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Psychiatric morbidity and its correlates among informal caregivers of older adults

Janhavi Ajit Vaingankar*, Siow Ann Chong, Edimansyah Abdin, Louisa Picco, Saleha Shafie, Esmond Seow, Shirlene Pang, Vathsala Sagayadevan, Boon Yiang Chua, Hong Choon Chua, Mythily Subramaniam

Research Division, Institute of Mental Health, 10 Buangkok View, Singapore 539747

Abstract

Objective: This present study estimated the psychiatric morbidity among informal caregivers of older adults and investigated its association with their socio-demographic factors and older adult's health status, including dementia, depression and physical health conditions.

Methods: Data from a national cross-sectional survey were used. For each participating older adult, an informal caregiver who 'knew the older adult best' and was aware of their health condition, was also interviewed to collect information on the older adults' care needs, and behavioral and psychological symptoms of dementia (BPSD). Data from 693 pairs was used. Informal caregivers were administered the Self Reporting Questionnaire (SRQ)-20 and psychiatric morbidity was defined as those with a total SRQ score of ≥ 8. Measures included informal caregivers' socio-demographic characteristics, assessment of dementia and depression in the older adults and self-report on their lifetime and current physical conditions. The association of socio-demographic characteristics, health conditions, care assistance and BPSD was investigated using backward stepwise logistic regression analysis where psychiatric morbidity (total SRQ score < or ≥ 8) was used as a dependent variable and all other variables served as independent covariates.

Results: Among informal caregivers, 8.8% exhibited psychiatric morbidity. Higher proportions of spousal caregivers and caregivers of older adults having more care needs and BPSD exhibited psychiatric morbidity. After adjusting for all covariates, caregivers' marital status, and the presence of BPSD and dementia in the older adults were identified as the strongest correlates of caregivers' psychiatric morbidity. The prevalence of psychiatric morbidity was 10%, 13.9% and 12.7% respectively in these groups. Married caregivers had higher odds of psychiatric morbidity (OR 2.50, 95% CI: 1.13–5.52). In addition, caregivers of older adults' with any BPSD (OR 5.87, 95% CI: 2.60–13.24) and dementia (OR 2.28, 95% CI: 1.23–4.20) were also associated with higher odds of psychiatric morbidity.

Conclusion: Informal caregivers' marital status and presence of any BPSD and dementia in the older adults in their care were identified as the strongest correlates of caregivers' psychiatric morbidity. Clinicians should be cognizant of the risk in this group of caregivers and assess and intervene to alleviate caregivers' psychological problems.

1. Introduction

Health problems associated with aging account for a major share of the global burden of disease [1,2]. While chronic conditions mainly contribute to mortality in this population, much of the burden of years lived with disability arise from dementia and related behavioral problems. Among informal caregivers (ICs) of older adults with health problems such as dementia, the adverse consequences of the constant care demands are numerous [3]. Such caregiver experiences are in turn more likely to be associated with the emotional and physical health of the older adults in their care and are important predictors of their institutionalization and higher service utilization [4,5].

Singapore is a developed economy of 3.8 million residents in South-East Asia, comprising a multi-racial population of 74.2% Chinese, 13.2% Malays, 9.2% Indians and 3.3% other races [6]. It is one of the fastest aging nations

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* Corresponding author at: Research Division, Institute of Mental Health, 10 Buangkok View, Singapore 539747. Tel.: +65 63892794; fax: +65 63892795.

E-mail address: janhavi_vaingankar@imh.com.sg (J.A. Vaingankar).

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with an unprecedented age shift towards the higher end. There are an estimated 600,000 older adults currently residing in Singapore and this number is expected to triple by the year 2050. This population aging has numerous implications on various facets of the economy, healthcare and society as a whole. In view of these imminent challenges, a slew of population-wide measures and policies have been implemented that aim to address the needs of the aging population and their ICs. These include measures such as coverage for seniors' healthcare expenditure, designing a fiscally sustainable healthcare financing system for the older adults and having 24-hour helpline, elder-sit, respite care and home intervention programs that support caregivers in managing older adults in the community. The importance of caregivers' health is further underscored by the enhanced caregiver support and counseling services offered by various governmental and non-governmental organizations.

Despite these efforts, the strain of caregiving is often unavoidable and this has been associated with higher burden [7], which in turn is associated with problems such as physical complaints of pain and headaches or psychiatric morbidity (PM) such as depression, anxiety and/or insomnia [8]. An estimated 25–70% of caregivers have depression while about one third report having anxiety [9,10].

Numerous observational studies have shown higher prevalence of PM in co-residents and ICs of older adults with dementia, particularly those exhibiting severe behavioral problems which were found to be twice as high compared to other older adults [11]. Factors that moderate and increase the presence of PM in ICs include being female or a spousal caregiver, additional stressful events in caregivers' life, their own physical health, quality of relationship between caregiver and care recipient, and high neuroticism, multiple chronic conditions, dementia and behavioral and psychological symptoms of dementia (BPSD) among older adults [11–14]. On the contrary, caregiver preparedness, increased social support and social networks, assistance in care, positive appraisal and coping, and satisfaction with healthcare services are associated with reduced depression and stress in ICs [15–17]. Evidence of these effects is important to plan caregiver interventions to mediate their psychological outcomes.

Studies conducted previously among caregivers of older adults in Singapore have yielded information on the associations of older adults' health status, particularly dementia, dependency and caregiver's attitudes and characteristics to caregivers' mental health [18]. Higher distress and anxiety were reported among female caregivers of older adults [18,19] while higher depression was noted among Chinese caregivers of people with dementia and community dwelling caregivers of older adults [16,20]. However these studies were largely conducted in small samples – studies by Mehta et al. [18] and Tan et al. [19] included 61 and 85 caregivers, respectively. Others were conducted in select cohorts based on geographic location, age, ethnicity or among help-seeking populations – the study by Malhotra et al. [16] included only caregivers of 'older olds' aged above 75 years while the Singapore Longitudinal Aging Study included only informal caregivers of Chinese older adults aged 55 years and above. Moreover the chronic conditions and variables included in the analysis varied widely, which make comparisons across the studies challenging. Therefore the findings on the risk of PM among ICs are still inconclusive and identification of the important and strongest correlates of PM from a comprehensive and relevant pool of variables is necessary.

In the present study, we estimated PM among ICs of older adults in Singapore using data from the Well-being of the Singapore Elderly (WiSE) study and investigated the factors associated with ICs' PM. The independent associations of caregivers' PM with older adults' BPSD, activity limitation, dementia, depression and physical conditions were also examined after adjusting for covariates.

2. Material and methods

2.1. Study design

A cross-sectional single-phase study, the WiSE survey, was conducted among population-based older adults and their informants in Singapore in the year 2013. Older adults aged 60 years and above were randomly selected for the survey from a sampling frame of all residents in Singapore. Older adults belonging to the three major ethnic groups – Chinese (38.5%), Malays (30%) and Indians (30%) were selected using disproportionate sampling with oversampling of Malays and Indians and those aged 75 years and above. A small proportion (1.5%) belonged to 'Other' ethnic groups.

2.2. Study process

The study methodology is described in detail in a preceding article [21]. Briefly, the study was initiated following approval from the relevant ethics committees (National Healthcare Group's Domian Specific Review Board and SingHealth Centralised Institutional Review Board). Participants were approached at their households or nursing homes for the study. Informed consent was obtained from participants themselves or from their legally acceptable representatives (for those participants who were mentally or physically incapable to consent themselves). For each participant, an informant was chosen and both were invited to participate in the survey. A total of 2565 older adults and 2421 informants were interviewed between August 2012 and November 2013 giving a response rate of 66%. In the current study, data from 693 older adults with care needs and their caregivers were analyzed.

2.3. Study sample

Informants who were Singapore residents (Singapore Citizens or Permanent Residents), aged 21 years and above and were able to provide adequate and accurate information on the older person's health condition and service use were