



# The challenges of asthma care in low- and middle-income countries: what's next?

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Asthma is a global health concern that affects millions of people worldwide, placing a significant burden on individuals, families, and communities. This chronic respiratory condition can have a profound impact on the quality of life and productivity of the patients. Understanding the global burden of asthma and recognizing the importance of asthma care for all is crucial to address this widespread issue globally. Firstly, it is essential to acknowledge the scale of the problem. Asthma is estimated to affect over 300 million people globally, and its prevalence continues to rise steadily. This chronic disease knows no boundaries and affects people of all ages, races, and socioeconomic backgrounds. From high-income nations to low- and middle-income countries (LMICs), asthma is a universal health challenge that demands attention. <sup>(1)</sup> The burden of asthma extends beyond individual suffering. Families with asthma members often face emotional, financial, and practical challenges. Frequent visits to healthcare facilities, medical expenses, and the need for ongoing treatment can strain household budgets. Moreover, asthma-related emergencies and hospitalizations can disrupt daily routines, impact education and work, and diminish the overall quality of life for both patients and families. <sup>(1)</sup> For the 2023 World Asthma Day (May 2), the GINA chose the theme "Asthma Care for All", acknowledging the importance of initiatives for achieving the best diagnostic and management practices for all patients with asthma, regardless of the country economic development. <sup>(2)</sup> The majority of the burden of asthma morbidity and mortality occurs in LMICs. <sup>(3)</sup> Some LMICs report very high rates (up to 90%) of uncontrolled asthma. <sup>(4,5)</sup> The GINA strives to reduce this burden by encouraging healthcare leaders to ensure the availability of and access to effective, quality-assured medications. <sup>(2)</sup>

Inadequate access to asthma care exacerbates the burden experienced by the individuals affected. Disparities in healthcare resources and limited availability of affordable medications, particularly in LMICs, hinder the effective management of the condition. This lack of access can lead to uncontrolled asthma, as well as increased hospitalizations and deaths. <sup>(6)</sup> It is crucial to recognize that proper asthma care, including accurate diagnosis, appropriate medication, regular monitoring, and patient education, can significantly improve outcomes and reduce the burden of the disease. <sup>(2)</sup> Addressing the burden of asthma requires a comprehensive and collaborative approach. Governments, healthcare systems, policymakers, and communities must prioritize asthma as a public health concern, especially in regard to severe asthma. <sup>(1,7)</sup> Increased investment in asthma research, improved access to affordable medications,

particularly those for severe asthma, and enhanced healthcare infrastructure are necessary steps toward achieving effective asthma management on a global scale. <sup>(6)</sup> Education and awareness also play a pivotal role in reducing the burden of asthma. Promoting asthma education among healthcare professionals, patients, and their families is vital for early detection of the disease, proper self-management, and prevention of exacerbations. By globally empowering individuals with knowledge and skills, we can foster a proactive approach to asthma care that improves health outcomes and reduces the burden on individuals and societies. <sup>(1,2,6,7)</sup>

In LMICs, the lack of disease awareness and that of access to adequate asthma treatment pose a significant challenge and exacerbate the burden of this chronic respiratory condition in these populations. Several factors contribute to the difficulties faced by individuals in LMICs when seeking asthma care, as follows: 1) healthcare infrastructure (limited healthcare infrastructure, including a shortage of healthcare facilities, medical professionals, and essential medical supplies); 2) affordability (the cost of asthma medications and limited financial resources); 3) limited availability (inadequate availability of asthma medications); 4) lack of awareness and education about the disease (from patients and health professionals); and 5) cultural and social factors (cultural beliefs and social stigmas surrounding chronic illnesses). <sup>(1,2,6,7)</sup> Addressing the challenges of accessing the best asthma management in LMICs requires a multifaceted approach. Efforts should focus on improving healthcare infrastructure, including expanding the number of healthcare facilities, training healthcare professionals, and ensuring the availability of essential medications at affordable prices. Public health campaigns aimed at increasing awareness and education about asthma, its management, and the importance of seeking medical care timely are also crucial. Collaboration between governments, healthcare organizations, medical societies, and international agencies is essential to mobilize resources and develop sustainable strategies for improving asthma care access in LMICs. <sup>(1,2,6)</sup> The difficulties to raise resources for interventional studies addressing important unanswered questions on asthma focusing on LMICs populations are also a challenge to be overcome. <sup>(1)</sup>

In conclusion, the burden of asthma is a significant global challenge that affects millions of people worldwide, particularly in LMICs. Recognizing the importance of "asthma care for all" is crucial for addressing this issue. Only by empowering all the stakeholders (patients, patients' nongovernmental organizations, healthcare organizations,

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governments, policymakers, and medical societies) to address all barriers to asthma management, increasing access to affordable medications, education, and awareness, as well as prioritizing asthma as a public

health concern, we will be able to alleviate the burden on individuals, families, and communities, ultimately improving the quality of life for those living with asthma in these populations.

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