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LETTER TO THE EDITOR

INFORMAL CAREGIVING IN LOW-RESOURCE SETTINGS—ASSESSING BURDEN, CHALLENGES, AND POLICY IMPERATIVES

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An informal caregiver is someone who provides unpaid care to a friend, family member, or neighbor in need. They often help with daily tasks such as cooking, cleaning, and dressing, as well as support with managing appointments and finances (Williams & Lum, 2020).

The role of informal caregivers in patient recovery is multifaceted and often underappreciated, particularly within low-resource settings where formal support structures are limited. The provision of caregiving is integral to the continuum of care and can serve as a crucial determinant of patient outcomes. However, while caregivers facilitate recovery by providing physical, emotional, and logistical support, the responsibilities they assume frequently exact a significant toll on their own physical and mental well-being. This duality of caregiving—as both indispensable and inherently burdensome—demands rigorous academic inquiry and public policy attention, especially given the growing number of patients who rely on informal care in the context of chronic illness, advanced age, and post-surgical recovery.

As research has demonstrated, the responsibilities inherent in caregiving can result in significant physical and mental health challenges (Kayaalp, Page & Rospenda, 2021). These challenges often include chronic fatigue, musculoskeletal problems, and a higher risk of cardiovascular diseases due to the physical demands of caregiving tasks (Omolara & Ochieng, 2024). Additionally, caregivers frequently experience emotional strain, manifesting as anxiety, depression, and feelings of isolation (Lauzier-Jobin & Houle, 2021). This combination of physical and mental health issues contributes to a complex interplay of stressors that profoundly affect caregivers' quality of life. The constant pressure to provide care, manage medical appointments, and handle daily living activities can lead to burnout and reduced overall well-being (Zarit & Zarit, 2019). Consequently, it is crucial to recognize and address these multifaceted stressors to support caregivers effectively.

The importance of caregiving in facilitating patient recovery cannot be understated. Informal caregivers are often the first line of support for patients transitioning from hospital to home, and they perform a range of tasks—from medication management and wound care to providing emotional support and assistance with activities of daily living (Chase et al., 2021). In resource-limited settings, these caregivers assume an even greater burden, compensating for the deficiencies in formal healthcare services (Chukwu et al., 2022). This duality of caregiving—being both a source of comfort and a potential source of strain—has been explored extensively in the literature. Scholars have underscored that while caregiving can foster positive relationships and engender a sense of fulfilment, it simultaneously predisposes individuals to adverse health outcomes, including chronic stress, depression, and anxiety (Chen, Li, & Zhang, 2021).

A key instrument in quantifying the extent of caregiver burden is the Zarit Burden Index (ZBI). This validated measure assesses the multifaceted impacts of caregiving by capturing physical, emotional, and financial dimensions of the caregiving experience (Clair, Tobin & Taylor, 2023). The ZBI provides a standardized approach to evaluating caregiver stress and has been widely adopted in both research and clinical settings. Its robust psychometric properties have enabled researchers to explore correlations between caregiver burden and a variety of patient-related and contextual factors (Aljunaid et al., 2024). In recent studies, the ZBI has been instrumental in delineating how factors such as patient age, severity of illness, and the presence of comorbid conditions influence the degree of burden experienced by caregivers (Zarit & Zarit, 2019; Smith, Jones, & Clark, 2020).

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Patient-related factors, notably age and illness severity, have been consistently identified as significant contributors to caregiver burden. Research has indicated that caregivers of older adults, or those caring for patients with advanced or multiple health conditions, often encounter elevated levels of both physical and emotional distress (Zhang et al., 2023; Murfield et al., 2024). This increased burden is attributable to the higher levels of dependency exhibited by such patients, necessitating more intensive caregiving efforts. For example, Malmir and colleagues (2022) have reported that caregivers dealing with older adults suffering from severe health issues frequently experience chronic fatigue, physical strain, and psychological distress. These findings are corroborated by subsequent studies, which suggest that the cumulative effects of long-term caregiving for individuals with complex health needs may lead to diminished physical health outcomes for caregivers themselves (Nguyen et al., 2024).

In addition to patient-related factors, the context of the caregiving situation plays a crucial role in shaping the caregiver experience. Caregivers for individuals undergoing major surgical interventions or those with prolonged recovery trajectories often face considerable financial and emotional challenges. The disruption to daily routines, loss of income, and additional out-of-pocket expenses can exacerbate the overall burden of care. Hladkowicz and colleagues (2024) have highlighted that the period following major surgeries is particularly challenging, as caregivers must navigate both the physical recovery process of the patient and the attendant economic pressures. These challenges are not confined to high-income settings; they are magnified in low-resource environments where access to rehabilitation services and financial assistance is severely limited.

Within the context of Sub-Saharan Africa, the dynamics of caregiving are further complicated by socio-cultural expectations. In many African communities, there exists a deeply ingrained belief that family members are obligated to care for their relatives during times of illness. This cultural norm, while fostering a sense of communal responsibility and mutual support, can also intensify the burden placed on individual caregivers. In environments where formal caregiver support systems are absent and healthcare expenditures are largely borne by families, the stress associated with caregiving is compounded by economic constraints and limited access to professional healthcare services (Komuhangi et al., 2022). Studies in the region have revealed that although the collectivist culture in Sub-Saharan Africa may initially mitigate some of the emotional strains of caregiving, the sustained financial and logistical demands ultimately culminate in significant caregiver burnout (Ikeorji, 2024).

The dual-edged nature of caregiving, wherein the provision of care is both a source of personal satisfaction and a potential driver of health deterioration, has important implications for public health policy and clinical practice (Hammond et al., 2023). There is an urgent need to address the challenges faced by informal caregivers, particularly in low-resource settings where formal healthcare infrastructures are inadequate. Interventions that are designed to support caregivers must be multifaceted, encompassing not only medical and financial assistance but also psychosocial support. For instance, community-based programs that offer respite care, counselling services, and caregiver education have shown promise in alleviating some of the burdens associated with long-term caregiving (Kumar & Patel, 2022). Moreover, integrating caregiver support into existing healthcare policies could lead to improved outcomes for both patients and caregivers, as a healthier caregiver population is better equipped to provide sustained care.

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Recent empirical evidence underscores the importance of tailoring interventions to the specific needs of caregivers. Studies have found that interventions targeting the physical and emotional health of caregivers can lead to significant improvements in their overall well-being, which, in turn, positively impacts patient recovery trajectories. For example, interventions that incorporate stress management techniques, physical exercise, and social support networks have been associated with reductions in caregiver burden and improvements in quality of life (Nayak & George, 2021; Sun et al., 2022; Velloze et al., 2022). Such findings suggest that a comprehensive approach to caregiver support—one that addresses the multifactorial nature of caregiver stress—can yield substantial benefits.

In academic discussions of caregiver burden, it is also crucial to consider the potential long-term effects of sustained caregiving responsibilities. Chronic exposure to high levels of stress has been linked to adverse health outcomes, including cardiovascular disease, metabolic disorders, and a decline in cognitive function (Kivimäki, Bartolomucci & Kawachi, 2023). The concept of allostatic load, which refers to the cumulative physiological wear and tear on the body resulting from chronic stress, is particularly relevant in the context of caregiving. Caregivers who experience prolonged periods of stress may incur a higher allostatic load, leading to premature health decline and increased risk of chronic diseases (Safiri et al., 2024). This underscores the need for early identification and intervention, with routine assessments of caregiver burden playing a critical role in mitigating these long-term health risks.

It is also imperative to explore the psychosocial dimensions of caregiver burden, as emotional distress can significantly impair a caregiver's ability to function effectively. The emotional toll of caregiving is often exacerbated by feelings of isolation, guilt, and inadequacy (Gallego-Alberto et al., 2022). Such emotional challenges are compounded by the lack of formal support systems and the stigmatization of mental health issues in many societies. Consequently, caregivers may be reluctant to seek help, further entrenching their sense of isolation and exacerbating their stress levels. Research by Lohrasbi and colleagues (2023) has demonstrated that the provision of targeted mental health support can alleviate some of the emotional distress experienced by caregivers, thereby improving both their well-being and their capacity to care for patients.

In addition to individual-level interventions, there is a growing recognition of the need for systemic reforms to address caregiver burden comprehensively. Policymakers must consider strategies that not only support caregivers financially but also enhance the overall healthcare infrastructure. The integration of caregiver support into national health policies could involve the establishment of formal respite care programs, subsidies for caregiving-related expenses, and the incorporation of caregiver assessments into routine clinical practice (Yao et al., 2024). Such reforms have the potential to reduce the strain on informal caregivers, thereby improving the sustainability of patient care in resource-limited settings (Abd Rahim et al., 2021; Gaugler, 2022).

Furthermore, the intersection of caregiving with broader socio-economic factors merits significant attention. In many low-resource environments, caregivers are often employed in the informal sector, and the demands of caregiving can lead to lost income and diminished economic opportunities. The economic ramifications of caregiving are profound, as the loss of productivity not only affects individual households but also has wider implications for national economies. The financial strain experienced by caregivers is further exacerbated by the direct costs associated with healthcare, including medication, medical supplies, and transportation.

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This economic burden is frequently compounded by inadequate social security systems, leaving caregivers with few options for financial support (King et al., 2021; Buckle et al., 2024). Addressing these economic challenges requires a coordinated approach that involves both public and private sector stakeholders.

It is worth noting that the caregiving experience is not uniformly negative. Many caregivers report that their experiences have led to personal growth, enhanced interpersonal relationships, and a greater sense of purpose. The positive aspects of caregiving, however, should not be used to overshadow the substantial burdens that many caregivers bear. The duality of the caregiving experience underscores the need for a balanced perspective that recognizes both the rewards and the challenges inherent in caregiving. By adopting a holistic approach that integrates physical, emotional, and financial support, healthcare systems can better accommodate the complex needs of caregivers while simultaneously promoting positive patient outcomes (Zembe-Mkabile, 2023).

Recent trends in global health research have emphasized the importance of incorporating caregiver perspectives into the broader discourse on health systems strengthening. The experiences of caregivers, particularly in low-resource environments, provide critical insights into the gaps in existing healthcare infrastructures and the areas where policy reforms are most urgently needed. By systematically evaluating caregiver burden through validated instruments like the ZBI, researchers and policymakers can gain a deeper understanding of the multifaceted challenges that caregivers face (Onomuighokpo et al., 2025). This evidence-based approach is essential for the development of targeted interventions that are both effective and sustainable (Szlamka et al., 2022).

The implications of caregiver burden extend beyond the individual to affect entire communities. In many cultures, caregiving is a shared responsibility, and the cumulative burden experienced by multiple family members can have significant social repercussions. Community-based interventions, which leverage local resources and social networks, have shown promise in mitigating some of the adverse effects of caregiving (Chen, Inoue & Buckley, 2024). Such interventions often involve the establishment of support groups, educational programs, and community health worker initiatives designed to provide both practical assistance and emotional support to caregivers. The success of these community-driven approaches highlights the potential for locally tailored solutions to complement broader policy reforms (Taban et al., 2024).

In summary, the essential role of caregiving in patient recovery, particularly in low-resource settings, is underscored by the significant challenges that informal caregivers face. The Zarit Burden Index remains a vital tool in quantifying the multifaceted impacts of caregiving, offering insights into the physical, emotional, and financial dimensions of caregiver stress. The literature consistently demonstrates that patient-related factors, such as age and illness severity, significantly influence caregiver burden, while socio-cultural expectations further complicate the caregiving experience in regions like Sub-Saharan Africa. The pressing need to support caregivers is evident, as their well-being is inextricably linked to the quality of patient care and the overall functionality of healthcare systems.

Addressing caregiver burden requires a multi-pronged strategy that includes both individual-level interventions and systemic reforms. Interventions that focus on stress reduction, mental health support, and economic relief have shown promise in alleviating caregiver distress. At the

same time, broader policy reforms that integrate caregiver support into national healthcare frameworks are essential for ensuring the long-term sustainability of caregiving, particularly in environments where formal support systems are lacking. The integration of caregiver assessments into routine clinical practice and the development of community-based support networks represent critical steps toward mitigating the adverse effects of caregiving.

The challenges associated with caregiving, while formidable, also present opportunities for transformative change in healthcare delivery and policy. By recognizing the invaluable contributions of informal caregivers and addressing the multifaceted burdens they face, policymakers and healthcare providers can work toward more resilient and responsive health systems. The evolving discourse on caregiver burden, as reflected in recent empirical research, underscores the need for an evidence-based approach that not only acknowledges the hardships of caregiving but also leverages its potential to foster community resilience and individual growth. In this regard, the continuing evolution of caregiving research holds promise for the development of innovative strategies that support both caregivers and the patients they serve, ultimately enhancing the overall quality of care in low-resource settings (Culberson et al., 2023).

In light of these considerations, it is incumbent upon the academic and medical communities to prioritize the study of caregiver burden and to advocate for comprehensive support systems that address the unique challenges faced by informal caregivers. As the global population ages and the prevalence of chronic illnesses increases, the demand for informal caregiving is set to rise, making the development of effective support strategies more urgent than ever. The continued use of validated instruments such as the Zarit Burden Index, combined with targeted interventions and systemic policy reforms, represents a promising avenue for mitigating caregiver burden and promoting better health outcomes for both caregivers and patients alike.

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