

A Systematic Review of Telemedicine for Maternal Healthcare Delivery in Remote Regions of the Democratic Republic of Congo, 2004

A, m, i, n, a, M, w, a, m, b, a, ,, J, e, a, n, -, B, a, p, t, i, s, t, e, K, a, s, e, k, a

| Abstract

Background: Maternal healthcare delivery in remote regions of the Democratic Republic of Congo (DRC) faces profound challenges.

Telemedicine presents a potential avenue for transformation, yet its specific application and impact within the Congolese context during the mid-2000s are not well synthesised in the field of African Studies. Purpose and objectives: This systematic review aimed to synthesise evidence from 2004 concerning the use of telemedicine for maternal healthcare in remote DRC regions. Its objectives were to map documented applications, analyse reported outcomes and constraints, and identify critical gaps in the evidence base to inform future research and practice. Methodology: A systematic literature review was conducted, identifying and analysing relevant scholarly and grey literature published within the 2004 calendar year. Identified sources were subjected to a structured thematic synthesis to extract and categorise key findings. Findings: The reviewed evidence from 2004 indicates that telemedicine was primarily utilised for consultation and diagnostic support. Structural constraints, including unreliable telecommunications infrastructure, limited electricity access, and a shortage of trained personnel, were pervasive. The evidence base was found to be limited and fragmented, with a lack of rigorous evaluation regarding health outcomes or cost-effectiveness. Conclusion: During 2004, telemedicine for maternal health in remote DRC remained at an early stage of adoption, constrained by systemic infrastructural and resource limitations. The available literature highlights its potential but is insufficient to demonstrate transformative impact, underscoring the need for more robust, context-specific evidence. Recommendations: Future initiatives should be designed with explicit consideration of local infrastructural realities and workforce capacity. Research efforts must

prioritise the generation of standardised outcome data and transparent reporting to build a credible evidence foundation for policy and investment. Key words: Telemedicine, maternal health, remote areas, Democratic Republic of Congo, systematic review, 2004 Contribution statement: This review consolidates the limited evidence on telemedicine for maternal healthcare in the DRC from 2004, providing a baseline analysis of early applications and systemic challenges to inform subsequent scholarly and policy discourse.
