



Smart Home Health Monitoring Systems Adoption Among Elderly Cairo Slum Dwellers

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Abstract

The Cairo slums face significant health challenges due to limited access to healthcare services. Elderly residents are particularly vulnerable and require innovative solutions for continuous monitoring. A mixed-methods approach was employed including surveys ($n = 120$) and depth interviews ($n = 20$). Data were analysed using logistic regression to predict adoption rates based on socio-economic status and health literacy. Smart home systems showed an adoption rate of 45% among the surveyed elderly, with higher uptake by those with moderate income and above-average health literacy. The findings suggest that targeted interventions focusing on affordability and education can significantly increase smart home health monitoring system adoption in Cairo's slums. Develop tailored educational programmes and financial assistance schemes to promote the use of these systems among elderly residents. Cairo, Slum Elderly, Smart Home Health Monitoring Systems, Adoption Rate

Keywords: *Cairo, Slums, Health Informatics, Telemedicine, Geographic Information Systems, Wearable Technology, Elderly Care*

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