten years,retrospective analysis of the 106 patients who were received from March 2000 to March 2010,Zhengzhou Wanqing Villa Apartments for the Elderly and has been diagnosed by the municipal level and above hospitals infestation of dementia. Questionnaire byrisk factors detection the life history ofthese patients, analyzing the reasons for their symptoms,Propose some individualpsychological interventions.

Results: The reasons with wandering symptoms of 63 cases of Alzheimer's patients can be summarized into the following four categories:1.Health maintenance and family responsibility, obligation type 8 cases2.Loss of self-realization and self-esteem type 26 cases 3.Walk without purpose 24 cases4.In order to continue to survive 5 cases.Two years after the implementation of psychological interventions for these patients, we obtained the following results:1.Symptoms continue developing of nine cases, accounting for 14.28%;2.Symptoms stopped developing of 26 cases, accounting for 41.27%;3. Symptoms improved in of 24 cases,accounting for 38.10%.

Conclusion:
With the aging of the population of society has become increasingly evident, the incidence rate of Alzheimer's is a rising trend, and has become a serious social problem.60% of patients with Alzheimer's will occur wandering symptoms.Such symptoms isdangerous, even life-threatening.Studies have shown that the walk is not a "walk around without purpose", usually the purpose and goals ".In need of family members and health care workers to understand its past history, observation and analysis the reason for their walk, and to give concern, respect,by setting the scene to reproduce and put into the emotional support and help,Take targeted psychological interventions,Most Alzheimer's patients' wandering symptom can be to improve,or stop developing,the better state ,some patient is on the mend.

References: [1] Shimizu Yun-Hee, Kitamura The studies of the life history,symptoms and countermeasures of Alzheimer's disease , 2012.10 (1) :24-31.
[2] Su Rong, Zhang Liping The survey of 1906 elderly dementia [J] Chinese Journal of Gerontology, 1989, 8: 75-78.

Disclosure of Interest: None Declared

P019

Topic: Dementia Prevention and Risk Factors

INCIDENCE OF DEMENTIA IN MIDDLE-AGED AND ELDERLY PATIENTS WITH DEPRESSION

L.-L. Yeh [1,]
[1]Asia University, Taichung, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Literatures revealed depression might be a risk factor of incidence of dementia. Thus, this study aimed to explore the time to incidence of dementia and detect the related factors for the middle-aged and elderly patients with depression.

Methods: A large national cohort of the middle-aged and elderly patients who received treatment for depression was identified from the National Health Insurance Research Database in Taiwan. Survival and Cox regression analysis were employed to explore time to incidence of dementia and related factors during the period of three years.

Results: 14,296 (10.6%) study subjects were initial diagnosed dementia amongst 135,360 of the middle-aged and elderly patients with depression; where 3.6% in the age group of 40-64 years, 23.3% in 65-79 years, 46.3% in 80-89 years, and 62.1% in over 90 years, respectively. Results from the survival analysis showed 7% incidence cases with dementia in 12 months, 9% in 24 months, and 11% in 36 months, respectively. The study subjects who had been elder (odds=8.1), recurrence depression (odds=1.1), major depression (odds=1.1), comorbidities of other psychoses (odds=2.4) or physical chronic disorders (odds=1.7) increased in the incidence of dementia. On the contrary, depression patients had a comorbid neuroses disorder decreases by16% in the incidence of dementia.

Conclusion: The incidence of dementia was higher in middle-aged and elderly patients with depression than in the general population. The study results also implied depression might be a risk factor of incidence of dementia, which reminds healthcare professionals to develop care plans for preventing from the exacerbation of cognition function. The clinical experts may pay more attention to take care of depression patient with comorbidity of psychoses or chronic disorders, especially.

Disclosure of Interest: None Declared

P020

Topic: Dementia Prevention and Risk Factors

THE EFFECT OF CAROTID ARTERY STENTING ON COGNITIVE FUNCTION IN PATIENTS WITH CAROTID ARTERY STENOSIS: A PROSPECTIVE, 3 MONTHS FOLLOW-UP STUDY

K. W. Park [1,*], B. A. Yoon [1], M.-J. Kang [2]
[1]Neurology, [2]Radiology, Dong-A University College of Medicine, Busan, Korea, Republic Of

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: The aim of this study is to assess the effect of carotid artery stenting on cognitive function from baseline to 3 months in patients with severe carotid artery stenosis compared with control subjects using detailed neuropsychological test.

Methods: We consecutively recruited 31 patients underwent CAS with high grade carotid artery stenosis (≥70%) and 10 control subjects at baseline, who visited to the clinic or emergency room between February, 2009 and February, 2012. Twenty three out of 31 patients underwent CAS and 10 out of 11 control subjects were included in our analyses, who have completed follow-up neuropsychological evaluation after 3 months. Main cognitive outcome measures were the Seoul Neuropsychological Screening Battery-Dementia version (SNSB-D) test which containing subcategories for testing of general cognitive function, attention, visuosaptial function, language and related function, memory, and frontal lobe/executive function. We evaluated the mean differences of cognitive outcome measures using SNSB-D in our cases between patients with CAS and control group from baseline to 3 months follow-up period, respectively.

Results: The demographic findings and general cognitive function in patients with CAS (n=23) and control group (n=10) at baseline were as follows: age (67.1 ± 8.2 vs. 61.1 ± 7.4), education level (8.5 ± 4.6 vs. 8.7 ± 4.0), and the score of mini-mental state examination (25.5 ± 3.7 vs. 26.2 ± 2.6). There were no significant differences between the two groups. Twelve out of 22 patients with CAS had asymptomatic CS. During 3 months follow-up period, the patients with asymptomatic CS (n=12) as well as all patients underwent CAS (n=23) did not show significant change differences in all cognitive outcome measures compared with control group (p>0.05).

Conclusion: Our results suggest that the effect of carotid artery stenting on cognitive function were not detected in patients with carotid stenosis as compared with control group during 3 months follow-up.

Disclosure of Interest: None Declared

P021

Topic: Dementia Prevention and Risk Factors

DIFFERENCES IN FUNCTIONAL FITNESS BETWEEN NORMAL AND MILD COGNITIVE IMPAIRED OLDER ADULTS.

H.-H. Wu [1,*], P.-S. Lin [1,2], T.-H. Liao [3], S.-P. Chen [1], A. F. Tsai [3]
[1]Department of Physical Therapy & Graduate Institute of Rehabilitation Science, College of Medicine, [2]Healthy Aging Research Center, Chang Gung University, Taoyuan, [3]Suang-Lien Elderly Center , New Taipei City, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Research had shown that fitter middle-aged adults have lower chance of becoming dementia when growing old than those who were less fit. However, few researches compared the fitness status of normal and mild cognitive impaired or demented older adults. In the current study, we will examine the differences in functional fitness between normal and mild cognitive impaired older adults.

Methods: We recruited volunteer residents in Suang-Lian elderly center, a highly standard and well-managed center in Northern Taiwan, for embarking an exercise intervention program. We conducted baseline comprehensive geriatric assessments for the residents who can walk independently with or without assistive devices and consented to participate in the exercise intervention program. The assessment included basic data, health and lifestyle questionnaire, cognitive and depressive status, and functional fitness tests including BMI, waist/hip ratio, 6-minute walk, hand grip strenght, knee extension strength, 30-second chair stand, 2-minute step test, chair sit-and-reach, timed up and go, functional reach, one leg stand time, drop ruler test and 5-meter gait speed. By using ANCOVA analysis with demographic data adjustment, we compared the differences of functional fitness test results of the 2 groups according to the cognitive status (Mini-Mental Status Examination (MMSE) score$\geqq$24 v.s. <24).

Results: We recruited 77 residents. The mean age was 83.67±5.17. And according to the MMSE scores, there were 36 (46.8%) residents classified as the mild cognitive group, 41 (53.2%) residents classified as the normal cognitive group. There were no significant differences in basic demographic data including age, gender, and BMI. And the result showed that except for 6-minute walk ($p = 0.042$), 30-second chair stand ($p = 0.034$), and geriatric depression scale (GDS) ($p = 0.019$), there were no significant differences in other functional fitness tests and health and lifestyle status.

Conclusion: Older adults classified as mild cognitive impaired showed significantly lower aerobic endurance and muscle endurance as well as in more depressed mood than those who were classified as normal cognition. We need to pay more attention to maintain or improve functional fitness, especially the endurance, and emotion of the mild cognitive impaired older adults.

Disclosure of Interest: None Declared

P022

Topic: Dementia Prevention and Risk Factors

DECLINE IN OBJECTIVE COGNITIVE FUNCTION VERSUS PHYSICAL FUNCTION IN OLDER ADULTS WITH CHRONIC DISEASES DURING 2 YEARS FOLLOW-UP

C.-I. Chang [1,*], C.-Y. Chen [2], J.-S. Tsai [2], C.-H. Wu [3], C. A. Hsiung [4], C.-C. Hsu [5, 6], C.-Y. Chen [1, 7]
[1]Division of Geriatrics and Gerontology, Institute of Population Health Sciences, National Health Research Institutes, Taiwan, [2]Department of Family Medicine, National Taiwan University Hospital, [3]Department of Psychology, National Taiwan University, Taipei, [4]Division of Biostatistics and Bioinformatics, Institute of Population Health Sciences, [5]Division of Geriatrics and Gerontology, Institute of Population Health Sciences, [6]Division of Health Services and Preventive Medicine, Institute of Population Health Sciences, National Health Research Institutes, Taiwan, Zhunan, [7]Department of Family Medicine, College of Medicine, National Taiwan University, Taipei, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Cognitive function decline is considered as one of the risk factors of frailty in elderly. However, the impact of cognitive function decline measured by mini-mental state examination (MMSE) on health outcomes is indefinite.

Methods: One hundred eighty-night ambulatory elderly outpatients with age equal to or over 65 years old were recruited for the comprehensive geriatric assessment in National Taiwan University Hospital for 2 years follow-up. The MMSE was performed at baseline, 1, and 2 years follow-up. Subjects with lower MMSE score compared with their baseline values duration the observational time were defined as decline on cognitive function. Additionally, frailty evaluated by Fried Frailty Index (FFI) and Comprehensive Geriatric Assessment – Frailty Index (CGA_FI) were conducted simultaneously.

Results: There were 98 (51.9%) female in a total recruited subjects (average age 77.2). After 2-years follow-up, there were 31 withdrew consent, 16 lost to follow-up, 2 moved to nursing home, and 12 passed away. The average MMSE score in total participants did not change significantly. However, there were 74 (48.7%) subjects defined as cognitive function decline including subjects withdrew after 1-year follow-up. Compared with subjects without cognitive function decline, participants defined as cognitive function decline were older, and demonstrated a higher proportion of frailty using FFI and CGA_FI at 2-years follow-up. Cognitive function decline was significantly associated with frailty defined by FFI and CGA_FI. After adjusting for multiple confounding factors including frailty status at baseline, the odds ratio of frailty using FFI at 2-years follow-up for cognitive function decline was 2.62 (95% confidence interval 1.22-5.61) compared with their compartments.

Conclusion: Cognitive function decline identified by MMSE could be considered as an alarm since its impact on frailty using physical and multidimensional approaches.

Disclosure of Interest: None Declared

P023

Topic: Dementia Prevention and Risk Factors

SOCIOECONOMIC AND OCCUPATIONAL RISK FACTORS FOR ALZHEIMERS DISEASE IN SWEDEN: A NATIONWIDE EPIDEMIOLOGICAL STUDY

X. Li[1,*]
[1]Center for Primary Health Care Research, LUND UNIVERSITY, Malmo, Sweden

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Our aims were to investigate possible associations between hospitalisation for Alzheimers disease and socioeconomic and occupational factors.

Methods: A nationwide database was constructed by linking Swedish census data to the Hospital Discharge Register (1970–2008). Hospital diagnoses of Alzheimers disease were based on the International Classification of Diseases. Standardised incidence ratios were calculated for different socioeconomic and occupational groups.

Results: A total of 18992 individuals aged >30 years were hospitalised for Alzheimers disease. Individuals with >12 years of education were at high risk for Alzheimers disease. White-collar workers had higher risks for Alzheimers disease, and farmers lower risks. In males and/or females, risks for Alzheimers disease were increased for physicians, nurses, assistant nurses, teachers, religious, juridical and other social-science-related workers, sales agents, shop managers and assistants, gardeners and related workers, forestry workers, drivers, postal and communication workers, shoe and leather workers, plumbers, other construction workers, cooks and stewards, waiters, hairdressers, and launderers and dry cleaners. Decreased risks were observed for farmers, chemical process workers, food manufacture workers, female textile workers and female launderers and dry cleaners.

Conclusion: The present study shows that occupational status increases the risk for Alzheimers disease. However, it remains to be determined which specific factors are responsible for the observed differences in occupational risks for Alzheimers disease.

Disclosure of Interest: None Declared

P024

Topic: Dementia Prevention and Risk Factors

HEALTH LITERACY CONTRIBUTES TO DECREASING PREVALENCE OF DEMENTIA IN THE COMMUNITY-DWELLING JAPANESE ELDERLY IN AN URBAN CITY

C. Yamamoto [1,*], T. Hoshi [2]
[1]School of Nursing, Chukyogakuin University, Mizunami-shi, [2]Department of Urban Environment, Tokyo Metropolitan University, Tokyo, Japan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: We reported prevalence of dementia was decreasing from 9.6% in 2001 to 7.5% in 2007 in Japanese elderly aged 65 years and older in an urban city at the ADI 2012 Conference in London. We aimed to clarify factors in decreasing prevalence of dementia focusing on their health literacy.

Methods: Baseline and follow-up data were collected in 2001, 2004 and 2007 in City A. The number of analysis subjects was 13,195 - 15,084. Questionnaire items were fundamental attributes, self-perceived health, activities of daily living, lifestyle, regular dental visits, years of shooling, and others. Results of data analysis were compared with national statistics.

Results: Proportions of the elderly who had regular dental visits were 72.0% and 71.0% in the 2001 and 2007 surveys, showing their high concern with dental health. Reserch Team of Ministry of Health, Labour and Welfare reported in 2011 that the elderly who had no teeth and/or who did not use artificial teeth had a risk of the onset of dementia 1.9 times as much as those who had more than 20 teeth of their own. Proportions of smokers over 70 years decreased from 24.5% to 17.3% in men during 6 years. According to the 2001 National Nutrition Survey, it was 29.0%. Rusanen M. et al. reported heavy smoking in midlife was associated with a greater than 100% increase in risk of dementia, AD, and vascular dementia more than 2 decades later (Arch Intern Med. 2011;171(4)). We put health-related questions to ask whether a respondent is intererested in health articles and programs, whether he or she thinks disease is preventable by taking care of him- or herself, and such. For the first question, 93.0% and 93.6% of analysis subjects in the 2004 and 2007 surveys answered "yes". As for the second, 56.5% answered "yes" in 2004. Health concern was high and health behavior could be observed among analysis subjects. As for years of schooling in the 2004 survey, the percentage of college (university) graduates was 23.7%. The 2008 Statistical Abstract of Education, Science and Culture reported college attendance rate was 10.1% in 1955 and 17.0% in 1965, which reflects attendance rate in the same generations as our analysis subjects.

Conclusion: Our elderly people were health cnscious and their health literacy seemed to be high. It could have possibly delayed the onset of dementia or prevented it. Health literacy can be improved by education. Education will be a key to delaying, decreasing, preventing dementia in future and promoting quality life of elderly people.

Disclosure of Interest: None Declared

P025

Topic: How Animal Models help Human Studies

EFFECT OF RED MOLD DIOSCOREA ON MEMORY AND LEARNING IN AN ANIMAL MODEL OF ALZHEIMER'S DISEASE

C. L. Chen [1,*], Y. W. Hsu [2], T. M. Pan [1]
[1]Department of Biochemical Science and Technology, National Taiwan University, [2]Research and Development Division , Sunway Biotechnology Company Limited, Taipei, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: The main manifestation of Alzheimer's disease (AD) is accumulation of senile plaques, primarily comprising amyloid beta protein (Aβ), around brain nerve cells.

Methods: We utilized the 8-week-old male rats (Sprague-Daw1ey system) as the study materials. Aβ was injected continuously into the hippocampus by ALZET brain infusion pump placed in the rat through brain surgery and thus resulted in Aβ deposition in the brain and causing damage to induce the formation of Alzheimer's disease.

Results: We examined the effectiveness of red mold dioscorea (RMD), a novel AD-treating compound, improving memory and learning ability by comparing the performance of an AD animal model created by intracerebroventricular Aβ infusion administered 3 different dosages RMD to that of a normal control group, an $Aβ_{1-40}$ infused group administered no drugs, and an $Aβ_{1-40}$ infused group administered a cholinesterase inhibitor. Comparison of performance in the passive-avoidance, Morris water maze, reference memory, probe trial, and working memory tasks indicates that RMD administration significantly enhances memory and learning ability. Examination of blood, lipid, liver, and kidney, and electrolyte functions indicates that RMD has no negative effect on liver or kidney functioning. Total antioxidant status and biochemical indicator levels showed that RMD administration enhances antioxidant capacity while significantly inhibiting Aβ-induced increase in acetylcholine activity, suggesting that RMD may enhance neural conduction and physical activity and reduce inducible nitric oxide synthase enzyme activity in the brain.

Conclusion: We conclude that RMD administration can improve Aβ-induced impairment in memory and learning ability in AD patients.

Disclosure of Interest: None Declared

P026

Topic: Dementia Care and Technology

NURSING INTERVENTION OF ALZHEIMER'S PATIENTS

W. Ma [1,*], S. Pan [1] and shiyuan bei street Zhongyuan Area, Zhengzhou City Henan Province Zip Code:450007
[1]Snile Dementia Institute of Zhengzhou Wanqing, Zhengzhou City , China

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: NURSING INTERVENTION OF ALZHEIMER'S PATIENTS

Objectives: In order to evaluate the Alzheimer's patients' care, summarizes the clinical characteristics of the disease of Alzheimer's, early detection of Alzheimer's, prevent exacerbations, appropriate and targeted care. Medical records, documents, questionnaires and to communicate with patients and their families.

Methods: October 2010 to February 2012 in addition to memory loss, unresponsive, slow performance other than the general spirit of the aging, personality change is the most common and noticeable symptoms, such as patients become more solitary, selfish, cold, emotional instability, less activity and sleep disorders.Through investigation and observation, found that these early signs of mental anomalies and timely treatment to avoid the further development of the disease.Disturbance of
consciousness and in the excited state by careful observation with or without fever, urinary retention, abnormal, and in a timely manner to be lifted.Some of the reactions of the patients, to give a certain degree of attention. For impulsive, self

Conclusion: Dementia is one of the common diseases in the elderly, endangering the health of the elderly common, Alzheimer's care has become a family, social problems.In this paper, appropriate nursing interventions for Alzheimer's,including:Include: abnormal psychological care, safe care, behavioral care, rehabilitation training, and pointed out that to take effective nursing interventions to improve patients 'quality of life, and improve patients' ability to live a very important significance,Elderly nursing research priorities in the future, Through the care of patients with Alzheimer's, we recognize that must be early prevention, earlier found that patients with Alzheimer's, and take timely and effective measures, meticulous, carefully work out of the nursing work, In order to prolong survival time and improve their quality of life, and alleviate the burden on families and society.

References: [1] Ma Yinnan Senile dementia patient care [J]. Foreign Medical Nursing Volume, 1995, 14 (2): 56 ~ 59
.
[2] Deng Hongyu. Hospitalized elderly patients with dementia severity and related factors [J] Sichuan Mental Health 2001, 14 (2):77 to 79.

Disclosure of Interest: None Declared

P027

Topic: Dementia Care and Technology

THE 1-YEAR EFFECTIVENESS OF INTEGRATIVE NON-PHARMACOLOGICAL INTERVENTIONS IN DAY CARE CENTER FOR PERSONS WITH DEMENTIA IN ONE PUBLIC PSYCHIATRIC TEACHING CENTER IN SOUTHERN TAIWAN- PILOT STUDY

W.-C. Ouyang [1, 2,*], C. Li [3], F.-C. Kuo [4], Y.-C. Tsai [5], S.-F. Chen [5], P.-W. Sun [6], H.-H. Hsia [7], J.-M. Hu [8], H.-H. Liang [7], C.-N. Lin [1]
[1]Department of Geriatric Psychiatry, Jianan Mental Hospital, Taiwan, [2]Department of Nursing, Chung Hwa University of Medcal Technolgy, [3]Depatment of Social worker, [4]Department of Occupational Therapy, [5]Dep. of Nursing, [6]Dep. of Clinical Psycholgy, [7]Dep. of General Psychiatry , [8]Dep of General Psychiatry, Jianan Mental Hospital, Taiwan, Tainan City, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: To investigate the effectiveness of integrative non-pharmacological interventions in day care center for person with dementia.

Methods: There are 28 persons with mild to moderate dementia in this 1-year retrospective naturalistic cohort study. The integrative non-pharmacological interventions included regular exercise for lower leg movement every day, music activity, horticulture, group occupational therapy, cognitive promotion activities and some other occupational therapies in weekly schedule for persons in dementia day care center in one public psychiatry teaching hospital. The outcome variables include happiness-sad face checklist (1-5: sad to happy), Occupational Therapy Assessment Scale(OTAS) which includes 3 sub-score and Caregiver Burden Inventory (8-20: mild burden, 21-32: moderate, 33-44: severe, >44: very severe) the first week, half year after and 1 year after person with dementia attended the program of this day care center. Paired-t test and Wilcoxon Signed Rank Test were used for statistical analysis. The dosage of psychotrophic drugs were kept stably or adjusted only in minimal range during this 1 year.

Results: 39% of samples(11/28) were male. The mean age was 71.4 ± 12.0 years. 17 have attended this program day care center persistently during half year and 1 year, and only 13 have continuously attended for 1 more year. There were 15 persons who have attended this program for less than 1 year because of physical disease or other reasons. The half-year and 1-year score of happiness-sad face checklist have got significant improvement in comparison with the score in the first week (half year vs the first week, 3.6 ± 0.5 vs 3.1 ± 0.4, p=0.008, n=14; 1-year vs the first week, 4.1 ± 0.7 vs 3.2 ± 0.4, p=0.007, n=10). The half-year and 1-year score of caregiver burden was less than that in the first week (half-year vs the first week, 28.8 ± 10.8 vs 29.3 ± 10.9, p=0.585, n=17; 27.1 ± 11.1 vs 28.5 ± 9.8, p=0.350, n=13). The half-year and 1-year sub-scores of OTAS did not find significant difference in comparison with the sub-scores in first week.(p>0.05)

Conclusion: The integrative non-pharmacological intervention in day care center for persons with dementia have effectively improved happiness after attending half-year and 1-year program. But further study need to confirm the effectiveness about decreasing caregiver burden by enlarging sample.

Disclosure of Interest: None Declared

P028

Topic: Dementia Care and Technology

CHANGE IN THE COGNITIVE FUNCTIONS AND DAILY ACTIVITIES DEMENTIA SUFFERERS WHO RESIDE IN A LONG-TERM, GROUP-LIVING FACILITY IN JAPAN

S. Kobayashi [1,*], E. Aoki [2], K. Hokari [2], A. Tsukada [3]
[1]School of Sciences, Tokyo University of Technology, Tokyo, [2]ASU-NO-SATO, [3]SOMAYAMA-NO-SATO, Yokohama, Japan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: This study describes the progression of dementia symptoms of four residents of a long term, group-living facility in Japan. It should provide insight to in-/formal caregivers on how to care for older people with dementia over the long term.

Methods: Subjects: Four residents with dementia who lived in a group-living facility for eight years or more. Measures: We conducted regularly observational investigation from entry until present using two scales: NM scale and N-ADL. The NM scale measures cognitive functions and the N-ADL measures the daily activity of people with dementia. Each scales' perfect score is fifty.

Results: All four subjects were female. Their mean age upon entering the facility was 80.5 years ±5.8 years. The mean length of residency was 125.3 months ± 20.0 months, with a range of 102-150 months. One resident had vascular dementia, two had Alzheimer's Disease, and the other was unknown.
 The mean NM score when they entered was 31.5±21.6 points, the range was 45-46. After 96 months, the mean NM scale was 19.8±11.6 (range: 31-34). The mean N-ADL score when they entered was 40.0±8.2 (range: 49-33) . After 96 months, the mean N-ADL score was 15.3±8.7 (range: 27-26). The NM score decreased 9.8±6.1 (range: 17-12) and the N-ADL score decreased 15.3±8.7 (range: 27-6) over eight years. One subject is still alive, two have died, and the other was relocated to a nursing-home.

Conclusion: We described the progression of dementia symptoms of four residents of a long-term, group-living facility in Japan. There were greater differences among the subjects in terms of their cognitive functions than in their daily activities.

Disclosure of Interest: None Declared

P029

Topic: Dementia Care and Technology

SUBSTANTIATIVE RESEARCH - THE EFFECT OF REGULAR, CONTINUOUS FOOT CARE ON THE ELDERLY WITH DEMENTIA

R. Rokkaku [1,*], S. Kobayashi [1], A. Sakuma [2]
[1]Nursing, Tokyo University of Technology, Tokyo, [2]Day Service Center,   Dementia care institute, Mito, Japan

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: For the elderly with dementia, the prevention of falls has important implications on the maintenance of quality of life (QOL). For them, self-care is often inadequate, especially regarding their toenails. In this study, ten dementia sufferers receive a foot care intervention for five years. Their outcomes are compared with those of previous studies.

Methods: Period: From October 2007 to October 2012
Subjects: Ten elderly people with dementia. They use day care services within the long-term care insurance system. They have been receiving foot care on a regular basis at least twice a week.
Analysis: Comparison with cases in a survey of incidence, such as falling, from previous studies.

Results: 1) Comparison with previous studies: In Yamashita (2006), the subjects are 82 people attending a day service center for older women (mean age 81.4 ± 6.1 years). All subjects walk independently. The incidence of an abnormal/claw foot was 18%. It was found that 46% of those with toenail abnormalities had experienced a fall within one year. Moreover, the survey found that almost half of the people with abnormality in the feet or toenails experienced a fall in one year. In other words, there seems to be a correlation between abnormality in the feet and a comparatively high rate of falls, compared to the general population.
2) In the study, two of the ten were males, and the average age was 88.6 years (97-76 years). Every one had some sort of dementia, several with Alzheimer's dementia. The ten walk on their own during daily activities. (Four walk with canes). These subjects displayed claw feet and had received foot and nail care on a regular basis, at least twice a week. In total, the ten people fell 21 times in five years. Causes were those such as tripping or slipping on a step. The average number of times a person has fallen in five years is 2.1 times. The falling rate of per capita is 42% per year.

Conclusion: The results of this study are slightly better than those of Yamashita's. These results suggest that regular foot care can effectively reduce incidence of falling among the elderly with dementia.

Disclosure of Interest: None Declared

P030

Topic: Dementia Care and Technology

THE EXPLORATION OF THE EFFECTS ON USING THE E-CHERISH MEMORIZING GAME MODEL TO POSTPONE THE LOSING MEMORY

H. Chang [1,*]
[1]Information Management, Chihlee Institute of Technology, New Taipei City, Taiwan

Are you submitting a scientific or non scientific abstract? Scientific

Objectives: We designed the e-Cherish Memorizing Game Model. The Model activates the memory area of the brain. Three objectives are:
I. The design of e-Cherish Memorizing Game Model. It owns the computer's repeating practice characteristic. Accompany by the family members, the patient inputs personal data into the personal repository system and uses the model to stimulate the brain repeatedly.
II. The records generated from the Model can be used by the medical assistant to evaluate the patent's status and make an appropriate medical cure plan for the patient.
III. Through the construction, laboratory, implementation and promotion of the research plan. The result supports the patients' families to accompany the patients in attending the recovery plan.

Methods: I. Literature Analysis Method
The research went through the literature on the subjects of Alzheimer's disease.
II. Interview Investigation Method
The interviewees are doctors, Alzheimer's disease patients and their family members.
III. Laboratory Design Method
The patient joined the program. The independent variables are: Personal repository data, memorizing game data, the status of the patient, the family resources and the related care service resources. The dependent variables are the six indexes of the CDR: Memory, Orientation, Judgment & Problem Solving, Community Affairs, Home Functions and Personal Care.

Results: I. The construction of the e-Cherish Memorizing Game Model.
The model includes: i. Personal Repository System, ii. Memorizing Game Model.
II. The beneficial results bringing to the patients, the family members and the society.
i. The patients:confidence, support, communication ability.
ii. The family member:support, mobile tool, medical cost reduction.
iii. The society:the prevention of the Alzheimer's disease, medical resource reduction.

Conclusion: After the memorizing game model training, the result appears good status. Especially the e-Cherish Memorizing Game Model provides the patient repeatedly practicing method that can stimulate the brain cells, recall the memory and achieve the goal of postponing memory loss. The usage records of the Model can help the medical staff control the patient cognition ability status. We can help the Alzheimer's disease patients' family members join the interesting and useful care program happily. This type of family interaction and warm can postpone the Alzheimer's disease patients' memory loss efficiently.

Disclosure of Interest: None Declared

P031

Topic: Dementia Care and Technology

MODERATING EFFECTS OF DYADIC RELATIONAL RESOURCES ON THE RELATIONSHIP BETWEEN CAREGIVING DEMAND AND ROLE STRAIN FOR CAREGIVERS OF ELDERS WITH DEMENTIA IN TAIWAN

Y.-I. L. Shyu [1, 2,*], H.-Y. Liu [2], C.-T. Yang [3]
[1]School of Nursing, College of Medicine, [2]Healthy Aging Research Center, [3]Graduate Institute of Clinical Medical Sciences, Chang Gung University, Taoyuan, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: The purpose of this study is to explore whether mutuality and other dyadic relational resources, including preparedness and predictability, moderate the relationship between caregiving demand and caregiving outcomes for family caregivers of elders with dementia.

Methods: A total of 219 family caregivers enrolled in the study from December 2010 to November 2011 and were given questionnaire to complete at the clinics, and 197 (90%) completed and returned the questionnaire. Family Caregiving Inventory (FCI) containing measures of caregiving demand, mutuality, preparedness, predictability, and caregiver role strain were used to collect the data.

Results: The coefficient of three-way interaction between demand, mutuality and preparedness yielded a statistically significant result (b = -0.014, $p < 0.01$) and the increment in R^2 was 2.6% ($p < 0.01$), thereby indicating the presence of a moderator effect, with the three-way interaction accounting for 2.6% of the variance in the caregiver role strain. For interpretation of the three-way interaction, the simple regressions of role strain on demand at the different combinations of mutuality and preparedness were calculated. As family caregivers have both low mutuality and low preparedness, the more caregiving demand (b1 = 0.019, $p < 0.01$), the more role strain was experienced by the caregiver. On the other hand, the slope of role strain on demand became the lowest (b1 = 0.009, $p < 0.05$) when mutuality and preparedness were high, suggesting that caregiving demand had less influence on role strain when the caregiver had high levels of mutuality and preparedness as compared to lower level of mutuality and preparedness. At the same time, higher predictability was found to predict less role strain (b = -0.06, $p < 0.01$).

Conclusion: The results of our study provide a knowledge base for theoretical understanding of complex family caregiver/care receiver dynamics as well as a guide for the development of interventions.

Disclosure of Interest: None Declared

P032

Topic: Dementia Care and Technology

EVALUATION OF A CARER TRAINING PROJECT FOR THE MANAGEMENT OF BEHAVIORAL AND PSYCHOLOGICAL SYMPTOMS OF DEMENTIA

W. Cheng [1, 2,*], J.-J. Wang [1, 2], K.-Y. Chen [3], A.-W. Kao [4], M.-C. Pai [2]
[1]School of Nursing, [2]Department of Neurology and Alzheimer's Disease Research Center,, [3]School of Statistics, [4]Department of Medicine, National Cheng Kung University, Tainan, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Behavioral and psychological symptoms of dementia (BPSD) have been identified as the most challenging and principal contributor to caregiving load. A training package that focuses specifically on the management of BPSD was developed and trialed with carers.

Methods: Method: This study uses quasi-experimental design, with a combination of quantitative and qualitative research. A web-based training project and related evaluation format with reliability and validity for professional caregivers were developed to take into account of the culture and custom of local care needs for dementia. Case scenarios were simulated from the data collection of the training project.

Results: Triangulation data collections wereconducted for outcome evaluation ofcarers' knowledge, attitude, and perceived self-efficacy (K, A, & P) and their feedback on using the program, a focus group and face-to-face interviews were conducted to articulate their reflections and suggestions regarding the program reform.

Conclusion: 103 nursing home-based carers (male: female= 5:98 with mean age of 34.2) completed statistically significant advances in knowledge of dementia and BPSD, management of BPSD, caregiving ability, and stress reduction, which were maintained 6 and 12 months post-training.

Disclosure of Interest: None Declared

P033

Topic: Dementia Care and Technology

CORRELATION OF FACIAL EXPRESSION AND SATISFACTION WITH COMMUNICATION IN THE OLDER ADULTS WITH MILD TO MODERATE ALZHEIMER'S DISEASE

S. Otsuka [1,*], A. Hamahata [2], M. Komatsu [2]
[1]Nagoya University Graduate School of Medicine, Nagoya, [2]Yokkaichi Nursing and Medical Care University , Yokkaichi, Japan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Caregivers tend to evaluate interactive communication that skillfully increases smiles and conversation of older adults with dementia as effective. However, the correlationof facial expression and subjective satisfaction in the older adults with Alzheimer's disease (AD) has not beenclarified. We attempted to clarify whether the facial expression of older adults with AD expresses satisfaction with communication.

Methods: This study was approved by the Ethics Committee of Nagoya University in Japan. Two observers watched communication between caregivers and the older adults with mild to moderate AD (mild; $n = 50$, moderate; $n = 50$) and 50 non-AD for 20 min during recreation in elder care facility, and assessed facial expression (positive affects, no expression, negative affects) using the Philadelphia Geriatric Center Affect Rating Scale (ARS). Immediately afterward, all subjects were asked to choose the appropriate their subjective feelings of satisfaction among three expressions (smile = *satisfied*, no expression = *neither*, crying expression = *dissatisfied*) on a face scale.

Results: The rate of Inter-rater agreement between the two observers was high ($\geq k = 0.86$). All 150 subjects of both AD and non-AD group showed positive or negative affects and no expression in ARS. The correlationof facial expression and satisfaction of each group showed a positive correlation (non- AD; $r = 0.92$, mild; $r = 0.90$, moderate; $r = 0.86$).

Conclusion: The results of this study suggested that the expression of feelings in older adults with AD and their subjective satisfaction can be evaluated. As the affect state still remains as a residual ability in advanced dementia, facial expression is one of the useful indicators to evaluate satisfaction of communication between the residents with AD and caregivers.

Disclosure of Interest: None Declared

P035

Topic: Dementia Care and Technology

AWARENESS REGARDING LAXATIVE USE AMONG STAFF MEMBERS AT GROUP HOMES FOR ELDERLY WITH DEMENTIA

E. Yoshihara [1,*], Y. maruyama [1], M. isii [1], N. hara [2]
[1]depatment of health & welfare course of nursing, Seinan jo Gakuin University, Fukuoka, [2]niigata callege of nursing, niigata, Japan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: To investigate awareness regarding laxative use among staff members at two group homes for elderly with dementia（GH）.

Methods: An anonymous questionnaire survey was conducted on 17 staff members at two GHs in October and November 2011. The questions were on "laxative use in cases of constipation" and "diarrhea as a side effect of laxatives", and subjects were asked to respond on a four-point scale and to provide reasons for each response. Data were analyzed by calculating proportions for each item and summarizing reasons based on similarity. Steps were taken to prevent personal identification, and approval was obtained from the ethical review board of the researchers' university.

Results: Regarding laxative use, 70.6% responded that use was unavoidable, 23.5% responded that they wanted to avoid use where possible, and 5.9% responded that they wanted to avoid use as much as possible. Reasons for indicating that laxative use was unavoidable were the effects of constipation on illness, difficulty with bowel control due to age, effects of constipation on lifestyle, and alleviation of suffering. Reasons for wanting to avoid use were that natural defecation was ideal and that one should try to identify the cause of constipation rather than easily becoming dependent on drugs.
As for diarrhea as a side effect of laxatives, 35.3% responded that they were "reassurance", 47.1% responded that they were "not very reassurance", and 17.6% responded that they were "not reassurance at all". The reason given for indicating "comfortable" was the fact that lack of defecation increases the risks for diseases, while the reasons given for not feeling reassurance were the great suffering experienced by residents and the risk of dehydration.

Conclusion: Staff members were aware that laxative use for residents was unavoidable. In addition, they were not comfortable with the fact that laxative use may lead to diarrhea, and regarded laxatives as a means for residents to lead reassurance lives without suffering. These findings suggest the need for educational support on appropriate laxative use and care methods that do not depend on laxatives.

Disclosure of Interest: None Declared

P036

Topic: Dementia Care and Technology

ADAPTIVE TASKS AND COPING SKILLS ASSOCIATED WITH ADJUSTMENT BY RELOCATING OLDER ADULTS WITH DEMENTIA TO LIFE IN A FACILITY.

M. Komatsu [1,*], A. Hamahata [1], K. Osuka [2], M. Sato [1], S. Otsuka [3]
[1]Yokkaichi Nursing and Medical Care University, Yokkaichi, [2]Aichi Gakuin University, [3]Nagoya University, Nagoya, Japan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Japan is aging faster than any other country in the world. Older adults with dementia who cannot live independently at home usually decide to relocate to a facility for elders. There are problematic adaptive tasks requiring solutions and use of coping skills are needed to adapt to life in a facility.
The objective of this study is to clarify the adaptive tasks and coping skills that are associated with adjustment by relocating older adults with dementia to life in a facility.

Methods: The assessment sheet for understanding relocated older adults was developed by the authors and the survey was completed by formal caregivers. The subjects of the assessment were older residents with dementia in their second week after moving into the facility. The Mann-Whitney U test was used to identify the factors of adjustment to life in a facility.

Results: There were 114 subjects with a mean age of 85.4 years. Formal caregivers divided these subjects into two groups, people who had adjusted to living in the facility and those who had not. As a result of analysis, the most common adaptive task was the change of physical conditions, such as a worsening state of illness. This factor was significantly higher in residents with dementia who had not adjusted to the facility ($p < 0.05$).
The coping skills used by older adults with dementia, "enjoying life in the facility," "talking about accepting one's own life," and "seeking help from formal caregivers when something was troubling them," were significantly higher among those judged to have become adjusted to living in the facility ($p < 0.05$).

Conclusion: Nurses, as formal caregivers, have to understand what happened to the residents with dementia, solve their adaptive tasks, and strengthen coping skills to support for adjustment to life in a facility. It is important for nurses to observe the resident's expression carefully, and ensure that they talk positively about the life in the facility.

Disclosure of Interest: None Declared

P036a

Topic: Dementia Care and Technology

TOUCHING CARE
R C Shabab

The illness of a close relative (her grand mother) inspired Rawad with the creativity To develop "Touching Care" which is a mobile application that aims to support the entire ecosystem: Alzheimer's patients, caregivers and physicians. Says Rawad, "I thought I could help by creating a social network where elderly and Alzheimer's patients can keep in contact, at the same time regulating the activities of their daily lives, and where caregivers can communicate with colleagues, friends, and other groups and entities that share similar concerns."

Rawad adds that the application provides comprehensive information, tools and resources to help those who seek to provide long-term care. It has a set of "Reminiscence" features and functions, multimedia and easy-to-use cognitive stimulation games that helps Alzheimer's patients to stimulate their memory. These functions also include a photo album where caregivers carry pictures of their loved ones in chronological order. According to experts on Alzheimer's disease, one of the most beneficial activities for patients is to see photographs and other multimedia such as music, art, video, and film to activate their memory.

Other functions include the implementation of a timetable and blueprint for medicine where care providers can regulate daily activities and keep track of dates and times of taking medications, nutrition intake as well as blood test. It also includes a daily schedule in the form of a checklist. Another advantage is that care providers can find the support and advice they need and share experiences. Furthermore, it provides an opportunity for volunteers who want to become benefactors and advocates in the struggle against Alzheimer's disease. . "Touching Care" is available in four languages
English, Arabic, French and Spanish and believes that "Alzheimer's is a battle you can fight, we can help!".
"Touching Care" is currently launched on apple store.

P037

Topic: Quality of Life

THE RELATIONSHIPS AMONG SELF EFFICACY, SOCIAL SUPPORT AND CARE BURDEN FOR CAREGIVERS OF ELDERLY WITH ALZHEIMER'S DISEASE

S.-J. Liu/劉 [1] on behalf of correspondant author, P. C. Fu [1,*] on behalf of Master student, first author
[1]Nursing, Fu Jen Catholic University, New Taipei City/新北市, Taiwan

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: The relationships among self efficacy, social support and care burden for caregivers of elderly with Alzheimer's disease

ABSTRACT

Po-Chun Fu   Shwu-Jiuan Liu [*]

Objectives: The purpose of this study is to explore the relationships among self efficacy, social support and care burden for caregivers of elderly with Alzheimer disease.

Methods: The cross-sectional descriptive research design will be applied. Through convenient sampling, 120 caregivers of elderly with Alzheimer's disease will be recruited fromthe Psychiatric Outpatient Department and Ward in one of Medical Center at northern Taiwan. The Self Efficacy Scale (CSS), Multidimensional Social Support Scale (MSPSS) , Burden Inventory Scale (BIS), and demographic data will be the research measurements. T-test, one way ANOVA and stepwise regression will be used to analyze data.

Results: The results of this study will be imperative to improve the clinical nursing care for caregivers of elderly with Alzheimer's disease.

Conclusion: This study will be essential referent to examine the burden of caregivers of elderly with Alzheimer's disease for nursing practitioners, teachers, and administrators.

Keywords : caregiver, Alzheimer disease, self efficacy, social support,
care burden

Disclosure of Interest: None Declared

P038

Topic: Quality of Life

WITH WHOM ARE DEMENTIA PATIENTS LIVING? A HOSPITAL-BASED STUDY

M. F. Yang [1,], M. C. Pai [1]
[1]Department of Neurology and Alzheimer's Disease Research Center, , National Cheng Kung University Hospital, Tainan, Taiwan , Tainan, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: As most of the Tainan citizens reside at home with their children and grandchildren into their late life, the purpose of this study was to understand the residential condition of dementia patients and the associated factors.

Methods: From 2011 April to 2012 in August, we consecutively interviewed care-givers (CG) or family members of patients with dementia who visited our dementia clinic. We focused on the primary diagnosis of the patients, their co-morbidities, current cohabitants and the people who provided assistance.

Results: A total of 1270 cases completed the study, with average age of 76 and female to male ratio 1.44. The rate of having comorbidities was 80%. 1102 (86.7 %) had lived in their own home and taken care by spouse and/or their children. 312 (24.7%) had hired a foreign CG and 36 (2.8%) lived with the foreign CG without other family. Older age, having more comorbidities and a diagnosis of mixed-type dementia are associated with the hiring of a foreign CG.

Conclusion: Our study found that dementia people have different living residence, it's was changed by increase with age and different types of dementia; therefore, family care resources also changed. In addition, it has the great conflicts between the twilight residences of elderly dementia patients and the ethical values of the traditional family in Taiwan. It also reveals that dementia and aged care industry needs individualized professional services and the investment of care resources in Taiwan.

Disclosure of Interest: None Declared

P039

Topic: Quality of Life

EMOTIONAL WELL-BEING AMONG FAMILY CAREGIVERS OF ELDERLY PERSONS WITH DEMENTIA IN URBAN JAPAN

M. Onozuka [1,*], T. Nakamoto [1], S. Okuno [1], T. Kitamura [1]
[1]kyoto tachibana university, Kyoto , Japan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: The quality of life (QOL) of elderly persons with dementia was inextricably linked to the QOL of their family caregivers. The aimes of this study is to clarify the level of QOL of these family caregivers and consider the ways to maintain and enhance their QOL.

Methods: Data were collected using a questionnaire including the background of the family and the elderly, the scale of QOL(VAS by Mc Cormac HM)and the reasons for their responses. The sample populations were the family looking after their elderly in a city in Japan (n=252). The data collection was from July, 2009 to January, 2010. The questionnaire was distributed to the family by mailing. The date statistically using the SPSS(Version 18) analytical software and open responses on the level of caregiver QOL was analyzed qualitative .This study was approved by a university ethical review board.

Results: The response rates were 105(41.7%). The background of the family were women(81.6%) and men(18.4%), average age 62.6 (± 10.0) years, and the age range was 31-82 years. The mean of QOL was 6.23 (± 2.23), the number of respondents score of over 6.0 were 40 and below 6.0 were 31.The reasons for their responses were nine items:[Burden of care][Balance between caregiving and personal lifestyle][Relationship with and support received from care recipient][Relationship with and support received from other family members][Attitude towards care][Significance attached to care] [Interaction and exchange with non-professional carers][Support from professional caregivers][Personal health]. The score of over 6.0 points cited positive points, who scored below 6.0 points gave more negative comments.

Conclusion: Respondents with QOL score of below 2.0 included both the youngest and oldest family caregivers. However, because the survey covered a diverse age range, we suspect that it would be difficult to maintain and enhance the QOL of family caregivers without providing support that is catered to their social role and stage of development as determined by their age bracket. Considering Japan's dwindling birthrate and aging society, improving and expanding social services with the aim of boosting the caregiving capabilities of an increasingly diverse population of family caregivers and enlisting the cooperation of neighbors and cohabiting family members will perform an important role in maintaining and enhancing the QOL of both elderly persons with dementia and family caregivers.

Disclosure of Interest: None Declared

P040

Topic: Quality of Life

REHABILITATION OF PATIENTS WITH DISEASES IS SOMATIC QUALITY LIFE IN GERONTOLOGY INSTITUTE

E. Brezoska [1,*], O. Bundaleska [2]
[1]Physical therapy, [2]Psychiatry, Gerontology Institute, Skopje, Macedonia, The Former Yugoslav Republic Of

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: Analyzing the most morbidity, mortality by the patients who are placed in Gerontology Institute-Skopje, are the same by World Medical Organization. The first five places are: cardiovascular diseases, lung diseases, injury, dementia and malignancy.In most cases it is multimorbiditate. Unfortunately, more often as complications of basic disease occurs and severe mobility or complete real estate, which in turn pulls him for depression by the patients. The depression is more difficult because of complicated primary disease and treatment.

  Rehabilitation treatment is very positively affect the physical and mental status of patients. With in kineziteraphy implement rehabilitation, electrotherapy, thermo therapy, fototherapy and rehabilitation after prostrations of patients. Depending on stage of disease, in most cases in rehabilitation completely or partially return of most lost functions of bogy, In very small number, usually when a terminal stage of illness, we do not have any physical effects of rehabilitation, hawevwr in these cases patient,s mental status improves. Therefore the treatment and care is easier for implement.

  Full or partially rehabilitation of patients are resocializes. It begins to socialize with other patients in our home and then with club members, pensioners, as well as across community. The first steps towards a better quality of life in our home, the patient makes the treatment work, where according to their affinities, and the remaining functions of body participates in the occupation or group therapy.

  Therefore, our patients become independent, mentally stable, satisfied and all that results that the basic disease tend ratia,or complications were mild and generally are not appearing as a depression related condition, illness or simply healing. On this way the patient is given the opportunity for higher quality and dignified life.

Disclosure of Interest: None Declared

P041

Topic: Quality of Life

THE USE OF DOLL THERAPY IN DEMENTIA CARE

J.-C. Wang [1,*], M.-C. Lin [2], H.-C. Wu [3]
[1]Graduate Institute of Long-Term Care, National Taipei University of Nursing and Health Sciences, Taipei City, [2]Department of Nursing, Cardinal Tien College of Healthcare & Management, New Taipei City, [3]Department of Nursing, St. Joseph Home, Hukou Township, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: To assess how doll therapy might reduce behavioral problems, maintain emotional stability, and improve social interaction amongst residents with dementia in the residential home.

Methods: Residents living with dementia and who were grandfathers or grandmothers were provided with plastic baby dolls during the day and before going to bed. Interactions were observed and reported upon by professional caregivers. All participants were volunteers and there was no time limit to the intervention.

Results: This study found that both male and female residents were able to hold a doll skillfully, constantly talked to the doll, and attended to the needs of the 'baby' through feeding the doll biscuits, bread and porridge, and clothing the doll for warmth. Also, a doll could attract the visual attention of 2 to 3 other residents and generated discussion of baby topics, thus increasing the interaction between residents. Further, some residents with problems sleeping were noted to sleep better through the process of coaxing the baby to sleep.

Conclusion: Doll therapy can help to meet the psychological needs and the desire for a sense of attachment amongst people with dementia, which, in turn, reduces the incidence of behavioral problems. As such it has a positive effect in dementia care.

Disclosure of Interest: None Declared

Topic: Quality of Life

APART FROM LOVE WHAT ELSE HAVE SUPPORTED US TO MOVE ON: EVIDENCE FROM PILOT STUDY OF FAMILY CARER

C.-M. Yen [1,*], M. C. Hu [1]
[1]Adult and Continuing Education, National Chung Cheng University, Chia-Yi County, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives:
Recent research shows caring for a family member with dementia can bring positive meaning for the carer. This pilot study has shown the evidence of the positive meaning in which spirituality has played a significant role from family carers with dementia in Taiwan.

Methods: A qualitative descriptive methology is used for this pilot study. Three carers of a family member with dementia are recruited. An in-depth individual, audio-recorded, interview is conducted with the participants. Open questions aim to explore why they became the primary carer for the family member with dementia and to evoke stories about doing the caring. Data are transcribed verbatim. The stories are returned to participants for verification. Data analysis are thematic interpretation of the meanings of caring, in particular to positive meaning.

Results: The results have indicated: 1)the relationship among family members are closer due to the process of caring a family member with dementia; 2) positive meaning are found among these three participants in which past life experiences; personal growth and believes toward life are three major events reported by participants and 3) the strenghts of primary carer to overcome the obstacles in which spiritual aspect is important.

Conclusion: This pilot study will be, firstly, expected to bring in more participants into a main study. Secondly, with which carer's life and caring experiences will be further investigated in order to gain a more complete picture. Thirdly, the relation between positive meaning and spirituality needs to be further defined and scoped.

Disclosure of Interest: None Declared

P043

Topic: Quality of Life

EFFECTS OF THE HOME-BASED CAREGIVER TRAINING PROGRAM ON QUALITY OF LIFE OF PERSONS WITH DEMENTIA: A RANDOMIZED, CONTROLLED TRIAL

H.-L. Huang [1,*], Y.-I. Shyu [2], W.-C. Hsu [3], S.-T. Chen [4]
[1]Department of Gerontological Care and Management, Chang Gung University of Science and Technology, Tao-Yuan, [2]School of Medicine, Chang Gung Universit, Taoyuan, [3]Dementia Center, [4]Department of Neurology, Chang Gung Memorial Hospital, Tao-Yuan, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: The purpose of this study was to examine the trend of one-year treatment effects of a home-based caregiver training program on quality of life for elders with dementia in Taiwan.

Methods: Design: A randomized clinical trial was conducted with random assignment of caregivers either to the interventional group receiving home-based caregiver training program with telephone consultations, or to the control group receiving only written educational materials and telephone follow-ups. Setting: The Neurology clinics of two hospitals in northern Taiwan. Participants: Patients with dementia and their caregivers (N=68) lived in the communities of northern Taiwan and were willing toreport the QOL of dementia elderly were randomly assigned to the interventional group (n=33) or control group (n=35). Measurements: The QOL of elderly dementia patients was measured using the Taiwanese version of Dementia Quality of Life instrument (DQoL). Demented elderly with a Mini-Mental State Examination (MMSE) score of 13 suggested that they could understand the questions, and a MMSE score >10 indicated that the demented elderly had acceptable psychometric properties. The QOL was self-rated by elderly dementia patients and assessed by their family caregivers before the training program (baseline), and at 1, 3, 6, and 12 months after the program. The difference in DQoL changes between the interventional and the control groups, and within 12 months following the baseline were examined using the generalized estimating equations (GEE) method.

Results: The Self –rated DQoL indicated that the elderly dementia patients of interventional group had a significantly better QOL ($\beta=1.40$, $p<0.05$) than the control group from the sixth month to one yearafter received the interventionover a period of one-year. The Caregiver-rated DQoL also suggested that the dementia elderly of interventional group had a better QOL ($\beta=0.53$, $p>0.05$) than those of the control group, although did not reach to statistical significance.

Conclusion: Our study showed that the in-home caregiver training program was effective in improving the QOL of demented elderly. Similar programs may be applicable to Chinese population in other countries. The results of this study can provide a reference for healthcare providers to develop strategies for dealing with Chinese/Taiwanese immigrants.

Disclosure of Interest: None Declared

P044

Topic: Quality of Life

THE SANDWICH GENERATION AND CARING FOR AGING ALZHEIMER PARENTS: A GENERATION STORY ?-THE FRENCH ALZHEIMER ALERT STUDY-

D. Huvent-Grelle [1,*], C. Pagniez [1], I. Delabriere [1], J. Podvin [1], E. Boulanger [1], F. Puisieux [1] and the Comité Scientifique de la Société Septentrionale de Gérontologie Clinique- FRANCE
[1]HOP GERIATRIQUE LES BATELIERS - CHRU LILLE, LILLE, France

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: The current study examines the socio-demographic characteristics and the quality of life of "the sandwich generation", defined as providing care to both grandchildren and old demented parents.

Methods: - design : multicentric, prospective study over one year (2011)
      - Setting : eleven dementia and geriatric clinics across the north of France
      - Participants : family caregivers (n=99) those simultaneously caring for aging parents with AD and young grandchildren

Results: 79 % of our caregivers are women. They are "boomers" in their late fifties (59 on average) with parents in their mid-eighties (86) and grandchildren aged 7 on average. 47 % of them take medications. 57 % of them feel stressed and they don't sleep well in 53 % of cases. The AD patient is most frequently the caregiver's mother or mother-in-law (69 %). The frequency of helping sessions is weekly for 95 per cent. 38 % of our respondents have a full-time job which must be added many hours to take care of their parents and grandchildren at home. Most helpers report that they like to help their parents but they nevertheless prefer to look after their grandchildren.

Conclusion: "Women-in-the-middle" (daughters and daughters-in-law) as helpers and caregivers for the elderly have to face care demands from three generations. We wonder whether the phenomenon doesn't reflect a larger social problem.

Disclosure of Interest: None Declared

P045

Topic: Quality of Life

DEMENTIA AND WELL-BEING: CAN THEY CO-EXIST?
K. Swaffer [1,*]
[1]Student, University of South Australia, Burnside, Australia

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: This presentation discusses well-being in spite of living with a diagnosis of younger onset dementia. With no pharmacological treatment options for semantic dementia, positive management was imperative to maintain a sense of perceived longevity and well-being. The use of the PERMA Principles, alongside a number of other positive psychosocial interventions will be explored in detail, with their effects on well-being. What is missing from research is how to help people with a diagnosis of dementia to achieve well-being, and how to maintain this for as long as possible. As health professionals generally refuse to believe anecdotal evidence of patients who have healed themselves using alternative interventions, it is the evidence based research needed to get them to support options that do work for some people, and might work for many people if doctors offered and supported them as main stream interventions. Interestingly, most people will believe in a 'God miracle', even non Christians, but not a cure brought on by positive psychosocial or non pharmacological interventions. Based on my own experience, if the medical community doesn't soon embrace these interventions, not only are they doing their clients a grave disservice, the lost opportunities will increase the global cost impact of dementia and ageing. This paper presents how to use positive psychosocial interventions to better manage the symptoms of dementia to ensure well-being, and the framework for why evidence based research is needed to support it.

Disclosure of Interest: None Declared

P046

Topic: Person Centered Care

THE RESEARCH OF MEDICAL-CARE ENVIRONMENT FOR THE ELDERLY PATIENTS— THE PLANNING AND DESIGN OF GERIATRIC WARD IN A MEDICAL CENTER IN SOUTHERN TAIWAN

P. T. Chen [1,*], C. M. Chang [2], Y. J. Liao [2], M.-C. Pai [3]
[1]Institute of Gerontology / Department of Neurology and Alzheimer's Disease Research Center, NATIONAL CHENG KUNG UNIVERSITY/ NATIONAL CHENG KUNG UNIVERSITY HOSPITAL, [2]The Department of Internal Medicine/ Institute of Gerontology, NATIONAL CHENG KUNG UNIVERSITY HOSPITAL/ NATIONAL CHENG KUNG UNIVERSITY, [3]Department of Neurology and Alzheimer's Disease Research Center, NATIONAL CHENG KUNG UNIVERSITY HOSPITAL, Tainan City , Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: A patient-centered medical environment has become the ideal for hospitals all over the world. The study investigates how the needs of the patients should influence the planning and design of wards for elderly patients regarding to their special requirements for medical treatment.

Methods: A case study of the refurbishment project of the geriatric ward of the medical center is conducted by an interdisciplinary team. The consensus in the team was based on the physiology, independence, social interaction and rehabilitation of the elderly patients. The research was conducted over a period of ten months and included four sections of focused group discussions. The results of the discussions led to the final version for the project.

Results: The research result shows that, due to the consideration of the medical treatment for elderly patients, the following environmental characteristics are required in the geriatric ward: 1) To offer the personal ward in priority; 2) To reinforce the visibility and identifiability of the bathrooms; 3) To maintain the nurses' visibility to the patients; 4) Toconsider auxiliary facilities for disabled patients; 5) To provide exercise places outside the ward for the patients; 6) To provide comfortable free space for the patients; 7) To provide multi-function non-conventional therapy places; 8) To provide spaces outside the wards for the patients to interact with their visitors; 9) To consider planning areas for volunteers to carry out necessary activities; 10) To clearly circumscribe the safe area of activity.

Conclusion: In conclusion, medical care for the elderly patients has to focus not only on the complete medical evaluation and convenience of medical care, but also on maintaining as much as possible the continuity of the patient's baseline habits in life. Care should actively assist the patients to regain their knowledge and skills, which help them to return to the community, thus the burden on the medical system might be reduced.

Disclosure of Interest: None Declared

P047

Topic: Person Centered Care

FROM THE INDIVIDUALIZED CARE PERSPECTIVE TO INVESTIGATE CHARACTERISTICS OF DAY CARE CENTERS THAT PROVIDE SERVICES TO THE DEMENTIA ELDERLY-FOR EXAMPLE, TAINAN CITY YMCA DAY CARE CENTERS

P. T. Chen [1,*], R.-Y. You [2], L.-J. Chu [3], C.-L. Hsu [4]
[1]Institute of Gerontology / Department of Neurology and Alzheimer's Disease Research Center, NATIONAL CHENG KUNG UNIVERSITY/ NATIONAL CHENG KUNG UNIVERSITY HOSPITAL, [2] Executive Director, Dept. of Senior Citizen Center for Nursing Home and Day service and Home care, [3]Supervisor of Tainan YMCA Senior Citizen Center, [4]Deputy Supervisor of Tainan YMCA Senior Citizen Center, The Tainan Young Mens Christian Association, Taiwan, Tainan City , Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: A day care support elder with dementia is important sources of care services, which let them continue living in the original community. Consider Dementia Elderly diverse needs of life and implement individualized care. How to provide appropriate day care services and show due care services qualities is the concerned subject by the Institute.

Methods: In this study, provided individualized care's point of view to dementia elderly, to the Tainan, YMCA Social Welfare Foundation since 1998 has set up three day care centers for the elderly dementia as the research object, and divided the dementia elder life needs into care support and self-reliance training, health maintenance and cognitive promote, leisure arrangements and social interaction the three aspects. The use of actual participation in the care services program, to observe and analyze elders with dementia in day care center behavior characteristics and lifestyle in three year.

Results: The research results show that good dementia day care center for the elderly have to show the following service characteristics: 1.to satisfy the patient's basic needs; 2 to create a safe environment ,security activities and assistance to encourage dementia elderly to choose 3 by developing the suitable program of taking care for dementia elderly to participate in activities 4. Guarantee that dementia elderly can choose whether or not to participate in the activities 5. Dementia elderly and their families have opportunities to continue learning health and disease management, 6.By activity arrangements so that dementia elderly retain the opportunity to interact with others and adjust affinities.7. Import and use community resources so that the dementia elderly are able to maintain community and family interaction.8.Arrangements for dementia elderly to join into the community and manage their own life in it.

Conclusion: In summary, dementia elderly can get a good quality of life in the day care center, if we import the concept of communities and unit care in the initial stage of environment and . Further more; dementia elderly can have a safe and comfortable life with a variety of living space and taking care. Dementia elderly can have chance to get autonomy and interaction with others, in order to assist the elderly in the community to live up to the old.

Disclosure of Interest: None Declared

P048

Topic: Person Centered Care

EFFECTS OF INTEGRATING THE CARING TECHNIQUES FOR THE MULTIPLE DISABLED IN SPECIAL EDUCATION AND FAMILY SUPPORTS FOR AN ELDERLY MOTHER WITH DEMENTIA

T.-L. Lee [1,]
[1]Department of Special Education, National Hsin-chu University of Education, Hsin-chu City, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: The purpose of this study was to investigate the treatment efficacy of using caring techniques for people with multiple disabilities in special education and family supports for an elderly mother with dementia.

Methods: The patient is the author's mother, female, 93 years old. She was found with dementia i.e. CDR 2. She has multiple disabilities.During the intervention, she started to participate in a center in day time. She also moved to live in a new home with a garden designed by horticulture therapy guidelines. Observations, interviews and autobiographical account of a family carer's journey were employed to collect data.Behavior problems (inactivity, and non-social behavior) and mood (dissatisfaction, depressive behavior) were assessed using standardized observation.

Results: It is found some improvement in cognition and stabilization in everyday functioning and behaviors after intervention by integrating the caring techniques for people with the multiple disabilities into care practice in this dementia mother. As for her mood, it demonstrated that positive effect through family's psycho-educational supports.

Conclusion: The findings illustrate the potential utility of caring technique for the multiple disabled in special education and family psycho-educational supports for individuals with dementia.

References: Chou, K. R., LaMontagne, L. L., & Hepworth, J. T. (1999). Burden experienced by caregivers of relatives with dementia in Taiwan. *Nursing Research, 48*(4), 206–214.
Mayer, J. F., Bishop, L. A., Murray, L.. L. (2012). The feasibility of a structured cognitive training protocol to address progressive cognitive decline in individualswith vascular dementia. *American Journal of Speech-Language Pathology , V21,* 167–179.
Wang, L. Q., Chien, W. T., & Lee, I. Y. (2012). An experimental study on the effectiveness of a mutual support group for family caregivers of a relative with dementia in mainland China. *Contemporary Nurse, 40*(2), 210–224.

Disclosure of Interest: None Declared

P049

Topic: Person Centered Care

THE APPLICATION OF REMINISCENCE THERAPY~ MOBILE GROCERY SHOP
C.-L. Huang [1,*], Y.-H. Teng [1], M.-C. Lin [2]
[1]Department of Nursing, St. Joseph Home, Hukou Township, [2]Department of Nursing, Cardinal Tien College of Healthcare & Management, New Taipei City, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: A mobile grocery shop was created to see if this would motivation to purchase snacks and increase interaction amongst residents.

Methods: A mobile grocery shop, selling nostalgic childhood snacks such as football chocolate, the prince, plum cake, cod fillets, big hogs, pickled peaches and dried mango was set up once a week, each time for one hour. The shop was approximately 100 centimeters tall, 100 cm long and 70 cm wide and placed in the cable car station in an area of the Court providing care for people living with dementia. Ringtones or a loud selling voice encouraged the residents to come to buy items

Results: Professional care staff found that with the arrival of the mobile grocery shop in the Court District residents with dementia began to smile, laugh and invite other residents to approach the shop to buy things and to discuss snacks by asking the price, bargain, or recommend selling new items. Finally, the residents bought some of their favorite nostalgic snacks to share with other residents.

Conclusion: Older people with dementia enjoyed the opportunities afforded by the mobile grocery shop to buytheir favoritesnacks to share with others, thus adding colour to the life of the institution. The mobile grocery shop is another example of facilitators using residents' memories to spur social interaction and aid in the care of dementia-related disease.

Disclosure of Interest: None Declared

P050

Topic: Person Centered Care

ALZHEIMER'S DISEASE AND DEMENTIA: AN IMPROVED MODEL OF CARE RELATED TO IMPROVED QUALITY OF LIFE FROM THE EARLY 20TH CENTURY TO PRESENT DAY.

K. Warkentin [1,*]
[1]Nursing, Dalhousie University, Halifax, Canada

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract:

Alzheimer's disease is a progressive, degenerative disease of the brain featuring memory loss, and one or more of the following cognitive impairments; aphasia, apraxia, agnosia, difficulty with day to day tasks, mood and behaviour.
Dementia is a word used to describe a group of signs and symptoms seen in a variety of diseases affecting the brain. Dementia is a progressive brain disease of older generations that affect higher order brain functions such as memory, thinking, orientation, comprehension, calculation, learning capacity, language, judgement, and executive functions. Although the chances of having dementia increase with age, it is not a normal part of aging. Overall, 8% of those 65 and older will get dementia.
The presentation will look at how care has evolved from the early 20th century to present day and with that is there any real advantage to a person centered care approach as opposed to disease centered in relation to the overall quality of life that the person with dementia gains.
Throughout the transformation of dementia care, three common needs have developed throughout the years; the need for ongoing training specific for health care workers working with dementia, the need for improved continuity of care through permanent client assignment and increased staffing needs, and the need for an interdisciplinary, person centered approach to care that includes the person with dementia, family, and frontline staff as active members of the care team.
With clinical practice trials, it is shown that with screening, efficient collection of clinical data, medical record prompts, patient education and empowerment materials (ASNS), and physician support and education provides the overall best results in quality of care, and quality of life for the person with dementia. This is shows that collaboration with outside societies such as the Alzheimer's Society of Nova Scotia, provides the best results in the journey of Alzheimer's disease and other dementias; education is the best defence. Whereas in the history and progression of Alzheimer disease, many clinicians thought of the person as "gone" but more and more evidence is supporting that in fact, the person is still there, and can still re call memories from past and present states. The importance of keeping in touch and fostering nurturing relationships with those who are elder, even in a diseased state, is of utmost importance, for clinicians.

Disclosure of Interest: None Declared

P051

Topic: Dementia Friendly Communities

A REPORT ON NATIONAL INITATIVES IN HOSPITAL CARE FOR PERSONS WITH DEMENTIA
M. Splaine [1, 1,]
[1]Splaine Consulting, Columbia, United States

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: Background: Persons with dementia and their families report that acute care hospitals are not Alzheimer friendly or capable, and several cost studies also bear this out. At least 4 countries have made improving hospital care for persons with dementia a part of their national dementia plans.
Methods: Author has reviewed all national dementia plans, their background papers and all government reports on implemnation. In addition, author has interveiwed key informants from patient advocacy organizations in those countries to cross check government claims.
Results: Seveal practices have been implemneted to improve screening for cognitive impairment within hospitals settings or improving the actual hospitala stay and quality data is just coming on line.
Learning Objectives: participants in this session will be able to identify policy changes made to improve hospital care, compare and contrats between the countries, and take away practical steps they might take at home
Method: Oral presentation with questions and answers

Disclosure of Interest: None Declared

P052

Topic: Dementia Friendly Communities

REGIONAL SUPPORT FOR THE ELDERLY WITH DEMENTIA AND THEIR FAMILIES BASED ON "NURSE CONSULTATION ON MEMORY LOSS" PART2: ANALYSIS OF CONSULTATION CONTENTS AND SUPPORT FOR THOSE CONCERNED ABOUT THEIR MEMORY LOSS

M. Shimizu [1,*], K. Tsuboi [1], K. Numoto [1]
[1]Kobe City College of Nursing, Kobe City, Japan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: In our rapidly aging society especially in Japan, it is vital to build up a system that gives support to the elderly with dementia on a regional basis. Since 2012, researchers have been offering "nurse consultation on memory loss" based on the program they formulated in 2011. This study aims at clarifying methods of regional support for the elderly with dementia based on the contents of consultation to people concerned about their memory loss.

Methods: 1) The "nurse consultation on memory loss" was conducted 3 times in 2012 and recorded in a format devised by the researchers. From the record, contents and ways of giving consultation are extracted.
2) After the consultations, joint researchers held meetings which were sound recorded.
3) Based on the results of 1) and 2), current status of consultation on people concerned about their memory loss were sorted out according to similarities to discuss the methods of regional support to the elderly with dementia.

Results: Of the 15 people who consulted, 10 were selected as samples, of which 4 is in 60s, 5 in 70s, and 1 in 80s of age, 3 males and 7 female. 2 of them live alone, 4 live with spouse, and 4 for others. The consultation included "concern about possibilities of getting dementia," "how to seek medical care," and "desire to gain knowledge about dementia and preventive measures." We conducted a simple test on the counselees using a checklist, and none of them showed clear symptoms of dementia. We listened to their concerns and offered information using a pamphlet, and we observed most of them satisfied with the consultation.

Conclusion: In this study, of the 10 counselees for their memory loss, only 2 were living alone, showing a different result from the earlier study that suggested those living alone tend to be concerned about their memory loss. However, it is possible that early detection of dementia symptoms of those living alone can be delayed, so consideration is needed when they visit for consultation. None of the counselees showed symptoms of dementia, but we think it is necessary to actively encourage them to have diagnosis at medical agencies that diagnose dementia in recognition of the preclinical diagnosis and treatment.

Disclosure of Interest: None Declared

P053

Topic: Dementia Friendly Communities

REGIONAL SUPPORT FOR THE ELDERLY WITH DEMENTIA AND THEIR FAMILIES BASED ON "NURSE CONSULTATION ON MEMORY LOSS"PART1: ANALYSIS OF CONSULTATION CONTENTS AND SUPPORT FOR THOSE HAVING FAMILY MEMBERS WITH MEMORY LOSS

K. Tsuboi [1,*], M. Shimizu [1], K. Numoto [1]
[1]Kobe City College of Nursing, Kobe City, Japan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: In our rapidly aging society especially in Japan, it is vital to build up a system that gives support to the elderly with dementia on a regional basis. Since 2012, researchers have been offering "nurse consultation on memory loss" based on the program they formulated in 2011. This study aims at clarifying methods of regional support for the elderly with dementia based on the contents and ways of giving consultation to people having family members with memory loss.

Methods: 1) The "nurse consultation on memory loss" was conducted 3 times in 2012 and recorded in a format devised by the researchers. From the record, contents and ways of giving consultation are extracted.
2) After the consultations, joint researchers held meetings which were sound recorded.
3) Based on the results of 1) and 2), current status of consultation on nursing family members with memory loss were sorted out according to similarities to discuss the methods of regional support to the elderly with dementia.

Results: Of the 15 people who consulted, 5 were selected as samples, of which 1 is in 40s, 1 in 50s, 2 in 70s and 1 in 80s of age, 4 males and 1 female. 2 of them live alone and the other 3 live with spouse or mother. They expressed their "concern for nursing worsening dementia," asked about "introduction of early diagnosis, nursing service," "how to deal with dementia family members living in an institution," and voiced their "complaint about the ways of care practiced by the institution where the families are staying." Their concerns were listened to, and available services were introduced and specific advice was provided for them.

Conclusion: The consultation contents pointed to their concerns about the ways of care whether they are living together with dementia family members or they are using paid services or not. It is therefore deemed vital to reduce the concerns of their families. Consequently, an emphasis was given to their sense of security by giving basic knowledge on dementia and to building up a system for offering consultation when they feel worried about their dementia family members.

Disclosure of Interest: None Declared

P054

Topic: End of Life Care

COMPARISON OF THE INFORMATION TO THE FAMILY IN THE TERMINAL SITUATIONS OF CANCER AND DEMENTIA IN JAPAN AND SOUTH KOREA

S. H. Lee [1,], T. Nakashima [2], D. Watanabe [3], S. Ogami [4], K. Tsuji [5]
[1]Korean Alzheimer's Association, Seoul, Korea, Republic Of, [2]Institute for Health Economics and Policy, [3]Seikei University, [4]ILC Japan , [5]Life Care System, Tokyo, Japan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Family is very important for person especially in terminal phase. Professionals need to explain his/her family about the situation and some information in detail. Comparing with Japan and South Korea among three professionals, the purpose of this study was to investigate what information is attached importance by professionals.

Methods: Data were drawn from a sample of 1311 physicians, social workers/care managers, and caregivers from Japan and South Korea in October to December 2011. Investigation centered care facilities and clinics which had experienced terminal care service. To clarify the ideal terminal approach and realistic one, the questionnaire included a fictitious case of person with cancer who was given one month to live (Case A) and person with dementia who was diagnosed as pneumonia and was unable to swallow foods (Case B). Differences among professionals about information were analyzed with chi-square tests.
Information contents:1. Remaining life expectancy; 2. Living will; 3. Alternative therapy; 4. Mrs. A/B's suffering and pain; 5. Available medical/long-term care systems; 6. The moment of death; 7. Future financial costs; 8. Future family care burden; 9. Grief after death.
The study was approved by the Institutional Review Board of the International Longevity Center, Japan.

Results: Japanese professionals had higher proportion that they explain all information except for 6 and 9 of Case A and except for 6 of Case B than South Korea. Information 5 had the most difference proportion between countries (Case A: Japan 77.4%, South Korea 37.0%; Case B: Japan 83.0%, South Korea 22.2%).
Among professionals in each country, chi-square tests show some information was significantly associated with professionals. In Japan, social workers/care managers tend to explain more about burden. In South Korea, in general low proportions of caregivers explain about information.

Conclusion: These results show the gaps between professionals about what information are explained to family. In terminal situation, professionals require collaboration of people with various occupations. In order to make good collaboration, we try to make consensus about what and which set of information are important to family in each country. And to improve terminal situation, we need to investigate family's needs in next stage.

Disclosure of Interest: None Declared

P055

Topic: End of Life Care

THOUGHTS OF GENERAL PRACTITIONERS AND THEIR EXPECTATIONS TO NURSES IN END-OF-LIFE CARE AT GROUP HOME FOR OLDER PEOPLE WITH DEMENTIA

N. Hiraki [1,*], Y. MOMOSE [2]
[1]School of Nursing, Miyagi   University, Sendai, [2]School of Nursing, Aichi Prefectural University, Nogoya, Japan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: The purpose of this study is to clarify thoughts of general practitioners (hereinafter, "GPs") and their expectations to nurses in end-of-life (hereinafter, "EOL") care at group home for older people with dementia (hereinafter, "GHs").SPECIAL;

Methods: Participants: Three GPs visiting GHs in "A" region
Period: From December 2010 to March 2011
Data collection and analysis:
Data were collected through semi-structured interviews with GPs, and then qualitative analysis was conducted.
Ethical Consideration:
The study was approved by the University's ethical committee. Written consents were made with GH administrators and GPs.

Results: 1.GPs Profiles
GPs had one or more years of experience in GH visit. One of the three visit teams consisted of a GP, a nurse, a pharmacist and a medical office worker, and other two teams consisted of a GP and a nurse.
  2.GPs' Thoughts toward EOL Care
GPs "wanted to support the decisions" of patients and their families but "found it difficult to provide EOL care as planned." In addition, because they "had hard time to communicate with nurses," and because "there was no cooperation between individual GPs," they realized the need for "sharing information among team members in advance." Furthermore, "it was stressful for GPs to decide to do nothing" while they could have treated patients. Although they wanted to grant patients and families' wishes, they "hospitalized them at last" in many cases. Such reality made them have "dilemma that hospitalization might be better while they wanted to keep them at GHs."
3.Expectation to Nurses
GPs expected nurses to understand their thoughts and feelings. They would like nurses to "act as intermediaries between GPs and patients, family members and GH staff." They would also like them to "provide information useful for decision making" and to "know of GPs' stress."

Conclusion: GPs were caught in a serious dilemma between supporting patients and families for natural death at GHs and not practicing treatments as a medical professional. GPs also expected nurses to understand their dilemma as intermediaries among patients, their families and GH staff. This study is a part of work supported by Grand-in-Aid for Scientific Research (C:21592933, represented by Hiraki).

References: N. Hiraki, Y. Momose,Workshop Participants Changed Staffs' Recognition for Death, 1ST world congress on healthy ageing 2012.

Disclosure of Interest: None Declared

P056

Topic: End of Life Care

BETWEEN IDEAL AND REALISTIC PRACTICE OF TERMINAL SITUATIONS OF CANCER AND DEMENTIA IN JAPAN AND KOREA: FOCUS ON DECISION-MAKING LEADER

T. Nakashima [1,], D. Watanabe [2], S. H. Lee [3], S. Ogami [4], K. Tsuji [5]
[1]Institute for Health Economics and Policy, [2]Seikei University, Tokyo, Japan, [3]Korean Alzheimer's Association, Soul, Korea, Republic Of, [4]ILC Japan, [5]Life Care System, Tokyo, Japan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: In the terminal situation, it is important that whose opinions are suitable to have priority in a discussion to set a direction of medical treatment and terminal care especially for people with dementia. Comparing between Japan and South Korea among three professionals who deal with terminal phase of cancer and dementia, the purpose of this study is to investigate factors of an ideal and realistic choice about a leader who makes a decision of care policy and to understand gap between two choices in both countries.

Methods: Data were drawn from a sample of 1311 physicians, social workers/care managers (SW/CM), and caregivers from Japan and South Korea in October to December 2011. To clarify the ideal terminal approach and realistic one, the questionnaire included a fictitious case of person with cancer who was given one month to live (CaseA) and person with dementia who was diagnosed as pneumonia and was unable to swallow foods (CaseB). Multinomial logistic regression was used to determine the ideal and realistic choices of leader (Mrs.A/Mr.B, family, professional) as outcome variables. Explanatory variables are years of home-based long-term care experiences (home care experiences), occupations, and experiences of patient's death at work of CaseA. Analyzed CaseB, we added current workplace too.
The study was approved by the Institutional Review Board of the International Longevity Center, Japan

Results: In Japan and South Korea, three professionals all selected Mrs. A as ideal and Mrs. A's son as realistic the most (CaseA) and selected Mr. B's wife as both ideal and realistic (CaseB).
As the results of multinomial logistic regression to professional, ideal choice (Japan, both CaseA & B) was significant associated with home care experiences (CaseA: OR 1.07, CaseB: OR 1.21). On the other hand, Ideal choice of South Korea (CaseA) was significant associated with professionals (physicians: OR 0.45, SW/CM: OR 0.38) and CaseB was significant associated with experiences of patient's death at work (OR 0.47).
A proportion of gap between ideal and realistic was 29.1% in Japan, was 30.1% in South Korea in CaseA, was 14.8% in Japan, and was 12.8% in South Korea in CaseB. The proportions of gap were not significantly different between Japan and South Korea.

Conclusion: The results show that decision-making leaders are different between Japan and South Korea. These are reflected on differences of family bargaining power structure and education for medical and care professionals between the countries.

Disclosure of Interest: None Declared

P057

Topic: End of Life Care

FACTORS IN END-OF-LIFE CARE FOR ADVANCED DEMENTIA PATIENTS IN LONG-TERM CARE SETTINGS

H.-L. Huang [1,*], L.-C. Weng [1], Y.-I. L. Shyu [1], M. C. Yeh [2], W. Hu [2]
[1] School of Nursing, Chang-Gung University, Tao-Yuan, [2] School of Nursing, National Taiwan University, Taipei, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: The purpose of this study was to explore the factors related to the willingness and attitude to providing end-of-life care for persons with dementia among professional caregivers in long-term care facilities.

Methods: A cross-sectional and correlational study was used in this study. The participants were professional caregivers in long-term care facilities in Taiwan. A stratified random sampling was applied, and a postal questionnaire was used to collect the data. The positive response rate of the institutions contacted was 77.1%. A total of 498 participants returned the questionnaires (a response rate of 94.1%). The predictive analytic software version 18.0 was used to analyze all study variables.

Results: Approximately 92.7% of the participants in the sample were women. The majority of participants had a college education or occupational high school level. The number of nurses, social workers, physicians, and other professionals were 77.3%, 13.8%, 4.4%, and 4.4%, respectively. Our results showed that the significant predictors of attitude toward end-of-life care for persons with dementia were: educational level, level of continued end-of-life care education, location of the care facility, knowledge about end-of-life care for persons with dementia, end-of-life care legislation, and perceiving the need for and the barrier to carrying out palliative care. The significant predictors of willingness to provide end-of-life care for persons with dementia were the level of continued end-of-life care education, knowledge about end-of-life care for persons with dementia, end-of-life care legislation, and the perception that they receive support from the institution. The significant predictors of executing the advanced directive and discussing the end-of-life care were the experienced to help patient or family DNR signature, knowledge about palliative care, and the perception that they receive support from the institution.

Conclusion: We suggest that the first priority will be to provide the professional caregivers with knowledge regarding end-of-life care for persons with dementia and the pertinent legislation regarding palliative care. The modification of current legislation and proper management of the care facilities for the elderly will create a supportive environment and will diminish the barriers perceived by professional caregivers. It will promote their willingness, attitude and actual practice toward end-of-life care for persons with dementia.

Disclosure of Interest: None Declared

P058

Topic: Policy and Campaigning

DIFFERENT CAREGIVER BURDEN PROFILES IN INDIVIDUALS WITH AND WITHOUT DEMENTIA IN TAIWAN COMMUNITY

L. Lin [1, 2,*], S.-C. Wu [2]
[1]Department of Psychiatry, En Chu Kong Hospital, New Taipei, [2]Institute of Health and Policy Management, Taipei, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: There is growing concern about cargiving experiences for substantial number of demented individuals in Taiwan. The aim of this study is to test heterogeneity of caregiver burden profiles in individuals with and without dementia in Taiwan community.

Methods: Interview data from the Assessment of National Long-Term Care Need in Taiwan (ANLTCNT) in 2000, which was designed to identify the long-term care needs of a nationally representative sample of disabled elderly Taiwanese subjects, were used in this study. The ANLTCNT used the probability proportional to size (PPS) sampling method to identify 303,545 Taiwanese adults ≥ 50 years old from 204 census areas. 17,191 (7.2%) disabled subjects were identified and invited for second stage interviews. 14,094 (82.0%) subjects completed the baseline interview; 12,748 of them (90.4%) dwelled in communities; 1,308 (10.3%) were diagnosed as dementia and 1,214 (92.8%) were cared by caregivers; 8,924 of 11440 (78.0%) non-demented ones had caregivers. We intend to indentify distinct clusters of caregivers with caregiver burden profiles using latent class analysis (LCA) for both groups. We started with a 1-class model then increased the number of classes until reaching the model with the best fit to the data, as determined by the Bayesian information Criteria (BIC). We would determine the best number of classes based on theoretical justification, parsimony, and interpretability.

Results: Valid data from 1,213 and 8,785 caregivers for demented and non-demented care-recipients are analyzed. The LCA models that best fits the data are 6-class-modelwith the relatively lower BIC (BIC based on L-squared = -1420.71, BIC based on Log-Likelihood = 22613.87) and 16-class-model with the relatively lower BIC (BIC based on L-squared = -56960.27, BIC based on Log-Likelihood = 145208.11) for demented and non-demeted individuals respectively.

Conclusion: Results of the LCA identified 6 homogeneous subgroups with different caregiver burden profiles among a heterogeneous sample of community caregivers taking care of demented individuals in Taiwan. The caregiver burden profiles in those caring individuals with and without dementia are quite different. Policy makers should address the difference when installing intervention strategies.

Disclosure of Interest: None Declared

P059

Topic: Policy and Campaigning

HOW HAVE PEOPLE WITH DEMENTIA BEEN REPRESENTED IN TV DOCUMENTARY PROGRAM IN JAPAN?

T. Iguchi [1,*], A. Tajima [2]
[1]Nara Women's University, Nara-shi, [2]Seirei Christopher University, Hamamatsushi, Japan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: This presentation outlines our ongoing research project, the NHK (Japan Broadcasting Corporation) Program Archives Trail Research Project. The project aims to explore how people with dementia (PWD) have been represented in TV documentary programs produced by NHK.
 In Japan, the new image of PWD and new care practices based on this image have been promoted through policies and narratives of caregivers from the late 1990s to the 21st century. NHK TV documentary programs have played the main role of conveying these new images to the general public. Especially since Christine Bryden's visit in 2003 and the ADI conference in Kyoto in 2004, the trend has been for Japanese PWD to speak about their feelings and thoughts in public. Since then, the total number of TV programs about dementia has increased and a new image of PWD has been promoted.
 It is easy for us to reveal such a drastic change. However, as social scientists, we think of image changes as a gradual event. We need to explore such a gradual change empirically. How were PWD represented in TV programs before 2004? How are previous images related to the new image? The final purpose of our project is to explore a variety of images of PWD and to clarify how these images have changed. In this presentation, we will present basic data and a simple hypothesis based on our first simple analysis.

Methods: This research project was conducted from 2010 to 2011. Our data set comprised the following three types of data:
  a title and contents list of TV programs about dementia;
  documentation of the story; contexts and scenes after watching each TV program produced between 1982 and 2003; and
  pictures of symbolic scenes in these TV programs.
 This presentation will explore the features of these TV programs based on the title and contents list and will use some programs as cases to explain how PWD are represented.

Results: The title and contents list shows that NHK TV programs focused on leading care practices in each period. We can therefore treat these titles as examples reflecting ideal dementia care in each period. Comparative case analysis brings two perspectives for exploring the variety of representations of PWD. One perspective is how are thoughts of PWD represented. The other perspective is how do caregivers manage the progression of dementia in their care practices.

Conclusion: This presentation is the first project report upon which more exploration will need to be based.

Disclosure of Interest: None Declared

P060

Topic: Policy and Campaigning

EXPLORING A COMMUNITY-BASED MODEL FOR THE SCREENING OF POTENTIAL DEMENTIA AND THE EFFECTIVENESS OF A CARE PLAN- USING TAOYUAN COUNTY AS AN EXAMPLE

Y.-L. Liu [1], C.-H. Lee [2], W.-L. Wang [3,*]
[1]Director General Public Health Bureau, Taoyuan County Government , Taiwan, [2]Long-term Care Section Chief Public Health Bureau, Taoyuan County Government , Taiwan, [3]Long-term Care Section Subsection Chief Public Health Bureau, Taoyuan County Government , Taiwan, Taoyuan County, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: The purposeofthisresearch project liesintheanalysis of the potential prevalence of dementia in Taoyuan County,the correlation betweenthe diagnosis rateafterscreening and thelong-termcare needs.

Methods: Based on a method predominant in theliterature, the 'AD-8 Scale and Long-term care needsassessment scale' was employed to screen subjects in the general population over theageof65,and subjects in the aboriginal community over the age of55years old. The 'AD-8 Scale and Long-term care needsassessment scale' data were completed by Health institutions and Community Medical Groupsfrom March to November,2012.

Results: By the end of July 2012, screening of atotalof22,849peoplehad been undertaken.The initial studyresultsshowa total of 579 persons demonstrated a score of greater than 2 on the AD-8 Scale, of which 184 have alreadybeen referredfor medical treatment (ratio of 31.8%),Diagnosishas been establishedfor129 people (25 personsshowedmild cognitive impairment; 104people showedDementia). An estimated2.7% of the cases are suspected to bemild cognitive impairment.

Conclusion: With the extensionof the sampling period, it is estimated that thenumber of cases identifiedwillbecomemore accurate.The results of this study will be used as to developdementia policy for implementation inTaoyuan County.

Disclosure of Interest: None Declared

P061

Topic: Policy and Campaigning

THE ECONOMIC AND SOCIAL EFFECTS OF CARE DEPENDENCE IN LATER LIFE: A 10/66 RESEARCH PROJECT FUNDED BY THE UK'S ECONOMIC AND SOCIAL RESEARCH COUNCIL, RUNNING FROM 2011-14

M. Prince [1], P. Lloyd-Sherlock [2], C. Ferri [1], M. Guerra [3], Y. Huang [4], Z. Liu [4,], R. Mayston [1], J. Murray [1], A. Sosa Ortiz [5], R. Uwakwe [6] and 10/66 Research Group
[1]Institute of Psychiatry, KCL, London, [2]University of East Anglia, Norwich, United Kingdom, [3]Instituto de la Memoria Depresion y Enfe, Lima, Peru, [4]Peking University, Beijing, China, [5]National Autonomous University of Mexico, Mexico City, Mexico, [6]Nnmadi Azikiwe University, Anambra, Nigeria

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract:
Background: In low or middle income countries chronic diseases are rapidly becoming the main cause of disease burden. Numbers of dependent older people are set to quadruple by 2050. These trends have profound implications for poverty reduction, gender relations and equity. The economic impact of providing long-term care is likely to be substantial.

Design: The study draws on and extends an established set of international population-based surveys conducted by the 10/66 Dementia Research Group. We focus on two countries in Latin America (Peru and Mexico), China and Nigeria. We will identify households with one or more dependent older people at both time points (chronic dependent), those where an older resident became dependent between baseline and follow-up (incident dependent), those with no dependent older residents (control households). We are going back to these households to make a much more detailed assessment of their overall economic status (measured as food consumption and household income) and the use of health services by all family members.

We assess the extent to which onset of dependence serves as an economic shock to households as a whole, leading to economic vulnerability and impoverishment, exploring the effects on social relations between household members and others in their network, paying particular attention to gender dynamics and decision-making about caring roles. In each of the four countries we are carrying out six detailed 'case studies' using qualitative research methods (detailed open-ended interviews) to explore in more depth some of the associations observed from the survey data.

Disclosure of Interest: None Declared

P062

Topic: Public Health Initiatives

PREVALENCE AND PREDICTORS OF CLINICALLY UNDIAGNOSED COGNITIVE IMPAIRMENT AMONG OLDER RESIDENTS OF NURSING HOMES IN PENANG, MALAYSIA

L. L. Chen [1,], A. S. H. Chng [2], A. A. Shafie [3], M. A. Hasali [3], B. Tangiisuran [4]
[1]Discipline of Clinical Pharmacy, School of Pharmaceutical Sciences, University Sains Malaysia, Penang, Malaysia, [2]Department of Medicine, Seberang Jaya Hospital, [3]Discipline of Social and Administrative Pharmacy, School of Pharmaceutical Sciences, University Sains Malaysia, Penang, Malaysia, [4]Discipline of Clinical Pharmacy, School of Pharmaceutical Sciences, University Sains Malaysia, Penang, Malaysia

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: To determine the prevalence and predictors of cognitive impairment among older residents of nursing homes in the state of Penang, Malaysia.

Methods: A multi-centred and cross-sectional study was conducted in two phases over a six-month period at four non-governmental organizations (NGO) nursing homes in Penang, Malaysia. Older residents (≥65 years old) who were taking at least one medication and had not been previously clinically diagnosed with dementia were included. Demographic and clinical data were collected through direct interviews and the review of medical records. Cognitive screening was performed using the Mini-Cog at baseline. Health Related Quality of Life (HRQoL) was assessed at baseline and after a three-month interval using the UK-based EuroQol (EQ-5D) tariff and EQ Visual Analog Scale (VAS).

Results: The median age of the 211 participants was 77 years. Mini-Cog identified 129 (61%) residents presented with cognitive impairment. The three most common co-morbidities among the sample population were hypertension (71.1%), diabetes mellitus (27.1%) and cerebral vascular disease (12.3%). Logistic regression analysis revealed that a longer formal education of more than 6 years (OR = 2.81, $p = 0.007$, 95% CI [0.167-0.757]) and the inability to self-administer medications (OR = 3.29, $p < 0.001$, 95% CI [0.156-0.594]) significantly predicted cognitive impairment based on Mini-Cog score ≤ 2. However, Mini-Cog was not significantly associated with changes in HRQoL at 3 months follow up.

Conclusion: We found a high prevalence of possible dementia among nursing home residence who had not been previously diagnosed, especially those who were unable to self-administer their medications. The length of formal education can be deceptive. Therefore, more vigilant screening should be performed for early detection and proper intervention of dementia.

Disclosure of Interest: None Declared

P063

Topic: Public Health Initiatives

MAKING DEMENTIA A PUBLIC HEALTH PRIORITY- IMPACT OF THE DEMENTIA INDIA REPORT

M. Varghese [1,*] and National Dementia Strategy Group of the ARDSI, INDIA
[1]Dept of Psychiatry, National Inst of Mental Health & Neurosciences(NIMHANS), Bangalore, India

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: The Dementia India Report 2010 was published by the Alzheimer's and Related Disorders Society of India (ARDSI) and released in September 2010.Since then we have gone closer to make dementia a public health priority in India. Some of the recommendations made have begun to be implemented for geriatric care in general. In 2011 the National Program for Health Care of the Elderly (NPHCE) was launched by the Ministry of Health. Two National Institutes for Ageing, eight Regional Geriatric Centers and memory clinics at district level would be set up in the NPHCE. Funds for geriatric research and care have been increased in the last year with special drives to attract protocols. A new National Policy for Older persons is being drafted including dementia. The Report is paving the way for increasing awareness, early detection and treatment and measures for rehabilitation for persons with dementia.

The report has created wide spread awareness among the public and articles and stories have appeared in the print, A-V media and web portals. Awareness has also been created among government officials in different ministries, policy planners and health professionals. The report has been quoted and has received attention in many medical and public health seminars and conferences. As a result more people are attending elder clinics for memory screening and early detection of MCI or dementias. General physicians and specialists are beginning to detect and treat dementia early. Both pharmacological and psychosocial interventions for dementia are being used in the earlier stages. Cholinesterase inhibitors like donepezil are now found in the pharmacy of some public health systems. More care services like day care centers, home nursing, respite homes, dementia care centers and long term care facilities have come up in the last 2 years. Monetary benefits and pensions are available for the poorer elderly and persons with dementia. We successfully advocated for the inclusion of dementia as part of the WHO's Non-Communicable Diseases control program adopted by India.

Disclosure of Interest: None Declared

P064

Topic: Public Health Initiatives

MENTAL WELLBEING FOR BETTER CAREGIVING: THE DEVELOPMENT OF SELF-CARE RESOURCES FOR CAREGIVERS LIVING WITH ELDERLY PERSONS WITH DEMENTIA

D. S. I. Koek [1,*], Y. L. Sng [1]
[1]Centre of Excellence for Healthy Mind, Health Promotion Board, Singapore, Singapore, Singapore

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: As the number of people living with dementia increases with an aging population, the impact will also be greatly felt by family caregivers. The stress experienced by caregivers in their role is immense and permeates the physical, emotional and social aspects of their lives.

Local studies conducted have found that caregivers tend to prioritise provision of care to their love ones over their personal wellbeing, dismissing the stress they experience as part and parcel of their role as a caregiver. However, chronic stressful lifestyles without appropriate stress management predispose caregivers to mental health issues such as depression and anxiety disorders. Existing local resources generally focus on technical caring skills rather than on caregivers' self-care and wellbeing.

This paper outlines the development of this resource by the Singapore Health Promotion Board to help induct new caregivers and to support their psycho-emotional and social wellbeing. Developed with input from dementia care workers and health professionals, this resource also incorporates key insights from focus group dialogues with experienced caregivers. This evidence-informed resource comprises an online e-learning programme enabling caregivers to understand their emotional journey, and equip them with skills to optimise their wellbeing. and a resource pack of easy-to-use tools such as categorised bite-sized information, a medication management chart and tips for management.

Recently launched in September 2012, the resource is currently being distributed at various touchpoints including hospitals, caregiver support groups, voluntary welfare associations and community centres. The outreach and impact of this resource will also be discussed.

Disclosure of Interest: None Declared

P065

Topic: Epidemiology of Dementia

EPIDEMIOLOGICAL SURVEY OF SENILE DEMENTIA AMONG ELDERLY PEOPLE IN COMMUNITY

S. Dong [1,], S. Pan [1] and Snile Dementia Institute of Zhengzhou Wanqing, Zhengzhou City , China
[1]Snile Dementia Institute of Zhengzhou Wanqing, Zhengzhou City , China

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives:
In order to investigate the Characteristics of popular distribution Prevalencethe incidence and the factors correlative

。

Methods:
 In the period from August 2011 to April 2012,466 elderly people who live in Zhengzhou Wanqing Nursing Home and 298 live in Shiyuan Village Community of Zhongyuan Area residents age 60 years and over were surveyed in by cluster sampling method with the Mini

Results:
 Analysis univariate showed that Alzheimer's prevalence increased by the age increased, This indicates that the following factors were more susceptibility to develop Alzheimer's disease, such as the elderly have occurred significant adverse events, low educational level , had lived alone or widowed, introverted, stroke risk factors, family history . Coexistence and harmonious relations with the people around,early years of widely hobby would reduce the occurrence of Alzheimer's, and have not yet found the gender, place of residence on prevalence of Alzheimer's influential.Choose meaningful variable in its results on the basis of the results of univariate analyzes, multivariate logistic regression analysis, major life events, age, educational level, whether living alone, cerebrovascular disease, personality, and early years of the hobby, family history of both independent factors affecting.

Conclusion:
The survey found that nursing homes for the elderly and community residents with dementia prevalence similar to that reported with other countries,apartments for the elderly group and community group dementia prevalence were 13.4%, 8.2%,vascular dementia (VD) more than Alzheimer's disease (AD).

References:

[1] Gao Zhixu, Liu Fugen, Fang Yongsheng. The prevalence of senile dementia in Chinese cities,towns and rural areas. Chinese Journal of Psychiatry, 1993, 26 (4) :209-211.
[2] Lin Yubin, Zhao Shuzhen, Shao Jiawei. Alzheimer's disease clinical features. Chinese Journal of Psychiatry, 1994, 27 (3): 186(Received: 1998 - 11 - 02 repair back: 1999 - 01 - 25).

Disclosure of Interest: None Declared

P066

Topic: Dementia Imaging and Biomarkers

TWO-LAYER APPEARANCE ON BRAIN PERFUSION SPECT IN IDIOPATHIC NORMAL PRESSURE HYDROCEPHALUS

S. Kobayashi [1,*], M. Tateno [1], K. Utsumi [2], H. Morii [3], T. Saito [1]
[1]Neuropsychiatry, Sapporo Medical University, Sapporo, [2]Psychiatry, [3]Radiology, Sunagawa City Medical Center, Sunagawa, Japan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: It is often difficult to distinguish idiopathic normal pressure hydrocephalus (iNPH) from other neurodegenerative disorders such as Alzheimer's disease (AD). To understand the characteristic pattern of blood flow in iNPH, we performed brain perfusion SPECT and analyzed the results by using easy Z-score imaging system (eZIS).

Methods: Subjects were 12 patients with probable iNPH and 10 probable AD with prominent ventriculomegaly. They underwent brain perfusion SPECT using 99mTc-ethylcysteinate dimer as a tracer.

Results: Two-tail-view display of eZIS demonstrated an obvious two-layer structure consisting of decreased blood flow around the corpus callosum and, in iNPH, enhanced perfusion in areas surrounding the cingulate gyrus in the sagittal view, while no AD cases showed these findings.

Conclusion: Hypoperfusion around the corpus callosum in iNPH could be, at least partially, a false-positive finding due to insufficient anatomical standardization of SPECT images caused by an abnormally enlarged ventricle. Increased blood perfusion in the external layer adjacent to the hypoperfused area might be caused by increased radioisotope count per volume resulting from exclusion of cerebral cortex by dilated ventricle. Our results demonstrate that a two-layer appearance revealed by two-tail-view analysis of brain perfusion SPECT using eZIS could be a means to detect iNPH.

References: · Kobayashi S et al. Quantitative analysis of brain perfusion SPECT in Alzheimer's disease using a fully automated regional cerebral blood flow quantification software, 3DSRT. J Neurol Sci264:27–33,2008
· RelkinN et al. Diagnosing idiopathic normal-pressure hydrocephalus. Neurosurgery 57:S4–S16,2005

Disclosure of Interest: None Declared

P068

Topic: Dementia Imaging and Biomarkers

A CASE OF DEMENTIA WITH CHRONIC CEREBRAL PARAGONIMIASIS FOUND IN KOREA

S. W. Moon [1,], S. N. Choi [1], H. Y. Kim [1]
[1]Psychiatry, Konkuk University Chungju Hospital, Chungju-si, Korea, Republic Of

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: Cerebral paragonimiasis is a rare parasitic disease in Korea. It is caused by lung flukes Paragonimus genus in the brain. A 80-year-old Korean man had been developing insidiously memory impairment and mental deterioration for the past 2 years. The brain computerized tomoraphy(brain CT) scan and brain magnetic resonance imaging(brain MRI) revealed numerous calcified nodules at his right side of the brain.
The brain images of our case also revealed features of brain atrophy with presence of encephalomalcia or cerebrospinal fluid(CSF) space widening around the corresponding brain parenchyma and associated with prominent fissures, sulci, and dilated ventricles. The presentation of chronic image pictures of CT scan and associated with brain atrophy in our case indicates a more chronic course than reported cases.
Pathological findings included a great number of Paragonimus ova lining the inner side of the fibrous cystic wall and much necrotic debris in the cyst. His chest radiograph was abnormal showing us calcification in the right chest. This rare case and his clinical course are discussed here.

Key Words : paragonimiasis, dementia. calcification

Disclosure of Interest: None Declared

P069

Topic: Dementia Imaging and Biomarkers

CELL CYCLE PROTEIN MAD2 AND MAD2B SHOW DIFFERENTIAL EXPRESSION IN AD BRAIN COMPARED TO AGE MATCHED CONTROLS

V. Bajic [1], B. Spremo-Potparevic [2], L. Zivkovic [2], Z. Milicevic [3], A. Cabarkapa [2], T. Arendt [4], D. Ilievski [5,*]
[1]Department of Pharmacology, Galenika pharmaceuticals, [2]Department of Physiology, Faculty of Pharmacy, University of Belgrade , [3]3Department of Endocrinology and Molecular Biology, Vinca Institute; PO Box 552, Belgrade, Serbia, [4]Paul-Flechsig-Institute for Brain Research , University of Leipzig, Medical Faculty, Leipzig, Germany, [5]Department of Neurology, School of Medicine, Skopje University, Skopje , Macedonia, The Former Yugoslav Republic Of

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Anaphase promoting complex (APC), BubR1, Mad 2 and Mad 2b are proteins of the late phase of the cell cycle which have shown to express different functions than cell cycle control processes in post mitotic neurons *versus* mitotic cells.**Mad2b and Mad2 proteins** are inhibitors of the anaphase promoting complex (APC) thus regulating the anaphase cell cycle checkpoint control ensuring proper chromosome segregation and separation. Here we wish to elucidate the possible roles of Mad2 and Mad2b proteins in Alzheimer's Disease (AD) brain *versus* age matched control

Methods: Immunohistochemical analysis and Western blot were used to evaluate the levels and expression patterns of **Mad2 and Mad2b proteins** in the hippocampal region of AD brains compared to age matched controls.

Results: Our results show that **Mad2 and Mad2b proteins** are differentially expressed, i.e. we found a decreased expression of **Mad2 and Mad2b proteins** in AD brains compared to age matched controls.

Conclusion: The activity of APC is maintained by CDH1 in terminally differentiated neurons. It is conceivable that **Mad2 and Mad2b** proteins play a role in the control of the APC activity in post-mitotic neurons. Our results show changes in expression in the AD brain which may lead us to the possible role of MAD2 proteins in neuronal cell cycle re-entry, thus presenting a novel pathway to a possible new biomarker presentation of AD.

Disclosure of Interest: None Declared

P070

Topic: Dementia Imaging and Biomarkers

CLINICAL FEATURES, GENETIC SURVEY, AND NEUROIMAGING OF F-18 FLORBETAPIR (AV-45) WITH FDG PET SCANS IN A FAMILY WITH ALZHEIMER DISEASE

H.-C. Fung [1,*], T.-C. Yen [2], K.-J. Lin [2], I.-T. Hsiao [2], W.-C. Hsu [1], M.-P. Kung [3], D. M. Skovronsky [4], C.-C. Huang [1]
[1]Department of Neurology, [2]Molecular Imaging Center and Nuclear Medicine, Chang Gung Memorial Hospital and Chang Gung University, Taoyuan, Taiwan, [3]Department of Radiology, [4]Avid Radiopharmaceuticals, University of Pennsylvania, Pennsylvania, United States

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: AD is considered to be a genetically dichotomous disease presenting in two forms: early-onset familial cases usually characterized by Mendelian inheritance (EO-FAD), and late-onset (≥60 years), with no consistent mode of transmission (LOAD); Following advanced age, Family history is the second strongest risk factor for Alzheimer disease (AD) following advanced age. For familial early onset AD, rare mutations in APP, PSEN1, and PSEN2 were causative, which represents ~5% of AD. Not only the age of onset was different between EO-FA D and LOAD, but the clinical presentation varies. In our study, we identify the differential pattern of Aβ accumulation in EO-FAD and LOAD patients and its impact on the nature course of AD.

Methods: 3 members of the familial Alzheimer's disease Taiwaneses kindred aged 54-72 years and 11 non-carrier AD patients were recruited from the Dementia Center at the Chang Gung Memorial Hospital, Taiwan. The clinical manifestations and the clinical courses were charted. The detailed neuropsychological tests were performed. Mutational screening of the known EO-FAD related gene including APP, PSEN1, and PSEN2 and Apo E genes had been carried out. Cross-sectional assessment using florbetapir PET was done in symptomatic mutation carriers (APP D678H) with mild cognitive impairment or mild dementia, severe dementia and 11 symptomatic non-carrier patients. Both FDG and AV-45 PET scans were performed at 50 minutes after tracer injection in all subjects within a 3 month interval in these 4 patients with familial AD. In addition 11 idiopathic AD patients also received the AV-45 PET and FDG PET scans. Brain AV-45 parametric images were computed by calculating the region-to-cerebellum ratio in each voxel. Group comparison between these two groups was evaluated by statistical parametric mapping (SPM) after spatially normalized to a MRI template

Results: Mutational screening showed that our cohort carry a disease causing mutation on APP with non-synonymous amino acid substitution (D678H, Asp678His). There were no differences between groups in education, apolipoporotein E status, and Mini-Mental Status Examination scores. Regions-of-interest analysis of AV-45 parameteric image showed a higher AV-45 uptake in the occipital region of familiar EOAD patients. On SPM analysis, significant differences between the two groups were found in the right temporal, right parietal, visual cortex of calcarine, and lingual regions (p<0.001 uncorrected).

Conclusion: These findings contribute to the understanding of Aβ deposition in familial Alzheimer's disease and provide information for specific treatment and prevention strategy of EO-FAD.

Disclosure of Interest: None Declared

P071

Topic: Dementia Imaging and Biomarkers

CLINICAL ASSESSMENT FOR THE GERIATRIC SERIOUS GAMES FOR COGNITIVE DYSFUNCTION

M. H. Park [1,], K.-W. Park [2], J. Jung [3]
[1]Neurology, [2]KOREA UNIVERSITY, Ansan-city, [3]Ntelligent Games Inc, Seoul, Korea, Republic Of

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: The elderly patients with cognitive dysfunction are increasing rapidly. Because many neuropsychological screening tests are time consuming and so complicated to perform, there are many practical difficulties for screening the patients with cognitive dysfunction. For these reasons, we intended to find out the patients with cognitive dysfunction through a simple, easy and interesting computer games.

Methods: We studied total 588 patients (the normal cognitive (control) group: 464 people, cognitive dysfunction (patient) group: 124 patients). We performed neuropsychologic tests, and used the geriatric serious games thats are three kinds of computer games ("Catching a fruit" game, "Setting the table" game, "Elevator" game).

Results: There is a significant difference in "Setting the table" game scores ($t=-1.973$, $p<0.05$) and "Elevator" game scores ($t=-2.777$, $p<0.01$) between patient group and control group. However, there is not a significant difference in "Catching a fruit" game scores and total game scores between patient group and control group. Mini-Mental Status Examination scores are significantly correlated with the game scores of "Setting the table" and the number of correct answers and also correlated with game scores of "Elevator", the number of correct answers, and ratio of correct answer in both groups.

Conclusion: In this study, we can know about a difference between control group and patient group through the games measuring geriatric cognitive function. We conclude that through the simple, easy and interesting computer games, we can screen the patients with cognitive dysfunction, who have difficulties performing the existing neuropsychological screening test.

Disclosure of Interest: None Declared

P072

Topic: Dementia Diagnosis and Biomarkers

THE SUVEY OF EXCESSIVE DAYTIME SLEEPINESS OF PATIENTS IN MEMORY CLINIC

Y.-T. Huang [1,], W.-F. Wang [1], S.-L. Wu [1]
[1]Neurology, Changhua Christian Hospital, Changhua, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Approximately 20% of the elderly in community reported that they were "usually sleepy in the daytime".Daytime sleepiness has been found influence on their daily activities and cognitive function in normal older adults. However, previous study has showed that excessive daytime sleepiness (EDS) assessment with Epworth Sleepiness Scale Score (ESS) could not be accurate in older adults. They further found nondemented older subjects rated their sleepiness lower than their close relatives (CR) (spouse, a family member) did. For this reason, in our study, the CRs of subjects in memory clinic were conducted the ESS to avoid subjects' underestimated the severity of daytime sleepiness .

Methods: The cross-sectional observational study was conducted in memory clinic at Changhua Christian Hospital in middle Taiwan. Consecutive subjects over 50 years of age referred by a neurology doctor were examined by a clinical psychologist. Ninty-four subjects' CR were included in the study. An ESS score of $\geqq 8$ was considered abnormal. Data obtained were analyzed using Chi sequare test for categorical variables and Student's t-test for continuous variables.

Results: The mean age of sunjects was 78.5 (S.D.=8.0) years, and mean of education years was 5.0±4.7. The mean ESS score was 10.4 (S.D.=5.1) in the study. The mean ESS score of male(11.6±4.6) was higher than that of female(9.6±5.3) (p>.05).28 male (77.8%)had an ESS score>=8 whereas only 56.9% of female in the ESS>=8(p<.05)(Table 1).

Table 1 Demographic data of subjects.

	male	female	p
Number	36	58	
age	79.58±7.9	77.81±8.0	t=1.05(p>.05)
education	7.53±4.5	3.47±4.1	t=4.63(p<.05)
ESS score n(%)			
ESS score<8	8(22.2%)	25(43.1%)	χ^2=4.25, p<.05
ESS scorel$\geqq$8	28(77.8%)	33(56.9%)	

Conclusion: Excessive daytime sleepiness was more common in male subjects as compared to female in memory clinic.

Disclosure of Interest: None Declared

P073

Topic: Acute Dementia Care

LITHIUM-INDUCED DELIRIUM IN A PATIENT WITH DEMENTIA

K.-Y. Hsieh [1, 2,*]
[1]Department of Psychiatry, Chimei Medical Center, [2]Institute of Biotechnology, Southern Taiwan University of Science and Technology, Tainan, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: While behavioral and psychological symptoms of dementia can present as late-onset mania, delirium associated with use of mood stabilizers can interfere with the clinical course, diagnosis and treatment. Here we report a case of lithium-induced delirium in a dementic patient with mania-like symptoms.

Methods: A case of lithium-induced delirium in a dementic patient with mania-like symptoms was reported.

Results: Case report: This 64-year-old man had suffered from depression since his forties after a business failure. To cope with distress, he had been doctor shopping and abused alcohol and hypnotics for over a decade. In July 2011, he attempted suicide for the first time by drug overdose after a neighborhood conflict. Mania-like symptoms were first observed in December 2011, included elated and irritable affect, reduced sleep need, delusion of grandeur, and foolish financial investments. He was sent to our emergency room in January 2012 for another suicide attempt by overdose, as his investment was stopped by family.
Then he was admitted to our psychiatric acute ward. Manic symptoms partially improved after 5 weeks of treatment with valproate 1500 mg/d and olanzapine 20 mg/d, and lithium 600-900 mg/d was added in week 6. As confusion, disorientation and queer/disturbing behaviors developed acutely in week 7, we discontinued lithium. The delirious picture subsided in week 8, followed by improvement of manic symptoms. Then the patient received further neuropsychological assessment. His score on the Mini-Mental State Examination was 19, significantly less than the reference value based on age and education level. Computed tomography of the brain showed frontotemporal cortical atrophy. Diagnosed as having dementia, he was discharged in early March 2012.

Conclusion: Both lithium and valproate can cause delirium in a significant percentage of elder patients. Drug-related delirium should be considered in patients presenting with late-onset mania if symptoms worsened after use of mood stabilizers. Pharmacotherapy using second-generation antipsychotics is a reasonable alternative choice.

References: 1. Shulman KI, Sykora K, Gill S, Mamdani M, Bronskill S, Wodchis WP, Anderson G, Rochon P. Incidence of delirium in older adults newly prescribed lithium or valproate: a population-based cohort study. J Clin Psychiatry. 2005;66:424-7.
2. Steinberg M, Lyketsos CG. Atypical antipsychotic use in patients with dementia: managing safety concerns. Am J Psychiatry. 2012;169:900-6.

Disclosure of Interest: None Declared

P074

Topic: Acute Dementia Care

"NURSE'S MEMORY CLINIC" FOR PATIENTS WITH DEMENTIA IN ACUTE CARE HOSPITALS IN JAPAN
M. Tokui [1,], A. Takahara [1], D. Ito [1]
[1]Nursing, Himeji St. Mary's Hospital, Himeji, Japan

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: More than one in five people in Japan are over 65 years old, thus, making the prevention, treatment and care of senile dementia an urgent issue.
Although the elderly presenting at the outpatient departments in an acute care hospital often have cognitive impairments or symptoms such as behavioral and psychological symptoms of dementia (BPSD), not many patients are successfully diagnosed with dementia.
In this situation, caregivers of these patients (mostly nurses and family members) tend to experience difficulties in taking care of these patients.
Caregivers often ask "I wonder he/she has dementia or not" or "If he/she has dementia, what kind of care or social service should he/she receive at home?".
Under these circumstances, the nurses in our hospital (an acute care hospital) who are licensed for dementia care ("Certified Nurse Specialist in Gerontological Nursing" and "Certified Nurse in Dementia care") recently started the "Nurse's Memory Clinic".
 "Certified Nurse Specialist (CNS) in Gerontological Nursing" and "Certified Nurse (CN) in Dementia care" are unique licenses accredited by the Japanese Nurse's Association. For the abovementioned licenses, CNS's are required to complete a specialized program in graduate school; whereas, CN's need to complete a 6-month training course to qualify for the license.
CNSs and CNs support both patients and caregivers by providing education at the clinic.
Here we would like to present the activities conducted in the "Nurse's Memory Clinic" by individuals licensed as "CNS in Gerontological Nursing" and "CN in Dementia care", and discuss effective intervention methods for patients with dementia in acute care hospitals in Japan.

Disclosure of Interest: None Declared

P075

Topic: Support and Training for Informal and Professional Carers

THE CULTURAL CAREGIVING IMPACT FOR TAIWANESE CAREGIVERS WITH DEMENTIA PATIENTS

W. Shunting [1,]
[1]Ageing and Dementia, Queensland University of Technology, Brisbane, Australia

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: Figures predict that the number of older persons with dementia will rise to 81.1 million by 2040 worldwide. As dementia progresses, patients' physical and psychological wellbeing decrease dramatically, this consequently increases the care burden levels of those dementia caregivers. Most dementia caregivers are family members, neighbours and close friends. Caregiving burden of caregivers with dementia patients is now a widely discussed topic among dementia. Cultural beliefs and values of dementia caregivers can be influenced their caring approach for the patient. This literature review focuses on examining the disparity between Taiwanese and Western family caregivers with dementia patients regarding to the cultural background. Additionally, it outlines international researches to analyse care burden variations experienced by Taiwanese caregivers. There is ample evidence demonstrating that taking care of dementia patients results in a high cost of family caregivers' care burden. To be more specific, dementia caregivng can negatively and greatly affect their physical, psychological and social well-being. For Taiwanese caregivers with dementia patients, cultural beliefs and values have also been identified as an overwhelming obstacle applying interventions. With a lack of social support in caring for a dementia patient, it is predictable that Taiwanese caregivers will experience accumulated care burden levels.

Disclosure of Interest: None Declared

P076

Topic: Support and Training for Informal and Professional Carers

APPLICATION OF KOLB'S LEARNING STYLE THEORY FOR DEMENTIA CAREGIVING EDUCATION

W. Cheng [1, 2, *], K.-Y. Chen [3]
[1]School of Nursing, National Cheng Kung University, [2]Department of Nursing, National Cheng Kung University Hospital, [3]School of Statistics, National Cheng Kung University, Tainan, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: This paper explored the experiences of applying Kolb's Learning Style Theory for dementia NCs' education and the effectiveness of the learning process. Kolb emphasizes the important role of experience in the continuumof learning process.

Methods: Kolb's Learning Style is a four-stage cycle starting with concrete experience which forms the basis for observation and reflection. The observation is assimilated into a theory from which new implications for action can be deduced. These implications or hypotheses about experiences in turn, guide new experiences and interactions with the world. Each individual has different learning methods, so the individual teaching methods are used to assist the learning effectively.

Results: This nursing process found that styles of the NCs for dementia elders are Accommodator and Diverger. Kolb's propositional education, an individualized computer-aided teaching and written materials were used and the tests taken before and after to increase learning effectively.

Conclusion: This study provides nurses a reference for model of dementia education and promotes the application of Kolb's learning theory, and then enhances learning outcomes and quality care.

Disclosure of Interest: None Declared

P077

Topic: Support and Training for Informal and Professional Carers

POSITIVE ASPECTS OF CAREGIVING EXPERIENCE: AN EXPLORATORY CASE STUDY.

Y.-N. Chiu [1,*], M.-C. Pai [2, 3, 4], J.-J. Wang [3, 5], L.-H. Chang [1, 3]
[1]Occupational Therapy, National Cheng-Kung University, [2]Division of Behavioral Neurology, Department of Neurology, [3]Alzheimer's Disease Research Center, National Cheng Kung University Hospital, [4]Institute of Gerontology, College of Medicine, [5]Department of Nursing, National Chang Kung University, Tainan, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Family caregivers play a vital role in community-based dementia care. Few studies focused on the understanding of the positive aspects of caregiving experiences. On the other hand, sociocultural factors influence the actions and meanings associated with caregiv-ing. Understanding the caregiver' actions and experiences in Asia culture can contribute to the development of interventions that facilitate positive caregiving experiences. The purpose of this study was to explore the caregiving experiences of dementia caregivers and understand the positive aspects of caregiving experiences.

Methods: This study was adopted convenience sampling. Two respondents from the same family were recruited from a Dementia Consultation Clinic in Taiwan. Their relationship with the care recipient is husband and son. The husband provided daily care for his wife with dementia and lived together. Their son provided the primary support for them. A qualitative design involved in-depth semi-structured interviews. The interviews were recorded, transcribed and analyzed by ethnography.

Results: Preliminary qualitative analysis revealed the different notion of positive aspects between husband and son. The husband considered that nothing is better than his wife remaining clam, and he might receive the positive feeling when his wife appears smile. The son focused on how to do the filial piety for his parents, but he seldom notices his feeling during the caregiving process. Further analyses will be conducted and results will be reported in the final report.

Conclusion: Many studies have shown that the cultural values might affect the caregiving process Results from this study will help us better understand how the caregivers experience in the caregiving process and what is their feeling and think about the positive aspects of caregiving experience.

References: Liu, Y., Insel, K. C., Reed, P. G., & Crist, J. D. (2012). Family caregiving of older Chinese people with dementia: Testing a model. *Nursing Research, 61*(1). doi:39-50 10.1097/NNR.0b013e31823bc451
Tang, M. (2011). Can cultural values help explain the positive aspects of caregiving among Chinese American caregivers? *Journal of Gerontological Social Work, 54*(6), 551-569. doi:10.1080/01634372.2011.567323

Disclosure of Interest: None Declared

P078

Topic: Support and Training for Informal and Professional Carers

CLINICAL APPLICATION OF A NURSING PROTOCOL FOR THE ELDERLY WITH DEMENTIA CLASSIFIED AS CASES "DIFFICULT-TO-ASSIST IN BATHING"

T. Shigeko [1,*], O. HARUKA [2], W. yoko [3]
[1]faculty of health and welfare, ISHIKAWA PREFECTURAL NURSING UNIVERSITY, kahoku , [2]Hirosaki University, School of Health Sciences, Hirosaki , [3]faculty of health and welfare, Prefectural University of Hiroshima, mihara, Japan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Purposes: We evaluated the clinical application of a nursing protocol (draft) that we developed for the elderly with dementia classified as cases "difficult-to-assist in bathing". The draft covered 5 behavioral processes: "respond to bathtime notification (go to an undressing room)", "undress oneself", "wash body", "enter the bathtub", and "dress oneself". It consisted of: (1) basic response (e.g., privacy protection and consideration for the patient's sense of shame); (2) response: dealing with reasons for rejection, a symptom of dementia; and (3) response that we extracted from our 6-year observation of bathing of the elderly with dementia.

Methods: The study was conducted for 2 days, at specialized hospitals for dementia in Central Japan. Six nurses with more than 4 years of experience in dementia nursing cooperated in the study. The study received approval of the ethics committee of the Prefectural University of Hiroshima and obtained consent from patients and their families.The subjects were 9 patients, aged 73 to 96 years (average: 83.4) , of cases "difficult-to-assist in bathing" on the wards. Types of dementia included AD (n=3), VaD (n=1), DLB (n=2), FTD (n=1), and unclassified (n=2).

Results: Of the 9 patients, 3 (AD, severe: 2; unclassified, severe: 1) took a bath smoothly with nursing assistance proposed in the draft. "Standing by the patient to give instructions" was effective for the elderly with AD whose actions were unpredictable. In contrast, 2 patients (DLB, moderate: 1; FTD, severe: 1) exhibited difficulties in 4 of 5 behavioral processes, indicating the need to develop assistance items for DLB, and FTD. An analysis by types of behavioral process showed that 6 patients had difficulties with the first process: "respond to bathtime notification". In particular, 3 patients rejected assistance because of incontinence, and 1 (FTD, moderate) was preoccupied with other things of interest. This suggested the need to develop items of preventive response for these patients.

Conclusion: Two of 3 AD patients could take a bath with nursing assistance proposed in our draft, demonstrating its applicability for AD patients. However, no effect was seen in 1 DLB patient and 1 FTD patient. It was, thus, considered necessary to include additional assistance for these types of patient.

Disclosure of Interest: None Declared

P079

Topic: Support and Training for Informal and Professional Carers

AN EVALUATION OF TRAINING PROGRAM FOR DEMENTIA CARE LEADERS CARRIED OUT AT TOKYO DEMENTIA CARE RESEARCH AND TRAINING CENTER IN 2011

K. Nakamura [1,*] and Kikuko Tani,Tutomu Iida, Chiaki Ando,Keiko Kodama,Akira Honma
[1]Tokyo Dementia Research and Training Center, Suginami-ku, Japan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Tokyo Dementia Care Research and Training Center has been carried out training program, that was appointed by the Ministry of Health, Labour,and Welfare since 2001.Training Program include (1)The general remarks of dementia care training, (2)Manpower training and educational practice, (3)Practice of the community care, (4)Practice for solutions to the problem.The training program has carried out for nine weeks. People who completed the training become a trainer of the training program for dementia care that carry out in each prefecture From 2001 to 2012, 602 people have completed this training program.The aim of this study was to evaluate curriculum of the training program by trainees in 2011.

Methods: Targets of this survey was 48 people who completed the training in 2011.The data were taken byself-recording questionnairejust after the training, and48 trainees were asked to fill out a questionnaire on 5 levels of likert scale. A questionnairewas included six domains; level of improvementabout instruction planningabilities,curriculum planning abilities, supervise abilities, adequacyof a structure of the curriculum, an ordinal relation of instructions, and length of instructions time.Averages of each question were calculated in data analysis.

Results: All domain average took higher than 4.0 points (Table).

	instruction planning	curriculum planning	supervise	structure of instructions	ordinal relation	length of time
mean	4.6	4.6	4.3	4.4	4.5	4.0
S D	0.54	0.50	0.83	0.65	0.62	0.90

Conclusion: This results of this study demonstrated that trainees who completed the training program in 2011 appreciatedthe training.In future, we have to study more significant survey;(1)evaluations inafew month after the training program, (2)evaluations by fellow workers, and (3)practical usefulnessin local training program.

Disclosure of Interest: None Declared

P080

Topic: Support and Training for Informal and Professional Carers

INNOVATIVE LEADERSHIP BY LEARNING ORGANIZATION

H.-C. Wu [1,], M.-C. Lin [2]
[1]Department of Nursing, St. Joseph Home, Hukou Township, [2]Department of Nursing, Cardinal Tien College of Healthcare & Management, New Taipei City, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: The common goal was to establish a learning organization through enhancing the capacity of team through reflection and innovation, and to maintain the momentum of continuous learning.

Methods: From March to October 2012, 18 staff members (including the nursing supervisor, nursing colleagues, the educator staff and dieticians) worked together to identify common goals (the mission of care of the institution). An external supervisor was invited to lead the process of establishing St Joseph's as a learning organization, once a month, for about 4 to 8 hours. The workshop discussed person centered nursing care, the quality of team working and document management. The team agreed upon the next goal they wished to pursue before the end of each workshop.

Results: The format of individualized care service plan was developed to meet the need of residents of this institution. Through many discussions in the workshops, the implementation of the concept of Health maintenance, home living, leisure activities, social adjustment, interpersonal communication, behaviour and emotion and care resources were re-clarified, and the practical application of this assessment on the 180 residents was considered.

Conclusion: The process of becoming a learning organization provided the opportunity for the group to learn, grow and develop together. This team benefited in terms of cohesion in providing better care to the residents. It also helped the organization to provide positive flexible care to meet the individual needs of people with dementia.

Disclosure of Interest: None Declared

P081

Topic: Support and Training for Informal and Professional Carers

A LATENT CLASS ANALYSIS OF EXPERIENCES OF CAREGIVERS OF DEMENTED INDIVIDUALS BASED ON NATIONAL COMMUNITY SURVEY IN TAIWAN
L. Lin [1, 2,*], S.-C. Wu [2]
[1]Department of Psychiatry, En Chu Kong Hospital, New Taipei, [2]Institute of Health and Policy Management, Taipei, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: There is growing concern about cargiving experiences for substantial number of demented individuals in Taiwan. The aim of this study is to test heterogeneity of caregiver experiences perceived by the ones who took care of demented individuals in Taiwan community.

Methods: Interview data from the Assessment of National Long-Term Care Need in Taiwan (ANLTCNT) in 2000, which was designed to identify the long-term care needs of a nationally representative sample of disabled elderly Taiwanese subjects, were used in this study. The ANLTCNT used the probability proportional to size (PPS) sampling method to identify 303,545 Taiwanese adults ≥ 50 years old from 204 census areas. 17,191 (7.2%) disabled subjects were identified and invited for second stage interviews. 14,094 (82.0%) subjects completed the baseline interview; 12,748 of them (90.4%) dwelled in communities; 1,308 (10.3%) were diagnosed as dementia and 1,214 (92.8%) were cared by caregivers. Caregiver experiences were defined as burden of time, relational burden, financial burden, and emotional burden. We intend to indentify distinct clusters of caregivers with different experiences using Latent Class Analysis. We started with a 1-class model then increased the number of classes until reaching the model with the best fit to the data, as determined by the Bayesian information Criteria (BIC). We would determine the best number of classes based on theoretical justification, parsimony, interpretability and the a priori decision that no single class would be comprised of fewer than 5% of the total sample.

Results: Valid data from 1,213 caregivers are analyzed. The LCA model that best fits the data is a 3-class-modelwith the relatively lower BIC (compared to the 2-class, 4-class, and 5-class models) (BIC based on L-squared = -4445.89, BIC based on Log-Likelihood = 20509.24) and no single class fewer than 5% of total sample. The 3 classes described caregivers who experienced moderate, high, and low burden (class prevalence: 54.2%, 29.3%, and 16.5%).

Conclusion: The latent class analysis identified 3 homogeneous subgroups with different caregiver experiences among a heterogeneous sample of community caregivers taking care of demented individuals in Taiwan. The identification of relevant subgroups in this study offers an important initial means for examining caregiving experiences among those devoting themselves to care for demented individuals and suggests a number of avenues for future research.

Disclosure of Interest: None Declared

P082

Topic: Support and Training for Informal and Professional Carers

HSIN-LING CAFÉ: A HARBOR OF SPIRIT AND MIND FOR CAREGIVERS OF PATIENTS WITH DEMENTIA
Y.-H. Lin [1], H.-L. Huang [2], H.-J. Chi [1], C.-F. Kuo [3], C.-C. Yeh [1], W.-C. Hsu [1]
[1]Dementia Center, Chang Gung Memorial Hospital, [2]Department of Gerontological Care and Management, Chang Gung University of Science and Technology, [3]Department of Social Service, Chang Gung Memorial Hospital, Taoyuan, Taiwan

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: Dementia brings heavy burden to family. Family members of patients with dementia (PWD), especially the main caregivers, endure the sufferings. They face many challenges in the long journey of care giving, including medical interventions, daily life arrangements, social resource applications and so on. Long-term caring jobs will increase the risks of physical and mental issues of caregivers. Support groups for them can reduce the risks (Biegel et al., 2004；Cuijpers et al., 1996).

Alzheimer Café was first established in 1997 by Bere Miesen. It was a support group for families affected by dementia. The aims of Alzheimer Café are to provide information, space to speak openly, and emancipation of people affected by the disease.

Hsin-Ling café (HLC) is a concept adopted from Alzheimer Café. It is a support group operated for caregivers of PWD. "Hsin-Ling" means spirit and mind in Chinese. The café was in a semi-open and semi-structure fashion,with one session monthly. HLC was started on April 29th, 2010. The café was intended to form a Hsin-Ling harbor for caregivers of PWD. A social worker arranged group topics and group process based on members' needs, emphasizing the connection between members, staff and self. For instance,we made medicine/ nutrition /law /social resources consultation, introduced pressure coping skills, and taught musical relaxing. Those who completed the educational course of care giving were eligible to enter the café. HLC provided informational and emotional supports, promoted caregiver-self-care, and increased mutual support between families successfully.

We offer physio-psycho-social services for caregivers. Families reported that their stress was greatly relieved. Members can keep in touch with professionals and peers; in the meanwhile, they obtain brief respite. In the future, we plan to remodel into a caregiver-self-support group with assistance of social workers. HLC is a significant support strategy for caregivers of PWD.

Disclosure of Interest: None Declared

P083

Topic: Support and Training for Informal and Professional Carers

"LEARNING FROM EXPERIENCE": CARING FOR PEOPLE WITH DEMENTIA

M.-C. Lin [1,*]
[1]Department of Nursing, Cardinal Tien College of Healthcare & Management, SinDian Dist, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: This study explored learning experiences of caregivers who caring for people with dementia over time.

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

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

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

Disclosure of Interest: None Declared

P084

Topic: Education and Training of Medical Professionals

WHETHER PRIMARY CARE PHYSICIANS ARE ABLE TO ACCOMODATE BPSD?
M. Irahara [1,]
[1]Medical Office, IRAHARA Primaty Care Hospital, Matudo, Japan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Behavioral and psychological symptoms of dementia (BPSD) occasionally observed in cases of dementia frequently impede patients from continuing to lead normal lives either at home or in a health care facility. This study was conducted for the purpose of investigating the incidence and accommodation of BPSD among dementia patients being examined on an out-patient basis at the Ichihara Clinic or examined at home for the purpose of confirming whether or not primary care physicians are able to accommodate BPSD.

Methods: The subjects of the study consisted of 60 patients being examined on an out-patient basis at the Ichihara Clinic and 70 dementia patients residing at five elderly dementia patient group homes visited by physicians of the Ichihara Clinic. These subjects were investigated for the incidence of BPSD by classifying according to severity of dementia, Alzheimer's dementia and other diseases.

Results: 1.   The incidence of BPSD among out-patients was 20% and they were able to be accommodated in nearly all cases by implementing special measures during the course of providing of care.
2.   Medications for BPSD were prescribed for 5 out-patients, and although an antipsychotic drug was prescribed for 1 of the patients, administration was discontinued after two months.
3.   Four of the 60 out-patients were being examined on an out-patient basis for the purpose of treating dementia, while the remaining 56 patients were being simultaneously treated for complications.
4.   BPSD was not observed in 72% of patients residing at the elderly dementia patient group homes.
5.   Antipsychotic drugs had been prescribed for six of the patients residing at the elderly demented patient group homes, and were prescribed to two patients following their admission
6.   There were no cases of BPSD encountered that were so extreme as to require hospitalization among any of the out-patients or group home residents.

Conclusion: Treatment of dementia patients, including accommodation of BPSD, was determined to able to be adequately provided by primary care physicia.

Disclosure of Interest: None Declared

P085

Topic: Non Pharmacological Interventions

"I WILL FOLLOW YOU"—EXPLORE THE EFFECT OF SINGING-PROMPTED VERSUS SPOKEN-ONLY INSTRUCTIONS ON IMMEDIATE FOLLOW-DIRECTION IN MODERATE DEMENTIA

Y.-L. Chen [1,*], C.-W. Yang [2], Y.-T. Lin [3], W.-C. Hsu [2]
[1]Division of Music Education and Music Therapy, University of Kansas, Lawrence, United States, [2]Dementia Center, Chang Gung Memorial Hospital, Taoyuan, Taiwan, [3]Institute of Tropical Medicine and International Health Charité , Universitätsmedizin Berlin, Berlin, Germany

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Moderate dementia caregivers often find it challenging when their loved ones do not follow directions while doing daily activities. It further increases caregiving stress if some directions ought to be followed in a timely fashion. In addition to comprehension, attention could play an important role in following directions. Music may serve as an auditory stimulus that motivates the individuals with dementia to pay attention to the desired tasks. Accordingly, this study is interested in knowing if singing-prompted instructions will help individuals with dementia more focused and better follow directions compared to spoken-only instructions.

Methods: This pilot study will recruit 6 participants with moderate dementia. Each participant will individually attend two testing sessions under two different conditions. Under condition A, participants will be asked to follow directions that are first sung to them by the music therapist. Under condition B, participants will be asked to follow directions that are spoken to them only by the same music therapist. Directions in both conditions include "open the door," "sit down and wait for me," "bring me that book," "stand up," and "turn off the light." The reaction time from a direction is given to the corresponding behavior is initiated, and the number of repetitions a direction needed to be given for directions following are to be recorded for data analysis.

Results: It is observed that individuals with moderate dementia are more likely to follow directions during the activities that are structured in music such as participating in a therapist led group singing, instrument playing, and song discussion. With music played in the background, individuals with dementia seem more cooperative in doing daily activities including bathing and eating. We speculate that participants will better follow direction when the directions are first sung to them as evidenced by less reaction time and fewer repetitions of the directions needed.

Conclusion: Results of this study will add to our understanding of the effect of singing-prompted instructions on immediate follow-direction in moderate dementia.

Disclosure of Interest: None Declared

P086

Topic: Non Pharmacological Interventions

ESTIMATING THE MINIMAL CLINICALLY IMPORTANT DIFFERENCE (MCID) OF THE NEUROPSYCHIATRIC INVENTORY QUESTIONNAIRE (NPI-Q) IN DEMENTIA PATIENTS

H.-F. Mao [1,*], C. A. Kuo [1]
[1]Associate Professor, School of Occupational Therapy College of Medicine, National Taiwan University, Taipei, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: About seventy percent of dementia patients have at least one behavioral and psychological symptoms of dementia (BPSD). The BPSD not only can significantly aggravate caregiver's distress, decrease quality of life of caregivers and patients but also associated with multiple medical and psychiatric needs. After review many measurements, researchers find out that the NPI-Q appears to be a valid and reliable clinical tool which is a brief, informant-based assessment of BPSD and associated caregiver stress. However, there are few studies discuss about the minimal clinically important difference (MCID) of the instruments of BPSD. Being no exception, the reliability and the MCID of the Chinese version of the NPI-Q was little revealed, which limited the interpretation of clinical change of noncognitive symptoms of dementia patients. Therefore, our objective was to establish the reliability and MCID of the NPI-Q in dementia patients.

Methods: The study included 45 dementia patients from a dementia institution at Taipei city, Taiwan. The NPI-Q was assessed by primary caregivers in dementia institutions every month from 2012.1. to 2012.6. We determinated the test-retest ability from 35 randomly selected patients within 5-8 days; inter-rater reliability from 24 patients after observation for one month by two raters. Intraclass correlation coefficient (ICC) and weighted Kappa were used to estimate the reliability of total score and each item of the NPI-Q.
The MCID of the NPI-Q were estimated by following three ways: (1) global rating of change by 7-point Liker scale; (2) optimal cutoff point by ROC curve with anchor-based method; (3) standard error of measurement (SEM) with distribution-based method. The range of these three values will become the MCID of the NPI-Q.

Results: The test-retest ability of the NPI-Q was good (the ICC of the severity and distress subscales were 0.95 and 0.96, respectively) and the inter-rater reliability was acceptable (the ICC of 2 subscales were 0.73 and 0.67, respectively). The MCID by first method for severity subscale was 3.33 point, and distress subscale was 4.15 point; by second method for severity subscale was 3.5 point, and distress subscale was 5.5 point; by last method for severity subscale was 2.77 point, and distress subscale was 3.1 point. Thus, the MCID of severity subscale of the NPI-Q was ranged from 3-4 point, for distress subscale was 4-6 point. We can claim that patients' change have clinically important change when the difference of the NPI-Q over those range.

Conclusion: The NPI-Q showed good test-retest reliability and the acceptable inter-rater reliability. The MCID of the NPI-Q not only can assist clinicians in explaining the clinical changes of BPSD, but also can help to determine the effects of treatment methods.

Disclosure of Interest: None Declared

P087

THE OUTCOME EVALUATION OF A UNIT ACTIVITY PROGRAM FOR THE ELDERLY WITH DEMENTIA AT A NURSING HOME IN TAIWAN

J.-H. Wen [1, 2, *], P.-T. Chen [3]
[1]Department of Education, National University of Tainan, [2]Department of Social Work, Chia-Nan University of Pharmancy Science, [3]The Institute of Gerontology, National Cheng Kung University, Tainan city, Taiwan

Are you submitting a scientific or non scientific abstract?: Non-Scientific
Abstract:
Objectives
Due to the development of and advances in medical technology and living conditions, the elderly population in Taiwan has already reach to 11.02% of the total population by 2012. In the nursing homes, the ration of elderly over 65 with dementia is about 61% of the total elderly. This study presents the outcomes evaluation of a unit activity program which was conducted in a nursing home in southern Taiwan in 2010. In addition to medication control to relievethesymptomof dementia, the elderly with dementia attending activities may reduce the occurrence of problem behaviors, improve their daily life, and promote their self-expression and social interaction.

Methods
There were 12 elderly with dementia (8 female, 4 male) and age between 74 and 90 participating in this program. Ten unit activities had been implemented within three months and the types of activities including the sedentary activities (art crafting), light exercise, and holiday activities. The one-group pre-test-post-test design was used and the tools of the Simple Intelligent Examination (MMSE), the Geriatric Depression Scale (GDS) index and t the Assessment of Communication and Interaction Skills (ACIS-C) were conducted for evaluating the outcome of this program.

Results and Conclusions
The major findings of this study showed that 70% of the total participants' scores in MMSE and ACIS-C were maintained about the same level or made some progress; 50 % of the elderly made little progress in GDS score. Some elderly were not willing to attend activities because of the bad weather or felt depress when the program was finished. In summary, a well and small-scale designed unit activity program could maintain some level of the mental and recognition condition for the elderly with dementia and also increase their interaction with other elderly and staff in the nursing home.

Disclosure of Interest: None Declared

P088

Topic: Non Pharmacological Interventions

SO THAT I WOULDN´T BE FORGOTTEN -   STORIES FROM MY LIFE TO PEOPLE WHO WILL TAKE CARE OF ME

S. Aavaluoma [1,*]
[1]Helsinki Alzheimer Association, Helsinki, Finland

Are you submitting a scientific or non scientific abstract?: Non-Scientific
Abstract: <u>Objectives</u>
Everyone has inner knowledge about oneself and some hidden even from ones closest family members. Memory illnesses affect the capability to express one self. The interaction in the family changes. Later being away from home in a nursing home can be confusing. When the person with memory illness can´t express his/her thoughts, feelings, wishes, priorities, values, he/she becomes frustrated. The efforts to express the inner world is often seen as challenging behaviour or a disorder that needs sedative or other psyche medication. Medication may calm the behaviour, but the person inside is left alone and neglected. When the family members give the information to the health-care professionals, it isn´t always clear, are they telling the patients story or do they tell about their own thoughts and values.

<u>Methods</u>
In Helsinki Alzheimer Association group- couple- and family therapy methods have been developed since 2000. Into this book we have gathered the questions and themes that arised during the therapy sessions.

<u>Results</u>
The English version of the book is available for public at this conference. The purpose of this book is to
 1. help the families with memory illness to talk together about important questions about their past and present lives and about the future to come
 2. give the family comfort by helping them to reminisce and keep the person before the illness in their minds
 3. give the person with memory illness a chance to document his/her wishes, needs, values and dreams
 4. help the health care professionals understand better the person with memory illness and respect his / her life history, personality, preferences and choices

<u>Conclusion</u>
Many families with memory illness have told their fears about the future still unknown. The fear and the worries about how to survive with the disease can prevent the family´s ability to go on living – they start to live the death instead. Talking about the important things in life gives the family back their courage to enjoy the life despite the disease. It is comforting to all to remember the person with memory illness also as a person before the illness. It helps the whole family through the difficult moments with the progressive disease. Talking together about the future helps the family to make the decisions when living at home is not possible anymore. Writing down the most important things is also a gift to the professional carers hence it enables them to understand and respect the person as he/she really is.

Disclosure of Interest: None Declared

P089

Topic: Non Pharmacological Interventions

IS THE OUTCOME OF FUNCTIONAL PERFORMANCE IN OLDER ADULTS WITH COGNITION IMPAIRED DIFFERENT FROM NORMAL GROUP AFTER 3-MONTH EXERCISE TRAINING?

C.-C. Hsieh [1,], P.-S. Lin [1, 2], T.-H. Liao [3], S.-P. Chen [1], H.-H. Wu [1], A. F. Tsai [3]
[1]Department of Physical Therapy & Graduate Institute of Rehabilitation Science, College of Medicine, [2]Healthy Aging Research Center, Chang Gung University, Taoyuan, [3]Suang-Lien Elderly Center , New Taipei City, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Researches indicated exercise was nonpharmacological intervention which may maintain physical function and delay the progressive deterioration in the ability to perform ADLs in the mild cognitive impaired (MCI) or demented elderly. Exercise is beneficial for both normal and cognitive impaired (CI) older adults, however, if the effect of exercise is similar in both groups too. The purpose of this study was to compare the effect of exercise training in cognitive intact and impaired older adults.

Methods: Older participants age over 65 who could walk with/without walking aids were recruited through an elderly home center. Seventy-seven eligible and consented participants were classified as cognitive intact (MMSE score$\geqq$24) or impaired (MMSE score<24). We conducted baseline comprehensive geriatric assessments for both groups. The assessment included basic data, health and lifestyle questionnaire, cognitive and depressive status, and physical fitness tests including BMI, waist/hip ratio, grip strength, knee extension strength, 30-second sit to stand (30s STS), 6-minute Walk Test (6WT), Timed Up and Go Test (TUG) , 5-meter walking speed, 2-minute step (2MS), functional reach, one leg stand, chair sit-and-reach (CSR), and reaction time(drop ruler test). Quality of life (SF-36), depression (GDS) and nutrition status (mini nutrition assessment, MNA) were also assessed. Participants then received moderate exercise training (30-45 minutes, 3 sessions/week) for 3 months. The same measures were carried out again after the 3 months intervention. Two-way repeated measure ANOVA was applied in data analysis.

Results: There were 36 cognitive impaired (84.75±5.86 y/o)and 41 cognitive intact (83.00±3.41 y/o) older adults with no significant differences between two groups in age, gender, education, and BMI. The results showed significant group effect in 6WT(F=4.35, p=0.04), TUG(F=6.05, p=0.02), CSR(F=10.79, p=0.002); significant time effect in BMI(F=13.23, p=0.001), 30s STS(F=14.34, p=0.00), 2MS(F=20.68, p=0.000), QOL(F=7.33, p=0.009) and GDS(F=7.013 p=0.01). Significant interaction was only found in MNA(F=4.16, p=0.046).

Conclusion: After 3-month exercise training, cognitive impaired older adults had less improvements in cardiorespiratory endurance, flexibility and functional ability compared with cognitive intact older adults. However, they both showed significant improvements in BMI, L/E muscular endurance, QOL and depressive mood.

Disclosure of Interest: None Declared

P090

Topic: Non Pharmacological Interventions

A PILOT PROJECT ON MULTI-COMPONENT INTERVENTION TRAINING CLASS FOR PEOPLE WITH EARLY DEMENTIA IN THE COMMUNITY

T. H. Chan [1], I. Y. F. Wong [1,*], E. S. H. Lee [1], N. S. T. Chan [1], Y. Y. T. Leung [1]
[1]Hong Kong Sheng Kung Hui Welfare Council, Hong Kong, Hong Kong

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: In Hong Kong, 9.3% of elders aged 70 or above have dementia, and the growth rate is alarming. Because of lack of adequate services, many newly diagnosed patients are left untreated and might deteriorate very fast. Attempting to fill the service gap for people with dementia (PWD) and sustain the physical, cognitive and social functions of PWD in the community, the Hong Kong Sheng Kung Hui Welfare Council carried out the pilot project of School of Enhancing Intellect for the Senior (SEIS) (長者益智學堂).

SEIS is a one-year multi-component intervention program targeted at people with early stage dementia. The class is a 2.5 hour session held in an elderly center weekly. It was packaged as a training class so as to minimize the labeling effect from receiving treatment. Assessment was held every 6 months, containing Mini-Mental State Examination, Geriatric Depression Scale, and loneliness scale for the participants, and Zarit Burden Inventory and AD8 for the caregivers. Class structure was listed in Table 1.

Several efforts were paid to facilitate involvement of the participants, such as providing a few choices in reality orientation to reduce sense of failure, maintaining stable and high staff ratio, creating a cheerful atmosphere during physical exercise, and organizing regular sharing sessions and personal contacts with caregivers.

The results of the completed pre-post assessment of 5 participants after first half year were encouraging. The results showed slight improvement in cognitive functions and mood of the participants, and a small decrease in caregiver burden. Meanwhile, significant behavioural changes were observed, such as the more withdrawn participants at the beginning turned to be very engaged, and some even made humors.

This is only a pilot project, so we would try out more classes in different communities to benefit more users.

Table 1
Schedule of class activities

Time (minutes)	Activity
20	Reality orientation Welcome song Warm-up exercises
45	Physical exercises (laughter yoga, Baduanjin, praise dance, Qigong) (alternative every 3 months)
30	Break (Including healthy snacks, and relaxing social chit-chat)
45	Cognitive stimulation (reminiscence, Brain Gym®, gardening, music and arts) (alternate every 3 months)
10	Consolidation of learning Conclusion

P091

Topic: Non Pharmacological Interventions

THE EFFECTS OF MUSIC THERAPY ON EXPRESSING EMTOION IN DEMENTIA
C.-W. Yang [1,*], S.-T. TSAI [1], C.-C. CHOU [2] and Song Shan District Health Center in Taipei City
[1]Expressive Arts Therapy Center, Taiwan Adventist Hospital, [2]Song Shan District Health Center in Taipei City, New Taipei City, Taiwan

Are you submitting a scientific or non scientific abstract?: Non-Scientific
Abstract: Objectives
Dementia is a syndrome that decline of a person's cognitive function. Dementia involves memory dysfunctions which is the big symptom that lead to people with dementia who frequently engage in disruptive behavior. However, emotion effects behavior production. In treating the people with dementia most through pharmacological and physical intervention. However, numerous recent studies have showed the effectiveness of music therapy with dementia clients that use non-pharmacological approaches. Music therapy is one of intervention through lessening the music. Music therapy may reduce disruptive behavior by lessening such feeling through singing, playing and listening. To investigate how effect of music therapy reduces disruptive behaviors of patients with dementia from expressing emotion.This study aims to investigate the music therapy reduces on disruptive behavior through expressing emotional activities by people with dementia.

Methods
 The design of study with an experimental and control group in the community in Taipei City. All participants will assess the level of 15-23 on the Mini mental state Exam (MMSE). A sample of 10 participants is the experimental group and 10 participants is the control group from the communities in Taipei. All participants the primary diagnosis of Alzheimer's type dementia.The Experimental participants will have music therapy treatment one time (30-45minutes) every week for 8 weeks. Participants in the control group that read book one time (30-45 minutes) every week for 8 weeks. However, all caregivers need to do the Cornell Scale of Depression Test before sessions start and end.

Results
In this study, the experimental group shows more joyful during music therapy sessions. From the begin to the end of this study, participants show more positive interaction with others. Through playing instruments participants restore self-esteem and confirm emotion. In addition, participants find a way to express their emotion to reduce disruptive behaviors happened.

Conclusions
 It appears that music has potential to help emotion expression. From music activities, the people with Alzheimer may learn reassurance feeling from themselves. Also, music therapy can offer the relationship between care giver and participants. Future study will focus on care givers join the group of music therapy. Let care givers release more pressure from life that taking care of people with Alzheimer at home.

Disclosure of Interest: None Declared

P092

Topic: Non Pharmacological Interventions

NURSING CAREPROVIDERS' NURSING STRATEGIES FOR BEHAVIORAL AND PSYCHOLOGICAL SYMPTOMS OF DEMENTIA: A NATIONWIDE STUDY

W. Cheng [1, 2, *], K.-Y. Chen [3]
[1]School of Nursing, National Cheng Kung University, [2]Department of Nursing, National Cheng Kung University Hospital, [3]School of Statistics, National Cheng Kung University, Tainan, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Little is known about the overall effectiveness of nursing careproviders' (NCs) intervention strategies on the behavioral and psychological symptoms of dementia (BPSD) for patients. Conversely, the identification may provide useful information on the management and manifestation of BPSD.

Methods: NCs were surveyed to assess differences in caregiver management strategies. BPSD and related interventions were measured via their perspectives. Repeated measures analysis were carried out to investigate the relationship between NCs' intervention strategies and patients' BPSD.

Results: Six caregiver intervention strategies were identified, based on 1435 NCs' caregiving application and effectiveness. NCs' demographic characteristics such as age, working years, and working location, as the important determinants of intervention strategies were verified by multivariate analysis of variance (MANOVA).

Conclusion: The nationwide data of NCs' intervention strategies appear to be effective for managing BPSD. Future studies should aim at education programs training NCs adequate interventions independently.

Disclosure of Interest: None Declared

P093

Topic: Non Pharmacological Interventions

EFFECTS OF AEROBIC EXERCISE COMBINED WITH DUAL-TASK TRAINING ON COGNITIVE FUNCTIONS IN PATIENTS WITH COGNITIVE IMPAIRMENT

Y.-H. Chu [1,*], P.-F. Tang [2, 3, 4], M.-J. Chiu [3, 5], Y.-C. Lin [6], T.-F. Chen [5]
[1]Department of Physical Therapy, China Medical University, Taichung, [2]School and Graduate Institute of Physical Therapy, College of Medicine, [3]Graduate Institute of Brain and Mind Sciences, College of Medicine, National Taiwan University, [4]Department of Physical Medicine and Rehabilitation, [5]Department of Neurology, National Taiwan University Hospital and National Taiwan University College of Medicine, Taipei, [6]Department of Physical Medicine and Rehabilitation, China Medical University Hospital, Taichung, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Effects of aerobic exercise combined with dual-task training on cognitive functions in patients with cognitive impairment are unclear. The aim of the study was to investigate the effects of a 3-month moderate intensity aerobic exercises combined dual-task training on cognitive functions in patients with cognitive impairment.

Methods: Twenty patients with mild cognitive impairment (MCI) or mild Alzheimer's disease (AD) (age: 61–88 years) participated in the randomized controlled trial and were randomly allocated to the aerobic exercise combined dual-task training group (aerobic group) or the stretch control group (stretch group). The both groups received health education and exercises training for 12 weeks. The aerobic group received three 90-minuate group exercises sessions, that included aerobic exercises combined with dual-task training, and two 30-minute individual walking exercise sessions at home per week. The stretch group received three 90-minuate group exercise sessions that included stretch exercises and activities in sitting per week. Both groups received examinations on cognitive functions at baseline, post-training and after a 3-month follow-up period.

Results: There were no differences in the cognitive functions between the groups at baseline. After 3 months of training, the aerobic group showed a significant increase scores in the logical memory–immediate recall ($P < 0.05$) and the stretch group showed a significant increase scores in visual reproduction–immediate recall ($P < 0.05$). Both groups maintained cognitive functions at follow-up period. In addition, the aerobic group showed better performance of Modified Card Sorting Test than stretch group after 3 months of training and higher score of Mini-Mental State Examination and logical memory–delay recall at the 3-month follow-up period than the stretch group.

Conclusion: Both aerobic exercise combined dual-task training and stretch exercise training were effective in improving memory function of patients with MCI and mild AD. Aerobic exercise combined dual-task training especially produced cognitive benefit at follow-up period.

References: Olazarán, J., Muniz, R., Reisberg, B., Pena-Casanova, J., del Ser, T., Cruz-Jentoft, A.J., et al. 2004. Benefits of cognitive-motor intervention in MCI and mild to moderate Alzheimer disease. Neurology. 63, 2348-2353. Schwenk, M., Zieschang, T., Oster, P., Hauer, K. 2010. Dual-task performances can be improved in patients with dementia: a randomized controlled trial. Neurology. 74, 1961-1968.

Disclosure of Interest: None Declared

P094

Topic: Non Pharmacological Interventions

APPLYING THE MODEL OF HUMAN OCCUPATION TO ELDERS WITH MILD DEMENTIA: A CASE STUDY

P.-F. Wu [1, 2, *], Y.-L. Chen [2, 3]
[1]Institute of Health policy and management, National Taiwan University, [2]Zhonghua mental health halfway house, [3]School of Occupational Therapy, College of Medicine, National Taiwan University, Taipei, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Human occupation can be defined as doing culturally meaningful work, play or daily living tasks in the stream of time and in the contexts of one's physical and social world. The Model of Human Occupation (MOHO), first published in 1980, was a worldwide practice framework. Human occupation consisted of three components: volition, habituation and performance capacity. Each component is dynamically interacts with each other and influenced by the environment. This article applied MOHO as a framework to analyze the occupational participation of a sixty-eight year old, highly educated elder with dementia (Mr. Lin) during the Rui-Ling School.

Methods: The Rui-Ling School is an occupational intervention program which aims at increasing or maintaining the occupational participation and cognitive function for elders with mild dementia. Two certificated occupational therapists conducted the intervention program for the elders for two hours a week over ten weeks in a long-term care management center in New Taipei City. Nine elders with mild dementia participated in the Rui-Ling School during June and August, 2012. The Model of Human Occupation Screening Tool (MOHOST) was used to evaluate the changes of Mr. Lin's occupational participation.

Results: The results showed that his motivation for occupation, patterns of occupation, and communication and interaction skill have improved. And the process skill, motor skill and environment were maintained during the intervention period.

Conclusion: In this case study, application of the MOHO framework for an elder with mild dementia in the ten-week occupational intervention program is described. The MOHO is suggested to be a suitable framework which allows therapists to gain a comprehensive viewpoint on the changes of occupational participation for elders with dementia.

Disclosure of Interest: None Declared

P095

Topic: Non Pharmacological Interventions

A LEISURE ACTIVITY INTERVENTION IN PATIENTS WITH COGNITIVE IMPAIRMENT
Y.-C. Chiu [1,], Y.-S. Chen [2], C.-Y. Huang [3], W.-C. Hsu [4, 5], S. Lee [4]
[1]School of Nursing, College of Medicine, Healthy Aging Research Center , Chang-Gung University , Taoyuan, [2]Adult & Continuing Education, National Chung Cheng University, Chia-Yi, [3]School of Nursing, Collede of Medicine, Healthy Aging Research Center , Chang-Gung University , [4]College of Medicine, Chang Gung Universiy , [5]Dementia Center , Chang Gung Memorial Hospital, Taoyuan, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: The purpose of this study was to exam the efficacy of a tailored leisure activity intervention on QoL of PWCI (clinical dementia rating scores 0.5-2) in communities in northern Taiwan.

Methods: This was a randomized control trail with four time-point repetitive measures: baseline, 9th week during the leisure activity intervention, 16th week at the end of the intervention and 6th month (post test measure). There were 31 PWCI in the experimental group, while 29 in the control group. The intervention was 16-week tailored leisure activities based on PWDs' interest style, cognitive functioning and ADL. PWDs were required to perform prescribed activities at least 20-30 minutes, three times per week supervised by their FCGs. The outcome was dementia quality of life (DQoL) in five domains: self-esteem (SE), sense of belong (SB), feelings of aesthetic (FA), negative affect (NA) and positive affect (PA). We conducted Hierarchical Linear Model analysis (HLM) based on the principle of intention to treat.

Results: The level-1 parameters represented intercept (final value of linear growth) and linear growth rate in all five dimensions of DQL and overall DQL. We centered the time point to 24 months, the mean intercepts represented the final status of DQL. The mean linear growth rates for NA ($\beta_{10} = 0.01$, $p < .05$) and overall ($\beta_{10} = 0.01$, $p < .05$) were significant. The estimates for the variances of final status and growth rate of individual growth parameters were all significant. It implied that there were some predictors could explain these variance.

Conclusion: Tailored leisure activity intervention has potential benefit for PWCI. Health related practitioners may apply leisure activity as one of non-pharmaceutical strategies to improve PWCI's quality of life.

References: Alzheimer's Disease International, 2009. World Alzheimer Report 2009. Retrieved from: http://www.alz.co.uk/research/files/WorldAlzheimerReport.pdf.
Brod M, Stewart A, Sands L, Qalton P. 1999a. Conceptualization and measurement of quality of life in dementia: The Dementia-QoL Instrument. *Gerontologist* 39(1): 1-11.
Chiu, Y. C., Chiu, Y.F., Hsu, W. C., Lee, S. H., Chen, S. T., Kao, H. Y. (2010). Developing a Chinese quality of life in dementia instrument for patients with early-to-moderate dementia: An exploratory test of validity. *Journal of Clinical Nursing*, 19(15-16):2174-2184.

Disclosure of Interest: None Declared

P096

Topic: Non Pharmacological Interventions

SUPPORT GROUP FOR YOUNGER DEMENTIA AND THEIR CARERS: EMBEDDING DYNAMICS WITH DISCUSSION SESSION, LEISURE ACTIVITY AND SOCIAL INVOLVEMENT

Y.-H. Wu [1,], H.-C. Fung [2], L.-C. Chen [1], H.-C. Wei [1], T.-W. Chen [1], J.-P. Lin [2], Y.-M. Wang [2], Y.-C. Huang [2]
[1]Dementia Family Support Group, [2]Catholic Sanipax Social-Medical Service & Educational Foundation, Taipei, Taiwan

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: Objectives: Catholic Sanipax Socio-Medical Service & Educational Foundation started to set up support group for elderly people with dementia and their carers (SGE) from 1988. Services including caregiver training, group discussion, workshop, telephone counseling, newsletter and field trip have been developed over 15 years through a process of reflective practice.

In 2003, the professionals in the Sanipax targeted a one-year program for people with moderate younger onset dementia and the spouse-caregiver for the first time in Taiwan. By late 2009, the intensive voices from our caregiver training courses had prompted the foundation to initiate support group for people with younger onset dementia and their carers (SGYO).

Service programs for SGE and SGYO do share some similarities. Yet, the carers from SGYO need more emotional and psychological support other than instrumental and social resources. The younger onset dementia at mild to moderate stage demand more recreational activities. Our programs have been planned to serve the purpose. First, SGYO and SGE engage in 11 activities together annually. Second, we referred to the curricula of Western Australia, Alzheimer's Australia and Houston & Southeast Texas Chapter, Alzheimer's Association, USA. A dynamic service model for SGYO was embedded at three approaches to meet local needs: 1. Professionals conducted a half-day group discussion session in every two month 2. At a regular date of the other alternative month, group members participated in a whole day site visit or leisure activity. 3. We encouraged people with younger onset dementia and their carers, people with breast cancer and diabetics type II to join volunteer work together once a month.

The following will be discussed in the presentation: 1. Design of the SGYO activities 2. Benefit of multi-domain interventions 3. Revitalization of the participants through varied supports 4. Enhancing self-confidence and fulfilling the value of partnership through social involvement.

Disclosure of Interest: None Declared

P097

Topic: Non Pharmacological Interventions

USEFULNESS OF AROMATHERAPY ("SAHIME" ROSE WATER) ON BATHING PROCESS FOR ELDERLY WITH DEMENTIA LIVING IN A GERIATRIC HEALTH SERVICE FACILITY

Y. Takeda [1,*], S. Hara [1], S. Hasegawa [1], M. Ono [1], M. Nakamura [1]
[1]Shimane University, Izumo, Japan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: The purpose of this study was to include an aromatic bath using rose water in the bathing process of elderly with dementia who are living at health care facilities, and to evaluate the usefulness of aromatic baths for elderly with dementia.

Methods: Ten subjects took baths without aroma (bathing A), with aroma (bathing B) and bathing A again. The evaluation method was observation of emotions in the bathing process of the elderly in the dressing room and bathroom (undressing - body and hair washing - sitting in the tub - dressing). The expressions were classified into Happy, Neutral and Unhappy and recorded every two minutes by a researcher.Subjects and their family were informed that participation was voluntary.

Results: The difference between Happy and Unhappy was calculated and compared between bathing A and B, and bathing B and the second bathing A using the Wilcoxon signed ranks test, which showed a significant difference of p=0.018 and 0.008, respectively (p<0.05).

Conclusion: It was observed that aromatherapy using rose water had palliative effects on the emotions of the elderly with dementia in the bathing process.

Disclosure of Interest: None Declared

P098

Topic: Non Pharmacological Interventions

EFFECT OF PURPOSEFUL ACTIVITIES FOR SENSORY PROCESSING DEFICIT IN PATIENTS WITH DEMENTIA

H.-J. Chi [1,*], H.-Y. Chen [2], P.-J. Jiang [2], Y.-H. Lin [1], C.-C. Yeh [1], W.-C. Hsu [1]
[1]Dementia Center, Chang Gung Memorial Hospital, [2]Department of Occupational Therapy & Graduate Institute of Clinical Behavioral Sciences, College of Medicine, Chang Gung University, Taoyuan, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Sensory processing deficit is theoretically a primary factor of cognitive and behavioral dysfunctions in the patients with dementia (PWD). When working to improve function, occupational therapy practitioners use purposeful activities (PA) that are meaningful to the person in relation to his or her occupational history, preferences, personal goals, and needs. The awareness with the efficacy of PA in PWD to facilitate sensory processing is growing. However, empirical investigations of underlying processing mechanism linked to these clinical effects are rare. This study is aimed to investigate the neurophysiological effect of PA for the restoration of sensory processing function in PWD, and to provide evidence related to the application of PA in PWD.

Methods: Subjects of PWD were divided into two groups; one received individual format and another, group formats of PA. Age-matched controls were used for comparison. Suppression of the P50 event-related potential following the second click of a double-click paradigm was assessed to investigate the performance of sensory processing. It was used to determine the changes of sensory processing in PWD. By using the time- and frequency-domain methods, the ratio of amplitude and its relative power density of specific frequency of paired-click paradigm were measured. The analyses of variance were also used to compare the sensory gating ratios between different length of intervention courses.

Results: Gating ratios were higher in PWD than in controls as expected. Moreover, the study also indicated that the amount of intervention periods of PA has a positive effect on the performance in sensory processing. Further data analyses showed no significant difference in sensory gating ratios between individual and group treatment of PA.

Conclusion: The study underscore the importance of PA for PWD in order to facilitate (at least maintain) the ability of sensory processing. Appropriately sustained intervention of PA changes the neurophysiological performance of sensory processing in PWD. Further studies would be needed to investigate the relative mechanism in regard to the contribution of PA in the restoration of sensory processing function.

References: Heun, R., Maier, W., Hoenig, K., Papassotiropoulos, A., Fries, T., Kucharski, C., et al. (2001). Sensory gating deficit expressed by a disturbed suppression of the P50 event-related potential in patients with Alzheimer's disease. *American Journal of Psychiatry, 158*(8), 1319-1321.

Disclosure of Interest: None Declared

P099

Topic: Safety in Dementia

EFFECTS OF DIFFERENT NAVIGATION SYSTEM ON PATIENTS WITH ALZHEIMER'S DISEASE

C.-W. Fang [1,*], Y.-K. Ou [2], S.-N. Lin [2], Y.-C. Liu [2]
[1]Department of Neurology, National Taiwan University Hospital (Yunlin Branch), [2]Department of Industrial Engineering and Management, National Yunlin University of Science and Technology, Douliu, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: This research compared the way-finding ability and walking navigation system of three elder groups (normal control vs. with mind cognitive impairment vs. with Alzheimer's)

Methods: Ten AD patients, ten MCI patients and twenty normal control subjects participated in this experiment. This experiment used 3Dmax software to create a virtual environment, and using Virtools 4.0 to set up an interactive interface. We used different facilitating system including paper map, north-up and track-up electronic map incorporated with and without landmarks on AD patients' way-finding performance.

Results: The results showed that the track-up map had the best way-finding performance. The track-up map could almost correct the performance of patients with Alzheimer's disease to the level of normal control. The map with landmark had the lower error rate (0.91) than the map without landmark (1.10), but it increased the way-finding performance time. The worst results came from the paper map group.

Conclusion: In conclusion, in this study, we noticed that track-up system could effectively improve and normalize the effect of way-finding in patients with AD and MCI. This research may help to provide guidance for developing a walking navigation system for individuals with AD.

References: Hagethorn, F., Kröse, B., de Greef, P., and Helmer, M. 2008. Creating design guidelines for a navigational aid for mild demented pedestrians. Ambient Intelligence, 276-289.
Kaminoyama, H., Matsuo, T., Hattori, F., Susami, K., Kuwahara, N., and Abe, S. 2007. Walk navigation system using photographs for people with dementia. Human Interface and the Management of Information. Interacting in Information Environments, 1039-1049.
Kessels, P.C., van Doormaal, A. and Janzen, G. 2011. Landmark recognition in Alzheimer's dementia: spared implicit memory for objects relevant for navigation. PLoS One 6(4), e18611.

Disclosure of Interest: None Declared

P100

Topic: Nutrition and Eating Behaviours

RELATIONSHIP BETWEEN COMORBIDITY INDEX AND NUTRITIONAL STATUS IN CASE OF DAY CARE

L. Huang [1,*], S.-D. Lee [2]
[1]wise & shine nutrition consultanting center, [2]Graduate Institute of Long-Term Care, National Taipei University of Nursing and Health Sciences, taipei, Taiwan

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: Multiple chronic conditions and dementia caused to the health of the elderly, impact the quality of life and needs of long term care. Although the population of elderly dementia is increased, problems of the nutrition cannot be ignored in Taiwan.

The physical condition of elderly get worse will be inadequate in food intake. Aging bring degradation of the physical, mental and social, either directly or indirectly limit the quality and quantity of eating, resulting in inadequate nutrition. Obesity and diabetes often have zinc metabolic disorders, chronic obstructive pulmonary disease usually lead to intermittent fever and obvious weight loss; As dementia deterioration, poor intake will cause weight loss, dehydration, malnutrition and anemia.

Therefore, the elderly with diseases will take place malnutrition, and malnutrition and mortality, morbidity, cognitive dysfunction, and health-related quality have significant correlation. The nutritional assessment is important for the long-term care institution.

For nutritional assessments, not only considerations of age, disease patterns and the impact of the disease severity, but also by taking into account the severity or multiple diseases, high metabolic state of high consumption of interference, may increase the depletion of the body tissues, and then quickly developed into malnutrition or deterioration of nutritional status.

Mini Nutritional Assessment Form (MNA) is a tool to assess the condition of the nutrition, which can quickly examine the nutritional status of the elderly. It is regarded as a strong predictor of diseased condition of the overall health, and also is also important intermediary on epidemiological, correction or interference factors. The purpose of this study is to understand nutritional status and comorbidities correlation of the cases in the day care centers.

The study was designed cross-sectional study, purposive sampling. Data collected three day care centers in northern Taiwan, by chart review, health function, MNA and Charlson comorbidity Index by Quan, (CCI-Q). Pearson's correlation coefficient was used in data analysis. Expect predominate the problem of comorbidity and malnutrition. Give the correct nutritional education early, and to enhance the overall quality of medical care.

key world: Mini Nutritional Assessment、Charlson comorbidity Index)

Disclosure of Interest: None Declared

P101

Topic: Mental Capacity

DEMENTIA AND TERTIARY EDUCATION: AN UNLIKELY PARTNERSHIP
K. Swaffer [1,]
[1]Student, University of South Australia, Burnside, Australia

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: This presentation outlines the unlikely partnership of a person living with a diagnosis of a younger onset dementia with tertiary studies. With no pharmacological treatment options, and the realisation it is a fatal disease, I accepted it as a disease with disabilities, rather than one leading to my death. Rather than give up work, give up tertiary studies, and go home to 'live' for the time I had left, I instead developed strategies to accommodate the disabilities as they appeared. Studying and writing was greatly impacted by the symptoms of dementia but I remained engaged by adopting a plan to continue tertiary studies, and graduated in a Bachelor of Arts degree and a Bachelor of Psychology, both post dementia diagnosis. My days commenced like a pre-schooler, planned to the very last detail. The university disability advisers assisted me to set up strategies and assisted technologies were used to aid the language and IT disabilities. On campus mentors were provided for assistance with things like finding library books, and memory loss logs for reading and podcasts and note takers for lectures. Photographs of lecturers assisted with recognition. These actions equated to intense neuroplasticity training. Treating the symptoms of dementia as disabilities, rather than managing them in ways that constrained me were vital to my well-being, motivation, and my ability to continue with tertiary studies. The significant and positive impact on being meaningfully engaged and its impact on the progression of dementia is the overall theme of this paper.

Disclosure of Interest: None Declared

P102

Topic: Art and Dementia

NON PHARMACOLOGICAL THERAPIES FOR ALHEIMER'S PATIENTS AND CAREGIVERS
J. A. Vargas [1, 1, *]
[1]ALZHEIMER, SAN JUAN AGING CENTER, SAN JUAN, United States

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: In recent years there has been a growing interest in non-pharmacological therapies in people with Alzheimer's disease and their caregivers. This has happened for the increase in people with the disease worldwide which is expected to increase further.
In harmony with this pharmacological treatments available today have shown only modest effects in delaying the progression of dementia. My goal is to present the usefulness of non-pharmacological therapies in patients with Alzheimer plastic and caregivers and as favors cognitive development by presenting stimuli that stimulate the intellectual, emotional, relational and physical comprehensively.
Through creations / repetitions of the person the nondrug therapies, we propose the creation of complex forms of production from a symbolic journey, supporting the development of complete and being of the person.

Pharmacologic and non-pharmacologic treatments currently available have shown only modest effects in slowing the progression of dementia. Our objective was to evaluate the impact of a group of non-pharmacological intervention on outpatient cognitive function in patients with dementia in its early stages and determine the level of overload caregivers.

The intervention group was held in an amphitheater in a hospital for 12 months.
Two groups of 12 patients and their caregivers met for two hours on Tuesdays and Thursdays from 10a.m. to 12 pm and the second set of 1:00 to 15:00. He began using the non-drug therapies, but then I add cognitive training with the help of the caregiver, a time of spiritual space necessary for both patients and caregivers in a largely Catholic group, motor exercises as body heat with passive activities therapeutic group activities for interventions.

Disclosure of Interest: None Declared

P103

Topic: Cross Cultural Issus and Dementia

MEDICATION MANAGEMENT CONCERNS OF ETHNIC MINORITY FAMILY CAREGIVERS OF PEOPLE LIVING WITH DEMENTIA

R. J. Gillespie [1,*], L. Harrison [1], J. Mullan [2]
[1]School of Health Sciences, [2]Graduate School Of Medicine, University of Wollongong, Wollongong, Australia

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: To investigate the everyday roles, tasks and barriers that determine the experience of medication management as described by family caregivers from ethnic minority backgrounds in Australia in their care of a relative with dementia.

Methods: A qualitative methodological approach was chosen to explore the medication management experiences of family caregivers of people living with dementia (PLWD). Following ethics approval from the University of Wollongong Human Research Ethics Committee, three focus groups and seven semi- structured individual interviews were conducted in the Illawarra, a multicultural urban area, south of Sydney, Australia over a four month period from July-October 2012. A purposive sample of family caregivers of PLWD from ethnic minority backgrounds was gathered from volunteers contacted through community based informal carer networks and contacts known to the research team. Verbatim transcriptions of the audio recorded focus groups and interview data were studied independently by three members of the research team to identify patterns of meaning using a thematic analysis technique.

Results: The major themes emerging from the study were: managing medication is a source of stress; strategies used to avoid conflict; and sources of information and support for caregivers. Factors contributing to the stress of family caregivers in their role as medication managers include: the progressive loss of ability of care recipients to manage their own medications; the complexity of the medication regime and the caregiver's lack of trust of the care recipient to safely and effectively manage medications. Caregivers used various strategies to manage medications and avoid conflict with care recipients including being watchful and involving other family members in medication management tasks. Family caregivers indicated the lack of information and access to support available to inform their medication management role, which was exacerbated in some cases by limited English proficiency. Supportive factors noted by caregivers included a well-established relationship with a community pharmacist and the involvement of a geriatrician in managing care.

Conclusion: The role of medication management is a source of significant stress for family caregivers of PLWD. More appropriate information and/or services need to be provided to support family caregivers from ethnic minorities in their medication management role.

Disclosure of Interest: None Declared

P105

Topic: Cross Cultural Issus and Dementia

CULTURAL IMPACT ON THE BOSTON NAMING TEST: IMPLICATION FROM THE NORMATIVE DATA OF TAIWAN ELDERLY

T.-B. Chen [1, 2, *], C.-Y. Lin [1, 2], W.-T. Chen [1, 2], P.-N. Wang [1, 2]
[1]Department of Neurology, National Yang-Ming University School of Medicine, [2]Department of Neurology, Neurological Institute, Taipei Veterans General Hospital, Taipei, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Word-finding difficulty is a common complaint in the elderly. It may be just a phenomenon coming from the effects of aging on cognition, but also can be one of the early signs of dementia. The performance of the Boston naming test (BNT) would be influenced by the culture background of examined population. The goal of study is to identify the differences of the BNT performance between the Chinese population in Taiwan (TW), Chinese populations inhabited in other areas and Caucasian population.

Methods: Two hundred and sixty four native Chinese-speaking, aged more than 60 years, cognitive normal elders were enrolled and evaluated by the Chinese version of 30-item BNT. The effect of gender on the BNT was analyzed by independent sample t test. Group differences of different educational levels on the BNT were evaluated by the one-way analysis of variance analysis with Tukey post hoc test for multiple comparisons. Pearson Correlation Coefficients were used to determine the significance and strength of the relationship between the BNT score and the demographic variables. The percentage of correct responses on spontaneous naming for each item was calculated and yielded an index of difficulty level.

Results: The performance of the BNT between genders did not show any significance in all of the scores in BNT. Correlation analysis demonstrated positive correlation between education year and BNT score ($r = 0.376$, $p < 0.01$). The *Post-hoc* analysis showed that the between-group difference mainly occurred between 6-8 years and 9-12 years education in scores of sponaneous naming (6-8 years vs. 9-12 years = 22.0 ± 3.7 vs. 25.1 ± 3.0, p<0.01), and total correct responses (6-8 years vs. 9-12 years = 25.5 ± 3.1 vs. 27.8 ± 1.6, p<0.01). Nosignificant correlation between age and the scores in BNT was found in the Pearson's correlation analysis. The overall accuracy of all the items was 92.1%. "Pencil" and "Scissors" revealed 100% correct responses but "Protractor" showed the fewest correct response (44.7%).

Conclusion: After reviewing and comparing the BNT studies conducted in TW, US, Canada, Quebec French, Australia, New Zealand, Sweden, Spain, Greece, Belgium and Hong Kong, it is found that the major impact of culture on the performance of BNT in all populations may not be quantitative, but be qualitative. Attention should be given to the potential cultural effect on the item difficulties when administering the BNT to non-English speaking subjects.

Disclosure of Interest: None Declared

P106

Topic: Cross Cultural Issus and Dementia

HOW A LAY PROGRAMME FOR RED FLAGGING CAREGIVER STRESS IN A DEVELOPING COUNTRY WAS ADAPTED FOR THE RURAL HIGHLANDS OF SCOTLAND

A. Pascoe [1,*], A. Dias [2]
[1]Dementia Friendly Communities CIC, Golspie, United Kingdom, [2]Goa Medical School, Panaji, India

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: To show how Scottish Government dementia strategies were not reaching grass roots in the rural Highlands of Scotland and how one caregiver spoke out about how crisis management should not be the only option for dementia families: that while protection and care were important, quality of life was more important.
How that caregiver travelled to India on a Churchill Fellowship to work with Dr Amit Dias on programmes which red flag early frailty symptoms and promote early intervention, particularly with regard to dementia and caregiver stress.
How she realised that while India has a population of 1.2 billion people spread over a relatively small geographical area and Scotland has only 5 million people spread over a large geographical area, particularly in the rural Highlands, their problems were the same because in both cases professionals could deal only with crises.
How she adapted the Indian cost effective grass roots lay programme for application in the Scottish Highlands and showed that by redirecting existing resources to existing services in the rural Highlands caregiver stress could not only be reduced but a better quality of life put in place for dementia families, while at the same time meeting government priorities to use preventative measures to reduce crisis costs.

Disclosure of Interest: None Declared

P107

Topic: Voices of People with Dementia and Families

ALZHEIMER CROATIA – HELPING PEOPLE WITH DEMENTIA FROM 1999

N. Mimica [1,], M. Dajcic [2], G. Simic [3]
[1]1University Psychiatric Hospital Vrapce, [2]Croatian Institute for Brain Research, School of Medicine, [3]School of Medicine, University of Zagreb, Zagreb, Croatia

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: Alzheimer Croatia (AC), former Alzheimer Disease Societies Croatia (ADSC), since its beginnings from 1999 is helping people with dementia (PWD), their families and careers. We are fighting stigma, and bringing education to target and general population. Our Society doesn't have paid staff, so the whole work is done by volunteers. In our Counseling centre we have weekly meetings for families of PWD and all other interested. The AC has published four booklets, various leaflets, all in large number and we distributed them for free in public places. Till know our members have for numerous times spoken to media (TV, radio, newspapers) and we have organized various lectures, participate on many Meetings, Conferences and Congresses dealing with AD and dementia - all in the aim to raise awareness on dementia, and to present our work for PWD and their caregivers. In year 2012 we have organized the 6th Croatian Congress on AD with international participation in Primosten and this was one of the biggest meeting on AD in Croatia. Beside that AC organized three Psychogeriatric Symposiums on island Rab, last one in 2006. For last eight years we celebrate the World Alzheimer's day (September 21st), on the most popular squares in center of Zagreb. We have also organized the humanitarian public happenings called "Summer evenings on Zrinjevac" in which we raise some money for the AC. Our web-site (www.alzheimer.hr) is rebuilt and till today we have more than 33000 visits. On our 24-hours help-line (+385 91 569 16 60) we are receiving calls every day coming from whole Croatia, but also from Bosnia & Herzegovina and some other countries from the region. We are regularly replying to numerous letters coming through e-mail (alzheimer@xnet.hr). Our work is also internationally recognized, so we become a full member of Alzheimer's Disease International (ADI) in 2006, and of Alzheimer Europe (AE) in 2012. We have a nice place for our office, in the center of metropolis (Vlaska 24, Zagreb).

Disclosure of Interest: None Declared

P108

Topic: Voices of People with Dementia and Families

AN EXPLORATION OF FAMILY CAREGIVER'S ROLE IMPACT AND CHANGE DURING CAREGIVING PROCESS FOR ELDERS WITH DEMENTIA IN TAIWAN

Y.-Y. Chu [1,*]
[1]Nursing, NTUH Hsinchu, Hsinchu, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Faced by the senile dementia surge in the number of current situation, there will be more families have to face long and full of individual difference in illness trajectory. Unfortunately, we often referenced foreign research point of view to explain the care of phenomenon, but the family culture and social structure in Taiwan and Western countries are completely different. Follow the Western point of view may not be true dementia family care phenomenon to explain Taiwan.

Methods: This study extends the concept of role tuning with grounded theory. It investigates the role of the family caregivers of the dementia patient in Taiwanese culture during the changes in a caregiver's role in the caregiver process. A total of 35 in-depth interviews were conducted and the participants observed over a period of 2.5 years. The focus was on the interaction between the care-receivers and care-givers.

Results: A new core category "unidirectional role tuning" became evident from the interactive family care-giver process of dementia patients. In this core category, the interaction between care-giver and care-receiver shows the need for unidirectional balanced adjustments because of the constantly varying illness trajectory of the care-receiver. In addition, in this interaction it is only the care-giver that is capable of adjustment, and who must find a way to adapt to the changes of the care-receiver. The results in the care-giver going through three different states: conflict, compromise and stabilization. When facing these three states the care-giver may have to deal with different situation. The core tri-states are a kind of dynamic continues rolling process, along the illness trajectory and role development, naturally moving along as time passes. They form a parabolic curve representing the course of how the care-giver develops a "unidirectional " role and gains the capability after of dealing with a family member stricken with dementia.

Conclusion: The process was forced care-givers to move towards greater capability as well as to role maturation. The process is also influenced by other important interactive factors including the core rolling force and the elements that form the initial slope which made core tri-states rolling faster and moving toward role maturation much quicker. This result of this study provides professionals understand the changes in the role of caregiver, the development of appropriate resources to accompany the caregiver competent caring role.

Disclosure of Interest: None Declared

P109

Topic: Voices of People with Dementia and Families

THE ADAPTATION OF USING FOREIGN NURSING ASSISTANTS TO CARE FOR DEPENDANTS WITH DEMENTIA AT HOME IN TAIWAN

P.-L. Hsieh [1,*], Y. Y.-W. Fang [1], M.-H. Wang [1]
[1]Department of Nursing, Mackay Medical College, New Taipei City , Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: To clarify what changes arise and how coping strategies develop to adapt to their condition of family caregivers using the foreign nursing assistants (FNAs) to care for dependants with dementia at home.

Methods: A phenomenological study was conducted to guide for collecting and analysing the data, as well as for helping to generate appropriate themes from the emerging data. Unstructured individual interviews were conducted with 20 participants to understand the changes, needs, and adaptation of the family, during the stage of hiring the FNA to care for dependants with dementia in the home setting.

Results: Weighing up the current situation, including care burden, financial consideration, living environment, public opinion and previous experiences, was a way for participants to make sure of the best way of looking after their dependants with dementia, when they sensed they no longer had the ability to maintain the continuity of family care-giving. Once participants decided on hiring the FNA to provide care for their dependant with dementia at home, they rapidly faced a disparate culture, language, values and beliefs, which were brought by the new member into the family. Although many uncertainties occurred in participants' minds before their FNA arrived, their coping strategies started taking shape during the time they lived with the FNA to manage their problems and changes. These strategies for living together with FNAs included treating the FNA as a family member, having a clear number of tasks, setting priorities, accepting lower standards, reducing temptation, communicating, trusting, and getting along.

Conclusion: The findings revealed some insights into the family caregivers' life changes, and clarified their strategies to live together with the FNA. Dismissing the consideration of the rights and interests of the FNA to work in the home setting, this option for participants was considered as a way to achieve the state of equilibrium between financial considerations and a desire of maintaining the continuity of family care-giving. It would contribute to those families to gain a better adaptation and to continue the family caregiving, if early and timely professional intervention was provided.

Disclosure of Interest: None Declared

P110

Topic: Voices of People with Dementia and Families

THE TRANSITION OF TAIWANESE FAMILY CAREGIVERS TO CARE FOR DEPENDANTS DEVELOPING DEMENTIA AT HOME

P.-L. Hsieh [1,*], L.-C. Lu [2]
[1]Department of Nursing, Mackay Medical College, New Taipei City , [2]Department of Nursing, Tzu Chi College of Technology, Hualien, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: To clarify what changes arise and how coping strategies develop, when family caregivers face their dependants developing dementia, in Taiwan.

Methods: A phenomenological study was conducted to guide for collecting and analysing the data, as well as for helping to generate appropriate themes from the emerging data. Unstructured in-depth interviews were used to understand the changes, needs, and adaptation of the family, during the stage of caring for dependants with dementia in the home setting.

Results: 20 participants were recruited to take part in the study. The circumstances of dependants' development of dementia, for participants, brought about a very unfamiliar and difficult experience, particularly in dealing with the dependant's behaviour, and trying to get along with the dependant. However, emotion-focused coping strategies were found to lead to the adoption of unchangeable situations, such as denying the existence of dementia, thinking dependants' behaviour is 'on purpose', feeling sad and lonely, avoiding the trouble, and seeking a miracle. Problem-focused coping strategies were developed for managing their dependant's behaviour and its difficulties, as well as for getting along with their dependants, for example, turning around their attitudes and behaviour, learning about dementia, developing caring strategies, and finding meaning in care.

Conclusion: The findings provide some insights into the Taiwanese family caregivers' life changes, and might also inspire families in future to prepare for similar experiences, should they meet the same condition of a family member developing dementia. However, some emotion-focused coping strategies often were developed as a result of insufficient understanding of dementia and problem-focused coping strategies were more likely learned by trial and error in the study. Therefore, practical and tailored interventions are necessary to be developed and provided actively by professional carers for those families, who have a relative developing dementia, as well as helping them use more effective coping strategies to handle and manage the difficult circumstances.

Disclosure of Interest: None Declared

P112

Topic: Voices of People with Dementia and Families

LIVING WITH PEOPLE WITH ALZHEIMER'S: POINT OF VIEW OF THE MEMBER OF A FAMILY

M.-Y. Chiu [1,*]
[1]Graduate Institute of Rehabilitation Counseling, National Taiwan Normal University, Taipei , Taiwan

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: OBJECTIVES
Ten years ago, we had a family reunion in Japan. One night, while we had dinner, mother went to lady's room. A few minutes later, she got lost. Since that, mom forgot things all the time. Finally, we knew that mom got Alzheimer's disease (AD). For a while, all families got shocked and depression. Being a worker in the rehabilitation counseling field, it was still a challenge. We kept learning from the experiences (e.g., mom's memory loss, changes in personality, etc.). Ten years passed, thank God! She did not degrade much. I would like to share the following experiences with people living with Alzheimer's. (1)Medicine intervention as soon as possible. My mother took medicine at the very early period. (2)We let our mother know that we accepted what her like; she always said that she was old and useless though. (3)She was encouraged to keep her interests, such as reading, planting, singing, praying etc.,(4)We registered for her to join the senior citizens' programs.(5)We tried to let her stayed with the environment and people her got familiar with. When we moved to another area of Taipei Metropolitan, we still attended mass at the same church every Sunday, although it took us more time. (6) We appreciated what her talk to others, although she has problems to remember important things sometimes. (7) We brought her everywhere, such as travels, social events, even business trips sometimes. (8) We let her do what she can do such as doing laundry, and assist her to finish, if necessary. (9) Crutches helped her to feel more independent and comfortable recently.

Reviewed what the families did, that seemed to me that verified the International Classification of Functioning, Disability and Health **(**ICF**)** model's point of view. For Alzheimer's supports, communication, social relationship, and recreation and leisure were very important elements, just like the factors of medicine, product and technology.

Disclosure of Interest: None Declared

P113

Topic: Voices of People with Dementia and Families

LIFE EXPERIENCES OF DEMENTIA SPOUSE USING QUALITATIVE STUDY—PILOT STUDY
C.-L. Wang [1,*], L.-L. Young [2], Y.-I. L. Shyu [3]
[1]Department of Nursing, Tzu-Hui Institute of Technology, Pingtung County, [2]Department of Nursing, Yuh-Ing Junior College of Health Care and Management, Kaohsiung, [3]Department of Nursing, Chang Gung University, Taoyuan , Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific
Objectives: As the life expectancy prolonged, the numbers of the elderly population increased, and there is the tendency to have lesser children at present. The dementia will become the medical and social problems, which need the government to attach the great importance to it. It will be the front burner of our society for how to enable the caregivers to understand and respect the elderly dementia, and furthermore to minimize their problematic behaviors.The purpose of this qualitative pilot study was to explore the living experiences of dementia spouse.
Methods: The study were recruited from two home care centers in southern Taiwan. Purposive sampling of five participants were interviewed. The data were collected through field observation and in-depth interview with a semi-structured interview guide. Mile and Huberman(1994) the content analysis methods were used to analyze interview transcripts.
Results: Five themes were identified in the life experiences of the participant. They were: (1)recognized couple change stressor(2)mood transition experience; (3)marital attachment and interaction relationship; (4)seek support system and adjustment life;(5) to map out future and expected.
Conclusion: The findings provide information to health professional and long term care staff to understand problems and benefits policy intervention reference.

Disclosure of Interest: None Declared

P114

Topic: Voices of People with Dementia and Families

THE SUPPORT REQUIRED BY SPECIALISTS IN DEALING WITH YOUNGER ONSET DEMENTIA PATIENTS: A CASE STUDY OF SURVEY RESULTS AT BUSINESS FACILITIES IN MUNICIPALITY A

A. Yane [1,], A. Nishida [1], N. Fujiwara [1], A. Minami [1]
[1]KYOTO TACHIBANA UNIVERSITY, Kyoto, Japan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: The support for younger onset dementia patients in Japan is still in the embryonic stage. The care managers have, therefore, been finding difficulties in engaging with these patients. This study is to clarify the needs of the care managers involved with younger onset dementia patients, by conducting a survey to study the current situation and their needs.

Methods: 1. Study period: October 2011~February 2012; 2. Subjects: 200 business facilities selected randomly from 600 to which the care managers of municipality A are affiliated; 3.Data collection: Questionnaires regarding "the current situation of younger onset dementia patients support and the needs of care managers" were sent by mail. 4. Data analysis: SPSS Statistics 19 was applied.Ethical considerations: After receiving registered Ethical Review Board approval, the written explanation of the meaning, purpose, methods and ethical consideration of the study were sufficiently provided to the business facilities.

Results: 63 effective answers (70 replies, collection rate 35%). 1) No. of care managers affiliated per facility "1-2" 15, "3-4" 34, "> 5" 5, "> 6" 7, "N/A" 2; 2) Whether they provide support for younger onset dementia patients and no. of cases "yes" 28 ("1-2" 15, "3-4" 3, "5-6" 1, "other" 4, "N/A " 5) "no" 35; 3) The support required for younger onset dementia patients 1.enlightenment 2.reduction of care burden 3.establishment of services for younger onset dementia patients 4.building networks 5.economical support 4) The needs of care managers 1.establishment of support system 2.providing information 3.training opportunities 4.accumulation of support cases.

Conclusion: 1) The care managers have little experience of supporting younger onset dementia patients. 2) 77% of the care managers work at small business facilities. 3) They desire to build networks with other facilities. 4) They feel that a new service is required to improve the support for younger onset dementia patients. 5) The care managers require the accumulation of support experience as well as supervisors that they could consult on various issues.

Disclosure of Interest: None Declared

P115

Topic: Behavioural and Psychological Symptoms of Dementia

BEHAVIOURS - OPPORTUNITY AND CHANGE
N. Duggan [1,*]
[1]Dementia Centre, The Dementia Centre, HammondCare, Sydney, Australia

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: The antecedents of behaviour are multi-factorial and often have situational variables that influence the frequency and severity of behaviour.
- Why, when speaking about dementia and a person exhibiting behaviours is it always viewed as a negative?
- Why can it not be viewed as a positive opportunity? An opportunity to get to know the person better and find out what has gone on in their lives. Or, an opportunity to identify the triggers that caused the behaviour so that we can recognise what is discomforting them and prevent it from happening again.
- Every person is an individual, and born without instruction manuals, however, too often we slip into applying the same methods and strategies on the people we care for out of 'professional habits', rather than truly seeking the reasons why they are behaving the way they are.
 This presentation will address:
- impact of the physical environment
- elements of psycho-social environment
- conceptualization of the "internal environment" of the individual resident
- the role individuality plays in harmonizing these intersecting dynamics

Disclosure of Interest: None Declared

P116

Topic: Behavioural and Psychological Symptoms of Dementia

IMPACT OF BEHAVIORAL SYMPTOMS ON PATIENTS WITH ALZHEIMER'S DISEASE

D. Hewedi [1,*]
[1]Institute of Psychiatry-Faculty of Medicine-Ain Shams University, Cairo, Egypt

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Background: Behavioral symptoms of dementia are non-cognitive symptoms that occur commonly with Alzheimer's disease (AD). The characterization of the clinical profile of AD patients may help to better understand disease evolution and to improve diagnosis and treatment. Thus, the aim of our study is to describe the clinical profile of AD patients, and to correlate the presence of behavioral symptoms with other variables of the disease.

Methods: Methods: Assessment of behavioral symptoms measured by Revised Memory and Behavior Problems Checklist, Mini Mental State Examination, Clinical Dementia Rating, and Disability Assessment for Dementia were done for 40 AD patients.

Results: Results: The Revised Memory & Behavior Problems Checklist scores were significantly increased in severe cases in comparison to mild cases. There were significant positive correlation between Revised Memory & Behavior Problems Checklist with; Clinical Dementia Rating, and Disability Assessment for Dementia. A significant negative correlation between Revised Memory & Behavior Problems Checklist with; Mini Mental State Examination was found.

Conclusion: Conclusions: Our study shows that patients with AD have a high prevalence of behavioral and psychological symptoms measured by Revised Memory & Behavior problems Checklist and that behavioral symptoms, cognitive impairment and disease severity are correlated. Therefore, the Revised Memory & Behavior problems Checklist is a useful evaluation tool in patients with AD.

Disclosure of Interest: None Declared

P117

Topic: Behavioural and Psychological Symptoms of Dementia

THE CORRELATION OF AGITATED AND OVEREATING BEHAVIORS IN INSTITUTIONALIZED ELDERLY WITH DEMENTIA: A PILOT STUDY

C.-L. Lee [1, 2,*], H.-S. Wu [2, 3]
[1]Nursing, Tungs' Taichung Metro Harbor Hospital, [2]Nursing, Chung Shan Medical University, [3]Nursing, Chung Shan Medical University Hospital, Taichung City, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: To explore the relationships of agitated and overeating behaviors in institutionalized elderly with dementia.

Methods: A cross-sectional and descriptive correlation design was conducted. Fifty-eight residents with dementia were chosen from three long-term care facilities in Taiwan. Outcome measures included overeating behaviors measured via the Chinese version of the overeating scale (C-OE) and agitated behaviors recorded via the Chinese version of the Cohen-Mansfield Agitation Inventory (C-CMAI). A trained research assistant was asked to observe each participant's overeating and agitated behaviors for 7 days to complete outcome measures.

Results: There was a significant relationship between the C-OE and C-CMAI scores (p=.009). In the different categories of agitated behaviors, only the scores for physically nonaggressive behaviors, including wondering, inappropriate wear and undress and inappropriate handling objects, was significantly correlated with the C-OE scores (p <.05).

Conclusion: When the frequency of agitated behaviors, especially physically nonaggressive behaviors, increase, the overeating behaviors may occur in residents with dementia. Based on this finding, more attentions on food provision are needed in dementia residents with physically nonaggressive behaviors.

P118

Topic: Behavioural and Psychological Symptoms of Dementia

THE COMPONENTS AND UNDERLYING MEANINGS OF AGGRESSIVE AND AGITATED BEHAVIORS IN PATIENTS WITH ALZHEIMER DEMENTIA

S. Y. LI [1, 2,*], J. J. WANG [1, 2], M. C. PAI [2]
[1]Department of Nursing, National Cheng Kung University , [2]Department of Neurology and Alzheimer's Disease Research Center, National Cheng Kung University Hospital, Tainan, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: Aggressive and agitated behaviors are common in patients with dementia. These behaviors play a significant role in daily interaction between caregivers and patients. However, recent studies have been mainly focused on neurochemical factors of these behaviors, Little attention has been placed on the components and underlying meanings of these behaviors from a psycho-social perspective. The aim of this study was to understand the components of these behaviors through tracing back the patients' past life experiences and looking at their current environmental conditions through an in-depth qualitative data collection.

Methods: Five family caregivers of patients with Alzheimer's dementia and aggressive and/or agitated behaviors during the interview period agreed to participate in the study. Participants were drawn from a care and consultation clinic of a teaching hospital in southern Taiwan. Data were collected through in-depth face to face interviews based on a semi-structured interview guide. The directed constant analysis method was used.

Results: Three main components related to aggressive/agitated behaviors emerged from the data were "Old habits or law been broken", "Emotions are overlooked or isolated", and "Physical comfort been threatened". These components were mostly interactive between environment and caregiver relationship. The underlying meaning of aggressive/agitated behaviors drawn from the data was "a desire to maintain self- control".

Conclusion: This study provides caregivers with references in understanding the components and underlying meanings of aggressive and agitated behaviors of patients with dementia. Such information contributes to the planning of patient-centered care approaches for this group of patients.

Disclosure of Interest: None Declared

P119

Topic: Abstracts Submitted in Mandarin

協助一位外籍看護照顧失智症患者之護理經驗 - HELPING A FOREIGN HEALTH AIDE TO TAKE CARE OF DEMENTIA ELDERLY: CASE REPORT

H.-L. Huang [1,*], Y.-C. Chiu [2], M.-L. Huang [2], W.-C. Hsu [2]
[1]Department of Gerontological Care and Management, Chang Gung University of Science and Technology ,
[2]Dementia Center, Chang Gung Memorial Hospital, Taoyuan, Taiwan

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract:

隨著老年人口快速成長，失智症病患也急遽增加，近十多年來因家庭結構改變，居家失智老人除了由家人自行擔任照顧者外，僱用外籍看護已成為國人目前居家失智老人照顧的主要選擇。而當外籍看護在照顧認知功能障礙或是語言表達困難的失智症患者時，經常會產生溝通困難的瓶頸，導致雙方的關係緊張，促使病患出現激躁或攻擊性的行為問題，甚是使病情更加退化。

本文是描述協助一位外籍看護照顧居家失智症老人的護理經驗。文中之失智症老人臨床診斷分類為血管性失智症，症狀包括認知功能障礙、語言表達困難，且合併有重聽致使的接收訊息能力受損，失智症老人往往因溝通困難導致需求未獲得滿足而出現激動、生氣、怒罵、打人等問題行為。而負責主要照顧工作的外籍看護因其社會文化、生活習慣的差異與語言的不同，在提供照護的過程中，語言溝通障礙成為影響照顧工作最迫切棘手的問題，經常引發雙方的關係緊張與衝突；外籍看護也因為無法有效的溝通而感到悲傷、無助與挫敗感，甚至降低提供照護之意願。

筆者於2012年10月5日至2012年11月2日藉由門診衛教3次，電話訪談2次，以觀察、會談、傾聽及失智症中心團隊完整的評估方式，收集主客觀資料，經分析外籍看護的護理問題包含:1.無法有效的與失智症老人溝通；2.對失智症認知不足及缺乏相關照護技巧；3.照顧壓力與負荷。在此照護過程中，衛教師將外籍看護視為照護團隊的核心成員，要求家屬照顧者重視外籍看護的照顧壓力與需求；並運用同理心、傾聽、正向回應等方式，透過持續性的關懷，與外籍看護建立良好的合作友伴(partnership)關係。針對護理問題提供具體的護理措施，包括：1.運用確認治療溝通技巧，增進外籍看護與失智症老人間達到有效的溝通策略；2.提供越南語之失智症疾病的相關知識與照護技巧衛教光碟影片；3.鼓勵雇主給予外籍看護個人喘息時間，從事喜愛的休閒娛樂及社交活動，以協助外籍看護減輕照顧上的負荷。

筆者經由此次的護理經驗，深刻體認當家屬無法擔任主要照顧者時，略通國語及台語的外籍看護便要擔任起照顧失智患者的重責。但在密切相處的互動過程中，因語言溝通障礙，失智症老人常常無法獲得到適切的照護，而外籍看護也深感無助及失落。經由專業的失智症衛教師介入衛教，提供溝通的技巧及失智症相關知識與照護，將有助於提升外籍看護的照顧能力及自我效能，改善其與失智症老人充滿緊張及衝突的照護關係，達到優質的照護品質。期望藉由此護理經驗之分享，提供未來護理專業同仁在照護類似個案之參考。

Disclosure of Interest: None Declared

P120

Topic: Abstracts Submitted in Mandarin

運用成功老化理論之三要素檢視居家職能治療介入失智症長者居家生活情境之研究

?. 劉 [1,*], ?. 陳 [2], ?. 張 [3], ?. 康 [1]

[1]復健科, 國軍松山總醫院, 台北市, [2]國立成功大學, 台南市, [3]長期照護研究所, 國立台北護理健康大學, 台北市, Taiwan

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: 目的

面臨台灣人口結構高齡化及失智症人口快速增加的趨勢，在地老化、居家和社區式照顧為臺灣近年來的長期照顧趨勢，而職能治療師往往是協助失智症長者改造居家生活環境及教導家屬、照顧服務者居家照護技巧的第一線專業人員，先前探討成功老化的相關文獻較少納入失智症族群，因此本研究試著以成功老化理論檢視居家職能治療是否可以為失智症長者打造一個無障礙的行動、認知及社交環境以增加失智症長者延續居家及社區生活並促成其成功老化的機會。

方法

本研究採質性研究的個案研究法，以直接觀察個案並收集相關資料，藉由職能治療介入失智症長者實際生活情境來進行失智症長者成功老化的研究與探討。

結果

研究成果顯示，居家職能治療對失智症長者的介入依成功老化理論三大要素區分如下：

一、降低疾病或失能的風險

(1)安全和無障礙的居家行動環境-

不論是失能或失智的老人，在行動或認知上都有不同程度的障礙，因此安全且無障礙的居家環境是職能治療介入的第一步。

(2)跌倒預防措施及緊急救援系統-

建議使用緊急求救手環並將地磚更換為單色系的塑膠地板，以減少眩光或跌倒所造成的傷害。

二、維持高度的心智與生理功能

(1)營造現實導向及可辨識性的環境-

在客廳放置大字體的萬年曆掛鐘，以增加個案的現實感，並使用環境營造不同的居家生活區域，以利失智症長者可以清楚的辨識所處的環境，並執行該環境應有的日常生活活動。

(2)協助家屬制定長者居家生活作息表-

和家屬討論並制定適合長者的生活作息表以協助長者規律的參與日常活動，並減少問題行為的發生。

(3)尊重長者原有獨立生活的延續性-

實現失智症長者想要在自己熟識的社區中繼續生活並接受具人性化、有尊嚴及較高品質的生活照顧。

三、積極參與老年社交生活

(1)建立患者與家屬適當的溝通方式-

衛教家屬失智症的相關行為症狀，並建議可利用簡單的圖卡和適切的溝通技巧與失智症長者溝通。

(2)重點營造-家人互動的空間場所-

無障礙硬體環境改善後，失智症長者較可以安全獨立的行走至客廳、餐廳與家人互動。

(3)創造長者與社區互動的機會-

教導居家肌力活動以強化長者下肢肌力，讓失智症長者有機會下樓至公園和街坊鄰居互動，促進社會參與。

結論

居家職能治療師協助失智症長者與家屬建立安全的居家硬體環境、正確的日常生活活動安排及營造成功老化的生活情境，進而增加失智症長者日常生活的獨立性、提昇家屬處理問題行為的成效並且減輕照顧者的負荷，使得失智症長者能在居家及社區獲得良好的生活品質與照顧。因此，居家職能治療師對於協助失智症長者延續居家與社區生活並實現成功老化，實扮演著不可取代的重要角色。

Disclosure of Interest: None Declared

P121

Topic: Abstracts Submitted in Mandarin

以敘事研究法探討一位阿茲海默症患者之主要照顧者的生命經驗敘說
C.-J. Wang [1], Y.-T. Huang [1], W.-F. Wang [1]

[1] Department of Neurology, Changhua Christian Hospital, Changhua city, Taiwan

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract:
目的：隨著人口結構改變，失智症是一個值得重視的醫療與社會問題。患者約有九成由家屬扶養，主要照顧者也以家人為主，當出現精神問題行為時，更造成照護者的精神壓力及沈重經濟負擔。不僅患者無法獲得良好的照顧，家屬也因此身心俱疲而多所抱怨。本研究旨在瞭解阿茲海默症患者之主要照顧者在家人罹病前後之生命故事。
方法：採敘事研究法，以詮釋現象學作為理論方法之一，透過主要照顧者的半結構深度訪談，將所蒐集的資料，加以整理編碼形成訪談文本，透過不斷與文本的反覆對話，發現內容意義及主題脈絡後以敘說分析加以詮釋。運用「整體－內容」呈現其生命故事，以「類別－內容」分析其生活世界的經驗內涵，展現主要照顧者的獨特生命經驗。
結果：
一、用心傾聽是理解的基礎：在這場與疾病的共在中，「病者」與「健康者」語言的隔閡、彼此世界的不同，令人感到徬徨無助，能夠尊嚴的對待，並碰觸彼此內心，以相同的語言靠近，誠心誠意陪伴罹患失智的家人，才能使患者在這條記憶之路不再徬徨無助。
二、獻身疾病並真實陪伴：當失智「現身」眼前，研究參與者沒有退路，在勇敢承擔的信念下「獻身」失智症，越過健康人的處境，成為失智症共同的病友，體現失智所帶來的威脅與挑戰。以「共有」為起點，真實陪伴「此在」，在兩人共有的生命之海中努力活著。「永不放棄」的理念支持她在這條路上繼續前進。經驗的珍貴就在察覺的歷程，使自己更具備自我統整的能力與智慧。
三、性別角色與關照倫理相關：傳統社會男女兩性照顧觀點及行為表現不同。照護因照顧者性別角色不同、病患失智程度不同、所獲得的照護醫療資源不同而有差別，難度與挑戰也不相同。女性不僅擔任主要照顧者的角色，其中包含犧牲忍讓及忽略自己的健康。研究參與者身為家中唯一未婚女性，經濟獨立自主卻處於孤單照顧失智母親的情境中，在沒有支持系統的分擔下，身心壓力與體力的負荷完全由個人承擔。
四、照護資源與實際需求存在嚴重落差：研究參與者曾將母親送至安養機構，實際經歷後仍將母親接回照顧。乃致後來請了外籍看護，因不耐母親的混亂行為，半年未至便逃跑。病患的無法捉摸與難以照顧讓家屬身處其中，叫天地皆不應。對家屬而言，重要的是可以長期提供協助資源的處所，包含專業人員在內，適時提供建議與照顧技巧，給予情緒抒發管道，並在這當中有被尊重與被理解的情緒感受。
五、從受苦經驗窺見生命曙光：研究參與者於無法迴避的默會之中，將憂懼轉化為動力，讓受苦經驗帶來窺見生命曙光的契機，從中得到再出發的能量，支持其幽谷伴行不離不棄。在生命經驗與意義中，個人價值信念促使其獻身疾病與之共處，面對不可知的未來，散發堅韌的生命力，伴隨母親勇敢走向生命的單行道。
結論：每個人的生命故事都是獨特的。面對疾病本身，更多是心理的恐懼掙扎。從分析發現，關懷與理解、真實陪伴是協助家人共同面對失智的力量來源，因為痛苦一旦承擔，它就蒸發了。本研究提供政府相關單位和醫護機構對失智經驗內涵一個新的視域；期許用心陪伴、真正靠近每位長者，使其獲得尊嚴的對待與較好的生活品質，進而減輕家屬壓力，達到共贏境界。

Disclosure of Interest: None Declared

P122

Topic: Abstracts Submitted in Mandarin

運用實證醫學的方式探討睡眠障礙是否會影響失智症病患之認知功能

C.-J. Wang [1], S.-C. Chen [2]
[1]Department of Neurology, [2]Department of Nursing, Changhua Christian Hospital, Changhua city, Taiwan

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: 研究目的：

失智患者常見精神問題行為，不僅影響其睡眠品質及照護的難度，更是患者提早入住機構的原因之一。而臨床照護者在執行失智病患之功能評估和照護時，發現病患之睡眠品質好壞影響其接受評估的動機和照護的配合意願，因此，希望透過實證醫學的方法瞭解睡眠障礙是否會影響失智患者之認知功能，以提供臨床照護者以更適切的態度面對失智患者之睡眠障礙，提供人性化的照護。

研究方法：

依照實證醫學步驟蒐集文獻，鍵入關鍵字dementia、sleep disorder、cognitive及其同義字找尋15年內PubMed、Cochrane Library、CEPS等資料庫之文獻，再將RCTs、Systematic reviews列為必要條件，共獲得40篇證據等級I之相關中英文獻，閱讀摘要篩選後，採用7篇進行評讀。

研究結果：

老化所造成的睡眠問題，尤其是日夜節律的變動，在失智病患更為明顯，常見有白天過度昏睡、半夜起床、遊走、或起床從事不當行為，並存在認知功能減退和睡眠質量的下降，影響疾病的治療和生活品質。失智患者睡眠品質比常態老化來得差，在睡眠結構上快速動眼期也明顯的減少，睡眠障礙可視為行為異常的一種表現。隨著失智症狀趨於嚴重，夜間總睡眠時間以及睡眠效率均會減少，進而加重失智程度，使睡眠質量更差，形成一種惡性循環。

睡眠的混亂與認知功能障礙之精神症狀有關，影響患者合併睡眠障礙的原因，除了調節睡眠的神經迴路受損之外，尚有：(1)大腦老化之生理變化；(2)併發身體或精神疾患所產生之睡眠障礙；(3)併發原發性睡眠問題，如睡眠呼吸中止症；(4)不良的睡眠衛生；(5)環境因素，如噪音、白天日照不足與生活壓力事件等；(6)藥物與影響中樞神經之物質；(7)併發上述多種狀況等。另外，病患合併睡眠障礙常與患者激動、攻擊、妄想與焦慮有關。但其睡眠障礙嚴重度與失智嚴重程度之關係，目前尚無定論，與睡眠各個面向的關係也不十分清楚。

有研究指出，有睡眠困擾的阿茲海默失智病患可能與特定基因如單胺氧化酶A(MAO-A)的變異型有關，但其確切作用機轉仍不清楚。另外睡眠干擾也可能是早期失智症的一種非認知症狀。

研究結論：

睡眠混亂會影響日常生活和疾病的預後，增添照護難度。而失智患者常合併睡眠障礙，進而惡化已受損之認知功能與生活品質。在各種睡眠問題中，包括太少和太多的睡眠，也可能和認知功能下降有關，但是失智病患的睡眠問題並非單一原因可以解釋。從文獻探討得知失智患者睡眠障礙與認知功能相互影響，進而加重失智症狀。醫護人員在照顧患者時，應針對睡眠障礙多方的分析，透過詳細病史的詢問，才能了解造成睡眠障礙之原因，以提供病患更周全適切的照護方式，進而提高照護品質。

關鍵字dementia、sleep disorder、cognitive、失智症、認知功能、睡眠障礙

Disclosure of Interest: None Declared

P123

Topic: Abstracts Submitted in Mandarin

輕度失智症老人於團體治療之工具性日常活動功能成效初探：以切膚之愛基金會瑞智學堂為例
L.-J. Chan [1], Y.-M. Chen [1], Y.-H. Wu [2]
[1]A Skin-Graft With Love Foundation, [2]Changhua Christian Hospital, Changhua City, Taiwan

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: 一、　　目 的
切膚之愛基金會自民國98年至101年辦理瑞智學堂，期望學堂團體帶領技巧能延緩輕度失智長輩退化，本研究探討輕度失智症老人於團體治療-瑞智學堂之IADL
(工具性日常活動量表)退化程度及原因，作為瑞智學堂持續推展及改進參考依據。
研究目的：
　　　1. 探討參加瑞智學堂長輩IADL退化程度。
　　　2. 探討長輩IADL退化可能因素。

二、研究方法
　　參加對象為輕度失智症長輩，1年有三梯次，每梯次10週，每週1.5小時，每次成員8-
10位，由一位Leader帶領，一位 co-leader協助，觀察員負責活動過程觀察。
　　本研究選取99年-101年，近
3年持續參加瑞智學堂之輕度失智症長輩，共9位，研究方法為彰化基督教醫院記憶門診所使用之IADL
(工具性日常活動量表)，包含居家雜物（準備食物、家事維持、清洗衣物）、必需之行動能力（購物、使用交通方式）、以及認知活動（使用電話能力、自行服藥能力、及處理財務能力）等八個評估項目（但男性不評準備食物、家事維持、清洗衣物等項），每一項分為三至五個等級，分數越高代表日常生活功能越差；於每梯次團體前後進行施測，共收集14次的前後測分數，分析步驟有二：1.將9位成員的每梯次前後測平均分數的平均值作曲線圖比較；2.依成員的分數統計，分為前(99年)中(100年)後期(101年)，算出各期個人的平均數。
三、結果
1.9位輕度失智症長輩，基本資料：
　（1）年齡：70-75歲 2位，76-80歲 2位，80-85歲 5位。
　（2）病因分類：阿茲海默型 5位，血管型3位，其它因素(癲癇)1位。
　（3）教育程度：不識字1人，國小6人，高中1人，大學1人。
　（4）診斷年限：7年1人(中風)，6年1人（癲癇），4年5人(1
　　　人中風，4人阿茲海默型)，3年2人（1人中風，1人阿茲
　　　海默型）。
　（5）白天有無陪伴：**有**陪伴7人，**無**陪伴2人。
2.
成員整體前後測趨勢圖表現，開始訓練後測平均值低於前測，但從第四、五梯起，分數持平，至第六、七梯次時，後測平均值稍高於前測，但不超過1分，整體趨勢分數是維持未退化。
3.
IADL前後測發現有2位分數明顯上升，從14升至25，發現日常生活功能變差，7位IADL分數維持，佔所有成員的77.8%。
四、結論
1.得知長輩參加瑞智學堂能延緩日常生活功能退化，可作為瑞智學堂續推展及改進依據。
2.因每週僅一次的課程，故於每次結束時請家屬參與，分享活動內容及長輩的反應，引導家屬回歸社區後能繼續延續與長輩互動。
3.從退化較明顯的2位成員中發現，白天獨居無人互動；7位白天皆有家人照顧，此可能影響IADL 退化的原因之一。
3.因每次招收人數有限，能持續參加學員亦不多，故樣本數小，未來擴大後可取得較多的樣本數，加入對照組作分析，可增加研究可信度。
4.本研究未考量可能的變項，如：平日家中生活安排、家屬照顧時間、關係等，可做為未來研究的方向。

Disclosure of Interest: None Declared

P124

Topic: Abstracts Submitted in Mandarin

家屬陪伴入住以協助失智症者入住機構之適應策略分享---以私立雙連安養中心失智症專區為例

C. P. Chen [1,]
[1] Suang-Lian Elderly Center, New Taipei City, Taiwan

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: 家屬陪伴入住以協助失智症者入住機構之適應策略分享
---以私立雙連安養中心失智症專區為例

雙連安養中心失智症照護專區，共可讓66位失智症者居住。在失智症者入住的初期，經常可見到其情緒上非常之不穩定，激動的要回家或是找尋自己的家人。通常需要一～二、三個禮拜甚至更久的時間，失智症者才會逐漸適應新的環境，而情緒的波動也才會漸漸地降低。常常可以看到失智症者從一開始的激烈抗爭到後來漸漸適應接受，過程中我們只能不斷的轉移其注意力，安撫他們，逐漸適應接受著個環境。

我們常在想，這過程中我們需要花多少的心力陪伴失智症者的入住適應，而他們的心路歷程又是甚麼，到底有沒有更好的適應策略？我們試著站在失智症者的位置，來體驗剛住進一個陌生的環境，周圍住著一群陌生的人，同時需要接受一些陌生人做一些很私密的身體照護，那樣會是甚麼樣的感覺？可能是恐懼、緊張、焦慮、害怕；如果家人沒多久就離開了，他們甚至會有憤怒與絕望的感覺，以為家人拋棄了他們。

來到一個新的地方，周遭環境如此的陌生，身邊好像沒有一個認識的人，對於失智症短期記憶比較不好，對於新的環境適應原本就慢，初期的適應，感覺每一天都像剛來的第一天，這樣的緊張恐懼對失智症者是何等的煎熬。也難怪他們會想回家，想要找自己的家人，希望焦躁不安的心可以平靜下來。

初期適應入住的策略有很多種，在此特別分享"初期家屬陪伴入住共同適應環境"的入住適應策略。在中心內另設有家屬陪伴房，在失智症者入住初期，會請家屬一同陪伴長者入住三～五天，甚至更久的時間。希望入住時，好像家屬陪伴失智症者外出旅行，居住在一家旅館當中。因此初期大部分時間都由家屬陪伴在身邊，一同餐與專區內的各項活動，生活上的協助初期大部分也都由家屬來協助完成，經過一段時間工作人員與失智症者建立比較有好信任的關係，照護上的工作在讓工作人員一同加入共同協助。當失智症者逐漸熟悉周遭的環境與同住的住民，同時與工作人員也逐漸建立起信任的關係，家屬再從主要協助者的腳色，慢慢抽離，由工作人員慢慢接手，讓整個入住過程能夠更加平和與順暢，失智症者也減少在入住初期所遭遇適應上的衝擊。

經由這樣方式的嘗試與實施，可以看到許多新入住的失智症者，用更短的時間與更平穩的情緒適應入住新的環境。工作人員在協助比較個別私密的身體照護時，失智症者的抗拒也會比較少，激烈性也比較低。而家人與失智症者間的關係也較少衝突發生。失智症者較能夠融入到專區的生活當中，用更符合他們需求的方式，重新建立新的生活模式。希望這樣的入住適應策略可以協助到更多需要入住機構的失智症者，更好與更快的適應機構新的環境。

Disclosure of Interest: None Declared

P125

Topic: Abstracts Submitted in Mandarin

THE PROCEDURE ESTABLISHMENT FOR NUTRITIONAL CARE IN DAY CARE CENTERS

Y. W. Guo [1,*]
[1]wise & shine nutrition consultanting center, Taipei City, Taiwan

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract: 聯合國世界衛生組織(WHO)對老人國(aging country)的定義為老年人口超過國家總人口之7%，而當老年人口跨越14%時則另稱為老化國家(aged country)。台灣在1994年跨越了WHO老年人口7%的門檻，正式邁入老人國家之林。於2002年底，我國65歲以上的老年人口已佔總人口8.9%。根據內政部截至2010年年底的最新統計，台灣65歲以上的老年人口數已高達248萬人，佔全台人口總數的10.7%。

目前在台灣，每20位六十五歲老人中，就有一位罹患失智症。台灣失智症協會推估，目前全台已有18萬的失智人口；以年齡為調查，發現在60歲以上，每當年齡增加5歲失智症盛行率便倍增，未來台灣平均每年將增加一萬名失智症患者，推估到民國145年，將有近62萬的失智人口。台灣因應國際的老人照護政策，政府亦積極推動「去機構化」，將機構之功能擴散至社區中，使高齡者能生活在自己住慣的社區中接受「社區式模式」的照顧。

社區式長期照顧服務包括：居家服務、居家護理、日間照顧及社區關懷據點。其中「日間照顧」（Day care）的概念產生，其起源於托兒所的想法，只是對象換成老人、身心障礙及行動能力失衡者，亦可稱為老人幼稚園或者是托老所。在中心裡提供老人餐食照顧及活動參與。目的乃在改善或維持服務使用者的身心功能，提供團體的支持與互動，延遲或避免機構化，並提供老年人社會互動及休閒、復健訓練、人際溝通技巧建立及健康的監控與維持，同時提供家庭照顧者喘息的休息機會。

日間照顧中心(簡稱日照中心)的人力配置要求雖比機構式嚴格，但營養師並非為日照中心的必要人力配置，故多數中心皆未聘用營養師。許多文獻指出營養不良與死亡、罹病、認知功能不全、健康相關的生活品質等皆有相當地密切關係。故日照中心聘用營養專業人士是不容忽視的。

日照中心僅供午餐與點心，並非為全天所需的飲食，且失智長者常見的飲食行為問題，有忘記進食過繼續不斷的攝食造成體重過重或肥胖；不明原因所致食慾不佳導致攝取不足，或因病情變化口含食物不吞下亦不吐出；必須使用固定的器具用餐，甚至拒絕食物等飲行為問題導致體重逐漸減輕等狀態；若同時罹患疾病，更可能有血糖、血壓值控制不易的情形。如果營養師只照顧長者在中心的用餐，很難達到完整的營養照顧，營養師必須將觸角伸至家庭，透過以電話與家屬溝通，或設計連繫單以書面方式讓家屬能了解長輩於中心的進食情況；必要時給予飲食紀錄單，記錄個案於家中的飲食狀態，包括食物種類、份量、烹調方式，採勾選的方式，方便家屬填寫與記錄。透過雙向的溝通，為長者做完整的評估，並提供家屬適合的在家用餐改善建議，為長者營造一個完整的營養照顧。

營養師於日照中心的工作內容，除例行針對長者執行營養評估、飲食設計、每月非計畫體重變化之監測以及廚房衛生管理之營養業務外，盼能以長輩為主的營養照護概念，建立個別化、彈性化、簡單化、合作性之營養照顧流程，進而將營養師於日照中心的功能發揮至極大化。

Disclosure of Interest: None Declared

P126

Topic: Abstracts Submitted in Mandarin

以人為中心的照顧~懷舊街景彩繪走道於機構中失智長者之照護經驗
L.-L. Wu [1,], M.-C. Lin [2]
[1]Department of Nursing, St. Joseph Home, Hukou Township, [2]Department of Nursing, Cardinal Tien College of Healthcare & Management, New Taipei City, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific
Objectives:
依據parker於1995年提出，懷舊可提供長者重要的持續感並促進其適應。對於居住於機構中的失智長者經常走錯房間的狀況下，如何幫助他們容易找到回房間的路，使他們容易分辨自己所居住的環境且能適應它則顯十分重要。本研究目的在於增進失智長者對環境的熟悉，降低焦慮。
Methods:
分析住民過去生活背景、工作經驗、熟悉環境及共同回憶之場景，由工作人員與失智住民透過懷舊活動討論出街景主題，並連結失智住民之家屬及志工共50位，以及7～8位失智長輩隨興參與，總共為時八小時於失智住民房間外走道牆壁上進行懷舊街景彩繪，分別在四個區塊的走道畫上『柑仔店』、『戲棚下』、『榕樹下』及『海邊仔』等四個主題。
Results:
照顧人員發現在懷舊的環境下，平時容易走錯房間的失智長輩，藉著懷舊走道找回自己的房間，長輩說：「我是住在『柑仔店』那一邊…(手指著有棒棒糖的房間)，我想回房間睡覺了…」、「我是”討海人”，住在『海邊仔』，以前的年輕人都在海上捕魚，我補了大半輩子的魚，現在要休息了…(說著說著往自己的房間方向走去)」。

而有更多長輩會聚在走道前述說他們的過往記憶：「我當初就是在海邊認識我現在的”牽手”，第一次看到她，我就知道她是我未來的另一半…(在『海邊仔』)」、「想當初我們幾個老朋友總是聚在一起看”黑白郎君”…當年的鄧麗君歌聲真是好聽，我們很喜歡…以錢賺錢不容易，那時一張電影票要8到10塊錢，哪捨得花錢看電影啊…(在『戲棚下』)」、「坐在樹仔下喫茶開講最快樂啦…每一次坐在那邊下象棋，沒有一個人會是我的對手啦…(在『榕樹下』)」、「到海邊釣一尾大魚，拿來配這邊的米酒頭，味道最讚…晚上喝幾杯米酒頭，一覽就到天亮囉…(在『柑仔店』)」。

除此之外，在失智長輩的記憶中，戲棚下、廟會或戲院旁就找得到廁所，因此特別將『戲棚下』的街景安排在有公共廁所那一區的走道，失智長輩會習慣的沿著『戲棚下』的走道走進廁所方便；另外有位失智的爺爺在家屬來訪時興奮的拉著孫仔的手，佇立在彩繪的走道上，述說著在牆壁上泡茶的那個人就是阿公啦…頓時，家人的笑聲不斷，家屬也表示營造懷舊環境的確讓長輩們有觸動往事的情懷，長輩們的話語明顯變多了，家屬同時能輕鬆的”看圖說故事”，和長輩們聊聊過往，彼此的心情上更顯得愉悅、開心。
Conclusion:
懷舊走道的設計，使失智長輩容易找到自己所居住的房間或公共廁所，失智住民間社交互動的頻率相對增加，長輩在熟悉的環境中容易維持穩定的情緒，同時家屬們也給予正向的肯定及鼓勵，懷舊街景彩繪對機構失智長輩有正面的意義。

Disclosure of Interest: None Declared

Topic: Abstracts Submitted in Mandarin

失智症照護實務之營養師帶領備餐活動經驗分享-以台北某團體家屋為例

C. Y. Ma [1,], H.-Y. Chen [1]
[1]wise & shine nutrition consultanting center, Taipei City, Taiwan

Are you submitting a scientific or non scientific abstract?: Non-Scientific
Abstract:

　　台灣的失智老人截至去年底已超過17萬人，依據經建會「中華民國2012年至2060年人口推計」，再加上社區盛行率及身心障礙人口比推估，台灣的失智人口到2060年時將逼近80萬人。現有長期照護多針對失能者為主，隨著高齡化社會快速發展，失智長者之照護需求將因人數增加而增加。

失智症除了記憶力的減退，還會影響到其他認知功能，然而失智者多數仍保有相當程度的行動能力，在照顧上應有所不同，以因應失智者之需求。目前針對失智症的治療除了藥物治療以外，也可以藉由環境的調整、活動的安排、認知訓練、懷舊療法等非藥物照顧方法，來改善失智者精神行為症狀。

失智症對於原本熟悉的事務常會喪失了既定的步驟，而難以順利完成。在團體家屋服務過程中發現有些長輩原在家中非常喜歡烹調的工作。因而希望藉由這些以前每天熟悉的備餐活動，勾起長者回憶，討論並分享過往的事情及經驗，經由營養師專業角度來考量其咀嚼功能退化、手部動作靈活度變差等狀況來挑選合適的食材，還須針對失智長者問題行為發生狀況隨時調整備餐活動內容，以符合長輩身心功能，增加成功機率，重拾備餐的樂趣，也能品嘗自製食物的歡愉感。

　　活動的進行我們先邀請長者參與，以不勉強，但會用誘導及鼓勵之邀請方式為原則。經過1~2次活動的觀察後，我們依據長者手部的功能及心智功能，將備餐的工作分解，對於無法進行複雜工作的長者給予單一且重複性的工作，對於功能較好的長輩給予一步一步明確的指示，使其完成工作，每人安排適合的洗切煮不同動作，大家按部就班合力完成餐點製備。經多次活動後，了解每位長者常拒絕參加的原因，有些自尊心高或眼力不好的長者，提供如撥蛋殼,削皮,挑葉菜等較簡易的工作。有些認知較為混亂但手功能良好的長者,需更費心的在旁以實際操作示範及口頭給予指令讓其認知及手功能可接上軌道以完成工作。原本在旁邊觀看的長者也因我們對她們的了解增加，而給予不同的邀請方式及提供合適的工作內容，漸漸的可慢慢一起加入活動。功能好的長輩拿起工具做得非常精準，雖然體力較差，但經由協助甚至可以獨力完成一道菜餚。

本活動將持續進行，以觀察長者參與率、手部功能、活動專注力、人際互動況狀與問題行為發生頻率作為評估活動之成效，盼藉由餐飲活動訓練能使長者有豐富之感官刺激，增加語言表達、人際互動、改善情緒，延緩認知功能退化及減少焦躁不安、遊走的行為發生，進而增加失智者生活品質及延緩失智者病程的惡化。

Disclosure of Interest: None Declared

P128

Topic: Abstracts Submitted in Mandarin

NURSING EXPERIENCE OF A DEMENTIA ELDERLY WITH HOARDING BEHAVIOR AND THE CAREGIVER

S.-H. Hsieh [1,*], P.-M. Wei [1], Y.-H. Lin [1], H.-L. Huang [2], Y.-I. Shyu [3], W.-C. Hsu [1]
[1]Dementia Center, Chang Gung Memorial Hospital, [2]Department of Gerontological Care and Management, Chang Gung University of Science and Technology, [3]School of Medicine, Chang Gung University, TAOYUAN, Taiwan

Are you submitting a scientific or non scientific abstract?: Non-Scientific

Abstract:

失智症老人除了記憶力減退之外，其精神行為問題更是讓家屬照顧者感到挫折與無力感，而在台灣約有70%的失智症老人合併精神行為症狀，包括精神病症狀、行為障礙及情感病徵。本文描述一位82歲男性失智症老人，因有病態收集等多項行為問題導致家屬照顧者過度負荷，運用壓力閾值漸進降低模式(Progressively Lowered Stress Threshold Model; PLST model)並與家屬照顧者建立合作友伴關係，協助家屬照顧者改善失智老人的行為問題，減輕照顧壓力。個案於2010年開始記憶力嚴重退化，交代的事一下子就忘了，告知門診、身體檢查、及拜拜日子會忘記，反覆確認錯誤時日，堅持己見，固執且易怒。常常會偷鄰居及公共自來水和廁所衛生紙，將家中鍋碗瓢盆，凡是可用來裝東西的容器，都拿來收集雨水、尿水、及社區池塘的水，導致家中無鍋煮飯，到處擺滿瓶瓶罐罐，蚊蟲孳生，惡臭撲鼻，家中十幾支電蚊拍、電蚊燈每週可捕殺上百隻蚊子，造成家中成員被叮咬，困擾不已。個案並隨地小便於冰箱前、廚房、陽台、門前之花園，造成惡臭，甚至連環保局都因此到社區進行環境清潔評估。家屬照顧者不堪其擾，且因不瞭解疾病病程及症狀，所以不知如何處理精神行為問題，導致身心過度負荷，幾近崩潰，經由內科醫師轉介到失智症中心尋求幫助。失智症中心團隊提供完整之評估，由於照顧問題複雜，衛教師予以收案，提供護理評估與衛教共五次，居家訪視一次，電話訪談兩次，以會談、評估、觀察、收集資料之方式，分析及確立個案護理問題，與家屬照顧者一起擬定護理目標及措施，並召開失智症中心團隊會議，進行個案討論。

由於此個案居住於家中由家人提供照顧，且其行為問題與環境壓力源有極大相關，因此本個案報告之評估及介入措施參考兩個已有實證依據之概念模式，第一個參考理論為壓力閾值漸進降低模式，依其概念中藉由減少外在環境壓力以促進適應為原則，安排家庭訪視，衛教師與家屬照顧者針對失智症個案行為問題、導因、居家環境安全及壓力源進行評估，教導家屬照顧者經由修正環境過度壓力，以減少行為問題之發生。此模式能提高家屬照顧者對失智症的照顧準備度及問題處理能力，加強主要照顧者增加處理行為問題之能力，因而減輕其家屬照顧者負荷。另一重要依據為partnership概念，強調家屬照顧者與衛教師之間的合作友伴關係，衛教師需先瞭解家庭之照顧經驗並與專業知識結合，提供個別性措施及多重策略使家屬能選擇最適合之照護措施。此外，失智中心並提供相關社會資源，鼓勵家屬參與失智症中心舉辦之家屬照護訓練班、心靈咖啡坊、瑞智學堂等相關服務，使失智症個案、家屬照顧者及家庭得到完整的照顧。

希望此護理經驗及理論依據能提供專業照顧者在照護居家失智個案及家屬照顧者時之參考，協助家屬照顧者增加行為問題處理之能力，改善照護品質，並減輕照顧者的壓力及負荷。

Disclosure of Interest: None Declared

P129

探討失智症專區照顧服務員的負擔及壓力
C. Y. hsu [1,]
[1]Student, 新北市, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific
Objectives:
隨著台灣社會人口老化的趨勢，據統計，2011年老年人口已達10.8%，失智症人口也達至十九萬人，因此長期照護中，照護需求對於失智者的照護更具指標意義。其中，照顧服務員扮演了舉足輕重之角色。失智症專區內的照顧服務員為第一線照顧者，其壓力負擔則成為是否可以提供良好照護的重要影響因素。本文將探討失智症專區的照顧服務員之壓力負擔。
Methods:
針對某失智症專區的照顧服務員進行相關調查及分析。調查以自擬結構式問卷方式收集資料，利用台灣勞工委員會的「簡易壓力量表」及華人版「**Zarit**負擔量表」與專區內個案的「日常生活評估量表」、「簡易智能量表」及「臨床失智評估量表」對機構內66位住民及38位照顧服務員進行訪查。並利用SPSS 12.0中文版進行統計分析。
Results:
據統計分析顯示，照顧服務員對於不同服務樓層對壓力負擔及心理健康指數間具有顯著性差異(P=0.003及P=0.042);然而對於簡易壓力量表的其他項目並無顯著差異(P>0.05)。
Conclusion:
照顧服務員的壓力來源眾多，機構內應定期針對照顧服務員的壓力負擔作一調查，並針對壓力源做適當的紓壓，以減少照顧服務員對工作的倦怠，提升照護品質。

References: 1. Yuki Miyamoto,Hisateru Tachimori&Hiroto Ito(2010).Formal Caregiver Burden in Dementia: Impact of Behavioral and Psychological Symptoms of Dementia and Activities of Daily Living. *Geriatric Nursing,* 2010;31:246-253
2. Sherry H. Pomeroy, Yvonne Scherer,Viliporn Runkawatt, Wipa Iamsumang, Jennifer Lindemann,&Barbara Resnick(2011). PersoneEnvironment Fit and Functioning Among Older Adults in a Long-Term Care Setting. *Geriatric Nursing*, 2011;32:,368-378
3. Lazarus, R. S., & Cohen, J. B. (1977). "Environmental stress".In I. Altman and J. F. Wohlwill (Eds.), *Human behavior and environment (Vol 2)*. New York: Plenum.
4.張嘉秀、林昱宏、葉淑惠、林麗味（2010）。Managing problem behaviors in cognitively impaired older people: The competence and preparedness of healthcare providers in long-term care facilities。*The Journal of Nursing Research*，*18*（3），164-173。
5.黃斯聖（2008）。*老年失智症之照顧者的負荷及憂鬱的相關因素探討*。未出版之，中山醫學大學中山醫學大學醫學研究所學位論文。
6.傅中玲(2008)。台灣失智症現況。*台灣老年醫學暨老年學雜誌* 2008；3(3)：169-181。
7.翁福居、林財源（2004）。失智概念認知調查與老人團體照護模式之探討。*身心障礙研究*，*2*（1），56-67。
8.高潔純（2004）。機構失智長者的問題行為。*長期照護雜誌*，*8*（2），251-261。
9.許佩蓉、黃耀榮、林健群、陳永煌、羅慶征、李世代（2004）。居住型態對照護機構內失智症患者問題行為之可能影響。*臺灣家庭醫學雜誌*，*14*（1），13-24。
10.鄭冠瑾、邱逸榛、李佳琳、廖順奎、李淑花（2011）。家庭照顧者壓力感受與壓力生理指標相關性之探討。*護理雜誌*，*58*（3），43-52。
11. 林冠宏（2006）．阿茲海默氏症。慈濟醫學雜誌，*18*（5S），39-48。
12. 國家政策研究基金會
　網址:http://www.npf.org.tw/post/3/10760
12. 世界衛生組織　網址:http://www.who.int/en/
13.邱麗蓉、謝佳容、蔡欣玲(2007)。失智症病患主要照護者的壓力源、評價和因應行為與健康之相關性探討。*精神衛生護理雜誌*，*2*(2)，31-44。

Disclosure of Interest: None Declared

P130

Topic: Oral Care

FACTORS RELATED TO ORAL HYGIENE CARE BEHAVIORS AMONGST INSTITUTIONAL NURSING ASSISTANTS FOR PEOPLE LIVING WITH DEMENTIA

H.-C. Wu [1,], M.-D. Lee [2], J.-C. Wang [1], M.-C. Lin [3]
[1]Department of Nursing, St. Joseph Home, Hukou Township, [2]Graduate Institute of Long-term care, National Taipei University of Nursing and Health Sciences, Taipei City, [3]Department of Nursing, Cardinal Tien College of Healthcare & Management, New Taipei City, Taiwan

Are you submitting a scientific or non scientific abstract?: Scientific

Objectives: This research aimed to determine how oral hygiene care is currently performed by nursing assistants for people with dementia, while also analyzing other related factors and behaviors.

Methods: A cross-sectional study was applied and data were collected through a questionnaire survey completed by 109 nursing assistants responsible for the care of people with dementia in five long-term caring institutes in the north district equipped with special dementia care facilities.

Results: The study the care provided by institutional nursing assistants with regard to the oral hygiene of people living with dementia is of a medium-good level (Mean = 61.63; SD = 8.33), whereas their knowledge of oral hygiene remains good (Mean = 8; SD = 1.6), and their attitude toward oral hygiene is of a medium-high level (Mean = 30.53; SD = 4.26). Among factors which influence oral hygiene behaviors are the sufficiency of time to perform oral nursing care, the degree of positive attitude toward oral nursing care and the degree to which nursing assistants are troubled by the behavior of the person living with dementia.

Conclusion: While oral hygiene maintenance is very important to the health of residents with dementia it is the attitude and behavioral problem-solving ability of oral care behaviour on nursing assistants that is significant in its delivery.
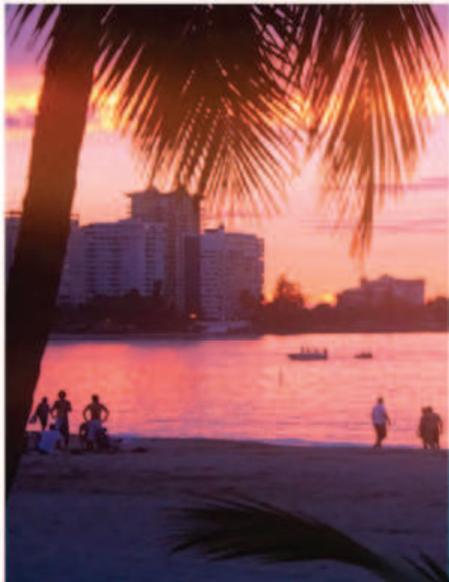
Disclosure of Interest: None Declared