



Commentary Editorial

Filling the Gaps in Healthcare: Advancements, Challenges, and Perspectives from Sudan and Beyond

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The editorial team of the *Sudan Journal of Medical Sciences* is proud to release its June 2025 issue, which confronts Sudan's most pressing health challenges and showcases innovative solutions alongside regional insights. We reiterate our call to Sudanese researchers to submit research that addresses the country's medical emergencies, particularly war-driven epidemics such as cholera, and to document efforts to control endemic diseases, including malaria. Additionally, we encourage researchers to examine the resource losses impacting these initiatives and the broader humanitarian consequences of the ongoing conflict.

This edition includes a letter from the Sudanese American Medical Association detailing how emergency surgical services were effectively strengthened during the crisis. Their practical framework highlights how resource optimization and adaptive strategies can maintain operational capacity even within active conflict zones [1]. Complementing this, a study provides essential insights into patterns of emergency surgical diseases in Sudan, emphasizing the critical need for strategic resource allocation and targeted healthcare planning to improve patient outcomes [2].

Continuing with emergency responses, a Tanzanian commentary on Marburg virus containment demonstrates the effectiveness of swift, coordinated action. The commentary underscores preparedness, equity, and cross-border collaboration as fundamental elements in outbreak control [3].

Shifting focus to maternal and neonatal health, a new study underscores how instability and insufficient services in Central Sudan continue to jeopardize the well-being of mothers and infants. Younger maternal age and inadequate antenatal care emerge as key modifiable risk factors for low birth weight [4]. A parallel study from Saudi Arabia analyzes neonatal ICU admissions. Together, they advocate for context-specific interventions to improve maternal and child outcomes, especially in low-resource settings [5].

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Received: 16 June 2025

Accepted: 17 June 2025

Published: 30 June 2025

Production and Hosting by
KnE Publishing

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The issue further highlights the escalating threat of antimicrobial resistance, with a comprehensive four-year laboratory review providing critical data to inform rigorous antibiotic stewardship policies [6].

The journal also examines the understanding and application of artificial intelligence in medicine among Sudanese health professionals. It explores how chronic disease management has deteriorated due to resource loss and the displacement of resources to under-equipped rural areas [7]. This topic is further elaborated through two pivotal studies: the first addressing the prevalence and risk factors associated with non-proliferative diabetic retinopathy among Sudanese patients with type 2 diabetes, emphasizing the critical need for improved diabetes care and stringent glycemic control [8]; the second highlighting cardiovascular health, where alarming data reveals a significant rise in acute coronary syndrome among young adults, underscoring the necessity for nationwide preventive screening initiatives [9].

In the realm of genetics, an investigative study into PNPLA3 missense variants offers valuable computational insights into risks associated with non-alcoholic fatty liver disease [10]. Additionally, the issue concludes with two insightful case reports: one detailing statin-induced myonecrosis, a rare yet significant adverse drug reaction [11], and another focusing on Smith-Lemli-Opitz syndrome, emphasizing the importance of detailed clinical observation and biochemical analysis [12].

Collectively, these contributions spark debate, question existing assumptions, and support integrated, ongoing interventions. They confirm that only a resilient, innovation-driven health system can address Sudan's current challenges—and those that lie ahead.

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