Development of a Digital Healthcare Intervention to Reduce Digital and Healthcare Inequality in Rural Communities with a Focus on Hypertensive Management

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Abstract : Hypertension is one of the main health issues in Ghana, where prevalence is higher in rural than in urban areas. This is due to the challenges rural areas have in accessing technology and healthcare services for hypertension control. This study's goal is to create a digital healthcare solution to alleviate this inequality. Through an analysis of current technology and problems, using the ring onion methodology, the study determined the needs for the intervention and evaluated healthcare disparities. An online application with teleconsultation capabilities, reminder mechanisms, and clinical decision support is part of the suggested solution. In outlying areas, mobile clinics in containers with the required equipment will be established. Heuristic evaluation and think-aloud sessions were used to assess the prototype's usability and navigational problems. This study highlights the need to develop digital health interventions to help manage hypertension in rural locations and decrease healthcare disparities. To develop and improve digital healthcare solutions for rural areas worldwide and in Ghana, this study might be used as a tool for future research.

Keywords : digital health, health inequalities, hypertension management, rural areas
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