

Caregivers' Falls Concern For Older Persons In The Singapore Community

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Abstract - This paper discusses the prevalence of caregivers' concern, its impact on fall prevention strategies, falls risk awareness among older persons, clinical points and study potential. Older persons suffering from fall-related psychological concerns such as fear of falling has been well established in previous research, however little is known about caregivers' falls concern in its relationship with the risk of older persons falling. In Singapore, families are regarded as the fundamental support system for older people. The potential influence of caregivers' concern on the outcome of fall prevention strategies and falls risk awareness of older persons is expected given their significant involvement in the older persons' care. However, it is difficult to accurately appreciate the impact of caregivers' falls concern on the risk of falls among older persons in the local community given the Singaporean cultural differences and the dearth of Singaporean research on caregiver's concern. It is promulgated in this paper that further research should address the impact of caregivers' falls concern on fall-related issues associated with caring for an older person at risk of falling.

Keywords-Caregivers; Older persons; Falls concern; Singapore

I. INTRODUCTION

Ageing involves a gradual deterioration of physiological functioning which increases an older persons' risk of falling [1]. With an increasing risk of falls and awareness of its detrimental consequences, up to 85% of older persons can experience the adverse effect of fear of falling [2]. While fall-related concern may heighten ones' caution, over-estimation of falls risk often leads to unnecessary restriction in physical and social activities [2, 3], resulting in deconditioning, functional deterioration, and poorer quality of life [4, 5]. Consequently, some older persons are susceptible to repeated falls, and possibly early admission to long-term care [5]. Though older persons living with fall-related psychological concerns, such as fear of falling have been well established in previous research, there is a shortage of research on caregivers' falls concern related to the risk of older persons falling. It is feasible that caregivers experience similar concerns as an older person does who has fallen, or that they are anxious about falls occurring during their day-to-day care.

This paper will discuss the important issues related to caregivers' concern, its potential impact on fall prevention

strategies, falls risk awareness among older persons, clinical points and study potential.

II. BACKGROUND

A. Aging population and falls

Globally, people are living longer, with the proportion of those aged above 60 estimated to double from 12% to 22%, between 2015 and 2050 [6]. The number of older adults will increase from 900 million in 2015, to two billion by 2050. In Singapore, the proportion of older persons aged 65 and above had also increased rapidly from 8.4% to 12.4% in 2016 over the last ten years [7]. Falls are the leading cause of injury deaths among older persons and are defined as the occurrence of an individual unintentionally coming to rest on the same or lower level of ground [8]. About 646,000 people are estimated to die from falls every year, with adults above 65 years old frequently sustained fatal falls [8].

Similarly, falls are a serious health problem among older Singaporeans. A retrospective analysis of 720 patients aged 65 and above admitted to the emergency department for trauma revealed that falls caused 85.3% of the injuries [9]. 74.1% of the falls sustained had occurred at home and majority due to accidental or environmental causes [9]. Another larger retrospective study of 1,178 trauma patients seen at the emergency department also found that those who sustained injuries from same levels falls were generally older with an average age of 69 years [10]. Moreover, those having same level falls were 1.5 times more likely to sustain head injuries, which can be life threatening [10]. An ageing population, together with higher incidences of older people falling indicates a greater need for healthcare services to be focused on falls injury, including outpatient and emergency services; and long-term institutional care.

B. Policies influencing care of older people

Home caregivers, who are often family members of the older persons, are regarded as indispensable partners in the delivery of care [11]. This is in part due to health systems in many countries, including Singapore, transitioning toward the responsibility of caregiving from the hospital into the community setting [12, 13]. This shift, in approach to ageing and health strives for the continuous provision of cost-effective and sustainable healthcare amidst growing healthcare needs [13, 14]. Yet, shifting care out of hospitals

and having a patient to remain at home will require reinvestment into community and social care services which are currently inadequate [13, 15]. The presence of service gaps means that home caregivers would need to shoulder care responsibilities greater than the support provided [13].

In Singapore, as in other Asian countries, families are regarded as the fundamental support system for older people. In tandem with Asian cultural norms of filial piety, several national policies have been implemented to promote a family-oriented society. These include the provision of subsidised public housing, income tax relief for children to reside with their parents, and implementation of the "Maintenance of Parents' Act" to protect older adults neglected by their children [16, 17]. Children are expected to look after and provide continual support for their parents and it was reported that up to 95% of older people are living with their family members [11, 15].

Despite these pro-family policies, families are found to encounter considerable stress during the process of caregiving [15, 18]. Several reasons for this include, social policies being desensitised to low-income caregivers in lieu that income tax relief only benefit middle-range or high-income caregivers, smaller household size and the lack of legislation in eldercare leave [16, 19]. Of importance, the lack of a full-time family caregiver, together with other issues such as shortage of home and community-based services or nursing homes, and its unaffordability have forced many families to turn to employing live-in full-time foreign domestic workers (FDW) to look after their aged parents at home [20-22]. A national survey of 1190 older Singaporeans requiring functional assistance reported up to 50% of the participants had received instrument support from FDW [21]. With an ageing population, the number of FDW is projected rise as more families struggle to cope with the burden of caregiving. The change in family dynamics of caregiving should therefore be accounted as we explore the impact of caregivers' falls concern in Singapore.

III. ROLE OF CAREGIVERS

A. Falls concern among caregivers

The prevention of older persons from falling while maintaining their functioning needs is central to caregiving responsibilities. In a qualitative interview of ten older persons and their caregivers to explore the impact of falling, it was revealed that caregivers experienced similar fall-related concerns as did their older persons [23]. They were apprehensive about leaving their family members alone and feared serious accidents could happen to them.

Additionally, caregivers expressed emotions like anger, helplessness and frustration when the older persons refused to listen to their advice about how to prevent falls [23]. In some cases, these may have been due to the older persons' cognitive and physical decline, age and personality type. Most caregivers felt that falls are inevitable and any fall prevention program will not prevent older persons from falling [23].

Similarly, a mixed method study of 14 family caregivers and older persons with dizziness participating in vestibular rehabilitation reported that fear of falling resulted in lifestyle changes [24]. Caregivers were not confident regarding the older persons' balance, and felt the need to provide constant support to them [24]. This extra support resulted in the caregivers sacrificing their personal time for activities and social participation, also influencing their quality of life [24].

Therefore, falls concern not only affect the patients' life, but can also lead to the social withdrawal of caregivers. While falls concern are found affecting family caregivers, one would expect the FDW to experience greater falls-related distress. As paid caregivers, they may be caught between obeying their aged employers' instructions (and their families) and preventing them from falling. If the older person falls, then the FDW would be reprimanded for their negligent. Most of the FDW in Singapore are females coming from neighboring countries such as Indonesia and Philippines [25]. In 2011, it was estimated that there are about 198,000 FDW in Singapore and it is expected to increase to 300,000 by year 2030 [26].

B. Impact of caregivers' falls concern on fall prevention strategies

Fall prevention programmes are recommended to include caregivers because of their significant involvement in the older persons' care. The inclusion of caregivers in falls prevention programmes are supported with the success of a randomised controlled trial exploring the efficacy of instructional DVD fall-prevention programme on 132 cancer patients and their caregivers [27]. The treatment group reported significant improvement in falls risk awareness and knowledge, and were less likely to sustain a fall at three months follow-up compared to the control group [27].

While inclusion of family carers can contribute to the success of fall prevention programmes, excessive caregivers' falls concerns are likely to increase older persons' risk of falls. Retrospective interviews were conducted with 539 older persons recovering from hip fractures and 492 family caregivers in this cohort found that the caregivers had significantly higher falls concerns than the patients [28].

Furthermore, increasing disparity of falls concern between caregivers and patients also leads to longer recovery time for the latter [28]. This could be due to caregivers being excessively worried about the older persons falling, and then they become over-protective care by taking away their independence as found in a previous study by Honaker and Kretschmer [24]. Consequently, these older persons can then become more dependent on their caregivers and experience slower functional recovery times.

Likewise, falls concern may also affect professional caregivers. A longitudinal study was conducted on 550 professional caregivers including nursing aids and registered nurses, and 85 older persons with dementia from 19 long-term care units to evaluate the relationship of fear of falling between the caregivers and care recipients [29]. The caregivers' fear of their residents falling was found to be predictive of restriction of mobility, declining functional

ability and injury falls among the older persons at 3 months' follow-up [29]. In contrast, older persons with less cognitive impairment was associated with decreased activity restrictions by their caregivers. Therefore, the provision of support to reassure caregivers' falls concern is important when addressing issues of older persons falling in the community.

C. Increase awareness towards fall risks among older persons

Besides influencing the efficacy and methods of fall prevention strategies, caregivers' falls concern also directly contributes to the older persons' sense of caution and fear of falling [30]. In a phenomenological study by Ward-Griffin, Hobson [30] among older people living in the community, the participants shared about being constantly reminded to be careful and felt their activities were scrutinised by their family members and friends. This led them to become more fearful and exercise precaution such as seeking help, restricting activities and eliminating hazards in avoiding falls. While caregivers' falls concern could encourage more vigilant behavior among older persons to reduce their risk of falls, it may inevitably limit attempts to strive for independence. Therefore, balance between needs of safety and independence is needed to prevent the older persons from isolating themselves socially and continue participating in their daily activities.

Another qualitative study by Huang [31] exploring the theoretical framework of managing fear of falling found that older persons with strong family support will have better satisfaction with their strategies to manage fears and prevent falls. For example, one participant illustrated that her life was not affected after two previous episodes of falling and injuries. Moreover, her strategies for managing fear of falling were positive which includes participating in physical therapy regularly, using assistive devices and talking to her family members about her concerns of falling [31].

While caregivers can both contribute to and moderate their care recipients' fear of falling, the older persons' concerns and its impact on their falls risk may vary across culture. A cross-cultural comparison between 692 Chinese and 762 Western community-dwelling older persons reported that the Chinese had a lower incidence of falls than western cohort and the fall rate was stable regardless of their levels of falls concern [32]. The incidences of falls however had increased with concern about falling among the western population [32].

It is likely that the Chinese older population with higher falls concern had better awareness of their falls risk and took appropriate measures to prevent possible falls. For example, Chinese older persons with lower limbs weakness are more likely to use walking sticks compared to the western older persons whom largely view the mobility aid as a marker of frailty [32]. Singapore, despite its westernised outlook, is still very much influenced by traditional norms and Asian cultural values. It is therefore likely that the local older populations with greater fall-related anxiety due to their caregivers' falls concern are more motivated to prevent falls.

IV. CLINICAL POINTS

FDW as surrogate caregivers for providing elder care is becoming a de-facto model in Singapore with higher cost of home and community services, lower employment levy and introduction of sponsorship schemes to hire a FDW [20, 22]. Several clinical issues arise when we consider the caregivers' falls concern and management of falls risk among older people at home. As the supply and demand of FDWs is left largely to the employment agencies, little is known about the quality of care provided by FDWs; whether they are properly trained to look after older people at home and especially in relation to ensuring the safety and preventing falls.

According to Yeoh and Huang [20], it was only in recent years (since 2005) that training programmes have been provided for families wanting their FDWs to receive eldercare training. Some examples include state-initiated course(s) offered by FDW association, and training programs by private companies (often conducted by registered nurses) and FDW agencies [20].

Despite its introduction, most households do not send their FDWs for eldercare training. Reasons are not limited to the courses being non-mandatory, the employers having to bear the cost of training, and the value of prior experience, and on-the-job training over the formal eldercare training. This ad hoc approach may subsequently lead to problematic employer-domestic worker relations when the FDWs could not meet expectations of their employers.

Another issue related to a power differential between employee-employer, could potentially prevent FDWs from making independent decisions such as initiating fall preventive measures during the care of older persons who are also their employers. This subservient relationship together with the burden from household responsibilities such as cooking and housework may limit fall prevention efforts. Better understanding about the FDW falls concern is necessary with growing dependence for their care of our older generation at home.

V. STUDY POTENTIALS

This paper has identified several study potentials. Understanding the relationship of caregivers' falls concern and the risk of older persons falling in the community is important, particularly when considering care of older persons who are cognitively impaired. Health professionals when designing and implementing falls prevention measures need to account for both the older persons and their caregivers. Further research is needed to address the impact of caregivers' falls concern on psychological factors (i.e. anxiety, depression and quality of life), and fall-related psychological concerns (i.e. falls efficacy, fear of falling) of older persons in the community. Cross-cultural studies could compare the differential influence of caregivers' falls concern on the risk of falls among older persons from different countries.

Presently, there is no validated questionnaire measuring caregivers' falls concern. Previous studies had evaluated caregivers' concern by the means of open-ended questions

[24] and closed-ended questions using a Likert scale [29]. Examples of closed-ended questions include caregivers rating on a scale of one indicating low levels and ten indicating high levels on how they feel about the patients falling or how confident they feel about them not falling.

One study had applied the Falls Efficacy Scale-International (FES-I) which was originally designed for older persons on caregivers to gauge the caregivers' assessment of the older persons' fear of falling [28]. Since the FES-I scale was not designed to measure caregivers' falls concern and not validated, the reliability of study findings are inconclusive.

VI. CONCLUSION

This paper has highlighted the prevalence of caregivers' falls concern and attempted to associate it to the Singapore cultural context. A close relationship between caregivers and older persons suggests potential influence of caregivers' concern on the outcome of falls prevention strategies by improving falls risk awareness of older persons. It is currently not possible, however, to accurately foresee the impact of caregivers' falls concern on the risk of falls among older persons in the local community. This is especially the case given the cultural differences and the lack of studies previously conducted.

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