

Mini Review

Effect of Interventions on Informal Caregivers of Older Adults: A Scientific Mini Review

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Abstract

The growing number of older adults with long-term health issues has led to more family members becoming informal caregivers. These caregivers play a crucial role in providing care to their elderly loved ones. However, this caregiving can be physically and emotionally demanding, affecting the caregivers' own well-being. This scientific mini-review examines various ways, known as "interventions," that can help ease the challenges faced by informal caregivers and improve their quality of life. These interventions can include things like training programs, support groups, or using technology to assist caregivers. To get the most up-to-date information, we looked at the recent systematic reviews and studies published in the last 5 years. We searched for this information in three widely recognized electronic databases: PubMed, Web of Science, and Scopus with full text. These interventions show promise in making life easier for informal caregivers and improving their quality of life. This mini review intends to offer insights into how these interventions can be beneficial, serving as a resource for healthcare professionals, policymakers, and researchers working to enhance the well-being of both caregivers and the elderly individuals they care for.

Keywords: caregivers, caregiver burden, quality of life, internet-based intervention, psychosocial intervention

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1. Introduction

The global elderly population is steadily growing both in absolute numbers and relative proportions. According to data from the World Health Organization (WHO), the number of individuals aged 65 and above was 524 million in 2010, and this number is estimated to surge to 1.5 billion by 2050 [1]. This demographic shift underscores the increasing demand for informal caregiving to support older adults with chronic illnesses, disabilities, or frailty, primarily provided by family members and relatives. The prevalent definition of an informal caregiver is as follows: an informal caregiver refers to a non-professional individual who voluntarily provides care or assistance to a family member, friend, neighbor, or any other person with a long-term mental or physical illness, disability, or age-related condition" [2].

The role of informal caregivers in providing a wide range of support to older adults is vital, but it can take a toll on their physical and emotional well-being. This caregiving responsibility often leads to an increased burden on the caregiver and a reduced quality of life. Caregivers commonly assist with patient companionship, serve as intermediaries between patients and healthcare providers, and aid with basic daily activities. However, they also experience negative consequences such as fatigue, limited free time, disruptions in daily routines, decreased social interactions, and various emotional and physical symptoms. Many of their needs, including clarifications about the illnesses they are dealing with, training for caregiving tasks, and psychological support, often go unmet [3].

In response to these challenges, numerous studies have explored interventions designed to reduce caregiver burden and improve the quality of life for informal caregivers [4–6]. These interventions predominantly focus on educational and psychosocial approaches [4, 6–8]. The primary outcomes targeted by these interventions include caregiving burden, quality of life, and health-related indicators. This mini-review evaluates the effectiveness of such interventions in addressing caregiver-related outcomes.

2. Care-related Burden

The concept of "care-related burden" in the literature is consistent with research trends in social sciences, which emphasize "psychological dysfunction," such as anxiety and depression [9]. Care-related burden is a term used to understand how the role of caregivers can negatively affect family members who take on caregiving responsibilities. This burden stems from various interconnected factors, including socio-economic characteristics, available resources, and the stressors faced by the caregivers [10]. It can be both "objective," related to the physical or instrumental assistance provided by caregivers, and "subjective," linked to emotional or psychological distress, such as stress and anxiety [11].

Common precursors of this burden include financial constraints and a lack of social activity [12]. Financial and economic limitations are significant factors contributing to caregiver burden [13]. The conflict between career, caregiving responsibilities, and family needs places a heavy burden on caregivers [14]. One common caregiver outcome is depressive symptoms. Caregivers of individuals with dementia are more likely to experience depressive symptoms compared to those caring for individuals without dementia. Therefore, interventions aimed at reducing caregivers' depressive symptoms are a crucial research focus.

3. Care-related Quality of Life

Quality of life, as defined by the World Health Organization (WHO), is how a person sees their life concerning their values, goals, health, relationships, work, and more [15]. In simpler terms, it's about how content someone feels with their life. Teoli & Bhardwaj provide a more comprehensive definition, considering it a concept aimed at assessing the well-being of individuals or populations at a given time. Quality of life encompasses various aspects, including physical and mental health, relationships, education, work environment, social status, material well-being, security, freedom, autonomy, social belonging, and environment [16]. Thus, quality of life is a multidimensional concept.

When we look at caregivers, we find that their quality of life is closely tied to the challenges they face [17]. Lessening these challenges can improve their quality of life. Caregiving often means less free time, social isolation, and less physical activity [18, 19]. This can lead to problems like anxiety, depression, and fatigue [12]. Caregivers who provide care in a difficult or unsatisfactory environment not only experience a reduced quality of life themselves but also provide lower-quality care [20]. Adding more challenges to caregivers' lives can have a negative impact on their overall well-being and health. This will lead to the development of a vicious cycle that may worsen without appropriate interventions. Interventions are needed to break this cycle.

4. Interventions

Depression and anxiety represent the two most prevalent mental disorders among individuals engaged in both formal and informal caregiving. Mental health is a significant public health concern, given its high prevalence, disease burden, and disability impact. As a result, researchers are actively seeking strategies to reduce depression and anxiety and enhance the quality of life through interventions. A review of the literature reveals that interventions can be categorized into two primary types: non-pharmacological and pharmacological (Figure **1**). Pharmacological interventions, in turn, aim to ameliorate the psychological state and provide education for caregivers, both for the recipient of care and for themselves.

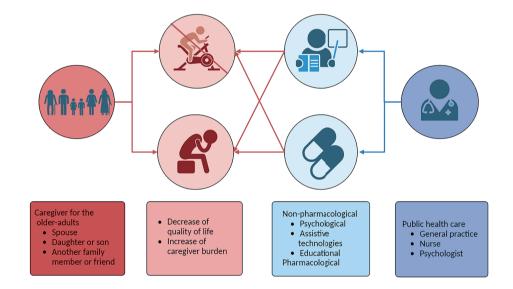


Figure 1: Interventions' types and their impact on the quality of life and burden of informal caregivers of older adults.

4.1. Non-pharmacological interventions

4.1.1. Psychosocial interventions

Psychoeducational sessions typically encompass topics such as understanding aging, caregiving, emergency response, care for the caregiver, and community support. Psychoeducational interventions have shown significant improvement in the mental health of the care providers, as demonstrated by the pre-test to the first follow-up assessment

after 2 months, and a positive influence on the behavior of the caregivers [21]. Furthermore, in a systematic review conducted by Aksoydan et al. in 2019, psychosocial interventions were implemented in the training program for family caregivers. Care providers who underwent supportive educational training exhibited significantly improved quality of life [22]. Another systematic review revealed a notable impact of psychosocial interventions on hospitalization duration for patients, municipal support expenditures, and emotional well-being, especially when informal caregivers were involved. A significant effect was also observed in the reduction of depressive symptoms among informal caregivers over time [23].

A reduction in symptoms of depression and anxiety among care providers was noted in those who attended traditional weekly sessions compared to the participants in a control group with minimal therapist contact [24]. Psychoeducational interventions generally yield positive outcomes for caregivers, delaying the need for permanent institutionalized care for care recipients. Cognitive behavioral therapy mitigates maladaptive thought patterns among caregivers, and occupational therapy addresses behavioral issues among patients while enhancing the self-efficacy of caregivers. In summary, interventions tailored to individual needs result in superior outcomes [25].

4.1.2. Assistive technologies

Assistive technologies typically operate using computers or phones, which may include DVD discs, CDs, the internet, or computer programs. Internet-based interventions can help expand the capabilities of caregivers for individuals with chronic illnesses and develop solutions to reduce the physical and psychological consequences of caregiving. The most commonly measured variables in studies were caregiver burden/stress and depression. Technology-based interventions can reduce caregiver burden, alleviate depression, anxiety, and stress, as well as enhance the caregivers' coping abilities [26].

By enhancing the independence of older individuals, assistive technologies reduce the workload required of informal caregivers, thus decreasing the caregiving burden. Assistive technologies have benefited caregivers by reducing the time, level of assistance, and energy expended on caregiving, lessening concerns and fears, simplifying tasks, and reducing safety risks, especially in activities requiring physical assistance, while increasing users' independence [27]. Research has shown that as a result of these interventions, anxiety decreased after the intervention, positive aspects of caregiving improved, and caregivers' self-efficacy increased [28]. The evaluation of the impact of internet-based interventions on mental health, overall caregiving outcomes, and the general well-being of informal caregivers for individuals with chronic illnesses living in the community revealed significant improvements. Furthermore, improvements were noted in positive aspects of caregiving, knowledge, relationships, anger-hostility reduction, and mood improvement [29].

Moreover, delivering the course through the internet enables individuals to work independently with modules at their preferred pace, at their convenience, and from any location. Discussion forums have also been identified as a significant advantage due to the potential for social interaction and a sense of community, which many experienced while sharing their experiences [30].

4.1.3. Education

Educational interventions conducted by nurses can be successful among caregivers, instilling a sense of shared responsibility and ensuring safer home care for the elderly. For instance, medication management is a complex process that involves various activities supported by the use of various tools and strategies adapted and personalized for each specific caregiving scenario. Caregivers typically engage in activities such as medication retrieval, pillbox preparation, and assistance with medication intake. Additionally, they perform cognitive tasks, such as medication organization and tracking, information gathering, and treatment decision-making. Caregivers employ a variety of tools and strategies to support these medication management activities. However, these tools and strategies need to be modified and personalized to meet the specific needs of the care recipient's situation [31]. Research findings have shown that educating caregivers reduced the burden on them and improved their quality of life [32].

Educational interventions have led to improvements in knowledge, attitudes, and practices in various caregiving domains, including feeding, bathing and hygiene, and mobility and transportation, between caregivers and the elderly care recipients. Results have indicated enhanced relationships in most areas [33].

4.2. Pharmacological

Depression and anxiety are among the most common mental health disorders, both among formal and informal caregivers. It was found that women, older individuals, and those dedicating more hours per week to caregiving, especially for non-family members, have an elevated risk of depression, anxiety, and the use of antidepressants or anxiolytics [34]. Additionally, in another study by Stroka-Wetsch et.al., women were reported to consume approximately five defined daily doses of antidepressants more when caring for dependent family members. Furthermore, it was observed that caregivers, in addition to psychoactive drugs, also take more analgesics and gastrointestinal medications. In the case of tranquilizers and analgesics, the estimated effect for women amounts to about one defined daily dose per day. Regarding gastrointestinal medications, the effect is about two defined daily doses per day [35]. In Finland, among female caregivers, the relative risk of using antidepressants was approximately 1.3 compared to women who were not caregivers, within the age range of 20 to 70 years, after which the relative risk decreased. Among male caregivers, the relative risk was highest (approximately 1.4–1.5) in the age group of 45 to 65 years, in comparison to those who were not caregivers [36]. Therefore, informal caregiving proves to be a burdensome task with consequences for both mental and physical health.

5. Conclusion

In conclusion, this article underscores the importance of understanding and considering the mental health of individuals engaged in caregiving, whether formal or informal. The high prevalence of depression and anxiety among this group, particularly among women, older individuals, and those dedicating a significant amount of time to caregiving, highlights the need for more effective support measures and interventions. Furthermore, the identified increase in the consumption of psychoactive and other medications among caregivers emphasizes the heavy burden and stress associated with this responsibility. These findings accentuate the importance of developing caregiving approaches and support systems that consider the mental well-being of caregivers and caution against potential risks and consequences for their health. Further research and the development of relevant support programs will be necessary to enhance the quality of life for caregivers and reduce the burden they bear.

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