

patience and irritation). The difficulties reported by caregivers in patient care were related to neuropsychiatric symptoms (appetite changes and irritability), inattention to personal care/hygiene, repetitive questioning, diminished initiative and increased stubbornness of the patients; burden of daily tasks, continual oversight and lack of social support for the caregivers. **Conclusions:** Caring for older adult with AD is a complex process that can bring positive and negative feelings. Caregivers need psychoeducational interventions that provide information on the development of AD, management of behavioral symptoms and stress management training. Support for caregivers in specialized services and strengthening social relationships can reduce caregiver burden.

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CREATIVE WAYS TO CARE: STRATEGIES FOR CARERS OF PEOPLE LIVING WITH DEMENTIA—AN EVIDENCE-BASED EDUCATION PROGRAM FOR FAMILY AND FRIEND CARERS TO USE ACTIVITIES AND DIVERSIONAL STRATEGIES AT HOME



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Background: Families find it increasingly difficult to know how to respond and relate to the person they care for living with dementia including wandering, restlessness, repetitive questioning, resistance and withdrawal. Many family carers are advised to use diversional strategies to manage these symptoms, yet they don't know what this means or are so tired or exhausted they can't "think on their feet". The Creative Ways to Care- strategies for carers of people living with dementia is an education program which gives carers the opportunity to experience and learn a range of diversional strategies to assist them to respond to changing behaviours in an imaginative and inspiring way. **Methods:** Creative Ways to Care is designed for health professionals to deliver as seven workshops for groups of family carers. The resource comprises of a Facilitator's Guide including cultural notes, DVD with voice overs in 7 community languages (Vietnamese, Chinese, Arabic, Italian, Greek, Polish and Russian) and translated participant resources. The 7 workshops are: Introduction Session; Dementia, Behaviour and Activities; Reminiscence; Stimulating and Soothing the Senses; Music, Creative Activities, Review Session. Each workshop follows a standard format with an experiential approach. The facilitators guide provides a detailed step-by-step instruction to delivering the program. The intention is to build carers' familiarity and confidence with the strategies, and consider how it might be tailored to their needs and the person they care for. Carers learn how to connect, engage and have fun with the person they care for through meaningful activities. Throughout the program, carers are provided with take home resources, helping them apply their learning at home. **Results:** In 2011 evaluation by the Lincoln Centre for Research on Ageing, Australian Institute for Primary Care, LaTrobe University, in Melbourne demonstrated that the program: Increased carers' confidence to respond effectively to changed behaviours; Decreased the occurrence of changed behaviours; Improved the relationship between carers and the person with dementia; Improved carers' quality of life. **Conclusions:** Creative Ways to Care is effective evidence based approach which supports and assists families to find an easier pathway through dementia. Further details may be found by visiting: www.carersouth.org.au

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THE IMPACT OF CARING FOR A RELATIVE WITH DEMENTIA ON INFORMAL CAREGIVERS' EMPLOYMENT: A SYSTEMATIC, MIXED STUDIES REVIEW



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Background: The number of patients suffering from Alzheimer's disease or other forms of dementia is increasing, and many are cared for by their relatives, mostly female, at home [1]. Corresponding to the upward trend of female labor force participation most informal caregivers of working age are also employed. Caring for a demented relative causes caregiver burden [2], and contributes most directly to productivity loss [3]. Therefore, reconciling caregiving and working often implies a twofold burden for informal caregivers. To our knowledge, until now no study has systematically reviewed the influence of informal care responsibilities for dementia patients on the caregivers' employment. This relationship is complex, among other things due to mutual dependence, and different research approaches addressed it in the international literature. Therefore, a mixed studies review [4] was conducted. **Methods:** One meta-database and six databases were systematically searched for articles meeting predefined inclusion criteria, complemented by using online search engines and investigating reference lists. The methodological quality of the studies was assessed utilizing the Mixed Methods Appraisal Tool (MMAT) by two reviewers [5]. For synthesizing included studies, a convergent synthesis design was chosen [4]. **Results:** 46 primary studies with limited overall methodological quality were included. Although studies were heterogeneous, shared themes covered caregiving-related factors and employment-related outcomes. Caregivers' sociodemographic characteristics and degree of involvement in care made up the majority of influencing factors analyzed. With respect to the care recipient, the level of impairment due to disease stage was the most relevant factor. Only a few studies analyzed other caregiving factors like formal supportive services or other informal caregivers. Concerning employment-related outcomes, adaptations of employment status and interferences with working were examined most frequently. **Conclusions:** This review gathered rich contextual findings on the complex relation between caregiving for a demented relative and caregivers' employment for the first time in a systematic manner. After synthesizing quantitative and qualitative evidence, the examined association was mostly negative. From a policy making viewpoint, it is important to understand the relationship and its impact to alleviate the personal and economic burden on caregivers and the society by establishing or promoting suitable supportive services.

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IN SUPPORT OF A NATIONAL DEMENTIA PLAN: UNDERSTANDING DEMENTIA CARE IN FILIPINO HOMES



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Background: As a chronic progressive brain disease, dementia eventually leads to long-term dependence and high burden of care. Most studies on dementia care are from western settings done in institutions where care is provided by professionals. In the Philippines and most of Asia, where low to middle income families have limited access to support services and formal dementia care, dementia care happens in the home until the patient's demise usually by co-resident family members who become informal caregivers. With our care situation, our National Dementia Plan must embrace policies and support systems particular to our culture and circumstances. In support for the plan, we examined family caregivers' understanding of dementia, their adaptive strategies and challenges, and how cultural factors influence care practices. **Methods:** In this qualitative study, we conducted semi-structured in-depth interviews with twelve informal family caregivers co-residing with their patients. Data were coded, organized into themes and categories and subjected to content analysis. **Results:** Caregivers' characterization of "pag-uulyanin" or dementia and their explanatory model of illness are, apart from being natural to aging, consistent with some concepts in clinical medicine that dementia is associated with genes, depression and bereavement, brain injury and stressful life. Despite limitations of space in the homes, caregivers recreate the physical environment to accommodate the needs and safety of their patients, which are regarded as primordial in caregiving. Caregiving is unbound by space and made virtual by technology allowing distant caregiving through talk therapy by overseas family members. Burden of care is mitigated by consensus decisions, financial cooperation, and shared care and responsibility which are cultural expectations. Caregiver distress is most apparent when such expectations are unmet. Economic scarcity compounded by increased expenditure due to dementia and absent social (community and government) support are challenges identified. **Conclusions:** Family caregivers, despite no formal training, have reasonable understanding of dementia with provisioning and safety as the goal of care. Their adaptive strategies are emergent on kinship, and failed expectation from family is a major source of distress. Our National Dementia Plan must integrate our culture of caregiving and address scarcity of economic and social support in dementia care.

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RELATIONSHIP BETWEEN FILIAL OBLIGATION AND DEPRESSION THROUGHOUT THE STAGES OF ALZHEIMER DISEASE: A PRELIMINARY STUDY OF BRAZILIAN CAREGIVERS WITH PARENTS SUFFERING FROM DEMENTIA



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Background: Filial obligation (FO) reflects an individual's perceived obligation to support his or her family members though periods of disability, such as decline associated with geriatric neurocognitive disorders. FO has been broadly characterized as a reflection of one's cultural identity even though cross-cultural studies are few. The current research is part of a broader project to understand cross-cultural variability in filial obligation and its correlates. The goals of this study were A) to examine preliminary evidence for the validity of a Portuguese language measure of filial obligation, and B) to

examine how the caregiver's reported filial obligation and the care recipient's dementia severity relate, individually and in combination, to caregiver's depressive symptomatology. **Methods:** A sample of 100 Brazilian dementia caregivers (mean age=33 years, education=17 years) responded to a Qualtrics survey written in Portuguese and distributed through ABRAZ. The sample was primarily female (90%), and most respondents were primary caregivers (71%). A Portuguese language version of the Filial Obligation measure (Cicirelli 1990) was derived using back translation procedures. Other measures included familism; caregiver-reported dementia severity which was assessed using colloquial terminology well understood by Brazilian caregivers (early, middle, and late stage); and depressive symptomatology (Portuguese CES-D) among others. **Results:** Internal consistency for the Portuguese FO measure was adequate (Cronbach's alpha=.76). Portuguese FO measure scores correlated with familism scores ($r=.32, p=.001$). Mean FO was .42 ($SD=.21$). Results of a multiple regression analyses were that neither FO ($F=.03, p=.86$) or care recipient's disease stage ($F=.37, p=.69$) predicted depressive symptomatology; however, the interaction between these variables did predict depressive symptomatology ($F=3.07, p=.03$). **Conclusions:** The first finding is that preliminary data support this Portuguese FO measure. The second finding is that care recipient disease severity moderates the relationship between caregivers' filial obligation and caregiver's depressive symptomatology. Specifically, Brazilian dementia caregivers with high FO reported fewer depressive symptoms early in the dementia process, but more depressive symptoms as the care recipient's dementia progresses, but those with lower obligation experienced more depressive symptoms early in their caregivers dementia progression. Findings suggest that FO influences the caregivers' perception of the dementia disease process.

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INTRAINDIVIDUAL ANALYSIS OF THE ZARIT BURDEN INTERVIEW: A BRAZILIAN CASE STUDY



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Background: Caregiver burden is a fairly well studied construct whose main tool for evaluation is the Zarit Burden Interview (ZBI). Studies found in the literature use interindividual approach, however, according to ergodic theorems, they cannot be directly applied to the individual. The purpose of this study was to evaluate ZBI through intraindividual approach and compare the findings to the current data in regards to its structural validity. **Methods:** A 68-year-old female Brazilian caregiver was the participant in this study. She is married, retired and has been taking care of her mother for nine years. Her mother suffered a Cerebral Vascular Accident, is dependent for five of the six Activities for Daily Living measured on the Katz index and scored 11 on the Mini Mental State, indicating a cognitive decline and possible dementia. After being interviewed, the participant answered the ZBI over the telephone for 90 days during a period of four months. **Results:** The participant's total mean score during the period was 30.35 ($SD=1.90$). The data was analyzed using Dynamic Factor Analysis and factor retention was determined by four criteria: Kaiser-Guttman criterion, Parallel Analysis, Scree Test with Optimal Coordinates and Scree Test with an Acceleration Factor. Two of these criteria indicated that a three factor solution was the most well-adapted for the data. The factors were named: "Negative Caregiver Feelings and Patient In-