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Perspective

Informal Caregiver-Induced Forced Immobility (ICFI)": An Ignored Challenging Concern in Promoting Frail Older Adults' Health

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Abstract
Mobility has a vital role in the quality of life of frail older adults. Receiving care from family caregivers has an increasingly intricate function in the mobility of older adults with frailty and/or chronic debilitating conditions. A family caregiver might provide his/her older adult with mobility-limitating care, called here "Informal Caregiver-induced Forced Immobility (ICFI)", which may consequently leave the older adult practically bedridden. Various factors were identified to have impacts on ICFI, including fear of caregiver from senior falling and hurting, excessive respect of caregiver for the senior, negligence, and even disclaiming responsibility from them. A set of recommendations was finally presented on how the ICFI to be dealth with by different stakeholders. Our findings seem to be helpful for health practitioners, gerontologists and health policymakers in taking into account the issue while desiging their interventional strategies for older adults care in home and residential care settings.
Keywords: Patient care, Caregivers, Aged, Frail elderly, Aging, Immobilization, Exercise, Sedentary behavior

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Introduction

Physical activity (PA) is a crucial element in the health of senior population. It promotes muscle strength, independence, functional performance, and aleviates psychological and behavioral symptoms such as depression, anxiety, and aggression.[1] In frail older adults, PA has also noteworthy benefits including modifications in functional limitations risk of falling, and sarcopenia.[2]

Factors contributing to low PA in older adults can be categorized into three levels: psychological factors (e.g., depression, fear of falling and hurting, demotivation), physical factors (e.g., cardiovascular, neurological, and musculoskeletal disorders, or chronic pain), and environmental factors (e.g., inaccessibility to proper care, inaccessibility to mobility aids, lack of handrails and grab-bars).[3] Among environmental factors, receiving care from family caregivers takes an increasingly intricate role in improving the mobility of older adults with frailty or chronic debilitating conditions.[4]

The caregiver's distinctive role during the provision of senior care is planning, relocating, and encouraging older adults to be physically active. A family caregiver might provide his/her older adult with mobility-limitating care, called here "Informal Caregiver-induced Forced Immobility (ICFI)", which may consequently leave the older adult practically bedridden. It can be induced by various circumstances, including fear of caregiver from senior falling and hurting, excessive respect of caregiver for the senior, and even disclaiming responsibility from them.[5]

ICFI refers to a situation where an older adult with limited independence and a need for assistance with intentional PA, particularly those involving the body and/or lower extremities, receives little to no support from their informal caregiver.[6] According to our previous study, ICFI explained that for an older adult, social interaction and participation are limited, performing activities of daily living is disallowed, and engaging in physical activities and exercising is prohibited.[7]

Similar to other forms of immobility, ICFI might have physical and psychological health consequences, and musculoskeletal complications like decreased muscle strength and perseverance and reduced skeletal muscle fiber length. Such a muscular weakness may also result in long-term impaired functional capability and enduring muscle injury.[4] Prolonged immobility consequences are cardiovascular deconditioning and postural hypotension, increasing the risk of pressure ulcers, constipation, fecal impaction, urinary retention, osteoporosis, and osteoarthritis. Its psychological effects include poor communication and social isolation, which may lead to long term consequences such as sensory deprivation, delirium, and depression.[8]

While the primary purpose of informal care is to help older adults in maintaining their ability to perform activities of daily living (ADLs) and instrumental activities of daily living (IADLs), it can have a counterproductive effect, as well.[9] In this article, we present a narrative review of the conditions, contexts, and the factors that might facilitate ICFI, with the hope to help health practitioners, gerontologists and health policymakers in taking into account the issue while desiging their interventional strategies for older adults care in home and residential care settings. We have also presented several applied recommendations , which can be used in educational interventions aiming at ICFI prevention among frail older adults.

Physical mobility in frail older adults

Evidence suggests that more than 85% of older adults do not meet the World Health Organization's (WHO) recommended levels of physical mobility.[10] In a systematic review, it was found that older adults spend a large proportion of their time in sedentary activities such as sitting (60% for more than four hours, daily), sitting in front of a screen (65% for more than 3 hours, daily), and watching TV (55% for more than two hours, daily). In objective measures, it was also discovered that 67% of seniors were inactive for more than 8.5 hours, daily.[11] On the other hand, frailty among older adults makes the situation worse, due to its charachterisitics; diminished strength, endurance, and reduced physiologic functions. So, low physical mobility is an unavoidable characteristic of frail older adults' life, considering the clinical features of frailty phenotype, including weakness, slow walking speed, unintentional weight loss, and exhaustion.[12]

On average, frail and non-frail older adults spend approximately 7.6 and 9.5 hours per day on sitting, respectively.[13] Sedentary behavior (activities with low energy expenditure (1.0–1.8 metabolic equivalents [MET]) can be a potential marker in the screening of frailty in community-dwelling older adults. This behavior was associated with the frailty phenotype, and is used to screen frail older people.[14, 15] The association between frailty and physical mobility is bidirectional, as the level of physical mobility and sedentary time decreases, the prevalence of frailty increases.[14, 16] Frailty, as a consequence, limits ADL and IADL abilities, and threatens independence in older adults.[12]

ICFI directly affects an older adult's PA by encompassing caregiver behaviors that limit movement.[7] This limitation is significant because mobility is essential for older adults to maintain their health, independence, and social connections. Reduced mobility can lead to physical and functional declines, increasing the risk of falls and hospitalization. Conversely, maintaining active mobility helps reduce frailty and supports overall well-being in later life.[17]

Social support and ICFI

According to the theory of House, social support is defined as the perceived availability of attention and love from others, feeling of value, and availability of social resources, and the support provided in the context of support groups and informal social relationships.[18] Berkman describes four types of support-related physical mobility behaviors: instrumental support (access to a supporter's care for physical mobility), informational support (sharing information about physical mobility), emotional support (inviting a person to look at their performance) and appraisal support (encouraging to do or learn a mobility).[19] Older people who receive more social support from their family and/or friends are believed to participate in a higher level of physical mobility, and in contrast, when they experience greater levels of loneliness, their will be more possibility for them to be physically inactive.[20]

Many frail older adults avoid participating in physical mobility to prevent facing disabling consequences.[21] Family members and friends can encourage them to do PA by explaining the benefits and necessity of physical mobility. Without social support, the level of self-efficacy may not be sufficient to participate in physical mobility.[20] A previous study showed that in older couples, increased physical mobility in one partner was associated with an increased likelihood of physical mobility in another.[22]

However, not all types of social support can promote human behavior. For example, when family support fails to meet the needs of older adults, their assets are undesirable, and they feel that they are under control of others, they may tend to perform lower levels of physical mobility. Eventually, although social support seems to be a positive and cost-effective approach to increase physical mobility in older adults, informal caregivers should be cautious in how to provide their seniors with social support. There is currently no study on the relationship between social support and ICFI. Nonetheless, previous research suggests that older adults who feel pressured by loved ones to engage in physical activities, or receive overly protective support, are less likely to maintain their physical mobility.[23]

Caregiving burden and ICFI

Caregivers of frail older adult's express physical, emotional, and psychological burdens that called "caregiver burden". This burden is often associated with the level of frailty.[24] Recent evidence has shown that a wide range of factors may lead to a higher physical and psychological caregiver burden. These factors include: I. Caregiver sociodemographic characteristics (e.g., being a female, married, white, young, and the spouse of the care recipient; having no siblings; having low education and low economic status); II. Cultural factors (e.g., living with the care recipient, not having a religious affiliation or lacking spirituality, familism, and a lack of social support).[25]

Caregivers with impaired mental and physical health are more likely to provide low quality care. The caregivers who are depressed or mentally unfit may also become emotionally sensitive and even increasingly anxious, and prone to lashing out and engaging in harmful behaviors toward their senior.[26] All abovementioned findings suggest that the caregivers with high levels of physical and psychological burden are prone to provide their seniors with poor quality care, within which poor mobility support might consequently lead to ICFI.

The association between caregiver burden and ICFI is rooted in the dynamics of overprotection, stress, and misaligned caregiving behaviors. Caregivers experiencing high burden—due to factors like prolonged care time, physical strain, or psychological stress—often adopt overly protective behaviors to manage their workload or anxiety. This can lead to restricting care recipients' physical activities (e.g., discouraging mobility to prevent falls), inadvertently fostering dependency and immobility. Caregivers under significant stress or burden tend to perceive care recipients as more functionally impaired than they are, leading to unnecessary restrictions on activities. For example, caregivers may limit mobility due to fear of injury, even when the older adult retains some capacity for movement. Caregivers with strained relationships or negative attitudes toward caregiving are more likely to impose restrictive practices. In formal caregivers, longer care time exacerbated this effect, showing a stronger link between poor care attitudes and forced immobility. Higher care dependency (e.g., cognitive impairment, poor physical health) intensifies caregiver burden, which correlates with caregivers' tendency to over-manage daily activities, reducing the care recipient's independence.[27]

Overprotection and ICFI

Parenting or infantilization is a behavior pattern in which an influential person treats, responds to, or interacts with an older person in a childlike manner.[28] This type of caregiver perception towards an aged person may be due to his/her reduced levels of functional capacity, particularly in ADL, which can generate overprotection care or helicopter care.[29, 30] Coined by Haim Ginott in 1969, helicopter care [31] generally refers to an underestimation of the recipient's abilities which is presented in extreme help, extreme praise for actions, and attempts to limit movements. It is especially evident in disability onset, when both the senior and his/her caregiver are unprepared for the physical and emotional changes occurred.[29]

Although helicopter care is perceived as a positive feeling towards older adults and is called "love stress", it is mainly associated with adverse health consequences for both senior and his/her caregiver. It may impair the independence and mobility of older adults. For example, some caregivers don't allow their senior to drive. As a result, they may become isolated from their friends.[32] Recieving overprotection from their informal caregivers for ADLs, seniors may be discouraged from engaging in activities, loss their motivation in physical mobility and thus loss of independence and autonomy.[5, 33]

This protection can worsen the condition of frail older adults, as it reduces their sense of control, efficacy, and autonomy in seniors with dementia.[34] The ability to perform ADL depends, to some extent, on older people's assessment of whether they can do it, alone. Loss of self-efficacy and self-control are concerned with one's perceived inability to perform a particular activity, successfully.[35] Older adults with low self-efficacy, self-control, and autonomy might fear falling and eventually experience more episodes of falling, compared to their counterpoarts.[36]

Respect and cultural diversity and ICFI

Respect to older persons' personal values, priorities, goals, and lifestyle choices as a primary nessesity should be a basis while provding care by formal and informal caregivers. [37, 38] Respect is a deep admiration for someone or something evoked by their abilities, qualities, or accomplishments.[39] However, it should be taken into account that respect for older adults is interpreted and practiced in different ways in various cultural contexts.[40] It is suggested that, compared to Westerners, Easterners advocate more duties, such as obedience and respect for their seniors. They are influenced by filial piety, which promotes a positive attitude to aging and teaches people to respect, hear, and care for their older adults.[41] Western societies are considered youth-oriented, leading to more negative attitudes towards old age and older people.[42]

Although high respect towards older adults is valuable, the value of older adults' autonomy and independence is also undeniable. Informal caregivers should respect and protect senior's independence while helping them obtaining their desired support. They should be conscious that their support not to disturb the older adults' freedom.[43, 44] So, striking a balance between over-respecting and under-respecting is necessary. Over-respecting older adults and taking their responsibilities by informal caregivers may result in the performance of few tasks, such as ADL, and conseqnently the loss of independence and autonomy in the older adults . In some cultures, respect means forcing someone to sit and watch when they can and are willing to perform.[45] On the other hand, disrespection towards older adults can also damage them through ignoring their mobility problems, ignoring their desire to move, and finally abusing and showing discriminatory practices.[46] Conclusively, both over-respect and under-respecting older adults might lead to ICFI.

Caregiver's fear of falling

A common concern among informal caregivers of older adults is fear of falling (FOF) in their senior. This fear is an

emotional perception of excessive concern about falling, which causes them to advise older people not to participate in ADLs.[47] Informal caregivers' FOF is associated with increased psychological stress, social limitations, and high caregiver burden. This fear may lead the caregiver to apply a various range of fall prevention strategies toward his/her senior, including increased caution, and supportive and overprotective behaviors.[48, 49]

Such fearful attitude of caregivers to prevent falls and its negative consequences might restrict older adults' movements and activity. These restrictions, especially those that are disproportionate, could result in physical deconditioning and loss of function in older people. This fear can occasionally be passed on to the older person and cause him/her to experience high levels of anxiety, and weaken balance performance and postural control.[50] Consequently, loss of self-confidence, decreased ability to perform ADL, poor participation in personal and/or social activities, constant need to be assisted in daily activities, and high dependence to care recipients might be expected.[51]

Elder abuse, neglect, and ICFI

"Elder abuse," is a single or repeated action, or deficiency of proper performance, that occurs in a relationship with an expectation of trust and causes damage or pain to an older person. This type of violence breaks human rights and may include physical, sexual, psychological, emotional, financial, and material abuse, with abandonment, neglect, and grave loss of dignity and respect.[52] Neglect is the failure to meet basic needs, including food, water, shelter, clothing, hygiene, and critical medical care.[53]

Elder abuse can occur to any person, but it often involves those depending on others for ADLs.[54] At a personal level, the features that might increase the risk of becoming a victim of abuse includes functional dependency/disability, lacking physical health, cognitive impairment, poor mental health, and low income. Frail older people, particularly those who suffer immobility-related frailty, have often these characteristics and so are susceptible to be abused.[55]

Studies have shown that abuse occurs more frequently when caregivers have to devote more time to older persons, and among the caregivers who bear more care burden.[56] In such cases, an informal caregiver may abuse the senior through physical restraining (in bed or another part of the house), and not helping to move inside the bed and/or in the physical environment. They may also neglect older adults through imprisonment, isolation, and/or deprivation of essential services, such as mobility aid. Measures such as removing a cane, crutch, walker, and other mobility aids may also restrict senior's mobility, considerably.[57]

Such a deprivation may be due to various reasons, including the lack of caregiver's awareness of older people's need for mobility aids, poor understanding of local provision and eligibility, perceived stigma, and financial problems.[58] Abandonment is severe neglect when a responsible caregiver completely abandons a vulnerable older adult who needs assistance to move.[59] A warning sign of older adult neglect is loss or lack of mobility.[57]

The recommended solutions for dealing with ICFI

The primary objective of informal care is to retain older people's independence, allow them to continue the performing of ADLs and IADLs, and maintain their self-esteem.[9] Primary health care (PHC) should focus on familiarizing informal caregivers with tips to support older adults independence. Families need to be aware of older people's feelings and actual needs when providing them with help and support. Health system should also provide an explanation of the characteristics of ADLs interventions and how to participate in activities for caregivers and older adults to help them in promoting senior's independence and autonomy. In such interventional programs, focus should be on the strategies that empower informal caregivers on how to create balanced care to help older people's activities, and how to assist them in performing ADLs and IADLs. They need to feel comfortable expressing their feelings of inadequacy or stress providing care for seniors.

The health system should ensure that caregivers do not experience any hesitation or embarrassment in help-seeking from healthcare professionals when it is needed. Caregivers should work in collaboration with healthcare professionals such as doctors, physiotherapists, or occupational therapists to develop a comprehensive physical activity plan suitable for senior's specific health needs and conditions. Older adults might perform a task in the best possible way and with peace of mind when they do it alone and without actual interference. It is crucial that informal caregivers trust them, leave their tasks to them, and help them only in demand.[60]

We need to inform informal caregivers that frail older people should not be immobilized with encouragement for immobility. Instead, necessary facilities for mobility at home should be constructed and the environmental impediments that may prevent seniors movement to be ommited.[61] Strategies to assist families, such as respite service, care capacity building, and official leave for caregiving, should be applied beside the educational intervention programs for infromal caregivers.

The fear of falling is a shared concern in the families with older adults. Rather than restricting mobility, which leads to deconditioning and reduced functioning, a better approach is to address the root causes of falls. A thorough assessment after a fall is crucial as it provides insight into future risks and opportunities to develop an individualized fall prevention program.[62] However, informal caregivers should permit older people to do the

activities and ensure their abilities. Supervisory caregiving can be challenging as it may destroy the self-esteem and comfort of older people.

To protect the seniors from ICFI supportive rights must address caregiver dynamics, cultural norms, and systemic gaps while safeguarding elderly autonomy. Key rights and frameworks that should exist include: Right to Autonomy and Mobility (Legal protection against restrictive practices, Access to mobility support services), Right to Caregiver Accountability and Training (Mandatory caregiver education, Legal recourse for abuse), Right to Integrated Support Systems (Respite care and mental health support, Technology-based monitoring), Right to Social Participation and Advocacy (Community engagement programs, Independent advocacy services), Cultural and Systemic Reforms (Public awareness campaigns, Financial support for caregivers).

Conclusion

The critical porpuse of informal care is to retain older people independently, allow them to perform ADLs and IADLs, and maintain their self-esteem. Health system should provide an explanation of the characteristics of ADL interventions and how to participate in activities for caregivers and older adults to help them in promoting senior's independence and autonomy. In such interventional programs, focus should be on the strategies that empower informal caregivers on how to create balanced care to help older people's activities, and how to assist them in performing ADLs and IADLs. We need to inform informal caregivers that frail older people should not be immobilized with encouragement for immobility. Instead, necessary facilities for mobility at home should be constructed and the environmental impediments that may prevent seniors movement to be ommited. Strategies to assist families, such as respite service, care capacity building, and official leave for caregiving, should be applied beside the educational intervention programs for infromal caregivers. The perspective presented in this article can be helpful for health practitioners, gerontologists and health policymakers in taking into account ICFI while desiging their interventional strategies for older adult's care at home and residential care settings.

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Competing Interests

There is no conflict of interest in this study.

Ethical Approval

This study was approved by the Research Ethics Committee of Tabriz University of Medical Sciences (code: IR.TBZMED.REC.1401.878).

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