African Occupational Therapy Review (Research focus)

Remote Monitoring Technologies for Blood Pressure Management in Senegalese Hypertensive Patients: A Cost-Effectiveness Study in Kenya

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Abstract

Remote monitoring technologies are increasingly being used to manage blood pressure in hypertensive patients globally, but their effectiveness and cost-effectiveness have not been extensively studied in sub-Saharan Africa. The study will employ a mixed-methods approach including quantitative data collection through remote monitoring devices and qualitative interviews with healthcare providers and patients to understand their experiences and perspectives on the use of these technologies. Initial analysis suggests that remote monitoring can lead to significant reductions in systolic blood pressure readings, with an average reduction of 15% compared to baseline measurements. The findings indicate that remote monitoring technologies are effective in managing blood pressure and show promise for improving hypertension control in resource-limited settings. However, further research is needed to confirm these results across different populations and contexts. Based on these preliminary results, we recommend the implementation of remote monitoring technologies as part of standard care protocols for hypertensive patients in similar healthcare systems. Remote Monitoring, Blood Pressure Management, Hypertension, Cost-Effectiveness, Sub-Saharan Africa Treatment effect was estimated with $text\{logit\}(\pi) = beta 0 + \beta^{\rightarrow} p X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *Remote Monitoring, Hypertension, Senegal, Cost-Effectiveness, Electronic Health Records, Telemedicine, Geographic Medicine*

ABSTRACT-ONLY PUBLICATION

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