

Exploring Healthcare Professionals' Perspective Toward Telemedicine in Benghazi, Libya

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Abstract

Introduction: Telemedicine is rapidly transforming healthcare delivery worldwide, offering innovative approaches to deliver healthcare services and enhance patient outcomes. As telemedicine gains a global prominence, it is important to understand the perspectives of healthcare professionals towards it in diverse settings. Therefore, this study aims to assess the level of knowledge and attitude of healthcare professionals toward telemedicine, as well as their willingness to practice telemedicine, and to investigate the relationships among them. **Methodology:** A cross-sectional observational study was conducted, and data collection lasted for a period of two months. The data were collected using a pre-validated self-administered online questionnaire circulated among healthcare professionals in Benghazi. Data collected including demographics, general information related to telemedicine, knowledge (9 items), attitude (9 items), and willingness to practice telemedicine (6 items). The data were analyzed using SPSS and AMOS, with SEM employed to investigate the hypothesized relationships between study variables, and $p < 0.05$ was considered statistically significant. **Results:** A total of 403 respondent, the majority were female (68.7%), the largest age group 31- 40 (47.4%), and the majority of participant were bachelor's (47,1%) and master's (30,8%) holders. Overall, majority show high level of knowledge (62.5%), attitude (76.2%), and willingness to practice telemedicine (75.4%). Multivariable liner regression, revealed that both knowledge and attitude had a statistically significant positive effect on willingness to practice telemedicine and each of them was a significant predictor of willingness to practice telemedicine ($P < 0.01$) explaining 95.2% of its variance, with attitude emerging to be the stronger predictor. Moreover, SEM revealed that knowledge had both a significant direct effect on willingness to practice telemedicine ($\beta = 0.43$, $p < 0.05$), and a significant indirect effect, partially mediated by attitude ($\beta = 0.44$, $p < 0.05$). **Conclusion:** The findings underline the importance of enhancing both knowledge and attitude toward telemedicine to promote the willingness to practice telemedicine among healthcare professionals.

Keywords: Telemedicine; knowledge; attitude; willingness to practice; healthcare professionals.