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P-5: A Structural Equation Model for Health Workers' mHealth Adoption in the Developing World.

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Abstract

The study aims at developing health workers mHealth adoption model for the developing world based on structural equation modelling. In this study, a health workers' mHealth adoption questionnaire (HeMAQ) previously developed through structural review of literature with five constructs, namely, multi-sectorial engagement and ownership, staffing and technical support, reliable infrastructure, usefulness and stewardship, and intention to adopt, was used.

The HeMAQ questionnaire consisting of 20 parameters was issued to 104 nurses and midwives in the Ewutu Senya district of the Central region of Ghana who had used mHealth (Mobile Technology for Community Health-MoTeCH) to deliver maternal health services to mothers in their catchment zones. A convenience sampling method was used to select nurses and midwives with previous MoTeCH experience for at least six months. Data was collected through self-administration in the months of September – October, 2017. The data was analyzed using SPSS v20.0, and SPSS Amos 23.0 for the structural modelling. The study tested five hypothesis and all were found to be statistically significant. It was found that all the parameters impacted on health workers' adoption of mHealth in the developing world with a mean value of 6.23 for a 1 to 7 likert scale. The analysis shows that there exists a strong positive correlation among the latent variable with the strongest existing between usefulness and stewardship and intention to adopt.

This study presents a useful model for future mHealth implementation for health workers in the developing world.

Keywords: mHealth, Adoption, Telemedicine, Health Worker, Developing World, e-Health, Structural equation model.