P2-251 VISUOCONSTRUCTIONAL IMPAIRMENT IN SUBTYPES OF MILD COGNITIVE IMPAIRMENT

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Background: While past dementia research suggests that executive impairment can underlie difficulty with visuoconstructional tests (VC), this problem has not been well researched among patients with mild cognitive impairment (MCI). The current study assessed VC with the clock drawing test (CDT) to command and copy with hands set for "10 after 11" in conjunction with other neurocognitive constructs often used to determine MCI diagnosis, and tested the hypothesis that clock drawing errors are related to executive impairment. **Methods:** 83 MCI patients were studied. First, to assess the relationship(s) between clock drawing errors and other neurocognitive constructs independent of MCI subtype, a principal component analysis (PCA) was obtained comprised of tests assessing executive control, naming/lexical retrieval, and declarative memory along with clock drawing errors to command and copy. Second, using these same neuropsychological variables (excluding clock drawing parameters), MCI subtypes were statistically-determined using cluster analysis. Statistically-determined MCI subtypes and a normal control (NC) group not drawn from our MCI corpus was used as a grouping variable. ANOVA and logistical regression determined between-group differences for clock drawing errors among MCI subtypes and NCs. **Results:** PCA yielded a 3-group solution (65.43% of variance). Contrary to expectation, increased clock drawing errors loaded with reduced performance on naming/lexical retrieval tests rather than executive tests, i.e., Factor 1: executive tests; Factor 2: naming/lexical retrieval and clock drawing errors to command and copy; Factor 3: memory tests. Cluster analysis sorted patients into dysexecutive (dMCI, n= 15), multi-domain (mMCI= 56), and amnestic (aMCI= 12) subtypes. ANOVA found no differences between dMCI vs. mMCI or aMCI vs. NC groups. However, both dMCI and mMCI patients generated more clock drawing errors than aMCI and NC groups in the command condition. Only mMCI patients generated more clock drawing errors than NCs in the copy test condition. Logistic regression found only clock drawing to command predicted MCI group membership. **Conclusions:** When VC is assessed with the CDT, NCs and aMCI can be distinguished from dMCI and mMCI. Demands placed on both language-related as well as executive neurocognitive constructs underlie impaired clock drawing behaviour in MCI.

P2-252 JUNIOR DOCTORS' KNOWLEDGE ABOUT DEMENTIA IN THE ELDERLY AND THEIR ATTITUDES TOWARD THESE DISEASES

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Project Description: Doctors of some medical areas deal with patients with dementia more frequently. This study aims to evaluate the relationship between junior doctors' (JDs) knowledge about dementia in the elderly and their attitudes towards these diseases and to check whether these attitudes are influenced by these professionals' area of interest (General Practitioner/GP, Psychiatry, Geriatrics and Neurology). Cross-sectional study with a convenience sample of 61 JDs in their first day of residence who were invited to answer the Knowledge Quiz (14 questions distributed into 3 groups - epidemiology, diagnosis and management of dementia) and Attitude Quiz (10 sentences about different situations that can be classified into 5 different answers that range from 1="totally agree to 5="totally disagree"). The knowledge mean about dementia in the elderly was 50%. JDs who have chosen specialized areas to deal with dementia showed higher knowledge than those from GP ($p<0.05$); that difference has occurred due to "diagnostic questions". Regarding attitudes, JDs from all areas answered that much can be done to increase quality of life of the patients and their caregivers, that to give a diagnosis of dementia is positive, that it is better not using euphemism when treating patients, and that GP services play a major role in the caring of the elderly with dementia. Nevertheless, there was a difference between answers from the "specialized" and "not specialized" JDs in 3 items: the specialized think that dementia is best diagnosed by specialist services; patients with dementia cannot be a drain on resources with little positive outcome and that managing dementia is more often rewarding than frustrating. The table shows that JDs from GP area were more susceptible to correlate the higher knowledge to positive attitudes. There is a relationship between JDs' knowledge about dementia in the elderly and their attitudes towards these diseases, principally in relation to GP area of interest. It means that the future GPs is probably more susceptible to change the attitude from negative to positive when submitted to continuing education during the residence, improving their capacity to deal with the elderly population.

P2-253 DEMENTIA CRISIS SUPPORT TEAM: AN INNOVATIVE MODEL OF DEMENTIA CARE IN THE COMMUNITY

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Project Description: The project describes the setting up of a Dementia Crisis Support Team to support and manage crisis in a person with dementia in the community, to avoid admissions to hospital. The support team consists of Old age Psychiatrist, Community psychiatric nurses, support workers, occupational therapist and general nurses. The team supports and manages physical, social or psychological crisis in people with dementia using a bio psycho-social model of care. The team provides carer education and support as part of the intervention and works with people with dementia living at home or in care home settings. The crisis team for people with dementia has reduced admission rates to hospital for dementia. It is very popular with g.ps, carers and care home staff. It is a specialist dementia care team which is one of it's kind in the U.K designed specifically for people with dementia.

P2-254 RELATION OF SERUM 25-HYDROXYVITAMIN D TO PULSE PRESSURE IN ALZHEIMER'S DISEASE

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Project Description: Keywords: vitamin D, pulse pressure, elderly Introduction: The Pulse pressure, surrogate measures of arterial stiffness, is simply the difference between systolic and diastolic pressures, and depends on the cardiac output, large-artery stiffness and wave reflection. Advances in biomedical science suggest that vitamin D is a hormone that is integral to numerous physiologic functions in most cells and tissues. A number of recent reports on potential associations between vitamin D deficiency and

cardiovascular disease have highlighted its role in this system. We investigated a relation of Pulse Pressure with 25-hydroxyvitamin D (25(OH)D) in a population of elderly subjects with diagnosis of Alzheimer's disease. We studied the relationship between arterial stiffness and 25(OH)D assessed by pulse pressure in 122 (F 77% age 78,8+ 5,21 years) consecutive elderly patients attending our Memory Clinics with diagnosis of Alzheimer's disease. In our population hypovitaminosis D was present in 100%; 96 patients (78,7%) had 25(OH)D serum levels inferior to 20 ng/ml; 26 (21,3%) patients between 20 and 30 ng/ml. In our study we find that pulse pressure is inversely correlated with 25 (OH)D (Figure 1, r= - 0,553, P=0,000). After adjustment for age, gender, systolic blood pressure, cardiovascular diseases, and antihypertensive therapy, a significant relationship was observed between pulse pressure and 25(OH) (β= -0,524; p=0,000). Our results showed a relationship between Pulse Pressure and 25(OH) D suggesting that 25(OH) D could be involved in the onset of arterial remodelling. Certainly our results need confirmation with prospective studies, but this study could open the way to perform other investigations to better explore the correlation between arterial stiffness and vitamin D.

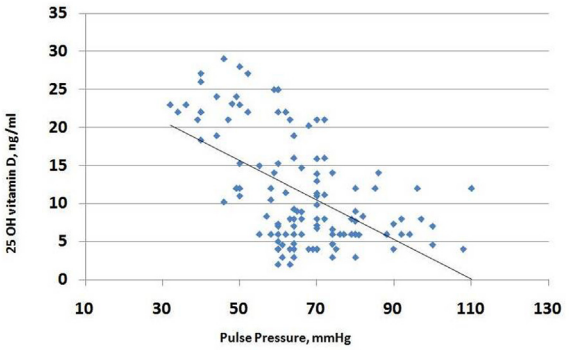

Figure 1. Pulse Pressure and 25 OH- Vitamin D

P2-255 BEST PRACTICE IN THE DESIGN OF RESIDENTIAL ENVIRONMENTS FOR PEOPLE LIVING WITH DEMENTIA AND SIGHT LOSS: AN EVIDENCE-BASED RESOURCE

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Project Description: Advancing age is a well evidenced risk factor for sight loss as well as for dementia. Dementia can compound and complicate sight loss, as memory and understanding may become impaired. Furthermore, some forms of dementia may entail neurological damage which can produce additional sight problems. Despite this, researchers have been slow to consider the impairments together, and the scientific literatures have tended to remain largely separate. This research reviewed and evaluated the research on design for people with dementia and people with sight loss before combining findings with iterative stakeholder engagement activities to inform the development of new evidence-based design guidelines. A structured literature review combined systematic searches of electronic databases with recommendations from expert informants and identified publications for full text review and evaluation (n=33). Findings were synthesized with data from interviews with expert informants (n=8), people with dementia and visual impairments (n=4) and care staff (n=5) to produce draft 'best practice statements'. These were refined following focus groups with people with dementia and/or sight loss and care staff (n=3, 15 participants), then 'sense checked', commented on and improved by a further focus group (8 participants) and respondents to an electronic survey (n=360, including people with sight loss and/or memory issues, informal carers, and practitioners). The literature considers many design issues, generally making recommendations either for people with dementia or for people with sight loss. Whilst research quality is not high, recommendations tend to be consistent and most have 'face validity'. Many publications are either not research based, or the evidence base is unclear, and there are widespread calls for further higher quality research. The literature relating to people with dementia tends to emphasize design for formal care settings whilst that relating to people with sight loss mainly focuses on enabling and supporting independence. There is a paucity of published research looking at issues related to the design of residential environments for people with both dementia and visual impairments and further research is needed to build the evidence base more securely. This research is timely: survey responses suggest considerable practitioner demand for evidence-based design guidelines.

P2-256 BENEFITS OF PSYCHODYNAMIC GROUP THERAPY AND BODY AWARENESS THERAPY ON DEPRESSION, BURDEN, AND QUALITY OF LIFE OF FAMILY CAREGIVERS TO AD PATIENTS

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Project Description: Family caregivers of Alzheimer's disease (AD) patients suffer from high burden of care and depressive symptoms. The objective of this study is to evaluate the effectiveness of the body awareness intervention versus group psychodynamic psychotherapy to improve burden of care and depressive symptoms, as well as the impact on quality of life of family caregivers of patients with Alzheimer's disease. Forty family caregivers were included in this study. They were allocated to receive psychodynamic group psychotherapy (n = 20) or body awareness intervention (n = 20) for a total of 14 sessions. Outcome measures included the scores on the Zarit Burden Scale, Beck Depression Inventory, Body Awareness Questionnaire, WHOqol Scale. Family caregivers on the body awareness intervention group showed a significant improvement of the burden of care (p=0.001), body consciousness (p=0.04) and on quality of life (p=0.01). There was no improvement on depressive symptoms (p = 0.13). Those on the psychodynamic group psychotherapy showed a significant improvement on burden of care (p=0.01), depressive symptoms (p=0.005) and quality of life (p=0.002). There was no significant effect on burden of care (p=0.16). Body Awareness and psychodynamic group psychotherapy are effective to reduce burden of care and improve quality of life in AD family caregivers. These interventions were selective to improve depressive symptoms (psychodynamic psychotherapy) and improve body awareness (body awareness intervention). These interventions can be complementary to improve depression and burden of care in family caregivers of AD patients.

P2-257 UNDERSTAID: A PLATFORM THAT HELPS INFORMAL CAREGIVERS TO UNDERSTAND AND AID THEIR DEMENTED RELATIVES

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Project Description: The Ambient Assisted Living Joint Programme (AAL JP) is an EU funded program with the aim of enhancing the quality of life of older people and strengthening the industrial base in Europe through the use of Information and Communication Technologies (ICT). A consortium led by VIA University College and involving partners from Denmark, Spain and Poland has been funded to develop an ICT mobile platform that helps