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Challenges and Opportunities for Facilitating Telemedicine Services Through Information and Communication Technologies (ICT) in Ethiopia

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Abstract: Background: The demand for healthcare services is growing in developing and developed countries. Information and communication technology is used to facilitate healthcare services. In the case of developing countries, implementing telemedicine is aimed at providing healthcare for people living in remote areas where health service is not accessible. The implementations of telemedicine in developing countries are unsuccessful. For example, the recent study indicates that 90% of telemedicine projects are abandoned or failed in developing countries. Several researchers reported the technological challenges as the main factor for the non-adoption of telemedicine. However, this research reports the health professionals' perspectives arising from technical, social and organizational factors that are considered as key elements for the setting and running of telemedicine in Ethiopia. The importance and significance of telemedicine for healthcare is growing. For example, the use of telemedicine in the current pandemic situation becomes an essential strategic element in providing healthcare services in developed countries. Method: Qualitative and quantitative exploratory research methods used to collect data to find factors affecting the adoption of Information and communication technologies for telemedicine use. The survey was distributed using emails and Google forms. The email addresses were collected from personal contact and publicly available websites in Ethiopia. The thematic analysis used to build the barriers and facilitators factors for establishing telemedicine services. A survey questionnaire with open-and-close questions was used to collect data from 175 health professionals. Outcome: The result of this research will contribute to building the key barriers and facilitators factors of telemedicine from the health professional perspectives in developing countries. The thematic analysis provides barriers and facilitators factors arising from technical, organizational, and social sources.

Keywords: telemedicine, ICT, developing country, Ethiopia, health service

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