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PERSPECTIVES

Nursing and chronic wounds in global health: Addressing an unresolved burden in low- and middle-income countries

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Abstract
Chronic wounds are currently a significant health issue in the world. Despite the substantial burden, these conditions receive less attention than global priorities such as diabetes, cardiovascular, and infectious diseases. This condition has a significant negative impact especially in low- and middle-income countries (LMICs). In these regions, fragile health systems, workforce shortages, socioeconomic inequities, and limited access to wound technologies exacerbate the suffering of individuals. Therefore, the perspective article argues that chronic wounds should be reframed as a priority. They are not merely biomedical conditions but complex syndromes reflecting structural inequities and failures in care delivery. The article emphasizes the importance of integrating patient-centered outcomes, pain relief, preservation of functionality, and quality of life into decision-making processes. Furthermore, nurses are vital frontline providers who drive care continuity and technological innovation in underserved areas. Treating chronic wounds must be viewed as a fundamental right and a matter of social fairness, rather than a secondary medical priority. Urgent steps must be taken to prioritize greater investment in accessible technologies, nursing capacity building, and wound care inclusion in global health agendas. These actions are vital for reducing preventable disability and restoring dignity within an equitable health system.

Keywords: Chronic wounds, global health, holistic nursing, primary care, public health nursing

Wounds and the global burden

Chronic wounds are a silent epidemic that is often sidelined by higher-profile diseases worldwide (Sen, 2023). The burden of non-healing wounds is extensive that resulting in persistent pain, recurrent infections, loss of function, significant financial strain, and even amputation (McDermott et al., 2023). Though the burden of wounds is evident across all societies, it is disproportionately borne by low- and middle-income countries (LMICs). LMICs, as classified by the World Bank, include nations with a gross national income per capita below US$13,845 (Timothy et al., 2022). In the context of wound care, LMICs face unique challenges that exacerbating the burden of chronic wounds such as fragile health systems, limited healthcare financing, and restricted access to specialized technologies (Olsson et al., 2019). Given this situation, chronic wounds remain absent from health diplomacy and international cooperation agendas. This neglect constitutes an unresolved debt in global health, a debt that directly undermines the principles of equity and universality. Globally, the prevalence of chronic wounds continues to rise that driven by aging populations, trauma-related injuries, and age-related chronic diseases (López-Jiménez et al., 2025). A recent study estimated that chronic wounds affect approximately 2–6% of the population in high-income countries (Vogt et al., 2020). However, the prevalence is often higher in LMICs due to elevated rates of uncontrolled diabetes, peripheral vascular disease, and infections (Díaz-Herrera et al., 2025).

Among chronic wounds, diabetic foot ulcers represent the highest burden, followed by venous leg ulcers, pressure injuries, and arterial ulcers. This ranking, however, varies by region, with diabetic foot ulcers being especially prevalent in sub-Saharan Africa and South Asia, while venous leg ulcers are more common in parts of Latin America (Díaz-Herrera et al., 2025). In LMICs, the impact is magnified by structural vulnerabilities: higher rates of uncontrolled diabetes and infections, limited access to diagnostic tools, and insufficient referral systems. In the biomedical dimension, chronic wounds perpetuate cycles of poverty. Families are often forced to allocate limited resources toward prolonged and ineffective treatments. This financial burden leads them to resort to traditional remedies or inexpensive dressings that

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offer little clinical improvement (Popescu et al., 2023). The burden of disability and lost productivity reverberates across households and communities that entrenching inequities.

Structural inequities and systemic barriers

The invisibility of chronic wounds in health agendas origins from systemic fragmentation. Also, health services in many LMICs are not designed for continuity of care; patients navigate disjointed systems with little follow-up (Edwards et al., 2023). The shortage of trained professionals, vascular surgeons, podiatrists, wound-care specialists, compounds this problem (Sumarno, 2019). Equally critical is the inequity in access to innovative technologies. Advanced therapies have demonstrated efficacy in accelerating healing, reducing pain, and preventing amputations such as topical oxygen devices, negative pressure wound therapy, or bioengineered dressings (Du et al., 2024; Tang et al., 2024). Yet, these interventions are often labeled as "too expensive" for LMICs, overlooking the long-term costs of therapeutic failure: prolonged hospitalizations, repeated use of antibiotics, and loss of productivity (Kathawala et al., 2019). This paradox highlights the need for a more holistic, cost-effectiveness-based approach to technology adoption in wound care. To overcome these barriers, some solutions could be prioritized: 1) strengthening primary care networks to ensure continuity of follow-up; 2) integrating community-based nursing leadership to address workforce shortages; 3) implementing cost-effectiveness analyses to guide the adoption of innovative wound-care technologies; and 4) developing international partnerships that promote technology transfer and capacity building tailored for LMIC settings.

Nursing and holistic perspectives in chronic wounds

Nurses are often the closest point of contact for patients and their families, especially in resource-limited settings (Shaban et al., 2025). Their role is more than just treating wounds but they provide education, monitor adherence, and advocates for patient needs (Morell et al., 2024). From a holistic perspective, nursing recognizes that the success of wound care cannot be measured solely by wound closure (Turi et al., 2026). Reducing pain, maintaining mobility, and upholding patient dignity are also equally essential clinical goals (Adi, 2025). Owing to their frontline role, nurses are well-equipped to identify and document these qualitative aspects of patient health by integrating them into care plans and advocating for their recognition in research and policy (Subrata, 2025). In LMICs, nurses often represent the backbone of wound care delivery where access to physicians and specialists is limited. Given their central position, nurses must adopt a holistic management strategy that include preventive and community-based support. Effective nursing care in these contexts includes patient education on hygiene and foot care, use of affordable dressings, monitoring for infection, and coordination with community health workers. A significant reduction in preventable complications and a marked improvement in healing rates is achievable when nurses are equipped with the necessary training and resources such as community-based wound care programs in Africa and Asia (Shao et al., 2017). Through training, community outreach, and leadership in multidisciplinary teams, nurses can bridge the gap between scientific advances and real-world practice. Strengthening nursing capacity in wound care thus represents a clinical imperative and a pathway to equity and social justice (Turi et al., 2026).

Looking forward: Integrating chronic wounds into global health agendas

If global health aspires to be equitable, chronic wounds must be brought into the conversation. First, they should be recognized as part of the noncommunicable diseases (NCDs) burden prioritized by international agencies. Second, financing mechanisms should include provisions for wound-care technologies within universal health coverage packages. Third, international cooperation must facilitate technology transfer, research partnerships, and training programs focused on LMICs. Health diplomacy has a role to play: ensuring that chronic wounds are no longer treated as marginal or secondary issues but as markers of systemic injustice. Investment in wound care, particularly in accessible and cost-effective technologies, should be reframed not as an expense but as an investment in human dignity and sustainable health systems. Due to the burden of disease and the existing gaps in scientific evidence, as well as the lack of clear implementation plans and outcomes, this topic represents a scientifically relevant opportunity of global interest (Lozada-Martinez et al., 2025a; Lozada-Martinez et al., 2025b; Lozada-Martinez et al., 2025c). It should therefore serve to drive new processes of funding, research, and action aimed at developing innovative and original solutions capable of generating definitive results **(Table 1)** (Lozada-Martinez et al., 2024). Future health policies should include chronic wound care in broader global initiatives, such as Universal Health Coverage, instead of treating it as a separate issue. Elevating wound care in policy discussions helps unlock the resources and research needed for a sustainable global response. In 2026, this strategic prioritization is essential for integrating wound management into national universal health coverage

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frameworks. Through this approach, healthcare systems can transition from reactive treatments to proactive, evidence-based interventions that reduce morbidity and economic strain.

Table 1. Chronic wounds in LMICs: Current challenges and forward-looking strategies.

Dimensions	Current challenges	Forward-looking strategies
Burden of disease	Rising prevalence especially linked to diabetes and infections	Integrate chronic wounds into NCDs global health agendas
Health system capacity	Fragmented care, lack of specialists, weak referral systems	Strengthen nursing leadership, community-based programs, and interprofessional models
Access to technology	Limited availability of advanced therapies, high perceived costs	Promote cost-effectiveness analyses, technology transfer, and innovation for LMICs contexts
Patient-centered outcomes	Pain, disability, and poor quality of life often neglected	Recognize these as valid outcomes guiding policy and practice
Equity and justice	Vulnerable populations most affected, yet least likely to access innovation	Position chronic wounds within health diplomacy and universal health coverage frameworks

Conclusion

Chronic wounds are more than clinical problems; they are indicators of inequity in global health. The neglect of their burden in LMICs reflects a gap in our collective commitment to justice and universality. Nurses, with their holistic perspective and proximity to patients, are key actors in addressing the challenges. Recognizing chronic wounds as a global health priority, investing in nursing capacity, and ensuring equitable access to innovative technologies are urgent steps toward reducing preventable complications. In doing so, the international community can begin to repay its long-standing debt to those most affected including vulnerable populations in low-resource settings.

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Publishers and journal's note

This article is compelling as it addresses the often-overlooked issue of chronic wounds, particularly in LMICs. The key insights from this work serve as a vital consideration for optimizing the role of nurses—especially community nurses—in delivering high-quality wound care to their patients. Furthermore, equipping these frontline professionals with training

and sustainable resources is a fundamental step toward reducing wound complications. Such initiatives will transform chronic wound management from a burden into a prioritized component of universal health coverage.

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Authors' insight

Key points

- In resource-constrained settings, nurses' ability to manage chronic wounds is the most critical factor in preventing severe complications like sepsis or amputation.
- The impact chronic wounds in LMICs are intensified by high diabetes prevalence, lack of affordable modern dressings, and socio-economic barriers.
- Wound care must be integrated into national health agendas and universal health coverage frameworks to secure necessary funding.

Emerging nursing avenues

- What specific barriers currently prevent nurses in LMICs from achieving full competency in advanced wound management?
- How can healthcare leaders embed chronic wound protocols into existing programs for NCDs without overstretching the nursing workforce?
- Which nurse-led models of care have shown the highest potential for long-term sustainability in rural or low-resource communities?

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