PL 1
Sam Gandy

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

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

PL 2
Frank Jessen

The field of neuroimaging in Alzheimer’s Disease (AD) has drastically evolved over the last two decades. It has contributed substantially to both diagnosing AD and understanding the pathological progression of the disease. In the field of magnetic resonance (MR) highly sophisticated strategies for structural data analysis have been created that enable investigator independent early disease recognition and tracking. In addition new MR application allow assessments of white matter integrity (diffusion tensor imaging, DTI), biochemical brain tissue composition (MR-spectroscopy), brain function at rest and during cognitive task (resting state and functional MRIs) and contrast media free perfusion measures (arterial spin labelling, ASL). All of these techniques provide information on different aspects of brain function and are currently applied to improve diagnosis and the understanding of pathophysiological processes. The other field of major advances in neuroimaging of AD is positron emission tomography (PET). The well established fluorodeoxyglucose (FDG-PET) is a very sensitive indicator for early synaptic dysfunction. The novel tracers for amyloid deposition, such as Pittsburgh Compound B (PiB-PET), visualize the pathological hallmark of AD. Both are highly valuable markers for early disease recognition. Applied in combination, in longitudinal studies, these two markers have provided improved insight into the temporal dynamics of AD.

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

PL 3
Pieter Jelle Visser

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

PL 4
Bengt Winblad

Ongoing clinical trials in Alzheimer disease Alzheimer disease (AD) is the most common cause of dementia in advanced age. Currently available medications improve AD symptoms, and development of disease-modifying drugs is a very active area of research, which includes cholinergic, anti-amyloid compounds, drugs targeting tau-protein or mitochondria, neurotrophins and other therapeutic approaches. The amyloid cascade hypothesis dominates current drug development strategies, but whether Aβ is more pathognomonic than pathogenetic is not yet clear, and so is the therapeutic role of Aβ removal. Identification of effective disease-modifying drugs will benefit from understanding the interplay between mechanisms causing neurodegeneration in AD. Combined therapy could me a more effective strategy to halt AD progression. Solving methodological problems in clinical trials on AD - including use of standardized diagnostic criteria able to identify homogeneous group of patients, appropriate treatment duration and measures of disease-modifying effects - will help finding a cure for AD.

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

PL 5
Paraskevi Sakka

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

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

In 2007, together with 20 Associations from major cities around Greece the Greek Alzheimer’s Federation was founded. On February 2009, Athens Alzheimer’s Association launched the “Greek Alzheimer’s Initiative”, a signature - collection campaign considered to be the first step towards a national action plan against Alzheimer’s disease. We managed to secure more than 12,000 signatures which were presented to the Greek Minister of Health by people with dementia on Alzheimer’s Day, 21st of September 2009.
PL 6  
Jean Georges

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

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

PL 7  
Pekka Lane

**IMPORTANCE OF PLANNING – THE EUROPEAN PERSPECTIVE**

P. Laine*

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

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

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

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

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

PL 8  
Esme Moniz-Cook

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

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

PL 9  
Bob Woods

Psychological therapies have been used with people with dementia for at least 50 years, aiming to improve or maintain cognition, functional abilities, quality of life and adjustment and to reduce distress, anxiety, depression and behavioural difficulties. In recent years, some interventions have been subject to more rigorous evaluation, and there are already some encouraging findings, for example in relation to cognitive stimulation and behavioural approaches. Effect sizes comparable with those associated with pharmacological therapies have been reported, with less adverse effects. However, it is important to continue to ask ‘what works for whom’. No approach will be appropriate for, or effective with, the whole range of individuals who experience a dementia. Interventions need to be tailored and targeted to the individual in his / her unique circumstances and context. The drive for ‘evidence-based practice’ must not be allowed to stifle creativity in the development and application of psychological interventions that can maintain social relationships and quality of life.
PL 10
Barry Reisberg

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

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

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

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

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

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

PL 11
Paul Francis

BRAIN DONATION - THE EXPERIENCE OF BRAINS FOR DEMENTIA RESEARCH
P. T. Francis
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Objectives and Study: The majority of scientific advances in our understanding of Alzheimer’s disease (AD) have resulted from study of post-mortem human tissue at some stage. There is now a lack of material suitable for the new techniques and in particular from people without dementia. Brains for dementia research is a new £2.3M initiative by UK Alzheimer Society and Alzheimer Research Trust to address this problem and help discover new treatments and eventually find a cure.

Methods: Four existing brain banks in London, Manchester, Oxford and Newcastle have joined the BDR network and we have established recruitment centres in these cities plus Cardiff to consent and assess people over 65 with and without dementia with standard tools. The co-ordinating centre and the brain banks have been working together to develop standard operating procedures for brain collection and processing.

Results: Publicity within the Alzheimer Society and Alzheimer Research Trust have resulted in over 350 new enquires about brain donation with the majority of these from people without dementia.

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

PL 12
Angela Clayton-Turner

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

PL 13
Rose-Marie Dröes

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

PL 14
Sadao Katayama

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

In Japan, Family Associations have been tackling to coordinate medical care, welfare service and government so that all of concerned can jointly set a future of well being for people with dementia and their family.
The public has become increasingly aware of research suggesting that food and nutrition can make a difference in their risk of developing Alzheimer’s disease, vascular dementia and other forms of cognitive decline.

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

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

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

References:

SS3A European experience on the use of generic medication in psychiatry

Prof. Dr. Lutz Frölich
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Zentralinstitut für Seelische Gesundheit
Medizinische Fakultät Mannheim, Universität Heidelberg

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

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

K. Wolff-Ostermann1, T. Facetter2, M. Worch1, J. Nordmann1, J. Grässel1, J. Wolff1, S. Meyer1
1, Anne Salomon University of Applied Sciences, Institut für Medizinische Soziologie, Charité Universitätsmedizin Berlin, Berlin, Germany

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

Nevertheless, research to back this claim is widely lacking.

Methods: Using a longitudinal design, new residents of small-scale living arrangements suffering from dementia (MMSE < 24) were surveyed for one year. They were assessed at the time of moving as well as six and twelve months later. Quality of life was measured using the Quality of Life Index (QoL-6D). Measures for physical and psychological health (Mannesmann Quality of Life Index (QoL)).

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

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

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

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

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

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

Results: There is a significant difference between the quality of well-being in small house units and nursing homes for the elderly. In case studies you find that the group WISH-Store (well-being) between traditional nursing homes and small house units is 0.7 to 1.2 but the well-being in small house units is 1.4 and 2.2. The individual WISH-Store is between 0.4 and 1.5 and between 1.1 and 2.7 in small house units.

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

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

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2University, Maastricht, Netherlands

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

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

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

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

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

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

In the era of ageing population in most European countries and the rise in health care costs associated with this, generic medicines allow patients to get access to safe, effective, high-quality medicine at 20%-80% of the price of branded originator medicines. In this way, generics support the sustainability of health care provision and contribute to controlling pharmaceutical expenditure.

In psychiatry, innovative medicines against depression and psychosis, developed in recent years, have become generic by now and this has broadened their availability to the patients. Especially for diseases with high prevalence, e.g. depression and dementia, the use of generic medication improves the medical care for the general population. In addition, governmental agencies like NICE or the German KGWIO use generic medicines to establish standards of costbenefit ratios as a reference point to compare originator medication. This competition from generic medicines also forces originator companies to develop more innovative medicines and to reduce price on off-patent originator medicines thus generating additional savings to patients. Savings on the pharmaceutical budget, in turn, enable governments to reburse newer, more expensive medicines. Thus, generic medication not only improves the medical care on a population level, but also drives the development of medical innovations; by this contributing to the development of medicine.
OC005 THE RELATIONSHIP OF ADO AND COGNITIVE PERFORMANCE IN GREEK CYPRiot ADULTS: A PRELIMINARY STUDY

02. Ageing and dementia

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

Methods: Subjects: Participants were 84 Greek-Cypriot men and women, between 55 to 85 years (a = 69 ± 6.5) with average education 9.5 years (sd = 3.9) and average MMSE 29.2 (sd = 1.8).

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

Results: Statistical analyses revealed a negative relationship (r = .91) between levels of cognitive performance and age. In addition, the analyses identified significant relationships between years of education and cognitive abilities. Participants in the higher education groups (13 years and above) scored significantly higher (a = .25) on cognitive tests than individuals with lower education levels. The presence of decline on the AD8 was negatively related to performance on other cognitive tests such as the MMSE and the HVLT. Finally, education was significantly related to fewer symptoms reported on AD8.

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

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

02. Ageing and dementia

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

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

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

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

OC009 PROGNOSTIC FACTORS FOR WEIGHT LOSS OVER A ONE YEAR PERIOD IN PATIENTS RECENTLY DIAGNOSED WITH MILD ALZHEIMER’S DISEASE
02. Ageing and dementia
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Objectives and Study: The aim of the study was, with a prospective design, to identify prognostic factors for weight loss in patients recently diagnosed with mild AD, with special emphasis on the patients’ social participation and living arrangements.

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

Results: The mean age at inclusion was 76.1 (range 54-92), 66 patients (34.6%) lost more than 4% of body weight during the first 12 months of the study. The logistic regression showed that an increase of one baseline body mass index (BMI) point significantly increases the odds of weight loss by 6%. Furthermore, the results suggested that for men, living alone was a risk factor for losing weight (living alone OR=2.4 vs. living with someone OR=1.0), while for women there was actually a higher risk associated with living with somebody (living alone OR=1.9 vs. living with someone OR=2.7).

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

OC011 ALZHEIMER’S DISEASE: THE CHALLENGES OF MANAGING MULTI-MORBIDITY
02. Ageing and dementia
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Objectives and Study: The management of Alzheimer’s Disease along with other long term conditions, including cardio- and cardiovascular disease, depression, diabetes, arthritis, and cancer creates particular challenges for health care systems, practitioners, caregivers, and individuals with Alzheimer’s Disease. This presentation has three principal objectives: (1) To examine the evidence-base for clinical co-management of Alzheimer’s Disease alongside other long term conditions; (2) to identify methodological challenges in studying multi-morbidity; and (3) to outline how health care systems and practitioners may respond when facing multi-morbidity.

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

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

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

OC010 RISK FACTORS OF RAPID COGNITIVE DECLINE (RCD) OF DEMENTIA IN A PROSPECTIVE STUDY: 3 YEARS FOLLOW-UP
02. Ageing and dementia
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Objectives and Study: Dementia is characterized by marked interindividual differences in the rate of cognitive decline. This variability probably implicates different factors including ageing, associated- and non-associated factors. Previous studies found that extrapyramidal and psychotic symptoms, cardio-vascular risk factors and denutrition were associated with RCD. Thus, the aim of this study was to assess risk factors of RCD in dementia of the elderly.

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

Results: Of 392 included patients, 244 (62.2%) suffered from Alzheimer’s disease, 93 (23.7%) from mixed dementia, 12 (3.1%) from dementia with Lewy bodies, 9 (2.3%) from Parkinson’s disease related dementia, 8 (1.5%) from progressive primary amyasia, 6 (1.5%) from subcortical dementia, 5 (1.3%) from frontotemporal dementia and 17 dementias (4.3%) had unknown etiology. The mean age at diagnosis was 81.1 ± 9.9 years and 83.1% were women. 122 patients (31.1%) showed RCD. The factors significantly associated with RCD were: denutrition (OR, 2.3 [95% CI, 1.2 – 4.4], p=0.0133), psychotic symptoms (OR, 1.9 [95% CI, 1.1 – 3.3], p=0.0227) and depression (OR, 1.7 [95% CI, 1.1 – 2.7], p=0.0243).

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

OC012 DEMENTIA KNOWLEDGE AMONG HEALTH WORKERS AND OTHER ADULTS IN A SLOVENIAN AREA
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Objectives and Study: Early recognition of dementia symptoms promotes adequate help-seeking and increases early identification and treatment of dementia. The aim of this study was to determine how much Slovenian health workers and other adults know about symptoms of dementia, and if they want more information about dementia.

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

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

Conclusions: In spite of small sample, this study demonstrated that efforts to increase knowledge about dementia symptoms should be expanded, with special attention to a gradual loss of skills needed to carry out daily activities. Improved recognition of dementia symptoms will promote adequate help-seeking behaviors and will increase early identification and treatment of dementia.
OC012B  FREQUENCY AND CAUSES OF EARLY-ONSET DEMENTIA IN A TERTIARY REFERRAL CENTER IN ATHENS

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

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

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

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

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

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

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

Results: The mini-mental state examination (MMSE) score of the 36 tenants was 6.7±5.8. Physical Activity of Daily Living (ADL) was assessed by 1 (independent), 2 (dependent) scoring on 8 items (bathing, dressing, personal grooming, toileting, continence, transferring, walking and eating). The median values for number of items of score 1-4 in each tenant were 0, 3 and 3, respectively. The numbers of death, evacuation to hospital, and deterioration in cognitive function (>3 score in MMSE) in the last 1 year were 0, 3 and 1, respectively. ADL became worse (>2 items) in the 6 tenants, in contrast improved (>2 items) in the other 6 tenants.

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

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

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Objectives and Study: Partnership approaches in healthcare that recognize and embrace the unique knowledge-bases of all involved in care, including persons with illness or disability, their family members, and professionals, are critical to meeting the needs of individuals and their families. Nonetheless, partnership approaches in dementia care that actively include persons with dementia but their care partners, triggering personal and social transformation. More specifically, these approaches involve breaking the silence and reducing the stigma associated with dementia, ensuring the highest quality of life for those experiencing it.

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

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

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

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

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

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

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

Conclusions: Conclusions and recommendations for whom and how to use GPS will be discussed.
OC016 ITSC APPLICATIONS IN THE MULTIFACTORIAL ATTEMPT OF PHYSICALLY AND/OR COGNITIVELY DISABLED ELDERLY AT HOME

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

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

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

Conclusions: The development of AT and AmI is one of the most suitable answers to global aging and its medical and economical challenges. AT and AmI impact lies on the creation of tools that will improve the quality of life and autonomy of the elderly and disabled people, often combining cognitive and physical impairments, the improvement of the tools of their evaluation and monitoring, the definition of their needs and impairment profiles, useful for the elaboration of innovative forms of agent-based artifacts that will enhance the autonomy of the target user group in their daily life.

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

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

Dementia is generally considered as rapidly progressive (RAPID PROGRESSIVE DEMENTIA (RPD)), in cases with overt cognitive impairment, established within months. Data about the relative frequency of underlying diseases in cases of RPD are few and extremely variable, depending on the clinical setting. We examined the relative frequency of the underlying causes of RPD, in a university tertiary referral center, in Athens. A series of consecutive patients presenting with RPD in a 3-year period was included. All patients received a comprehensive clinical, imaging, and laboratory evaluation. Of a total of 279 patients hospitalized for dementia diagnosis, 68 patients had RPD (37 males and 31 females). Mean age at onset ±SD was 65.5±10.0. The most common cause of RPD was secondary dementias, accounting for 18 cases (26.5%). Alzheimer disease and frontotemporal dementia were almost equally represented, accounting for 12 (17.6%) and 11 (16.2%) cases, respectively. Vascular dementia, Creutzfeldt-Jakob disease, and various neurodegenerative diseases accounted for 9 cases each (13.2%). In a tertiary referral center, secondary dementias represented the most frequent cause of cases presenting with RPD. As a substantial number of these cases are potentially treatable, our finding reconfirms and underscores the importance of an exhaustive evaluation in any case presenting with RPD.
OC021 THE EXPERIENCES OF RADIOPHARMACEUTICALS FOR ALZHEIMER’S DISEASE IN TAIWAN
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Objectives and Study: Alzheimer’s disease (AD) is one of the epidemic neurodegenerative disorder-affecting millions of elders. Numbers of dystrophic neuritis has correlated with severity of dementia been associated with fibrillar A-beta (beta-amyloid). As serial plaques (GPs) and neurofibrillary tangles (NFTs) are hallmarks in AD, histological dysana biomarker for mapping A-beta, like [18F]FDGDP and [123I]IMPY, showed the superiority characteristics.

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

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

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

OC022 VALIDATION OF A NOVEL BLOOD TEST FOR THE EARLY DETECTION OF ALZHEIMER’S DISEASE - CHALLENGES WITH AN ‘IMPERFECT GOLD STANDARD’
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Objectives and Study: Early and accurate detection of Alzheimer’s disease (AD) is critical for implementing active management strategies which may delay the onset of the most debilitating symptoms of AD. Our objective was to develop a blood test (ADtest®) that can be used to aid the early diagnosis of AD.

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

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

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

OC023 IMPROVING GENERAL PRACTICE DIAGNOSIS OF DEMENTIA
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Objectives and Study: Screening for cognitive impairment by primary care physicians (PCPs, general practitioners, GPs), while controversial, has been recommended as routine for targeted minor cognitive decline which are clinically the most difficult cases to diagnose.

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

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

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

OC024 INTRANASAL DELIVERY OF INSULIN FOR THE RESTORATION OF MEMORY SIGNALLING IN ALZHEIMER DISEASE
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Objectives and Study: Alzheimer’s disease (AD) is characterized by marked atrophy of the cerebral cortex. The objective of present research is to determine the therapeutic potential of nano-carriers for delivering insulin into the brain, employing a non-invasive approach (intranasal delivery). In this line, the present work conceives the formulation, optimization, encapsulation and in vitro release profile of Insulin from Plain PLGA and PEGylated PLGA nanoparticles.

Methods: PEG-PLGA copolymer has been synthesized and characterized by IR, NMR, and Mass spectrometry. Plain PLGA and PEGylated PLGA nanoparticles were formulated by double emulsification method. The size of optimized Plain and PEGylated nanoparticles were found to be 130±2.16 and 286±3.24, nm, respectively.

Results: To our best of knowledge, this is first ever work that reports the optimization of nanoparticle formulation taking three types of surfactant (Poly vinyl alcohol, PVA, Tween-20 and Tween-80) as one of formulation variables, along with stirring rate and entrapment efficiency. Outcomes suggested Tween-80 to be the best surfactant for nanoparticle formulation, wherein the parent PLGA systems showed an entrapment of 37.78±0.91%, as opposed to 31.18±3.38% and 28.45±2.97% with Tween-20 and PVA, respectively. PEGylation of systems resulted in further enhancement in entrapment efficiencies, which showed 59.78±2.97, 44.97±3.74 and 29.78±3.78, %, entrapment with Tween-80, Tween-20 and PVA, respectively.

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

OC02a CRYSTAL STRUCTURES OF JNK-INTERACTING PROTEIN 1 AND KINESEIN-1 LIGHT CHAIN SUBUNIT: INSIGHTS INTO MOLECULAR INTERACTIONS WITH AMYLOID PRECURSOR PROTEIN

8.0: Future treatments in Alzheimer’s disease


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

Methods: x-ray crystallography

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

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

OC02b KETONE BODIES AS A THERAPEUTIC FOR ALZHEIMER’S DISEASE

8.0: Future treatments in Alzheimer’s disease

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

Methods: An oral ketogenic compound, AC-1202, was tested in subjects with mild to moderate AD in two clinical studies to examine the cognitive effects of induced ketosis. Acute administration of AC-1202 was tested in 20 AD participants in a blinded, randomized, crossover study. Chronic administration of AC-1202 was tested in 153 AD subjects in a US-based, 90-day, randomized, double-blind, placebo-controlled, parallel-group study. In both studies, subjects were on a normal diet, most were taking approved AD medications, and results were stratified by APOE4 carriage status.

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

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

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

8.0: Future treatments in Alzheimer’s disease

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

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

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

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

OC027b DIFFICULTIES IN DETECTING BEHAVIORAL SYMPTOMS OF FRONTOTEMPORAL LOBAR DEGENERATION ACROSS CULTURES

8.0: Future treatments in Alzheimer’s disease

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Cross-cultural studies of neurodegenerative disorders especially important when the disease in question is difficult to diagnose, particularly if symptoms of the illness include behavioral disturbances that may be interpreted differently in different cultures. One such disease is frontotemporal lobar degeneration (FTLD), an early-age-of-onset dementia that disproportionately affects social behavior. We report the demographic and neuropsychologic characteristics of more than 300 patients diagnosed with FTLD in the United States, Greece, and Turkey. We find that patients with the frontal variant of frontotemporal dementia (FTD) are diagnosed at an earlier age and report earlier symptom onset in the United States than in Greece or Turkey. Furthermore, neuropsychologic measures indicate that at diagnosis, FTD patients in the United States are less impaired than patients in Greece and Turkey. Patients with FTD in Greece and Turkey are diagnosed later in the disease, presumably because their behavioral symptoms are not easily detected by the medical system in these countries. Our study underscores the need to create culturally appropriate indices of the behavioral symptoms of FTLD, so that patients may be diagnosed and treated at an earlier stage.
OC030  SUSTAINING AND DEVELOPING SERVICES FOR PEOPLE WITH DEMENTIA IN KERALA, INDIA
11. Multidisciplinary approach of dementia

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

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

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

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

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

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

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

Methods: This was a cross-sectional descriptive study

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

Results: Majority was females 74.5% and 45.5% were widowed; 27.8% were living alone; 26.6% with daughters; 14.5% with their sons, 9.0% with their spouse and the remaining 22.7% were living with other relatives. Dementia was found in 14.6% and 13.1% had depression (4.8% mild, 5.5% moderate and 2.8% severe symptoms). Chronic physical illnesses identified included hypertensin (11.3%), epilepsy (8.2%), diabetes (3.4%) and tuberculosis (2.8%).

Conclusions: Social isolation was common. Dementia, depression and other physical conditions were common in this cohort. The 14.6% prevalence of dementia is higher than that reported in Western Europe 7.3%, South Asia (5.7%), Latin America (8.5%) and East Asia (4.9%).

While more research is need, there is need for appropriate policies and practice guidelines to screen the elderly for psychological and physical disorders and for appropriate social support and initiate appropriate management.
OC033 DEMENTIA CARE ADVISERS: AN EVALUATION OF THE WORCESTERSHIRE EXPERIENCE

11. Multidisciplinary approach of dementia

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

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

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

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

OC034 PATIENT-CENTERED dementia: GROUP HOME: IMPLICATIONS FOR the WORCESTERSHIRE EXPERIENCE

11. Multidisciplinary approach of dementia

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Objective and Study: Currently, the dementia patients have occupied more than 7% of the elderly in Taiwan. The increasing incidences that care for the dementia patients are not increasing and still continuously dominate the entire hospital setting in the near future. Harmed with the memory loss, thinking problem, and behaviors change, dementia patients’ families and themselves suffer from a variety of pains and social problems, including diseases care burden, time spend, social perspective...Taichung Hospital initiated a new care model of Patient-Centered Group Home for dementia patients in March, 2008 and aimed to make these patients feel like at home, have easy physical care and medical care.

Methods: Patient-centered Group Home consists of the following components: 1. Tailored-made hardwares, Patient-centered group home design, where nine people in a small unit with equipment such as living room, restroom, multipurpose smaller room and hidden three rooms, aiming to help patients bridge the perception gap between hospital and home. 2. Integrated team of Patient-centered group home will incorporate in a team work that have family physicians, neuro-doctors, psychiatrists, rehabilitation doctors, nurses, name role, social workers, pharmacists, and dietitian... making the integrated care plans possible in regard to short, medium, long-term medical, psychological, social aspects, for the dementia patients. 3. Integrated easy plan: Our residents have their own rooms so we can follow the results for the first 3 months.

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

Disclosure of Interest: None declared Presentation method:Oral or Poster presentation The abstract version above is only for information, please note that your or our email software might have corrupted some characters in the sending or receiving. In this case, please refer to the online version of the abstract.

OC035 COGNITIVE FUNCTION of ELDERLY PEOPLE IN AN OPEN PROTECTION FRAME—CORRELATION OF FINDINGS WITH THE RESULTS ON PEOPLE’s EFFICIENCY

11. Multidisciplinary approach of dementia

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

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

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

Results: The systematic research from our part, has shown that memory does not have to deteriorate with the years passing. In the contrary, it tends to lose part of its original strength if it is not exercised. The systematic use of mnemonic exercises within an open protection framework in a Third Age target group has proved to boost memory. More specifically it has been proved in this way, memory status can be preserved to a satisfactory level just by employing a few short, weekly exercises (combined with the necessary medical treatment, of course).

Moreover, the findings as to the big percentage of loss in efficiency, the important loss of cognitive abilities and the symptomatology pointing to depression all lead to the conclusion that cognitive deficiency and emotional disturbances are to be blamed to a large extent for the appearance of senile disturbances in older people.

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

OC037 MY SELF, MY LOVED ONE and OUR GROUP – SUPPORT GROUPS FOR PEOPLE IN the EARLY STAGES of AD

15. Non-pharmacological interventions

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Objectives and Study: The creation and outcome of a network of 1 of support groups in Israel for people in the early stages of AD and their caregivers.

Methods: The support groups were piloted in 2001, as a response to the special need of people in the early stages of AD. A multidisciplinary professional team was trained and groups set up nationwide. Groups are affiliated with memory clinics, social services, and the Alzheimer association’s hotline. After identifying a suitable dyad an intake takes place. Average group consists of six dyads (person with AD and caregiver).

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

Disclosure of Interest: None declared Presentation method:Oral or Poster presentation The abstract version above is only for information, please note that your or our email software might have corrupted some characters in the sending or receiving. In this case, please refer to the online version of the abstract.

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

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

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

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

Methods: An APOE4+ 58 year old caucasian male with probable early onset Alzheimer’s disease received 35 ml coconut oil daily with breakfast. On day 35, dosing was increased to twice per day and on Day 54 to three times per day. MMSEs were administered on Day 0, four hours after Day 1 dose and on day 65. On Days 0, 14 and 37 the Clock Test was repeated. On day 32, plasma ketones acetoacetate and beta-hydroxybutyrate levels were measured and at several intervals following 35 ml of coconut oil at two meals.

Results: On Day 0, SJN scored 14/30 on MMSE. Four hours after Day 1 dose of coconut oil, MMSE increased to 18/30 and on Day 65, 20/30. Accompanying image shows clock drawings on Days 0, 14 and 37. Day 52 levels of acetoacetate+beta-hydroxybutyrate (mM) peaked at 0.143±0.0335 grams 180’ after 35 gram dose coconut oil at breakfast and increased to 0.217±0.135 180’ after dinner dose. By Day 90 SJN reported resolution of visual disturbance that interfered with reading, and author/caregiver noted normalization of gait, near resolution of facial and intention tremor, improvements in interaction, conversation, sense of humor, memory of recent events, task completion, renewed interest in exercise and learning, and expression of hope for the future.

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

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

15. Non-pharmacological interventions

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

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

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

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

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

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

15. Non-pharmacological interventions

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

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

Results: comparison of stress and anxiety inventories, pre and post – intervention was made. At the end of the intervention, there was a statistically significant improvement in BDI (Z=-2.38, p=0.02) and PSS scores (Z=-2.29, p=0.02)

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

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

15. Non-pharmacological interventions

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

Methods: Twelve AD patients were selected on the basis of a geriatric visit, the assessment with traditional test for the diagnosis of dementia (e.g. MMSE) and the neuro-radiologic documentation (CT). Patients entered a five-week cognitive training, 2 hours/day, 4 days/week, in which they were administered exercises to stimulate the main cognitive functions. All patients performed two computer tasks which stressed visual-spatial recognition, attention, and working memory. In the experimental task (Colorful), repeated every 2-day during the training session, patients had to memorize the colour of a single square and, after a 2-second inter-trial interval, they had to recognize it among four coloured squares (Colour-Non-Go paradigm). In the control, no-time task (Motor), a fixation cross was followed by a yellow or blue square: patients had to respond by pressing the button corresponding to the colour of the square. Neurophysiological, behavioural (Response Times [RTs] and Error rates [ERs]) and electrophysiological (ERPs) data were compared before and after training.

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

Conclusions: results suggest that, during the training, AD patients developed new cognitive strategies able to activate their undamaged neural networks. Thus, an intensive, cognitive training modulated AD patients’ learning skills and contributed to induce a plastic re-organization of the residual cortical regions.
OC042 SPACED-RETrieVAL: A memory intervention for improving eating performance of patients with mild cognitive impairment (MCI)
15. Non-pharmacological interventions

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

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

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

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

OC044 PRACTICE OF ATTENTION AND PARAMETERS OF EXECUTIVE FUNCTION FOR PATIENTS WITH MILD COGNITIVE IMPAIRMENT (MCI)
15. Non-pharmacological interventions

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

Methods: The study included 46 women and 28 men with MMSE=27.59 (1.47), age=68.06 (7.23), and education=8.78 (3.63), classified in one experimental and one control group matched in age and sex. Participants received an experimental training for three 30-40 minutes per week. The training consisted of immediate and spaced retrieval used immediately, 1, 2, 4, 8, 16, 32 minutes time interval to train subjects. Between time intervals, Montessori-based activities were used to maintain interests of the subjects.

Results: At baseline, there were no differences between groups, in cognitive and functional performance. At the end of the therapy, differences were noticed between groups in favor of the experimental group, in general cognitive ability (p=0.02), attention (p=0.00), ADL (p=0.02), visual perception (p=0.00), and executive function (p=0.00). Within group analysis showed improvement in the experimental group in ADL (p=0.02), executive function (p=0.00), attention (p=0.01), visual memory (p=0.04), naming (p=0.01), and visual perception (p=0.01). Controls maintained stable cognitive and functional performance.

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

OC045 THE DEMENTIA RESOURCES GUIDE PROJECT
21. Supporting and educating caregivers

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

- The Guide was developed for people with dementia, their families and carers, including staff and volunteers across community, residential, and health care. The Guide provides links to resources. Phase 2 involved evaluation of the uptake and dissemination of the Guide via several surveys (including residential aged care agencies, community care agencies and other users).
- Phase 3 involved updating the Guide and providing advice on maintaining currency.

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

Results: Phase 1:
- 104 resources (27.7%) of existing resources required updating. 306 new resources were found, of which 252 were evaluated and 111 included.
- 45,315 visits were made to the Guide website from June 08-February 09 (average 165 visits per day). Most users found the Guide useful, easy to read and there was sufficient information/topics covered. They found out about the Guide via: seminars, conferences, network meetings, forums, newsletters.
- The Guide provides links to resources on 51 topics. In 2009 DoHA engaged NARI to update the Guide to include recently available updated resources.
- 45,315 visits were made to the Guide website from June 08-February 09 (average 165 visits per day). Most users found the Guide useful, easy to read and there was sufficient information/topics covered. They found out about the Guide via: seminars, conferences, network meetings, forums, newsletters.

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

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

Conclusions: Phase 2:
- 45,315 visits were made to the Guide website from June 08-February 09 (average 165 visits per day). Most users found the Guide useful, easy to read and there was sufficient information/topics covered. They found out about the Guide via: seminars, conferences, network meetings, forums, newsletters.

Recommendations included strategies for:
- Ongoing promotion of the Guide
- Improving usability (e.g. providing key word searches)
- Providing the option for a feedback survey for users to complete
- Ways of regularly updating the website content and links.
Objectives and Study: To what extent does the high level of stress accompanying the task of caring for a patient with dementia affect the caregiver’s well-being and perspective on the future? It has been shown that a positive outlook on the future and long-term goal setting has a motivational effect which enhances a person’s psychological well-being during trying circumstances. Preoccupation with the present is associated with emotional distress and feelings of hopelessness. The objective of this study was to determine the interplay between caregivers’ time perspective and psychological well-being.

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

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

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

OC046 DOES A CAREGIVER HAS A FUTURE?
21. Supporting and educating caregivers
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Objectives and Study: To evaluate a unique caregiver education program designed to provide support for family caregivers during the care giving period as well as provide an opportunity for a career choice or advancement when care giving ceases. This program was a collaboration between a private educational institution offering certified nursing assistant (CNA) training and an Area Agency on Aging (AAA) Caregiver Support program in El Paso Texas.

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

Results: Results: A total of 12 students successfully completed the program in the first 12 months. Support for students included full scholarships, including books and supplies, and respite care for the 12 family caregivers who were accepted to the 6-week CNA program. The population of El Paso is 84% Hispanic, primarily Spanish-speaking, with less than a 9th grade education. This study explored learning experiences of carers who caring for people with dementia over time. In this study, exploration of carers’ learning experiences was completed using a qualitative research methodology. Interview data was transcribed and analyzed using thematic analysis. The results emphasized the importance of support for the caregiver to empower him or her to nurture interests and maintain a positive future perspective.
OC051  PROMOTION OF HIGH IDEAL VOLUNTEERISM
21. Supporting and educating caregivers

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

Methods: The approach to enable volunteerism by ARDSI through volunteers in the context of serving the people affected with Alzheimer’s and related disorders, took a logical journey of trying different strategies, consolidation of successful ones and institutionalization through internalization and these include:
- Identification and nurturing people with key traits, which is of paramount importance, such as possessing
  - resolve to serve others;
  - proactive service to meaningfully contribute to the society and dedicate time;
  - knowledge of the problem and have interest and belief in what they do;
- draw pleasure in contributing to the cause;
- Categorization of volunteers and identifying their present carrying capacities and optimizing them through training and capacity building
- Ensuring support mechanisms
- Recognition of efforts through awards in public forums
- Maintaining a rhythm and sustaining innovations
- Optimizing potential resources and adding new volunteers through the above process

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

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

OC052  COMBINED INTERVENTIONS IN DEMENTIA FOR PATIENTS AND CAREGIVERS. RESULTS OF AIMDA: A FRENCH CONTROLLED STUDY
21. Supporting and educating caregivers

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

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

Results: Both groups were comparable at baseline on all criteria. At 3 and 6 months, patients showed stabilization of their condition in both groups. Concerning caregivers, in the intervention-group difference were observed on VAS measures of disease understanding at 3 months (p=0.007) and 6 months (p=0.001), and on VAS measures of coping strategies at 6 months (p=0.02). In the control group depressive symptoms increased (p<0.02) whereas scores remained unchanged in the intervention group. 

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

OC053  THE ITALIAN VERSION OF THE CAREGIVER’S NEEDS ASSESSMENT TOOL - CNAD: PSYCHOMETRIC PROPERTIES AND INFLUENCE OF PATIENTS/CAREGIVER CHARACTERISTICS ON ANSWER’ NEEDS ASSESSMENT FOR DEMENTIA
21. Supporting and educating caregivers

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Objectives and Study: For purpose of service planning for dementia, an instrument was developed to assess 18 pre-defined areas in which determine the relevance of caregiver’s needs and whether they are met. From the original German version, an Italian version was developed. The 1st step of the ongoing study aimed to verify whether the Italian version maintain the psychometric characteristics of the original one. The 2nd step aimed to detect inter-rater and test-retest reliability on a sample of 15 interviews, for content validity 15 “experts” (geriatrics, psychiatrists, psychologists, care, social workers) was recruited to rate the relevance of each problem area and intervention on a four point scale. To address the 2nd objective, a geriatric team evaluated a series of dementia patients with diagnoses dating over 1 year; both cognitive performance and behavioural profiles has been collected. A different team with the Zarit Burden Scale, the General Health Questionnaire, DCL-60 and Self-Competence Questionnaire, evaluated the principal caregiver of each patient. Till now, a sample of 30 Ss has been examined.

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

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

OC054  PHOSPHATIDYLSERINE CONTAINING OMEGA-3 FATTY ACIDS MAY IMPROVE MEMORY PROPERTIES IN NON-DEMENTED ELDERLY WITH MEMORY COMPLAINTS: A DOUBLE BLIND PLACEBO-CONTROLLED TRIAL
21. Supporting and educating caregivers

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

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

Results: 131 participants completed the study although nine were excluded from the efficacy analysis due to protocol violation. At endpoint, verbal immediate recall was significantly improved in the PS-DHA group compared to the placebo group. 

Conclusions: The results indicate that PS-DHA may improve short term (working) memory in non-demented elderly with memory complaints. 

ABSTRACTS

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OC005 THE EFFECT OF ANIRACETAM, EITHER AS MONOTHERAPY OR COMBINED WITH CHOLINESTERASE INHIBITORS, ON NEUROPSYCHOLOGICAL FINDINGS OF PATIENTS WITH DEMENTIA IN DIFFERENT STAGES. (DATA FROM THE GREEK AMNESSIA STUDY: ANIRACETAM MONOTHERAPY COMPARED WITH CHOLINESTERASE INHIBITORS)

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1Greek Alzheimer Association, 3rd Department of Neurology, Aristotle University, 2nd Propaedeutic Clinical Studies, ISPG, Mannheim, 3rd Department of Neurology, Aristotle University of Thessaloniki, Greek Association of Alzheimer’s Disease and Related Disorders, 3rd Department of Experimental Physiology, Aristotle University of Thessaloniki, Greek Alzheimer Association, Greek Association of Alzheimer’s Disease and Related Disorders, 2nd Propaedeutic Clinical Studies, ISPG, Mannheim

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

Methods: In our prospective, multi-centre, open-label study, we enrolled a total of 252 patients (mean age 71.6 years, 89 male) with cognitive disorders of variable severity (25 patients with MCI, 192 with Alzheimer’s disease and 35 with other forms of dementia). Our study population comprised 4 groups: the no treatment group (n=77), the aniracetam monotherapy group (n=47), the ChIs monotherapy group (n=68) and the group of combination treatment (n=62). Patients were examined with validated neuropsychological tests at baseline, and after 3, 6 and 12 months.

Results: Patients without treatment demonstrated a significant decline in cognitive performance at 12 months of follow-up (p=0.004). In patients treated with aniracetam, all studied parameters were adequately maintained at 6 and 12 months, while emotional state was significantly improved at 3 months (p=0.03). In patients treated with ChIs, we observed a statistically significant deterioration of cognitive status at 12 months (p=0.01). The combination treatment group exhibited a substantial amelioration of emotional profiles at 3 months (p=0.04), but there was a significant worsening of mental and functional parameters at 12 months (p=0.05 respectively). The comparison between aniracetam and ChIs monotherapy in patients with moderate dementia (MMSE 15-25) revealed a significantly better cognitive performance in the aniracetam group at 6 months of treatment (MMSE= 38±5 vs. 23±6, p=0.005). When comparing aniracetam monotherapy with combination treatment in moderate dementia, aniracetam performed better in cognitive and functional scales at 6 months (p=0.002 and p=0.05), while the mood of patients treated with aniracetam was significantly enhanced at 12 months (p=0.03).

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

OC006 PREDICTION OF TREATMENT RESPONSE TO RIVASTIGMINE IN PARKINSON’S DISEASE DEMENTIA

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Objective and Study: Translational research seeks to accelerate the journey from laboratory to the implementation of new treatments. This is a response to the increasing cost of drug development and the relatively low number of innovative new drug treatments which have been approved recently. Although there is increasing Alzheimer’s research, it is not known how effects were given a score of 2 or 3. It is believed that anticholinergic drugs have a significant impact on cognition and the development of effective treatments. This study examines the potential of translational research to help find a cure for Alzheimer’s disease.

Methods: 1. A descriptive model of translational research is proposed.
2. A literature search of Alzheimer’s research published in 2009 is used to identify the main areas of current research activity.
3. Current research activity will be compared with the translational research model with current research activity will be analysed to identify gaps and weaknesses in current research programmes.

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

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

3. Current research activity will be compared with the translational research model with current research activity will be analysed to identify gaps and weaknesses in current research programmes.

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

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

OC007 TRANSLATIONAL RESEARCH HELP FIND A CURE FOR ALZHEIMER’S DISEASE?

J. Jackson1
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Objective and Study: Translational research seeks to accelerate the journey from laboratory to the implementation of new treatments. This is a response to the increasing cost of drug development and the relatively low number of innovative new drug treatments which have been approved recently. Although there is increasing Alzheimer’s research, it is not known how effects were given a score of 2 or 3. It is believed that anticholinergic drugs have a significant impact on cognition and the development of effective treatments. This study examines the potential of translational research to help find a cure for Alzheimer’s disease.

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

OC008 ANTIChOLINErGIC DRUGS IN ELDERLy pPpPLE: STUDY OF AN ALZHEIMER’S DAY CENTRE

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1MRC Translational Medicine Programme, University of Edinburgh Medical School, Edinburgh, United Kingdom

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

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

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

Conclusions: According to the results of our study, there is a considerable percentage of elderly people that receive anticholinergic medication in a dosage that can lead to cognitive problems. Therefore it seems that the prescription of the drugs must be given with more caution, and drugs ‘over the counter’ should be avoided. However, there does not seem to be any correlation between anticholinergic activity and cognition as it is assessed by the performance of the patients in the neuropsychometric tests.
OC059 THE CYCLIN-DEPENDENT KINASE 5 INHIBITOR (CIP) REDUCES Aβ1-42 AND P25/Cdk5-MEDIATED TAU HYPERPHOSPHORYLATION AND APOPTOSIS IN NEURONS

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Objectives and Study: The extracellular aggregation of amyloid β peptides and the intracellular hyperphosphorylation of tau and neurofilament proteins at specific epitopes are pathological hallmarks of neurodegenerative diseases such as Alzheimer’s disease (AD) and Amyotrophic Lateral Sclerosis (ALS). Cdk5 is a member of the Cdk family of serine/threonine kinases, most of which are key regulators of the cell cycle. Unlike mitotic Cdk5, Cdk5 plays a crucial role in brain development, neuronal migration, neurite outgrowth, axon patterning and neuronal survival but has no known role in the mitotic cell cycle. Cdk5 activity is regulated through association with its neuron-specific activators, p35 and p36.

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

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

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

EFFICACY OF A MEDICAL FOOD (SOUVENAID®) IN MILD ALZHEIMER’S DISEASE: A RANDOMISED CONTROLLED TRIAL

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2. Dancne Research, Centre for Specialised Nutrition, Wageningen, The Netherlands

Objectives and Study: To assess the efficacy of Souvenaid®, a medical food, in mild Alzheimer’s Disease (AD) patients using AD medication. Results of both clinical studies are to be expected late 2010.

Methods: The combination of nutrients (Fortasyn™ C onnect) designed to improve cognitive performance in older adults resulted in the development of a new medical food, Souvenaid®, containing a combination of nutrients (Fortasyn™ Connect) designed to improve cognitive function.

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

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

OC059B Alzheimer’s Disease - New Treatments and Diagnosis. Giovanni Frisoni

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

OC060 QUALITY OF LIFE, YEARS OF EDUCATION AND NEUROPSYCHOLOGICAL PERFORMANCE IN OLDER ADULTS

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

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

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

Conclusions: Results indicate that certain aspects of quality of life relate to cognitive performance. In addition, higher education relates to perceptions of physical health in adults over 60.
**OC063 EFFICACY OF CHOLINESTERASE INHIBITORS ON NEUropsychiatric SYMPTOMS OF DEMENTIA: A MALAYSIAN EXPERIENCE.**

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**Objectives and Study:** To determine the efficacy of Cholinesterase Inhibitors in the treatment of neuropsychiatric symptoms in patients with Dementia.

**Methods:** Patients newly diagnosed with mild to moderate Dementia attending the Memory Clinic treated with any of three cholinesterase inhibitors (AChEIs), Donepezil, Rivastigmine and Galantamine, were recruited. Similar patients who were not on treatment with cholinesterase inhibitors were selected as controls. All patients were rated by their care giver at baseline, 12 weeks and 24 weeks on Neuropsychiatric Inventory Questionnaire (NPI-Q) for severity of symptoms and distress given to the care giver.

**Results:** A total of 100 patients commenced on AChEIs and 50 controls were recruited. After 24 weeks on AChEIs, the treated group showed significant improvement in NPI-Q severity scores compared to control group (mean change -3.8 vs 1.7 points, p<0.001), and in NPI-Q caregiver distress scores; 5.8 vs 3.1 points, p<0.001. Sixty one percent of patients on AChEIs had a 36% reduction in total NPI-Q scores from baseline. All neuropsychiatric symptoms showed improvement with treatment with AChEIs, along with reduction in care giver distress level.

**Conclusions:** AChEIs had significant efficacy in treating neuropsychiatric symptoms in patients of mild to moderate dementia.

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

E. Tsantali1, D. Economidi2, S. Rigopoulou2
12nd Dept. Internal Medicine, Geriatric Unit, Hipppocration hospital, Aristotle University of Thessaloniki, 2Neuropsychologia Clinic, Panagia hospital, Thessaloniki, Greece

**Objectives and Study:** The literature refers that Alzheimer’s disease patients have severe difficulties to learn new information and to connect the new one with the old information. However, there is well preserved the old learned information in most of the cases. The aim of our study was to investigate if the overlearned past knowledge which is associated with a delayed memory task can discriminate non demented elderly, mild cognitive impairment (MCI) and Alzheimer’s disease patients (AD).

**Methods:** Our sample was 96 non demented, MCI and AD outpatients recruited from the Memory clinic of the Geriatric Clinic of Hippocratin hospital and the Neourpsychic clinic of Panagia hospital in Thessaloniki in Greece. The diagnosis was set by an expert intercisciplinary team using clinical, laboratory, neuropsychological and neuroraming data. The participants were 68 (35<11.0) years old and they had 9.2 (SD=3.9) years of typicial education. The mean of the MMSE for the non demented, MCI and AD participants was 28.7(0.0) 26.5(0.0) and 23.2(0.0) respectively. The mean of the Overlearned past knowledge task was 5.46, 3.96 and 1.46 respectively.

**Results:** There was strong correlation between MMSE and the Overlearned past knowledge task in 2x, p<.01. The one way ANOVA analysis was performed that there is statistically significant difference (p<0.00) between non demented elderly and AD participants, non demented elderly and MCI (p<.000), and AD and MCI patients(p<.000). The discriminant analysis correctly classified 93.3% of the original grouped cases, 81% for the AD patients and 84.6.2% for the MCI ones. Though 15.6.2% of the MCI patients classified wrong as AD.

**Conclusions:** Our conclusion is that the overlearned past knowledge is starting to declined family from MCI and impaired more during the first stages of AD.

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

R. Van der Poel1, 2UNEFS, University of the Free State, BLOEMFONTEIN, South Africa

**Objectives and Study:** The study aimed at identifying the challenges associated with clinical interviewing and cognitive assessment as part of dementia research in a rural South African community.

**Methods:** 14 Healthcare workers (registered nurses) were interviewed during the pilot phase (N=230) of a cross sectional whole population survey on the prevalence of dementia in a rural Sesotho speaking community in South Africa. They responded to a structured questionnaire interviewing and cognitive assessment as part of dementia research in a rural South African community.

**Results:** 1. Clinical interviewing time is significantly more than the estimated time proposed in the research protocol.
2. Observing local custom adds to interviewee burden.
3. Low levels of participant/patient literacy adds to interviewer burden.
4. Translated clinical constructs and medical / psychiatric terminology are problematic in terms of proficiency in English and the local language.
5. Low levels of participant/patient literacy adds to interviewer burden.
6. Interview structure is difficult to maintain within the context of local ethnic customs and social graces.

**Conclusions:** Clinical interviewing and cognitive assessment as part of dementia research in a rural Sesotho speaking community in South Africa is challenging and requires a sound knowledge of local customs and colloquialisms. Challenges are best met through interviewer skills that include proficiency in English and the local language, tolerance for lengthy and cumbersome interviewee responses and tolerance for interviewee demands outside the scope of the research protocol. Thorough interviewer training is a prerequisite for the efficicent handling of cognitive, medical and psychiatric constructs during interviews and assessments.

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

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**Objectives and Study:** The aim was to find measures that differentiate between MCI and AD using tasks which assess cognitive domains which show impairments early in the disease process.

**Methods:** The sample consisted of (MCI=28) and (AD=25) patients with mean age=71.0 and 75.8 respectively. Their Mini Mental State Examination (MMSE) mean scores were 26.5 (sd. 2.2) and 22.1 (sd. 3.9) respectively. 31 patients were female and 22 were male and their mean educational level was 6.9 (4.0) for AD and 8.5 (4.3) for MCI. All participants underwent neuropsychological and clinical assessment consisting of verbal fluency (Controlled Oral Word Association), initiation and inhibition control (Hayling Sentence Completion task), the Geriatric Depression Scale and the Functional Rating Scale for symptoms of dementia.

**Results:** We present preliminary results of tests that were applied in the Greek population for the first time. The AD group generated significantly fewer words compared to MCI but did not differ in perseverations or intrusions. Similar results were found in the inhibition time only for sample completion in the as AD was slower. The AD group also failed to suppress relatively logical responses leading to increased numbers of errors compared to the MCI but no difference was found for initiation time in the inhibition portion.

**Conclusions:** The overall sensitivity of the initiation and inhibition task in addition to the verbal fluency task will be briefly presented and its use in differentiating among MCI and AD patients. Cut off scores for both tasks were also calculated in order to facilitate the clinical diagnosis of the two disorders. The effect of level of symptoms, overall cognitive function and clinical correlates is also examined for both groups in terms of performance in the neuropsychological measures.
OC067: VALIDATION STUDY OF PANDA QUESTIONNAIRE IN GREEK POPULATION
13. Neuropsychology and dementia
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2 General Hospital, ATHENS, Greece

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

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

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

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

OC067B: ALZHEIMER’S DISEASE (AD), FRONTOTEMPORAL DEMENTIA (FTD) AND
HEALTHY ELDERLY ASSESSMENT USING MEASURES OF EXECUTIVE FUNCTION AND
GENERAL COGNITIVE FUNCTION
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related disorders, 4Director of Geriatric Unit, Hippokration hospital of Thessaloniki, Aristotle
University of Thessaloniki, Medical School, Thessaloniki, Greece

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

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

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

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

OC067C: PROMOTION OF HEALTH AND EDUCATION. THE ROLE OF SCHOOL TO CRISIS
MANAGEMENT AND TO THE POSSIBLE PREVENTION OF ALZHEIMER DISEASE (PRESENTATION OF THE EDUCATIONAL PACKAGE «SOUND MIND & HEALTHY BODY»)
Evanthia Stefanou

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

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

The more specific aims of the educational package are:

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

The present educational package includes:

➢ A sensitization fair relating to the Alzheimer disease and the acknowledgement of
the voluntary actions of the Alzheimer disease company «SOLIDARITY» of the
prefecture of Heraklion. Through the fair relating the creative frame of contact between
the children and the taken it is proposed.

➢ An informative notebook which informs the children of the function of the brain, proposes
a prevention frame in relation to the disease, develops ways of emotion management and
creative ways of contact with individuals of the third age as well.

➢ An instructive poster-of sensitization with reference to the behaviour of children in their
relation to individuals that have been taken ill by the Alzheimer disease.

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

OC067D: AN EFFECTIVE GREEK HEALTH CARE DELIVERY MODEL FOR FAMILIES WITH A
PATIENT SUFFERING FROM DEMENTIA BASED ON THE EXPERIENCE GAINED FROM RURAL CRETE
Christos Lionis
Professor of General Practice and Primary Health Care (elect), School of Medicine, University of Crete

Although Integrated Primary Care and General Practice/Family Medicine have received prompt
attention in the current literature in regards to the management of cognitive and mood disorders,
unfortunately in the community it remains a neglected issue in the Greek health policy agenda.
This presentation attempts to report an effective Greek health care delivery model for families
with a patient suffering from dementia based on the experience gained from rural Crete.
OC068 THE Efficacy of SPACED RETRIEVAL AND MONTESSORI METHODS IN MANAGING EATING DIFFICULTIES FOR RESIDENTS WITH DEMENTIA
15. Non-pharmacological interventions

L. Lin1
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Objectives and Study: To construct a training protocol for spaced retrieval and to investigate the effectiveness of spaced retrieval and Montessori-based activities in decreasing eating difficulty in older residents with dementia.

Methods: A single evaluator, blind, randomized control trial (two treatments and one control) was used. Three special care units for residents with dementia in long-term care facilities in Taiwan were the sites for the study. Eighty-five institutionalized residents with dementia participated in the study, with 82 subjects completing the 8-week study. To avoid any confounding of subjects, the sites for the study were the sites for the study. Eighty-five institutionalized residents with dementia participated in the study, with 82 subjects completing the 8-week study. To avoid any confounding of subjects, the sites for the study were matched in gender (p=0.47), age (p=0.33), education (p=0.18), MMSE (p=0.20), and medication-cholinesterase inhibitors (p=0.64). The experimental group participated in 20 weekly sessions for a period of six months, 30 minutes per session, three sessions per week.

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

Conclusions: This study confirms the efficacy of spaced retrieval and Montessori-based activities, and suggests further investigation with larger sample size.

OC069 APPLICATION EFFECTS OF WALKING PROGRAM FOR COGNITIVELY IMPAIRED ELDERS IN TAIWAN LONG-TERM CARE FACILITY
15. Non-pharmacological interventions

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Objectives and Study: Very few empirically based programs for prescribing interventions have been developed for elderly people suffered from dementia in Taiwan long-term care facilities. The aim of this quasi-experimental study was to evaluate the impact of a walking program with endless loop on cognitively-impaired seniors’ physical, psychological, and cognitive functions.

Methods: The purposive sample was eight dementia elders, aged 67-82 (x=77), from a LTCF in southern Taiwan. The length of stay in nursing home ranged from 0.25 to 7.5 years (x=1.5). Based on the Progressively Lowered Stress Threshold (Hall & Buckwalter, 1987), the program had run during the most available hours for Sundowner Syndromes (4-50:30:30) for eight weeks. 30 minutes per session, three sessions per week.

Results: (1) The Barthel Index increased from 10.70 to 81.0 (p=0.007); (2) The Geriatric Depression Scale decreased from 6.88 to 3.00 (p=0.014), 71% changed into good mood; (3) The Mini-Mental Status Examination and Clinical Dementia Rating improved however insignificantly (x²=7.71, 13.86, 1.21; p=0.002, 0.067); and (4) Ryden Agitation Scale improved (physically: x²=0.01–0.52, verbally: x²=0.50–0.52).

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

OC071 PRACTICE OF LINGUISTIC SKILLS: COGNITIVE TRAINING INTERVENTION IN PATIENTS WITH MILD COGNITIVE IMPAIRMENT
15. Non-pharmacological interventions

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

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

Results: At baseline, there were no differences between groups in cognitive and functional performance. At the end of the intervention were found differences in favour of the experimental group in attention (p=0.005), visual perception (p=0.03), and verbal fluency (p=0.01). The within group analysis for the control group has shown deterioration in attention (p=0.00). For the experimental group it was observed improvement in attention (p=0.01), verbal fluency (p=0.00) and visual memory (p=0.00).

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

OC072 COGNITIVE TRAINING PROGRAMME THROUGH MUSICAL STIMULI: A NON PHARMACOLOGICAL COGNITIVE TRAINING INTERVENTION IN PATIENTS WITH MILD DEMENTIA
15. Non-pharmacological interventions

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

Methods: The study included 25 women and 6 men with age=75.13 (4.83), education =7.74 (3.75) and MMSE=23.20 (3.12) in two groups: one experimental and one control group matched in age (p=0.49), gender (p=0.32), education (p=0.26), MMSE (p=0.09) and cholinesterase inhibitors (p=0.18). The experimental group attended 20 weekly sessions for a period of six months with music stimuli as crucial component in exercises of attention, memory, dual task and language. Controls did not attend any non-pharmacological therapy during the same period and were at waiting list. Participants were assessed with the same psychometric battery at baseline and at the end of the therapy.

Results: At baseline the experimental and the control group were matched in cognitive abilities assessed in the study. At the end of the therapy there were not found differences between groups. Within subjects analysis showed that ADL was improved for the experimental group (p=0.05), while it remained stable for the control group.

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

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

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

**Methods:** Forty-one participants, men and women, 55-80 years old, neuropsychiatric symptoms free, diagnosed with MCI, were classified in one experimental and one control group, matched in age (p=0.07), education (p=0.08), gender (p=0.32) and drugs (p=0.37). The experimental group attended 24 weekly sessions in a period of 8 months, while the control group did not (waiting list). Cognitive Intervention included discussion of every day issues, orientation techniques and visual-auditory stimulation. Neuropsychological assessment was performed at baseline and at the end of the intervention.

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

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

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

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

**Methods:** The participants were 59 MCI patients, aged 68.08 (7.25), education 9.17 (3.93), and MMSE 27.73 (1.35), classified in one experimental (N=40) and one control group (N=19). The groups were matched in age (p=0.68), education (p=0.06), drugs (0.51) and gender (p=0.52). The experimental group attended 20 weekly sessions in a period of 6 months, including tasks of visual attention, visual spatial abilities, visual memory, and executive function. The control group did not participate in any type of intervention and was in a waiting list. Neuropsychological assessment was performed at baseline and at the end of the training.

**Results:** At baseline, there were no differences between groups in cognitive abilities. At the end of the training, between groups comparison yielded differences in favor of the experimental group in performance (p=0.00), verbal fluency (p=0.00), visual memory (p=0.01), verbal memory (p=0.00) and learning through feedback (p=0.06). Within group analysis of the experimental group’s performance has shown improvement in attention (p=0.00) and daily function (p=0.00). Controls have shown an improvement in perseverative responses and cognitive flexibility (p=0.00) and naming (p=0.02), and deterioration in abilities of attention (p=0.00).

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

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

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

**Methods:** Dr. Jon Vila’s team administered Memory Preservation Nutrition Supplement Program (MPNP) supplements incorporated into standard mouse chow to triply-transgenic mice known to develop features of AD with age. MPNP—a phyto-nutrient powder comprised of 100% organic freeze-dried fruits and vegetables, spices, grains and probiotics; an ameliorant of herbs and spices chosen for their reported anti-inflammatory properties, and cod liver oil. Mice (N=50) were fed either supplemented or standard chow beginning at an average age of 38 weeks in age- and sex-matched cohorts in a full 2x2 design (genotype x diet). After approx 4 months of supplementation, mice were cognitively tested on a delayed match to position (DMP), a 30-minute DMP delay challenge, as well as spatial reference memory Morris maze.

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

**Conclusions:** Polynutrient supplementation may counter functional consequences of AD-related brain changes. Studies are underway to deduce the effects of MPNP on glucose uptake, mitochondrial function, amyloid and tau pathology, inflammatory markers. Boston University is conducting a feasibility, safety, biomarker study in cognitively normal adults, with a similar polynutrient therapy, Nutritional Supplement Combination Therapy, looking at similar biological parameters. Fish oil is cod liver oil and DHA- enhanced fish oil. 2000 IU of vitamin D3 was added.

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

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

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

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

**Conclusions:** It is easily understood that the basic effort for the elderly should be the maintenance of their good quality of life, their self-sufficiency, as their protection in case of illness. The growth of services and structures for elderly becomes important role that the family still continues playing. Most of the patients with Alzheimer’s disease in Greece stay at home—mostly because of lack of qualified, easy-available care centers but also for emotional reasons. An informal care is usually provided by patients’ close relatives. The caregivers are children or spouses of patients. The care takes them seven days a week and most of the caregivers have no possibility of rest. They all ask for more money; better pensions and provision of financial aids to all demented people. They also ask for better and more convenient provision of services from the insurances. They ask for free help at home provided by the state even for a few hours a day or sometimes in a week. And what they all ask is for better information; they want to be informed by their insurance for everything they can get and not having to search in order to find something.
OC077 MANAGING TOGETHER AN EXPLORATION OF THE FAMILY EXPERIENCE OF MANAGING THE IMPACT OF DEMENTIA UPON THE RELATIONSHIP BETWEEN GRANDPARENTS AND THEIR GRANDCHILDREN

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

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

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

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

OC078 CAREGIVER’S OPINION ON CURRENT STATUS OF AD MEDICATION IN GREECE

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

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

Results: 300 caregivers participated, mainly women over 45 years old of middle/lower level of education, living in the same house with the patient and having a first-degree relationship with him. 85% of the caregivers reported that caring for an AD patient has increasing negative psychological implications as the disease progresses. Main reported feelings were (in order of frequency): sorrow, frustration and anger. Nevertheless, more than 80% of caregivers did not wish admittance the patients to be admitted in a nursing home. All patients were under pharmacological treatment receiving on average 4 medication per day. They had been on AD medication for 3-4 years on average and since diagnosis they had tried 1-2 different drugs. The medication was characterized as at least ‘somewhat inconvenient’ by 63% of the caregivers. Caregivers of patients with severe disease reported more difficulties in ensuring medication compliance and adherence to dosage schedule, mainly due to patient refusal to cooperate.

Conclusions: As expected, negative feelings are strongly related to caring for a person with dementia, especially as the disease progresses. Caregivers experience difficulties with AD medication and seem to be rather skeptical about its effectiveness. Interestingly, the vast majority of caregivers were unwilling to place patients in a nursing home. There is an urgent need to recognize the significant practical and emotional burden of caregivers and support the development of respite services in Greece.
OC081 THE FRENCH ALZHEIMER NATIONAL PLAN AND THE CALLIOPE WEB SERVICE FOR PATIENTS WITH ALZHEIMER DISEASE: TOWARDS A EUROPEAN EXTENSION

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

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

Results: This web service is used by 153 specialized memory centers to follow patients, with some clinical, diagnostic,therapeutic and cognitive evaluation data. 81 879 patients are in the data base with 183 952 consultations. A data set has been elaborated specifically for the plan. This data set will be the minimum requirement of information for patients with Alzheimer’s disease and will be launched in October 2009.

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

OC083 JACK - QUALITY OF LIFE IN DEMENTIA CARE

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

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

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

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

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

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

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

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

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

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

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

OC084 GETTING NOT TO FACE THE FACTS? INCREASED AWARENESS PREDICTS REDUCED MOTIVATION FOR COGNITIVE TRAINING IN MILD COGNITIVE IMPAIRMENT (A Cognitive reserve hypothesis)

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

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

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

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

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

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

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

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

Conclusions: As expected and according to literature, MCI patients in this study benefited from the intervention program in comparison with the control group. Cognitive training and physical exercise seem to be the non pharmacological therapy of choice for MCI patients. MCI patients must be informed about the benefits they gain participating in a multi-component training program.
OC088 PREVALENCE OF ANTICHOLINERGIC DRUGS IN PATIENTS WITH MILD COGNITIVE IMPAIRMENT IN EUROPE: DESCRIPTIVE STUDY.
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Objectives and Study: The aim of this study was to reach an evidence-based European consensus and develop clinical criteria on the identification of subjects with prodromal Alzheimer's disease (AD). Anticholinergic drugs are believed that can worsen cognition in elderly people, especially those that have already cognitive problems. The aim of this study is to investigate the prevalence of anticholinergic drugs in patients with mild cognitive impairment (MCI) in Europe.

Methods: 880 patients (375 males, 505 females; mean age±SD 70.34±7; mean±SD years of education 10.37±4.2) with mild cognitive complaints, who were recruited from 20 European centers, were studied. Exclusion criteria were age below 55 and obvious causes of cognitive impairments. A complete history was taken in all patients, demographic data was collected and several factors were studied, including type and dosage of medication taken. According to the Anticholinergic Cognitive Burden (ACB) scale the anticholinergic drugs were divided according to their properties: Drugs with possible anticholinergic effects were given a score of 1, whereas drugs with established anticholinergic effects were given a score of 2 or 3.

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

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

OC087 OLFATORY DEFECTS IN HEALTHY ELDERLY AND IN TYPE II DIABETIC PATIENTS WITH & WITHOUT MILD COGNITIVE IMPAIRMENT (MCI).
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Objectives and Study: Studies of olfactory tasks have consistently shown olfactory identification deficits in patients with Alzheimer’s disease in relation to control subjects. In addition there is growing evidence relating diabetes mellitus with dementia. However, there is limited information on olfactory identification test performance in patients with MCI defined broadly as fitting into the category between being “normal” and having “dementia.” Objective. To investigated the presence of olfactory deficits in elderly normal subjects and in Type II diabetic patients with and without MCI.

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

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

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

OC086 COGNITION IMPROVING EFFECTS OF A NOVEL PHYTOCHEMICAL FORMULATION MEMORHIS IN ANIMAL MODELS RELEVANT TO ALZHEIMER’S DISEASE.
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Objectives and Study: To assess the brain connectivity and microenvironmental changes in patients of amnestic Mild Cognitive Impairment (aMCI) using resting fMRI and diffusion tensor imaging (DTI)

Methods: 16 patients of aMCI (aged 67±8.4 years) and 14 normal controls (aged 63±10 years) were included. The diagnosis was made based on the criteria of the National Institute of Neurological and Communicative Disorders and Stroke and the Alzheimer’s Disease and Related Disorders Association of Diagnosis: All subjects were prompted to remain wakeful rest. Resting fMRI was performed using a single-shot T2*-weighted EPI sequence with whole brain coverage and the imaging parameters: TR/TE = 2500/35 ms, pixel size of isotropic 3mm and 144 measurements in approximately 6 minutes. DTI was measured using a spin-echo EPI sequence and the parameters were: TR/TE =7300/87 ms and b-value <1000 s/mm2 in 64 directions and an in-plane resolution of 1.5 mm. The acquisition time was approximately 8 minutes. The diffusion tensor reconstruction, tract based spatial statistics and the independent component analysis (ICA) in resting state fMRI were all performed by using FSL following the prescribed procedure.

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

Conclusions: The study suggested a loss of coherence in neuro-network in patients of aMCI, which could be detected by the reduced regional activities in the default mode network and the decreased Fractional Anisotropy in the surrounding white matter. Functional imaging of human brain such as resting state fMRI and DTI therefore has the potential to detect the subtle functional changes in neurodegenerative diseases such as Alzheimer’s Disease.
OC090 SUBJECTIVE COMPLAINTS OF MEMORY LOSS IN OLDER ADULTS IN SOUTHEASTERN NIGERIA: A NIGERIA 1066 REPORT.

R. Uwakwe1, J.A. Modake2, I.C. Njelita2, N. Ezeama2
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Objectives and Study: Objective: Studies of cognitive disorders and dementia in Africa are still very scanty. Sometimes subjective complaints of memory loss may be a prelude of cognitive impairment. Subjective complaints of memory loss are sometimes exaggerated when compared to actual performance on memory tests. The study describes subjective complaints of memory loss in older adults.

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

Results: Results. 162 older persons (83.6% males), mean age 71.6 ±6.9 years, 47.5% widowed, 8.6% living alone and 59.3% without any formal education were studied. About 17% of the subjects had psychological distress, 44% reported some difficulty with at least one ADL, and 95% reported more than one physical symptom. Nearly 47% of the subjects complained of memory loss. Impaired activities of daily living (OR 2.02, 95% C.I. 1.1-1.38, p=4.7, n=003), Self Rated Health (OR 4.4, 95% C.I. 1.1-1.5, p<0.002) and having four or more than four health conditions (OR 3.0, 95% C.I. 1.4-4.3, 8.7, p=003) were all associated with subjective complaints of memory loss. Remaining married and having formal education were associated with less likelihood of subjective memory loss (OR 0.7, 95% C.I. 0.5-0.9, 8.7, P=004; OR 0.7, 95% C.I. 0.5-0.9, 8.7, P=004) respectively.

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

OC090B INTERVENTION OF POTENTIAL BIODMARKERS OF OCCUPATIONAL DISEASES IN MINERS

S. K. Pingle1, A. A. Jawara2, B. R. Turnure2, B. B. Mchere2
1Department of Biochemistry, 2Biochemistry, National Institute of Miners Health, Wadi, Nagpur, India

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

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

Conclusions: The literature on Aluminium-specific biomarkers is fairly extensive, but no definitive conclusions that can be put into practice have been reached.

This study concluded that neoplatin and Heme oxygenase –1 are important specific biomarker for early diagnosis of the miners.

OC096 HELLENIC ONLINE SOCIETY FOR DEMENTIA – ALZHEIMER’S

Anna Papadopoulou

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

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

DEKAA is one more effort to comfort the carer.

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

06. Easeful death

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1Alzheimer’s Australia SA Inc, Alzheimer’s Australia SA Inc, Glenside, Australia

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

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

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

Conclusions: This paper aims for family members and carers when they feel unsure about making treatment decisions and preparing for death to have full confidence in the process and feel safe in making decisions. Family members/carers feel more supported and much more confident to help the person with dementia to have a good death. In conclusion, this key worker role will help families make informed choices.

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OC093 | ETHICAL ISSUES
07. Ethical issues

L. Mendoza1*
Education, Asociación Guerrerense Alzheimer, Mexico, Mexico

Objectives and Study: ETHICAL ISSUES

In recent years an increasing number of younger people in early stages have been diagnosed with dementia, mainly in English speaking countries. They look just like you or me. They have exactly the same human rights as everybody else, with a myriad of ethical and legal issues. It is no longer a matter between us and them, but of everybody's concern. People with dementia have established their own NGO's (Non Governmental Organizations) to express their voices, needs and fight for their human rights –examples of these are Scottish Dementia Working Group (SDWG) and DASH (Dementia Advisory Support Network International). And why not? To teach us about Alzheimer or other types of dementia from the inside out.

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

Ethical issues have to do with the economic development of a certain society (country), the legal organization, with attitudes, values, social standards, cultural and religious patterns, common sense and everybody concerns. But also with concepts like dignity, respect, autonomy, confidentiality, privacy, quality of life and death. Almost every time there is a need to choose between (a) or (b) situations one is confronted with an ethical issue. Examples: giving up the job, handling money, changing residence, driving, knowing or not diagnosis and technological advances, etc. It reflects in society and government, family, physicians and researchers, pharmaceutical industry, staff and institutions. And most of all, we can no longer neglect the people with dementia.

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Methods: Interviews and questionnaires

Results: People with dementia own NGO’s organizations

Conclusions: WE can no longer neglect the people with dementia

OC097 | RIGHTS OF PEOPLE WITH DEMENTIA IN NURSING HOMES: A FRENCH NATIONAL SURVEY
07. Ethical issues

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

Fondation Médéric Alzheimer produces regular national surveys to observe field practices concerning care of people with dementia in France. In 2009, a survey focusing on the respect of the rights of people with dementia has been conducted in 6,950 nursing homes, collecting quantitative information about residents’ rights and obstacles encountered by care professionals.

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

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

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

OC097B | NATURE & NURTURE DIMENSIONS OF ALZHEIMER’S PREVENTION
07. Ethical issues

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

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

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

Conclusions: The main actual requirement should be the holistic attempt of AD, critical in the context of the global population aging, in order to approach a possible conclusion about nature or nurture interplay in AD, and the elaboration of means to manage them both.
OC098  THE EFFECTS OF COGNITIVE TRAINING IN OLDER ADULTS: A RANDOMIZED CONTROLLED TRIAL
15. Non-pharmacological interventions
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Objectives and Study: This study examined the effectiveness of a cognitive training protocol to older adults in Hong Kong.

Methods: The study was conducted between September 2008 and June 2009. 223 older adults with memory complaints were recruited from 6 different community centers. Participants were randomly assigned into either the intervention group or the control group, and underwent a 12-week program. 1.5 hours each session, conducted by a trained occupational therapist. The intervention group received training in attention and concentration (e.g. visual search), mnemonic strategies (e.g. categorization, visualisation, association and organisation), and reasoning skills (e.g. global identification, subtask analyses and activity scheduling). The control group received psycho-education lectures on topics such as mood disorders, heart diseases and stroke.

Participants were evaluated before and after the 12-week program by the Chinese Auditory Verbal Learning Test (CAVT), the Chinese Dementia Rating Scale (CDRS) and the Stroop Color Word Test - Chinese Translated Victoria version (VST).

Results: 207 older adults completed the intervention program and the post-test assessment. ANCOVA analysis showed that, after adjusting for the baseline differences and education level, the intervention group had higher conceptualisation sub-score of the CDRS (M=27.6) than the control group (M=29). After the 12-week program, (F(1, 203)=1.1, p=0.02) no other significant differences were found.

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

OC099  WORKSHOP: USE OF MULTIMEDIA IN REMINISCENCE PROGRAM OF A DAY CARE CENTER
15. Non-pharmacological interventions
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1Dementia Day Care Center, Athens Association of Alzheimer’s Disease and Related Disorders, Athens, Greece
2Dementia Day Care Center, Athens Association of Alzheimer’s Disease and Related Disorders, Athens, Greece

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

The present workshop proposes an alternative way of reminiscence with the use of Information and Communication technologies (ICT).

Methods: During the workshop, the structure and implementation of reminiscence program using multimedia for dementia patients will be presented.

15 dementia patients over 65 years old participated in this program, which consisted of 24 weekly 1hr sessions and was conducted by trained health professionals. The participants developed their personal WebPages, with photo and video library and personal information about their past lives.

They had the opportunity to choose all the graphics and materials.

Results: During this process the participants were highly involved and enthusiastic. Caregivers contributed in this project by helping their patients to gather additional information and material.

At the end of the program, an event took place in order the patients to present their WebPages to patients’ families.

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

OC100  COGNITIVE MOTION THERAPY: A NON-PHARMACOLOGICAL COGNITIVE TRAINING INTERVENTION IN PATIENTS WITH MILD COGNITIVE IMPAIRMENT (MCI)
15. Non-pharmacological interventions
E. Bacojodiu1, 2, F. Kouvelis1, 2, M. Tsokli2
1Greek Association of Alzheimer’s Disease and Related Disorders, Association of Alzheimer’s Disease and Related Disorders, Kalamaria, 2Greek Association of Alzheimer’s Disease and Related Disorders, Association of Alzheimer’s Disease and Related Disorders, Kalamaria.

3rd Department of Neurology, School of Medicine, AUTH, Greek Association of Alzheimer’s Disease and Related Disorders, Thessaloniki, Greece

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

Methods: The study included 46 women and 12 men, MMSE=27.66 (1.74), age=69.49 (7.10), education=8.58 (4.33), classified in experimental and control groups matched in age (p=0.10), gender (p=0.61), education (p=0.08), MMSE (p=0.06), and cholinesterase inhibitors (p=0.24). The experimental group attended 20 sessions including kinetic exercises targeting attention, memory, dual task, language and visual-spatial abilities. Controls did not attend any non pharmacological therapy during the same period. Participants were assessed at baseline and at the end of the therapy.

Results: At baseline, there were not differences between groups in cognitive abilities. At the end of the therapy, differences were observed in favor of the experimental group, in general cognitive performance (p<0.01), attention (p=0.00), verbal memory (p=0.00), visual fluency (p=0.01), processing speed (p=0.02), executive function (p=0.00), general cognitive performance (p=0.02). The experimental group showed improvement in ADL (p=0.00), general cognitive performance (p=0.02), executive function (p=0.00), attention (p=0.00), verbal memory (p=0.00), verbal fluency (p=0.00). The comparison of the results of the control group remained stable.

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

OC101  DEVELOPMENT OF THE MAINTENANCE COGNITIVE STIMULATION THERAPY MANUAL
15. Non-pharmacological interventions
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2Research Dept of Mental Health Sciences, University College London, London, United Kingdom

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

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

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

Conclusions: Conclusion This study follows Medical Research Council guidelines for Phase I or modelling to develop an evidence-based maintenance group therapy programme for people with dementia. The MCST manual comprises a programme of 24 sessions of maintenance CST, based on the theoretical concepts of RO / Cognitive Stimulation and grounded on the original CST programme. The MCST manual is currently being evaluated within a randomised controlled trial as part of the SHIELD research programme.
OC102 MULTIFACETED PSYCHO-SOCIAL INTERVENTION FOR PATIENTS WITH MILD ALZHEIMER’S DISEASE AND THEIR PRIMARY CAREGIVERS (DASy STUDY): A RATER-BLINDDED, RANDOMIZED CONTROLLED TRIAL WITH 36 MONTHS FOLLOW-UP

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

Methods: 330 patients with mild AD (n=239), mixed AD (n=48), or DLB (n=49) and their primary caregivers were recruited from secondary care dementia clinics and allocated to usual care (n=167) or to the multifaceted intervention program (n=163). The duration of the standardized intervention program was 12 months. Inclusion criteria were age ≥50 years, a recent diagnosis of AD (within the last 12 months), and an MMSE score ≥20.5. A random allocation to one of the programs was made using a computer-generated randomization method. Main outcome was the difference in the primary outcome at the end of the intervention program. Results: There were no differences between the intervention and control groups. Further research is warranted, in order to identify relevant outcomes and identify patients who will benefit from counseling.

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

OC104 COMPARISON OF SEVEN DIFFERENT COGNITIVE TRAINING PROGRAMS IN MCI PATIENTS

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1Greece Alzheimer Association, Alzheimer Association of Kalamaria, Greece Alzheimer Association, Alzheimer Association of Kalamaria, 3rd Department of Neurology, School of Medicine, AUTh, Thessaloniki, Greece

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

Methods: One hundred sixty four MCI patients were included, 52 men and 112 women, with age=88.8 (7.15), education=9.95 (4.38), and MMSE=27.63 (1.71). Participants randomly assigned to one of the seven programs: practice of attention (N=39), mental imagery (N=24), computer training (N=27), cognitive motion therapy (N=27), visuospatial training (N=27), and training with musical stimuli (N=39) and MCI group training without any intervention (N=27). The 24 sessions were conducted in 12 weeks. The primary outcome was the difference in MMSE and Mini-Mental State Examination scores at the end of the intervention. Results: At baseline, there were no differences between groups in cognitive abilities. At the end of the intervention, comparison between groups yielded differences in favor of the experimental group in executive function of ADL (p=0.00), attention (p=0.01), visual perception (p=0.01), and general cognitive performance (p=0.01). Within group analyses of the experimental group’s performance has shown improvement in attention (p<0.005), language (p=0.002), visual perception (p=0.002), visual memory (p<0.003), general cognitive performance (p<0.01), daily function (p=0.002), and finally in anxiety (p<0.02) and depression (p<0.001). On the contrary, the control group showed improvement in attention (p=0.01) and deterioration in daily function (p=0.003).

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

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

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

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

Results: Preliminary results (after 8-11 months in various residences) suggest feasibility and good acceptance of this model nutritional program in assisted living communities, with changes accomplished in basic ingredients, menus and recipes as well as some dining practices. Emphasis on memory/AD special care units. Effectiveness studies were not done. Staff and referring providers appear eager to learn better nutrition for themselves, not just their clients, reflecting growing awareness in U.S. in how nutrition affects brain and body health.

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

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

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

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

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

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

OC107 ASSESSING PSYCHOLOGICAL DISTRESS IN CAREGIVERS OF PEOPLE WITH DEMENTIA: BEYOND THE SINGLE SEVERITY SCORE

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

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

Results: Factor analysis of the GHQ resulted in four subcales: ‘anxiety and insomnia’, depression’, ‘social dysfunction/loss of self-esteem’, and ‘somatic symptoms’. Current health status contributed to the explanation of GHQ total score and the three ‘GHQ subscale scores with an explanatory power of 26% for total GHQ, 15% for ‘anxiety and insomnia’, 11% for ‘depression’, 17% for ‘social dysfunction/loss of self- esteem’, and 37% for ‘somatic symptoms’. In multiple regression analysis, current health state, the CSDD and BADLS scores, explained 30% of the variance in ‘anxiety’.

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

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

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

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

Results: 55.8% of family caregivers showed signs of burnout, related positively to their Zart Care Burden scores. Our findings showed significant positive correlations between scores on the Zart Care Burden Scale and agitation (p<0.05), disinhibition (p<0.01), and irritability (p<0.06) of BPSD. However, burnout was not correlated with particular symptoms of BPSD.

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

OC108 PRESERVING INTERGENERATIONAL AND FAMILY TIES, IN SPITE OF DEMENTIA

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Objectives and Study: The role of family caregivers around people with dementia is recognized as essential, and as a key element for their quality of life. Support for carers has been developed, to help them to preserve their physical and psychological health and to continue their role of carers. In addition to immediate carers, the whole family is concerned by Alzheimer’s. Often, Alzheimer’s and its symptoms isolate the person with dementia from all relatives. So, it’s necessary to find ways for encouraging the continuity of a family life, including several generations.

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

Results: First, we note the variety of implemented initiatives: parties, family birthday lunch bringing together several generations with the elderly person having dementia. In care homes, gardens and playing grounds for children, or flat designed and dedicated to welcome more intimate family meetings. Colouring book to explain Alzheimer to younger, etc.

Then we will present the main characteristics, difficulties, results and perspectives of such initiatives. As key findings, we can notice a better understanding and capacity to explain dementia, less fears to bring children into a care home. But, a long process is needed to increase the awareness of family members to enlarge the circle around the person with dementia.

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

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

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

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

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

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

OC112 NATIONWIDE DEVELOPMENT PROGRAMME ON AGING IN PEOPLE WITH INTELLIGENT DISABILITIES – TO PROMOTE RESEARCH AND EDUCATION ON DEMENTIA

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

Methods: To achieve these targets there was established a national knowledge centre with library, education programmes, research and professional networks. During the spring 2002 the programme was evaluated from MMI Synovaks on commission from Norwegian Department of Health.

Results: UAU achieved to meet the main target for the development programme and was established as a permanent centre from 2006, financed through the Norwegian national budget. The new name for the centre is Intellectual Disabilities and Ageing which is one of three units in Ageing and Health, Norwegian Centre for Research, Education and Service Development.

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

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

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

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

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

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

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

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

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

Results: Poor vision was associated with the development of dementia (p=0.0048); individuals with very good or excellent vision at baseline had a 63% reduced risk of dementia (95% CI: 20%, 82%) over a mean follow-up period of 8.5 years. Participants with poorer vision who did not visit an ophthalmologist had a 9.5-fold increased risk of Alzheimer’s disease (95% CI: 2.3, 39.5) and a 5-fold increased risk of CIND (95% CI: 1.6, 15.6). Poorer vision without a previous eye procedure increased the risk of Alzheimer’s disease 5-fold (95% CI: 1.5, 18.8). For Americans 90 years and older, 77.9% who maintained normal cognition had at least one previous eye procedure, this compared with 51.7% for those with Alzheimer’s disease.

Conclusions: Poor vision is a risk factor for late-life dementia. The results suggest that treatment of visual disorders may delay the diagnosis of dementia, particularly Alzheimer’s disease.
OC116 WORKSHOP: MEMORY GROUPS FOR HEALTHY ELDERLY. STRUCTURE, IMPLEMENTATION AND PRELIMINARY RESULTS.

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

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

Results: The goals of the intervention were fully met:
1. General knowledge regarding memory, aging and dementia increased.
2. Self-reported day-to-day memory functioning significantly improved.

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

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

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

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


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

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

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

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1 Athens Association of Alzheimer’s Disease and Related Disorders, Athens, Greece

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

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

Results: 314 people (283 women and 36 men), 60+ participated. The average age was 72.4 (±7.4) years and the average years of education (g.1, (±2.2). According to the Hollinghead Scale, 35% of the participants were housewives, 49% were technicians, skilled and unskilled manual employees and 15% had middle/per upper level education.

Although 70.1% reported memory dysfunction as the reason for taking the examination, mean MMSE score was 26.7(±3.0) (g.4) and 63.5% of the participants scored 25 and over. Mean CDT score was 7.6(±10.4) (2,7). According to the GDS scores, 65% of the participants had no depression, 22% had mild depressive symptoms while 11% showed severe depression.

Conclusions: Memory complaints of the elderly participants in our project were not related to memory deficits confirmed by cognitive tests. The relatively high percentage of the MMSE scores below the cut off value of 25 points (16,8%) may be explained by the fact that many of the participants had been already facing memory problems and were offered the opportunity to recognize it.

OC119 IMPROVING MULTICULTURAL DEMENTIA CARE IN A WESTERN SOCIETY

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

Methods: The target-group-specific created toolkit ‘Knowing about forgetting’ (WOV) is used in a specially created infrastructure for health education. This education of WOV is given by 18 consultants from ethnic minority backgrounds, who are trained by Alzheimer’s Netherlands. These consultants organise specific information sessions on dementia and theme-based meetings for large groups. The WOV project reaches between 500-1500 family caregivers, senior citizens and other members of their communities. An action plan and evaluation of results is drawn up for each of the objectives. This project investigates the effectiveness and feasibility between 150 participants and 150 non-participants.

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

Conclusions: The wide coverage of the target group in this project opens up possibilities for additional (new) research regarding effectiveness of interventions in relation to dementia and dementia care. Results from this additional research will be converted into healthcare policy, more effectively unifyng supply and demand in health care.
OC112C NATIONAL PROGRAMME INTEGRATED DEMENTIA CARE

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

Methods: Alzheimer Nederland collected the wishes and demands of families of patients in 160 focus groups and with the ‘LPD-Questionnaire’ (N=1500 in 2007 and N=1547 in 2009).

Results: The results were impressive: 90% of the country participated with 206 improvement projects fitting the needs of patients and families. Providers of care, welfare and care worked together with volunteers of the Alzheimer Nederland. Nevertheless more incentives were necessary to integrate help for people with dementia and their families from the beginning until the end of the dementia. Therefore in 2008 the second programme started: Purchasing integrated dementia care. Now in this programme was the participation of ZN, the sector organisation representing the providers of healthcare insurance in the Netherlands. The goal is to provide and purchase integrated support including casemanagement. A purchase guide is developed (also in English) with a description of the ‘ideal region’ for people with dementia and families from the beginning until the end of the dementia, based on the client’s perspective. ZN made guidelines to finance the integrated care. Care providers who develop integrated dementia care, including casemanagement, receive extra budget. Again volunteers participate as patient advocates being spokesperson for people with dementia and their families in the region. At the moment 80% of the country participates in purchasing integrated dementia care. Alzheimer Nederland organise the evaluation (focusgroups and questionnaire) of the programme from a clientperspective.

In March 2010 first results will be presented. Do we see an improvement in quality of dementia care e.g. coordination, patientcentredness, timeliness, comprehensiveness.

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

OC112B IS CASE MANAGEMENT EFFECTIVE FOR HOME SUPPORT FOR PEOPLE WITH DEMENTIA? A SYSTEMATIC REVIEW

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

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

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

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

OC112B ALZHEIMER’S DEMENTIA: A SYSTEMATIC REVIEW

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Objectives and Study: To conduct a systematic review and meta-analysis of trials of Alzheimer’s Disease (AD) interventions (excluding drug therapies) for community living patients. Meta-analysis outcomes include measures of cognitive decline, quality of life and institutionalization, improving quality of life and/or reducing the number of hospitalizations.

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

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

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

OC112C COGNITIVE DEFICITS IN ALZHEIMER’S SPECTRUM DISORDERS

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Objectives and Study: To determine the cognitive deficits across the progression of Alzheimer’s Disease stages, to demonstrate familiarity with the problematic of Mild Cognitive Impairment (MCI) clinical entity and understand the potential correlations between the clinical impact and the socio-demographic data.

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

DEFINITION:

• M. Verny et al: Clinical Features of Severe Dementia. In Research and Practice in Alzheimer’s Disease. Venice Institute of Neurological Sciences (ed) S. Vignatelli (ed) Zanichelli Publisher, 2000, RAVENNA, RAVENNA.
Abstracts - Oral presentations

OC124A Genetic and protein biomarkers for the detection of Alzheimer’s disease

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Objectives and Study: The most promising strategy to detect AD in preclinical or presymptomatic stage need specific biomarkers. In this study we elucidated the relationship between Apo E genotype and CSF biomarkers Aβ42 and Total tau in Alzheimer’s Disease (AD) Patients, Non AD (NAD) patients, Neurological controls (NCs) and Healthy Controls (HCs).

Methods: In this study we included 30 HC, 30 AD patients, 40 NAD, and 46 NC from Nair Hospital, PGIMER, Chandigarh, India after obtaining informed consent from all the subjects. Apo E Genotyping was done according to the Wertham PR et al,1991. The levels of Aβ42 and total tau were determined by ELISA kits (Innogenetics, Belgium).

Results: Our data of CSF Aβ42 and tau levels in conjunction with ε4 allele had shown specificity and sensitivity of 100% and 42.8% respectively for the detection of AD. Aβ42 and Apo E ε4 combination had shown specificity 80.8% and sensitivity 72.1 %. The ε4 allele distribution was 10 % and 50 % respectively. Our data has shown that ε4 allele in combination with Aβ42 to have better sensitivity and specificity in the diagnosis of AD. AD patients with at least one ε4 allele had significantly lower CSF Aβ42 levels than those without ε4 allele (P < 0.001). There was a positive correlation of Aβ42 with low MMSE scores.

Conclusions: Observation from our study suggest that decreased Aβ42 and increased tau level in CSF along with Apo E ε4 allele as risk factors for AD. Our study also shows ε4 allele incidence to be a risk factor for AD.

OC125: Elderly care support and ICT innovations: the paradigm of the LLM project

Panagiotis Bamidis

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

OC126B: Usability of a cognitive rehabilitation software in centers working with dementia patients

Ma. Franco-Martín, Y. Bueno-Aguado; J. Ferrer, J. Valespero, T. Ohiwala, T. Cot

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

OC126B: The role of emotion in elderly trials from a neuroscience perspective

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

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

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OC126C: ACCEPTABILITY AND SATISFACTION OF COGNITIVE TRAINING SOFTWARE (GRADIOR) VS. TRADITIONAL PSYCHO STIMULATION INTERVENTION.

MA. Franco-Martín, J. Porto, Y. Bueno-Agudo; A. Solís; JL. Muñoz; Y. Miguel; C. Tobón.

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

OC126D: ZPLAY: AN INTELLIGENT HUMAN COMPUTER INTERFACE SYSTEM FOR AD ASSESSMENT AND INTERVENTION

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This paper describes an intelligent Human-Computer Interface (HCI) system, ZPLAY, to be used for assessment and treatment for Alzheimer’s. The work uses game-based diagnosis and intervention for the early – prodromal and early – stages of the disease (rather than the moderate, late to end stages), as it associates game performance data with fMRI (functional near infrared) imaging classification to determine AD disease progression through noninvasive monitoring of functional brain activity. fMRI protocols for Alzheimer’s is the prefrontal cortex, by placing the fMRI probes on the forehead, to measure the hemodynamic response to higher order cognitive functions such as doing anagrams. fMRI is an emerging neuroimaging technology, that studies the cortex in the clinic and under more realistic conditions. It uses near-infrared light to measure changes in the concentration of oxyhemoglobin and deoxyhemoglobin in the cortex and is limited to the outer cortex. It is less invasive, portable, and more affordable than other neuroimaging methods. It is also more robust to artifacts caused by movement and can be integrated with other technologies such as EEG. The project’s team has been validating fMRI brain activation outcomes with parallel MRI studies.
OC129 ROLE OF ALZHEIMER’S ORGANIZATIONS WITH RESPECT TO AIDING FAMILIES OF PEOPLE WITH DOWN SYNDROME

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Objectives and Study: Estimates are that of the 24 million adults projected to be affected by dementia worldwide, at least 225,000 are older adults with an intellectual disability (ID). Adults with Down syndrome (DS), a genetic condition and form of idiopathic ID, represent about 0.15 – 0.25% of the typical population of any nation’s adults with ID. Although in general adults with ID do not have an elevated risk of Alzheimer’s disease (AD), adults with DS do present with a high risk for AD (with some 60% of adults age 60 and older showing signs of behaviors associated with clinical dementia). With the progressive increase in longevity of people with Down syndrome, the presentation of dementia of the Alzheimer’s type among people with DS has caused many national and local Alzheimer’s organizations to be drawn into providing technical and clinical resources to families, NGOs, and adults with DS.

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

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

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

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

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

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

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

Conclusions: The data demonstrated the efficacy of applications of the MISIC to persons with ID/AD. Our results support the claim that not all gains that might result from training would have any clinically significant impact. The MISIC employs a holistic approach relating to areas that are not covered in the DMR. Notwithstanding a drop in DMR scores, there was success in subjective functional improvement and quality of life enrichment, aspects not sensitive to the DMR.
OC133 VHEDA STUDY: EFFECTIVENESS OF OCCUPATIONAL THERAPY AT HOME FOR OLDER PEOPLE WITH DEMENTIA AND THEIR CAREGIVERS – PRELIMINARY RESULTS OF A PRAGMATIC RANDOMISED CONTROLLED TRIAL EVALUATING A DUTCH PROGRAMME IN SEVEN GERMAN CENTRES

15. Non-pharmacological interventions

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

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

Results: We recruited a sample of 141 patient-caregiver-dyads, carried out 66 control and 67 experimental interventions. Post-treatment assessment was applied to 132 dyads. The process evaluation revealed that the interventions were highly motivated to take part in the study. We expect to collect data for another 70 caregivers until March 2010. At the conference data on the short term effectiveness of the intervention will be presented.

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

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

15. Non-pharmacological interventions

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2Objective and Study: In November 2008, an innovative eMental Health intervention for family caregivers of people with dementia, called ‘Mastery over Dementia’, was launched in the Netherlands. The intervention is built on principles of psycho-education, cognitive behavioral therapy, problem solving behavior, relaxation therapy and assertiveness training. Interactive feedback is given by a coach. Themes covered in the course are: coping with behavioral problems, arranging help from others, time for yourself, thinking and feeling, non-helping thoughts, helping thoughts, assertiveness and communicating problems.

In May 2009, we started a randomised controlled trial (RCT) to measure the effectiveness of the eMental Health intervention. The experimental group (N=75) received ‘Mastery over Dementia’, the control group received a minimal intervention consisting of a series of information bulletins sent by e-mail. Participants in both groups were followed during approximately 5 to 6 months. Caregivers in the experimental group had additional follow-ups at 3 and 6 months after finishing the intervention. Effectiveness of Mastery over dementia has been determined on psychological well-being, feelings of burden and perceived health.

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

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

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

OC135 OUTCOMES OF USING A WRIST WORN GPS LOCATION DEVICE

15. Non-pharmacological interventions

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

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

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

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

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

15. Non-pharmacological interventions

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

Methods: The study included 20 patients (11 women, 9 men) with MMSE= 27.6 (1.98), age= 72.50 (7.47) and education= 8.40 (3.57), classified in two experimental groups. Group A attended practice of memory and Reality Orientation (N=9) and group B attended the same program plus physical exercise (N=9). There was also a control group (N=7) without cognitive intervention during the same period. The experimental groups attended 20 weekly sessions for a period of 6 months targeting the enhancement of verbal, visual memory and visual perception. Neuropsychological assessment was performed at baseline and at the end of the intervention.

Results: At baseline, there were not differences between groups, in cognitive and functional performance. At the end of the intervention, in favor of the experimental groups, differences were noticed between the control and the group A, in attention (p=0.00) and between controls and the group B in visual perception (p=0.03). There were no differences between the experimental groups. Within group analysis has shown that the experimental groups remained stable in daily function, executive function, attention, visual memory. The experimental group B improved in visual perception (p=0.03). The control group deteriorated in attention (p=0.08), verbal memory (p=0.01) and visual perception (p=0.03).

Conclusions: The combination of memory practice, R.O., and physical exercise has provided a benefit in visual perception that was not present in the combined intervention without the physical exercise.
OC137 THE EVALUATION OF THE DUTCH COMMUNITY OCCUPATIONAL THERAPY INTERVENTION FOR OLDER PEOPLE WITH DEMENTIA AND CAREGIVERS

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Objectives and Study: Community occupational Therapy (OT) for older people with dementia and their caregivers is a multi-component psychosocial intervention that has proven to be very effective in the populations. Dementia phases of the Continuum of Increasing Evidence have been used to reach evidence based occupational therapy intervention in dementia. Methods and outcomes will be presented.

Methods: the “Continuum of Increasing Evidence” of the MRC framework, eligible for evaluation of dementia interventions, was used. This model contains of different research phases: 1) a theoretical; 2) a modelling; 3) a randomised controlled trial; 4) an exploratory trial; 5) an implementation phase.

Results: In the theoretical phase our occupational therapy guideline was developed on extended literature review, practical experience and consensus rounds. In the modelling phase, qualitative case study analyses were performed and defined possible successful components of this OT intervention. In the exploratory trial phase, a pilot study was carried out and determined good feasibility of the intervention and research design based on these successful components. Positive changes were found after OT intervention (n=11 patients and caregivers). Based on these outcomes, the randomized controlled trial design was developed (n= 135 patients and caregivers) and high effectiveness and cost-effectiveness of this OT intervention was found. In the implementation phase, a pilot implementation study determined barriers and facilitators for implementation. The design of the recent implementation study was developed on these outcomes on OT and organizational level, which is now tested in a RCT (n=45 institutes; 90 OT’s; 180 patients and caregivers).

Conclusions: The highly effective and cost-effective outcomes of our studies confirm the importance to follow all phases of the continuum of increasing evidence.

OC138 COGNITIVE EMPOWERMENT PROGRAMS ON HEALTHY ELDERLY IN THE PREFECTURE OF DODECANESE

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Objectives and Study: Cognitive empowerment programs are specifically structured mental exercise programs that are performed either in groups or individually and applied in combination with medication. The purpose of the program is to enhance the cognitive functions of patients through a series of specific exercises and methods. The programs are often applied proactively, i.e. in healthy population in order to maintain good memory function and learning techniques in everyday life.

Methods: On the island of Rhodes, mental reinforcement programs were implemented in the 1st ‘Open Care Centre’ of the Municipality of Rhodes. Specifically, two groups of 10 and 8 people aged 60-75 years were created, whose members were examined, before the beginning of the applied program, through the following psychometric tests:

1) The Mini Mental State Examination Test, about the diagnosis of cognitive function,
2) The Clock Test about diagnosis of cognitive function,
3) The Geriatric Depression Scale (GDS) to detect depression indicators,
4) A short demographic questionnaire and functional elements.

Twenty-two, one-hour weekly meetings took place, during which the completion of crisis, immediate and delayed recall exercises were applied. After 22 meetings, all the participants to the programme were further assessed through the same tests.

Results: The comparison of the results showed:
1) Stabilization or improvement in cognitive function in 15 people
2) A reduction of cognitive function in 3 people
3) Emotional state improvement in 10 subjects.

Conclusions: The results also clearly show the immediate need of preventive, cognitive empowerment programs, aiming to the constant, cognitive exercise, socialization as well as emotional support of elderly people.

OC139 NEUROPSYCHIATRIC INTERVENTIONS IN THIRD AGE IN DODECANESE

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Objectives and Study: During the last three years, when “Panacea”, as a Children’s and Adults’ Mental Health Community Services Development Services Federation, started its activities, it became more than obvious the fact of the inadequate provision of services and need covering for third aged people in Dodecanese.

More specifically, for the time being, the services that take action for people in third age are the following:

• the ‘Help at Home’ programme,
• two ‘Day Care Centers’ and two “Open Protection Centers” for aged people in Rhodes and in Kalymnos island,
• one ‘Friendship Club’ in Kos island,
• two ‘Geriatric Houses’ in Rhodes and Kalymnos island as well as
• one ‘Healing, Physical and Social Rehabilitation Center’ in Rhodes.

In smaller islands of the Dodecanese Complex, the only programme under function is the ‘Help at Home’ one, which, in several occasions, sub functions, due to lack of employees and support by relative local services. Nevertheless, the main concern of ‘Panacea’ and of the inhabitants has focused on the absolute absence of preventive and therapeutic services for patients suffering from Dementia and their caregivers.

Concerning the population of Dodecanese, which is approximately two hundred thousands, the absence of such services is considered to be completely unacceptable.

Methods: Willing to cover the mentioned need, “Panacea” started taking actions in the Dementia field by establishing-in year 2005- the ‘Consultant Center’ for patients suffering from Dementia and in October 2008, the ‘Memory Center’ and the ‘Therapeutic and creative Occupational Center’ for Dementia Patients. Since January 2009, when the union of all these services took place, the “Day Center for Dementia Patients, Arios”, started functioning till today.

Results: The ‘Arios’ center provides-without any fees- diagnostic, therapeutic, and creative occupational services for Dementia Patients and support services for their caregivers and their families.

Conclusions: In future time, we aim to the creation of a service net between Rhodes, Kos and Kalymnos, to the stable collaboration with smaller islands, as well as to the creation of a Psychogeriatric Structure in Rhodes, for the best possible quality services towards third aged people.

OC140 IMPLICATIONS OF THE ECO-SYSTEMIC MODEL OF WELL-BEING UPON SERVICES AND INTERVENTIONS TO PEOPLE WITH DEMENTIA AND THEIR FAMILIES

19 Quality of life in dementia

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Objectives and Study: To examine the implications for service delivery and psychosocial interventions of the recently developed Ecosystemic Model of well-being in older people (Papadopoulos, Biggs and Tinker, 2009) upon people with Dementia and their families.

Methods: Presentation of the research programme on well-being undertaken at King’s College London and development of the well-being model.

Results: To identify the implications of the model within the aims and objectives of current UK policy for people with dementia and their families.

Conclusions: To identify recommendations to the provision of services to this population.
OC141 MEASURING QUALITY OF LIFE IN DEMENTIA CARE
19. Quality of life in dementia
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Objectives and Study: In Germany Shared Housing Arrangements (SHA) - a specific kind of small-scale living facility for older, care-dependent persons often suffering from dementia - have increasingly become an alternative to traditional residential facilities. As to date no care for dementia is available, one of the primary goals in caring for people with dementia is the improvement of Quality of Life (QoL). The aim of our study is to give a review on dementia-specific QoL-assessments designed especially for use in dementia care under particular consideration of applicability in the framework of SHA.

Methods: To identify QoL-assessments a systematic search of literature was performed including databases like Pubmed and Cinahl without a time limitation. Search terms included "dementia", "Alzheimer’s Disease", "instrument" and "Quality of Life" in English and German. Publications were analysed regarding the instruments used to measure QoL, with regard to different settings, time to collect data / complete the questionnaire and severity of dementia.

Results: Dementia-specific QoL instruments as well as generic QoL instruments were identified. Three different methods are employed to assess dementia-specific QoL in institutional or community settings: Direct interviews with residents (e.g. Quality of Life for Dementia), proxy ratings by care staff (e.g. The Quality of Life – Alzheimer’s Disease) and observation of residents by trained observers (e.g. QUALID). Approaches used depend on dementia severity. Domains include independence, self-esteem, social relations among others. Most instruments show good to excellent interrater reliability and internal consistency. No instrument was developed especially for the use in the context of small-scale living facilities.

Conclusions: In the last ten years twelve QoL-instruments were developed and used in dementia care, so that the need for QoL-assessments is evident. Available instruments for assessing QoL in dementia care are highly specific for setting and severity of dementia, which impedes assessments across settings and along the continuum of care. An instrument adapted to small-scale living arrangements should be developed to account for the specific conditions of the setting.

OC142 GENERIC AND DISEASE SPECIFIC MEASURES OF HEALTH RELATED QUALITY OF LIFE IN PATIENTS WITH MILD AD.
19. Quality of life in dementia
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Objectives and Study: Quality of life (QoL) is now being recognized as an important outcome variable in clinical trials of AD. Therefore, there is a growing need to investigate the associative pattern of QoL with standard outcome variables on cognitive performance, activities of daily living, and behavioral and psychological symptoms in AD. In the present study the associative pattern of a generic and a disease specific QoL scale with important clinical variables in AD.

Methods: The study was based on baseline data from 327 home living patients with mild AD who participated in the Danish Alzheimer Intervention Study (DAISY) together with their primary caregivers. The patients and the caregivers separately completed the generic Euro-Qol 5D (EQ-5D) and Euro-Qol visual analogue scale (EQ-VAS) and the disease specific Quality of Life in Alzheimer’s disease scale (QoL-AD), rating the quality of life of the patient. Apart from these, Cornell depression scale, Alzheimer Disease Cooperative Study activities of daily living scale (ADCS-ADL), Neuropsychiatric Inventory (NPI-Q), and Mini-Mental State Examination (MMSE) were also administered. Pearson correlations were conducted to analyse the correlation among the two QoL scales as well as their associative pattern with the clinical variables.

Results: The mean age was 76 (±7.1) and the mean MMSE was 24.0 (±3.5). The patient rated as well as the caregiver rated versions of the two QoL scales were significantly correlated with each other (p<0.001). The caregivers rated EQ-5D and QoL-AD had significant correlation with Cornell, ADCS-ADL, and NPI-Q scores. For the patient rated QoL measures significant correlations were observed with Cornell and NPI-Q scores, but not with ADCS-ADL. MMSE was not significantly correlated with either of the QoL scales.

Conclusions: The generic and the AD specific quality of life scales correlated well with each other and showed a similar pattern of correlation with the clinical variables. This indicates that using a simple generic instrument as the EQ-VAS may reflect the same trends and pattern of association as more specific scales like QoL-AD.

OC143 AUTOBIOGRAPHICAL MEMORY, QUALITY OF LIFE AND PSYCHOSOCIAL INTERVENTION IN DEMENTIA CARE
19. Quality of life in dementia
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Objectives and Study: Autobiographical memory or ‘recollection’ of the past is commonly retained and personally relevant pleasant memories may have a positive effect on quality of life. We explored the relationship between autobiographical memory and quality of life (QoL) in people with dementia.

Methods: 124 community dwelling people with dementia completed the Autobiographical Memory Interview (AMI) and the self assessed Quality of Life in Alzheimer’s disease (QoL-AD) measure.

Results: No direct relationship was noted between the AMI and QoL-AD but stepwise regression modelling suggested that personally meaningful (i.e. semantic) autobiographical memories were associated with reduced likelihood of difficulties in mood and everyday living activity in people with dementia as well as stress and burden in the family carer. Where the quality of the relationship between the person and their family carer was perceived as ‘warm’ (rather than ‘critical’ or conflict-laden), high levels of QoL on the relationship sub-scales of the QoL-AD were seen.

Conclusions: Path analysis suggested that personally relevant semantic autobiographical memory on the AMI predicts a warm relationship between the person and their family carer as well as good QoL for personal relationships on relevant QoL-AD subscales.

The implications of these findings for the targeting of reminiscence therapies to maintain quality of life in dementia care is discussed.

OC144 SUPPORTING LOST CARERS
19. Quality of life in dementia
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Objectives and Study: Last year Norfolk Care Homes Service was fortunate in winning a bid from the Mental Health Foundation to provide funding for a two year project to develop a positive model of relative’s involvement and support to residents who live in care homes. Although the project has only been running since February 2009, we have been able to successfully engage relatives in the sessions run to date. Indeed the project enables family and friends to continue to play a key role in the life of their relative ‘because’ and not in ‘spite’ of being in residential care.

Methods: Despite the best efforts of staff, sadly it is not unusual for the relatives of residents admitted into residential care to feel they have lost their caring role and to experience a great sense of grief especially if the relative had previously looked after their loved one at home for a long period of time. To quote one relative – ‘After 50 years, you need help and something to fill the void.’ Feedback from relatives thus far is very enthusiastic about both the content and social aspect of the sessions and they have reminded us of the value of having opportunities to share their stories and feelings with each other. Indeed relatives are saying to us – ‘just give us more.’ Additionally through the project, care staff have been able to obtain a better understanding of the residents they care for. All people are unique, but how do you find out about a person if they are in the advanced stages of dementia? One way is by engaging relatives and friends who are keepers of important information about the resident who has dementia.

Results: The project is designed to focus on the needs of ‘lost carers’ whose relatives live in residential care whilst at the same time delivering real benefits in terms of:

• Supporting relatives continued positive involvement
• Designing individual appropriate activities for residents
• The ability of utilising expert inputs and opportunities from other external agencies
• The improved understanding by employees of individual residents

Conclusions: Already relatives have seen the benefits of sharing experiences and feelings, learning more about the conditions around dementia and appreciating that they are not alone and that they can maintain a very positive role with their loved ones and with other relatives. As one of the participating establishment managers has said – ‘We need to engage the person’ relatives/friends from the beginning; they are the most important people to the resident. Most people would desperately like to be able to continue to care for their relative at home, and feel terrible guilt when they can’t. A lot of people do not understand dementia.
OC145 QUALITY INDICATORS FOR PSYCHOSOCIAL INTERVENTION IN EUROPE

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Objectives and Study: The quality of psychosocial care for persons with dementia and their families can be improved and made more comparable between countries by the use of quality indicators for psychosocial interventions. The aim of this study is to test the feasibility of quality indicators for psychosocial interventions developed in the Eurocode project.

Methods: The feasibility of the potential set of 15 quality indicators for psychosocial interventions was investigated in a pilot-study by studying the care registered in patient files. Therefore a data extraction form has been made. Patient files of the following settings were used to gather the data: memory clinic, day care center, nursing home, home care service. The results on feasibility were discussed in a meeting of European dementia care experts.

Results: Quality indicator data were extracted for 45 persons with dementia and their carers from 8 European countries. Availability of the data was high in patient files in most settings and countries. The highest availability was shown on the indicator: Number of people with dementia with registration of personal and social needs in care plan and/or medical record. There was a remarkable difference in the use of the quality indicator on discussing the diagnosis with the patient. Not all of the 15 quality indicators were applicable to all settings. Feedback of the professionals who extracted the data will be used to improve formulation and thereby the feasibility of the set of quality indicators.

Conclusions: The results of this pilot-study show that it is feasible to implement the set of quality indicators for psychosocial care in dementia in different European countries. It should be noted that the pilot-study included patient files from dementia care services that were more than average interested in psychosocial interventions.

The set of indicators can be used to compare quality of psychosocial care between European countries and dementia services within countries.

OC146 CREATING SPIRITUAL CONNECTEDNESS

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Objectives and Study: Creating Spiritual Connectedness

The authors have closely worked with participants in a dementia-specific day center for 25 years and during that time have become very aware of the spiritual needs of persons with dementia. Persons with dementia retain their spiritual selves, being touched by the arts, music, religious beliefs and traditions, nature, helping others, and relationships with others. Family and professional carers must, the author’s argue, help create a time and space for persons with dementia for “spiritual connectedness.”

The goal of this presentation is to define spirituality, to discuss the spiritual needs of persons with dementia for “spiritual connectedness.” Persons with dementia retain their spiritual selves, being touched by the arts, music, religious beliefs and traditions, nature, helping others, and relationships with others. Family and professional carers must, the author’s argue, help create a time and space for persons with dementia for “spiritual connectedness.”

When we take the time to reflect on spirituality, take time to be in the present, the very thing that nourishes the person with dementia will nourish us as well.

OC147 THE LONG HELLO OF ALZHEIMER’S

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Objectives and Study: After completion of the presentation, audience participants will be able to:
1. Review the limitations of traditional, stereotypical viewpoints of Alzheimer’s.
2. Identify examples of the positive aspects of the Alzheimer’s disease experience from the lived experience of an adult child care partner.
3. Discuss the possibilities available in relationships with those living with Alzheimer’s disease when invited to express altered and emerging narratives without limitation or censorship.

Methods: This presentation uses extensive documentation, both written and recorded, of a daughter’s conversations with her mother, during the mother’s seven-year experience with Alzheimer’s disease. Based upon lived experiential knowledge, this presentation illustrates how witness-bearing and empathic listening can lead into an unconventional dance, transforming a seemingly despairing experience of loss and grief into one which reveals a meaning and beauty not often highlighted in the literature and experience of dementia. Strategies for creating and implementing an honourable helo are illustrated.

Results: The mother’s recorded voice weaves throughout the presentation with insight, humour, and astonishing poetic sensibility, and it is through her voice, against a background that includes suffering and despair, that new and beautiful insights into the poetic and eientic realities of dementia emerge.

Conclusions: When the landscape of the changing mind is embraced in a long “hello” - the limiting, negative and pervasive stenotypes commonly associated with dementia are challenged, serving as proof that love, loyalty, openness, presence, and listening can provide a canvas for the magical and limitless potential of the Alzheimer’s mind. These powerful insights were gained through the use of writing, and by engaging directly with the experience.
OC148B In search of molecular etiological factors in neurodegenerative processes. Metabolotaxin effects on NMDA and VDCC channels in hippocampal cells

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Abstract

Objectives and Study

Over the past two decades, metabolotaxins (iron, copper, aluminium) have been implicated in the initiation and progress of neurodegenerative processes. Despite understanding, these metabolotaxins have been linked to numerous pathological disorders and associated with the onset of neurological diseases such as Alzheimer Disease.1,2 Their targets - ensuring transport and absorption by the hippocampal cells - include N-methyl D-aspartic acid (NMDA) and Voltage Dependent Calcium Channels (VDCC), stimulating receptors on neurocellular membranes linked to Ca(II) homeostasis and playing an important role in memory.1,2 These targets were the subject of the current investigation, seeking to understand the molecular interactions with structural/soluble aluminium a) being bound to low molecular mass hydroxycarboxylic acids involved in cellular transport and b) affecting the neurotoxic effects on hippocampal cells and the repercussions in neurodegeneration in Alzheimer's disease.

Methods

In an effort to comprehend the transport of this neurotoxic metal ion from the environment to the hippocampus, and ultimately ending in the brains of Alzheimer patients, exhaustive synthetic and physicochemical work were employed in acute toxicity studies, using Ca(II) imaging techniques, on primary rat hippocampal cell cultures.

Results

The well-defined aluminium forms interact with the NMDA and VDCC channels in variable modes dictated by the nature of the metal ion and their solution properties. The Ca(II) response varies in the two channels and depends heavily on their structure, composition and biochemical function. Short and long term exposure of the cells to aluminium defines their susceptibility to apoptosis and necrosis as evidenced by Caspase(II) homeostatic variations at both the neuronal and glial cell level.

Conclusions

The results unravel the diverse reactivity of neurotistic aluminium as that is formulated by the nature of bound ligands in aqueous media, the arid species' thermodynamics, and portray the effects brought on by its variable structure complex forms. The interaction of the well-defined forms of aluminium with NMDA and VDCC cellular structures denote the salient features of both reactants and describe the key factors (size, hydrophilicity, hydrophobicity, charge distribution, local structure, chemical reactivity) affecting Caspase(II) homeostasis and neuronal and glial hippocampal cells variable susceptible to degenerative processes.

References


OC149 BIOAVAILABLE TESTOSTERONE DECREASES THE RISK OF ALZHEIMER'S DISEASE IN NON-DEMENTED CHINESE OLDER MEN: A ONE-YEAR COHORT STUDY

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Objectives and Study: Objective: There was limited data on testosterone and Alzheimer’s disease in Chinese elderly populations.

The objective of this study was to investigate the protective effects of serum total (TT) and bioavailable testosterone (BT) levels on the subsequent risks of Alzheimer’s disease in non-demented Chinese older men.

Methods: Methods: This was a one-year prospective cohort study of ambulatory community-living Chinese-elderly men without dementia at baseline. Morning blood samples for serum total testosterone (TT) and bioavailable testosterone levels were collected from all subjects for subsequent analyses. The primary outcome was conversion to Alzheimer’s disease (AD) at one-year follow-up, AD was diagnosed in accordance to the NINCDS-ADRDA criteria.

Results: Results: 83% of the baseline subjects (n=153) had full one-year follow-up. Their mean age was 72.7 years. 6.5% (n=10) developed dementia (i.e. converters) all having Alzheimer’s disease (AD). 93.5% (n=143) did not develop dementia (i.e. non-converters). Multivariate logistic regression analyses for independent predictors of AD showed that the baseline serum BT level, systolic blood pressure (SBP) and ApoE 4 genotype were independent predictors after adjustment for age, education, body weight, BMI, fasting plasma glucose level, serum HDL-C and SHBG levels. The baseline serum BT level was an independent protective factor for AD, and the adjusted relative risk (RR) of BT was 0.22 (95% CI: 0.10 to 0.49). Baseline SBP and ApoE 4 genotype were independent risk factors, with RRs of 1.04 and 5.04 respectively.

Conclusions: Conclusion: Bioavailable testosterone is a strong protective factor against future AD development in Chinese elderly men.

OC151 INCREASED INCIDENCE OF VISUAL HALLUCINATION IN DEMENTIA PATIENTS COMPROMISED WITH DIABETES MELLITUS

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Objectives and Study: Diabetes mellitus is known not only to cause neuropsychiatry and redopa-thynia but also to increase the risk of dementia. However, diabetic complications have not been determined to contribute to the development of psychotic symptom in dementia patients, and the current study was designed to evaluate the incidences of psychotic symptom of visual hallucination in dementia patients complicated with diabetes mellitus.

Methods: Methods: 231 dementia patients attending Mutsuoka Hospital between January 2007 and March 2009 were enrolled in this study, with an age range of 65-93 years and with 80 points of Hasegawa Dementia Screening Scale. 128 of these individuals were diagnosed with Alzheimer-type, 35 with vascular dementia, 11 with mixed dementia, and 11 with Lewy body disease. Diagnosis of diabetes mellitus was based on fasting blood glucose (FBG) > 9.99 mmol/l and hemoglobin A1c (HbA1c) > 6.5 %.

Results: Results: 41 patients were diagnosed with diabetes mellitus. 36 patients displayed symptoms of visual hallucination. 17 patients were complicated with both diabetes mellitus and visual hallucination. Considering that the prevalence of visual hallucination was 19 / 190 in patients without diabetes, it was remarkable high (11 / 41) in patients with diabetes.

Conclusions: Conclusions: Dementia patients with diabetes mellitus are inclined to associate with psychotic symptom of visual hallucination. In thinking that 40% of patients with retinopathy, they may misunderstand what they see through their damaged eyes when their cognitive functions are impeded. Furthermore, diabetic patients often complicate peripheral neuropathy which can invade oculomotor nerve and cause double vision, which may occur visual hallucination in dementia. Hyperglycemia may also harm central nerve system directly and cause visual hallucination.
OC152 SELECTED VASCULAR INDICES MAY REVEAL POSSIBLE DEMENTIA AND Cardiovascular Disease COEXISTENCE IN THE ELDERLY

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Objectives and Study: Both dementia and cardiovascular disease (CVD) are conditions of high prevalence in the old age. Growing evidence suggests that cardiovascular disease risk factors can be found in either group of patients with dementia of vascular and Alzheimer’s type. Objectives: To investigate the degree of co-existence of dementia and CVD’s risk factors, as well as indications of established clinical or subclinical CVD, in subjects aged 65 years and over.

Design: A case-control study was conducted at the outpatient clinic of an academic Geriatric Unit, in Thessaloniki Greece. The subjects were 85 demented patients and 109 non-demented controls.

Methods: A battery of neuropsychological screening tests for detecting dementia, special questionnaires, history and clinical examination and selected laboratory tests and screening tools for cardiovascular morbidity were used. Statistical processing was performed by SPSS 16.0 for windows. Multiple logistic regression analysis provided us with the odds ratio, displaying the possibility of existence of each of the studied parameters in relation to dementia.

Results: A higher possibility of dementia was found in relation to peripheral vascular disease, abnormal ankle-brachial index, carotid artery disease, white matter lesions in brain computerized tomography, raised levels of homocysteine and Natriy of vascular operation. Lower possibility of dementia was found in relation to raised body mass index.

Conclusions: The study provided evidence that selected cardiovascular indices may discriminate patients who have greater possibility to also suffer from dementia and so require an additional thorough specific examination.

OC153 CONVERSION OF MILD COGNITIVE IMPAIRMENT TO ALZHEIMER DISEASE IN A GROUP OF ELDERLY ROMANIAN PATIENTS

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Objectives and Study: Alzheimer Disease (AD) as well as other dementia have a complex etiopathology in which neurobiological, cognitive, anthropometrical and social risk factors are interfering with a specific genetic vulnerability. According to different authors, the rate of annual conversion of Mild Cognitive Impairment (MCI) to AD could vary between 6-25%. This study belongs to DESCRIPA project and represents its first descriptive attempt in the East-European area. Its goal was to evaluate the predictors of MCI’s conversion to AD in Romanian patients.

Methods: Sixty patients were diagnosed with MCI in our Memory Clinic using clinical criteria, psychometric, imaging and laboratory tests. The neuro-psychological evaluation was performed by screening tests such as MMSE, clock test, ADL, IADL, as well as tests focusing on several specific cognitive domains: memory, language, executive function/problem solving, praxis/visuo-construction, and attention/concentration (Grober Buschke, Rey figure, Verbal Fluency). Data processing included t-test for independent samples, partial correlations, and a logistic regression model (PASW). P-value less than 0.05 was considered significant.

Results: Statistically significant differences between the MCI group that do not progressed to dementia and the MCI group that did it were found with respect to MMSE(p<0.01), Clock test (p<0.01), ADL (p<0.01) and verbal fluency (p<0.05).

Conclusions: The best predictors of MCI to AD progression detected by us to the Romanian patients under study were verbal fluency and age (p<0.05). Larger prospective studies are necessary in order to confirm their role as markers for this conversion.

OC1515B CARE OF ALZHEIMER’S PATIENTS IN THE MIDDLE EAST

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Middle Eastern countries have certain cultural, social and economic characteristics in common with similar aspiration. The percentage of elderly in the Middle East is expected to increase with improvement of the health care delivery to the area. The region, like other developing countries, needs to define the policies and programs that will reduce the burden of aging populations on the society and its economy. There is a need to ensure the availability of comprehensive health services for the elderly. A rising geriatric population, with increasingly unmet health care needs, strongly suggest the necessity for a better educational preparation of those health professions actually or potentially serving them. The absence of sufficient numbers of trained geriatricians and gerontologists, among health professionals, seriously undermines the ability of the country’s health care system to adequately assess, treat, and rehabilitate the growing aging population. This shortage leads to inappropriate care, higher costs, and poorer patient outcomes.

As the population age the number of Alzheimer's patients will increase as well. Specialist services for Alzheimer's disease in the region are scarce. Usually Alzheimer patients are treated on the same floor of long term stay. There is lack of adequate services for Alzheimer’s patient in the region.

Current available services will be reported and at the same time future recommendation will be made.

OC0515C USE OF TELEMEDICINE FOR MANAGEMENT OF PATIENTS WITH ALZHEIMER’S DISEASE

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Current management of Alzheimer's Disease (AD) incorporates the early prevention, diagnosis and treatment of AD. Today, the use of telecommunications for health care has substantially increased. Therefore, prevention, diagnosis and treatment of AD, are potential targets of telemedicine services, which aim at the best assessment of AD patients and the reduction of caregiver burden. The results of studies performed on the use of telemedicine for AD showed that it is as accurate as face to face examination and also the patients were keen and willing to try the use of new technologies. The use of “smart homes” with the integration of technology and services through home networking, provide AD patients a better quality of living and can help them lead safe and independent lives.

Moreover telemedicine might serve in the education not only of doctors and other health professionals (such as psychologists and nurses), but also of the caregivers or even the patients themselves, on various aspects of AD.

To conclude, telemedicine can be used in a broad sense for the diagnosis and treatment of AD, it reduces time and distance in health care provision and it can serve as a future, easy and accurate, way for the assessment of AD patients.
OC1155 KNOWLEDGE AND BELIEFS ABOUT SYMPTOMS, TREATMENT AND OUTCOME OF DEMENTIA OF ELDERCARE AGENCIES STAFF IN SINGAPORE

22. Training of professional caregivers

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Objectives and Study: It aims to understand the literacy of dementia amongst staff of eldercare agencies to enable more targeted training and earlier detection of dementia.

Methods: 149 staff from 13 eldercare agencies answered the questionnaire. It comprised 15 MCQs (symptoms), 10 MCQs (risk factors), Likert scale 1 to 10 to assess beliefs about the helpfulness of (i) treatment modalities (medications, psychosocial interventions, ‘alternative treatments’), (ii) care providers (informal, doctors, non-doctors). They also rated outcome if patient refused/received treatment. Association between total dementia score and age, gender, education, socioeconomic class, work experience, training, source of knowledge, having friends/relatives with dementia & self-perceived understanding of dementia was assessed using linear regression analysis with SPSS version 10.

Results: Mean age: 40.6 (SD=12.1). The majority were female (82.6%), Chinese (83.3%), had post-secondary education (73.6%), had experience working with elderly (69.4%, average 5.5 years), no formal training in dementia (64.3%) & commonest knowledge on dementia were talks (47.7%) & media (42.3%).

For symptoms, average number of correct answers was 9.4/15 (62.7%). Memory problems (81.2%) & confusion (85.9%) were better recognized than loss of initiative (59.1%) and language problems (62.4%). For risk factors, the average number of correct answers was only 3.6/10 (38.5%). Only ‘having friends/relatives with dementia’ (p<0.006) & ‘knowledge on dementia from courses/talks’ (p=0.035) were statistically associated with better total dementia score.

More endorsements for psychosocial interventions (e.g. physically & mentally stimulating activities, 74.9%) than medications (e.g. antipsychotics, 20.9%) or alternative treatment (e.g. ginseng, 36.4%). Specialists (e.g. psychiatrist, 70.7%) & family (64.9%) were deemed more helpful than GP (43.9%) & non-doctors (e.g. TCM, 28.8%). With treatment, 77.4% less participants believed ‘patient will not improve/become worse’, & 58.6% believed ‘patient will recover fully but problems would probably re-occur’.

Conclusions: Since adopting these theoretical foundations to inform the KTE strategies of the AKE in 2008, AKE membership has more than doubled (from 1153 members in April 1, 2008 to 2358 members by March 31, 2009), the number of people engaging with the online resource tools has increased by approximately 400%, and knowledge exchange opportunities have more than doubled (from approximately 139 events in 2008 to 400 in 2009).

OC1156 BREAKING KNOWLEDGE TRANSLATION AND EXCHANGE BARRIERS WITH THE ALZHEIMER KNOWLEDGE EXCHANGE

22. Training of professional caregivers

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Objectives and Study: A major challenge for both paid and non-paid care partners of individuals with dementia is timely access to relevant research-based information, best care practices, and to the services, resources and supports provided by various government and community agencies and organizations. Engaging these care providers in knowledge translation and exchange (KTE) through networks, can facilitate the flow and use of meaningful information, to support evidence-informed decision making and better care for people with dementia.

In Ontario, the Alzheimer Knowledge Exchange (AKE) promotes and supports a knowledge translation and exchange (KTE) interface amongst researchers, educators, care partners (paid and non-paid), policy makers and stakeholder organizations. The AKE connects all sectors, settings, and disciplines, in order to support the learning needs of people seeking practice change.

Methods: The Knowledge Transfer Cycle (Sullivan et al., 2004) which illustrates the 5 non-linear phases of knowledge transfer was used within the context of the PARiHS framework (Kitson et al., 2006) which suggests that successful knowledge transfer is a result of the interplay between three key factors: evidence, context and facilitation. This evidence provided the theoretical foundation for successful KTE interventions.

Results: Since adopting these theoretical foundations to inform the KTE strategies of the AKE in 2008, AKE membership has more than doubled (from 1153 members in April 1, 2008 to 2358 members by March 31, 2009), the number of people engaging with the online resource tools has increased by approximately 400%, and knowledge exchange opportunities have more than doubled (from approximately 139 events in 2008 to 400 in 2009).

Conclusions: Valuable lessons have been learned by the AKE, captured through both summative and formative evaluation, about developing and nurturing communities of practice, the role of the knowledge broker and information specialist, stimulating practice change and engaging researchers, caregivers and policy makers.
OC159 PREPARING FUTURE HEALTH CARE PROFESSIONALS IN A SPECIALIZED ALZHEIMER’S FACULTY

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2

Objectives and Study: Thirty five million people have Alzheimer’s disease worldwide, and projections of numbers affected for the future are staggering. Currently, there is little formal Alzheimer’s disease training for health care professionals to prepare them for independent practice that will include the care of individuals and families facing dementia. A facility exclusively for persons with Alzheimer’s disease has afforded a unique teaching opportunity. The merging of academia and the service sector is a positive experience, promoting Alzheimer’s competency through more effective educational programs improving patient care and providing a forum for the exchange of information between students and staff.

Methods: Physicians, pharmacists, nurses and students in a variety of health related fields experience the effects of this disease on individuals and families, and learn to best manage their care by participating in weekly interdisciplinary rounds in a dedicated Alzheimer’s continuum of care. University affiliations and agreements were developed and students are assigned a facility preceptor. Students complete pre-surveys regarding expectations and objectives. Following their experience, post-surveys consist of how well their objectives were met, strengths, and weaknesses of the experience. Students’ comments and other data are analyzed to determine additional needed content to enhance the educational experience.

Results: Over the past 23 years, over 3,000 students from a variety of fields such as medicine, nursing, pharmacy, administration, gerontology, social work, geropsychiatry, etc. have participated in this program, generating more effective educational programs and clinical experiences. Benefits for staff, students, families and residents were explored and a determination of the student experiences were examined by comments made on evaluations.

Comments include, “Overall, this may be the strongest aspect of our geriatric rotation,” “Rounding was a really good learning experience – knowledge that you don’t get from textbooks,” “Having the pharmacy students as well as the nursing students present gave us a different perspective,” and, “It was an eye opening experience.”

Conclusions: Comments on student evaluations reinforce that even students with extensive training are not fully in touch with the impact of Alzheimer’s disease and dementia on the individual or their family without first-hand experience. This opportunity helps future health professionals understand the true impact of this disease. Reportedly students are more sensitive, and while aware they cannot at this time change the course of the disease process, know there is much that can be done to improve the quality of life for the individual and family. They also recognize the impact that a consistent, trained and supported staff make to enhance care and quality of life.

OC160 APPLICATION OF THE KAP MODEL TO PREDICT NURSES’ JOB SATISFACTION AND CAREGIVING STRESS: A NATIONAL STUDY OF DEMENTIA EDUCATION PROGRAM

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Objectives and Study: This study examined the applicability of a 9-hour dementia education program to evaluate nurses’ learning effects, which were tested using a quasi-experimental design. Participants were examined by using the Dementia Knowledge, Attitude, and Perceived Self Efficacy Questionnaires, Job Satisfaction & Caregiving Stress Scale.

Methods: National conferences were applied with purposeful sampling techniques to select registered nurses who were working at Long Term Care Facilities in Eastern and Western Taiwan. An anonymous, self-administered questionnaire based on the theory of Golden Triangle of Knowledge, Attitude, and Perceived Self Efficacy was distributed to 322 nurses. A total of 350 nurses who had returned the questionnaires were used for the analyses.

Results: Structural Equation Modeling (SEM) to test the KAP (you may write other terms) model indicated that knowledge (β = -.03), attitudes (β = -.15 & -.21), and perceived self efficacy (β = .37 & .17) were significantly direct effects on nurses’ outcomes (job satisfaction & caregiving stress). The hypothesized model test indicated except M. χ2(31, N=300) =43.75, p = 0.064, GFI = .974, RMSEA = .036. The KAP model constructs accounted for 54% of the variance in nurses’ learning outcomes.

Conclusions: The KAP appears to be an appropriate theoretical model capable of predicting nurses’ outcomes of job satisfaction and caregiving stress. Recognizing the related demographic factors for the KAP model with practical utility to develop more effective strategies for the dementia education program to improve quality of dementia care.

OC161 FITTING PROFESSIONAL CARING COMPETENCIES AND TOOLS TO INDIVIDUAL PREFERENCES AND CHARACTERISTICS OF PEOPLE WITH LATE STAGE DEMENTIA IN SPECIAL CARE UNITS.

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Objectives and Study: There is a general consensus around the fact that behavioural symptoms can be moderated by care and that knowledge concerning behavioural symptoms is not necessarily sufficient and accompanied by corresponding changes in practices. As a matter of fact staffs in nursing homes are often unlicensed and have limited training. Thus there is a need of follow-up of to maintain knowledge and practice changes.

In this communication we will present a training program that was partly designed to fit and understand interior design adaptations that are made in special care units (SCU) and partly designed to help accompany people with dementia by using a panel of psycho-social tools in order to fit best individual characteristics and preferences.

Methods: The training program was implemented with the staff members of 4 SCUs. The staff members benefited of 12 consecutive training sessions and one follow-up session 6 weeks after the last training session. Reports describing elements that have been taught in the training session, themes of concern of the staff members, atmosphere during the training session, implication of the trainees and organisational issues were transmitted to the experimenters at the end of each training session. A burnout inventory was administered to the staff before and after the training sessions.

Results: Results will be discussed in terms of assiduity, leadership, motivation, adherence and resistance to the training program, staff-resident relationships, engagement, and frustrations.

Conclusions: We will conclude this presentation on the global issues concerning the training program and the benefits of developing tools to help professional carers of people with dementia to fit their practice to the residents they take care of.
WS2 KONFETTI IM KOPF - A PHOTOGRAPHIC AWARENESS CAMPAIGN

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1,2 - Rellingen, Germany

Objectives and Study: "Konfetti im Kopf" (konfetti in your heart) is a multi-faceted campaign on dementia. It started in Berlin in October 2009 and will travel to other cities. The heart of Konfetti will be a large-scale open air exhibition displaying pictures from my long term photo project on dementia.

It was my intention to reach the general public, clearing out prejudices about dementia and helping to plant new pictures in heads and hearts of people.

During the pre-phase of the campaign 18 professional organisations dealing with age care could be activated to contribute their know-how and manpower.

Methods: Patron of the campaign is former Federal President of Germany, Prof. Dr. Roman Herzog. Klaus Wowereit, mayor of Berlin, also became a Konfetti-mentor, together with celebrities like actors, athletes, authors and singers.

The exceptional campaign was present all over Berlin, especially in the Central Station on big banners, posters, bill-boards and screens. At an information desk people could learn about dementia and were encouraged to visit the open-air exhibition. The Website provides in-depth details about the campaign. Every day visitors were involved in a supporting program with readings, plays, films, concerts, workshops, lectures and dances.

Results: The campaign "Konfetti im Kopf" was successful in bringing together many different professional organisations concerned with dementia care and using the synergistic effect for this important issue. Several German cities expressed their strong interest in continuing "Konfetti im Kopf" in 2010.

Conclusions: Dementia is a socially relevant issue, usually communicated in dreary colours. "Konfetti im Kopf" uses a constructive and colourful approach to handle this subject. Thus the campaign manages to show new perspectives and to encourage people to look into the subject more closely.

WS3 ART THERAPY FOR PEOPLE WITH DEMENTIA - CASE REPORT

Dario Garau Setzu

My mother, 81 years old, has suffered for almost 10 years from Vascular Dementia (and prob.

Methods: After an initial period of standard pharmacological therapy (about two months of neuroleptics, antidepressives and sedatives), during which my mother was very rundown, incredibly confused, very restless, no more able to eat by herself, to walk, etc... and she was given a diagnosis of a few months of life (!), I thought to change strategy, to stop gradually (in a few weeks) all pharmacological treatment with antidebandatives but behavioural disturbances were present. After his individual and family status were evaluated, he was advised to attend the Day care centre in a Nursing home for older and incapable people Medvescak, 1, Alzheimer Disease Societas Croatia, 2, Croatian Institute for Brain Research, Medical School, University of Zagreb, 3, OZ Trnje, Zagreb, 4, Neuropsychiatric Hospital Dr. Ivan Barbot, Popovaca, Croatia

Objectives and Study: To see if art therapy, as a non-pharmacological intervention, can be beneficial in person with dementia (P WD).

Methods: We are presenting a case report of a person with Alzheimer’s disease (AD) who was involved in art therapy while attending the Day care centre for PWD.

Results: Alzheimer Disease Societies Croatia (ADSC) which is located in Zagreb, the capital of Croatia, has been running the Counselling centre from its foundation in 1999. We have monthly meetings for families of PWD and at others interested. The cases (Mrs) and Mr. Zvonko, who was diagnosed with Alzheimer’s dementia of moderate stage, came one day to the Counselling centre. He was already on standard pharmacological treatment with antidementives but behavioral disturbances were present. After his individual and family status were evaluated, he was advised to attend the Day care centre in a Nursing home for older and incapable people "Medvescak", in Zagreb. This Day care centre, which has the longest experience with rehabilitation of PWD in Croatia, is located in the centre of the town, and the transportation for PWD is provided. They are equipped with occupational therapists who are providing a person-centered rehabilitation. They have agreed that for Mrs. Zvonko, who was a technician, art therapy may be appropriate. Although he has never painted pictures before developing AD, everybody, including his wife, was surprised with his talent and creativity. While painting the pictures he was calm and satisfied and his behaviour in the Day care centre, also at home, became much more adequate.

Conclusions: Art therapy, as an add-on non-pharmacological intervention, can be beneficial for behavioural disturbances in PWD who are taking antidementives.

WS4 MY MOTHER'S SECOND LIFE.....

Dario Garau Setzu

Objectives and Study: My mother’s second life.

Methods: After an initial period of standard pharmacological therapy (about two months of neuroleptics, antidepressives and sedatives), during which my mother was very rundown, incredibly confused, very restless, no more able to eat by herself, to walk, etc... and she was given a diagnosis of a few months of life (!), I thought to change strategy, to stop gradually (in a few weeks) all pharmacological treatment with antidebandatives but behavioural disturbances were present. After his individual and family status were evaluated, he was advised to attend the Day care centre in a Nursing home for older and incapable people "Medvescak", in Zagreb. This Day care centre, which has the longest experience with rehabilitation of PWD in Croatia, is located in the centre of the town, and the transportation for PWD is provided. They are equipped with occupational therapists who are providing a person-centered rehabilitation. They have agreed that for Mrs. Zvonko, who was a technician, art therapy may be appropriate. Although he has never painted pictures before developing AD, everybody, including his wife, was surprised with his talent and creativity. While painting the pictures he was calm and satisfied and his behaviour in the Day care centre, also at home, became much more adequate.

Conclusions: Art therapy, as an add-on non-pharmacological intervention, can be beneficial for behavioural disturbances in PWD who are taking antidementives.

WS4 MY MOTHER'S SECOND LIFE.....

Dario Garau Setzu

My mother, 81 years old, has suffered for almost 10 years from Vascular Dementia (and prob. AD).

Methods: After an initial period of standard pharmacological therapy (about two months of neuroleptics, antidepressives and sedatives), during which my mother was very rundown, incredibly confused, very restless, no more able to eat by herself, to walk, etc... and she was given a diagnosis of a few months of life (!), I thought to change strategy, to stop gradually (in a few weeks) all pharmacological treatment with antidebandatives but behavioural disturbances were present. After his individual and family status were evaluated, he was advised to attend the Day care centre in a Nursing home for older and incapable people "Medvescak", in Zagreb. This Day care centre, which has the longest experience with rehabilitation of PWD in Croatia, is located in the centre of the town, and the transportation for PWD is provided. They are equipped with occupational therapists who are providing a person-centered rehabilitation. They have agreed that for Mrs. Zvonko, who was a technician, art therapy may be appropriate. Although he has never painted pictures before developing AD, everybody, including his wife, was surprised with his talent and creativity. While painting the pictures he was calm and satisfied and his behaviour in the Day care centre, also at home, became much more adequate.

Conclusions: Art therapy, as an add-on non-pharmacological intervention, can be beneficial for behavioural disturbances in PWD who are taking antidementives.
WS5 MAKING THE DIFFERENCE THROUGH ADVOCACY

M. J. Splaine1*
Advocacy and Public Policy, Alzheimer’s Association US, Washington, United States

Objectives and Study: Participants will be able to name five essential components of an advocacy activity and use a planning grid for same.

Methods: Lecture, discussion, case examples, handouts

Results: What makes the difference in winning and losing policy issues? The broad answer is a well planned and executed strategy, but this session will specifically break down the five core elements of strategy (setting goals, reviewing organizational considerations, identifying constituents and allies, developing targets and creating winning tactics) using examples of both successes and failures from recent advocacy campaigns across the world.

Conclusions: Inspiration and capacity to replicate advocacy activities in home countries/communities

WS6 THROUGH THE LOOKING GLASS ... INVENTING A NEW ORGANISATIONAL FUTURE

F. J. Schapper2,3
CEO, Alzheimer’s Association WA Ltd, Subiaco, Australia

Objectives and Study: Not applicable

Methods: Not applicable

Results: Not applicable

Conclusions: Disease-specific peak organisations are often cast in a traditional mould that revolves around creating public awareness, advocacy, lobbying government and providing a voice for its constituents. Some organisations take on a service provision role often in the belief that generic services don’t have the necessary expertise or insight required to provide appropriate support or develop responsive service models. Those more adventurous may even encourage research and be directly involved in providing suitable research participants and funding. Is it possible to redefine such an important yet convention role? How can organisations reinvent themselves in order to increase their impact, be more responsive to the future demands of their constituents, ensure that best practice services are provided to all those that need them, and that credibility is enhanced? This presentation will tell of Alzheimer’s Australia WA’s journey in redefining itself to be better positioned strategically to influence government policy and academic programs, creating a practical focus on applied research, while developing strong national and international links. Secondly, the presentation will challenge participants in re-thinking the roles of disease-specific peak organisations, how they can create a new environment by working collaboratively with industry to build the capacity of others to meet the growing needs of their constituents. Alzheimer’s Australia WA is currently in the process of moving its entire operation onto a local university campus. This unique collaboration between the university and Alzheimer’s Australia WA has given a new meaning to “best practice” dementia care and facilitate the emergence of interdisciplinary practices across a range of university faculties and industry partners. This “capacity building” role of Alzheimer’s Australia WA will enable the organisation to work effectively with service providers to improve dementia care practices and create practical and appropriate care models that reflect the needs of those that live with dementia.

WS7 RISING TIDES: THE IMPACT OF DEMENTIA IN CANADA 2008 - 2038

D. F. Harvey1,2, D. Benczkowski3, P. Wilkinson1
Member Services, The Alzheimer Society of Ontario, 2CEO (Interim), 3Media and Government Relations, Alzheimer Society of Canada, Toronto, Canada

Objectives and Study: While other countries have recognized the current and impending impacts of dementia on their societies, Canada has just begun to do so. In 2008, the Alzheimer Society of Canada initiated a project to spur policymakers to action. The study projected the cost to society and to individuals, of Alzheimer’s Disease and related dementias, for each of the next 30 years, and analyzed the reduction in economic burden of four evidence-based scenarios which demonstrated how the projected burden could be changed.

Methods: 1. Using its Life at Risk® evaluation framework, RiskAnalytica developed a base case estimate of health and economic impacts of dementia in Canada over the next 30 years (assuming no policy or treatment interventions).
2. Dementia subject experts identified “what if” scenarios to explore where evidence-based interventions could have a significant impact on the base case.
3. “What if” scenarios were applied to the base case to quantify the impacts of prioritized interventions on the economic burden of dementia in Canada.

Results: 1. The cumulative total economic burden is expected to reach $872 billion (2008 dollars) over the 30-year simulation period.
2. Four interventions could significantly reduce the economic burden of dementia:
   a) Increasing physical activity: $52 billion
   b) Delaying the onset of dementia: $219 billion
   c) Supporting caregivers: $63 billion
   d) Providing a System Navigator to clients and families: $114 billion

Conclusions: The study concludes that the time to act is now, and suggests that a Pan Canadian response is needed. This should include:
   1. Investment in dementia research, particularly prevention and early intervention research
   2. Recognition of the important role of caregivers
   3. Fostering integrated models of care
   4. Strengthening Canada’s dementia workforce

WS9: THE VOICE OF PEOPLE WITH DEMENTIA

Lynda Hogg, and Maureen Thom
Alzheimer’s Australia

Lynda Hogg, who has a diagnosis of Alzheimer’s disease, will take the audience through her own personal odyssey. She will show how she has chosen to not just sit back and lament her losses but to get involved in positive activities, including:

- Joining the Scottish dementia Group
- Joining Alzheimer Scotland’s Council
- Being an active member of various reference and advisory groups
- Giving presentations to a wide range of audiences in Scotland, the UK and beyond
- Volunteering at a day club for older people with dementia
- Much more.

Lynda is passionate about the importance to people with dementia, their families and friends of appropriate and timely information. This led to her getting involved with Alzheimer Scotland’s multidisciplinary Information Guidelines Working Group which is developing practical information guidelines and tools to help health and social care staff in Scotland provide a better service at any stage of the journey through dementia. Lynda and I are keen to discuss the work of the Information Guidelines Working Group and its outputs so far.

* Corresponding author.
Abstracts - Oral presentations

**WS11: THE VOICE OF PEOPLE WITH DEMENTIA**
19. Quality of life in dementia

M. Sewell*1
Scottish Dementia Working Group, Alzheimer Scotland, Glasgow, United Kingdom

**Objectives and Study:** As far as we are aware, the Scottish Dementia Working Group remains the only national campaigning group of people with dementia in the world.

**Why is this?**
How can we help other countries develop their own groups?

**What has the SDWG achieved?**
How do members benefit from being part of the group?

**Methods:** The presentation will take the audience through a journey which begins with the early stages of how and why the SDWG was set up. We will look at some of the practicalities of how the group runs and how it is sustained. We will offer practical suggestions for how other countries may seek to establish their own campaigning groups of people with dementia. We will talk about the wide range of campaigning and awareness-raising activities that group members have been involved with. These include:

**Results:**
- campaigning on medical issues and respite care, amongst other things
- meeting with government ministers and other politicians
- submitting views to a wide range of organisations
- producing two DVDs and work is underway on a new training DVD
- membership of the Scottish Government's Dementia Forum and Mental Health Collaborative Dementia Reference Group
- speaking at conferences in Scotland and abroad
- contributing to the professional training of student social workers, doctors and nurses

**Conclusions:** We will conclude with a review of our current work, including perhaps the pinnacle of our achievements to date, in working with the Scottish Government on the development of the new Dementia Strategy. Members are participating on equal terms with professionals, in recognition of the real value the contribution of people with dementia can make and the unique perspective they can bring.

**WS12: CREATING PARTICIPATION AND RELATION FOR PEOPLE WITH DEMENTIA IN JAPAN**

Ryu Yoshino, Yoko Mizutani
Alzheimer's Association Japan

In the occasion of ADI International Conference in Kyoto in 2004, Japanese person with dementia spoke out. Following that, governmental measures for dementia in Japan have been advanced greatly. In 2005, "The committee for supporting network of people with dementia" was established as a supporting project by government, in which AAJ has been carrying secretariat. We will report concerning participation and relationship of people with dementia in AAJ activities as follows:

- "Appeal and presentation at a meeting of people with dementia ", "Summit on dementia of early onset". "Presentation at memory lecture by people with dementia on World Alzheimer's Day" and "Organizing participation in a branch office ".

**WS13: LIFE HISTORY – “PORTRAIT OF A LIFE”**

Peter J S Ashley, Suzanne Wightman

It has become a well established fact that stimulating people with dementia to become involved in intellectually challenging pursuits can be highly beneficial to their wellbeing and therefore that of their carers. The beneficial effects can, in some, slow down their decline and provide stimulus and interest by looking back at their own history throughout their life. Ongoing benefits thus derived are a personal history of the subject which can be used in the future to maintain a much better quality of life (the reminiscence effect).

In the United Kingdom the South West Yorkshire Partnership Alzheimer's Foundation Trust Collaborative, of which the presenter is proud to be the Patron has developed a multimedia toolkit for this Life Story work.

This toolkit, entitled "Portrait of a Life" has been spearheaded by a small project team lead by Suzanne Wightman, one of the Trust's senior nursing managers and Collaborative lead and who will be co-presenting today.

"Portrait of a Life" received funding from the UK Mental Health Foundation following an open competition with over 150 applicants. The product has been professionally produced by the team in the Collaborative and comprises a multimedia toolkit aimed at care homes, hospitals, the voluntary sector and all those concerned with the wellbeing of people with dementia.

In this presentation, a marvellous couple Leo, who has dementia, and his wife and carer Edith, have allowed us to use them as an example of how the toolkit can be applied to very positive effect. Prior to starting with our project team, Leo was quite and introverted, demonstrating the classical signs of late dementia. As they worked with our project team Leo became much happier and he became outgoing with his MMSE raised by some 6 points.

We launched this product in the UK this February/March and because of its instant success, we decided to bring it to the attention of the International community at this ADI Conference.