Factors Influencing Telehealth Services for Diabetes Care in Nepal: A Mixed Method Study

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Abstract: Background: Telehealth services have potential to increase accessibility, utilization, and effectiveness of healthcare services. As the telehealth services are yet to integrate within regular hospital services in Nepal, the use of the telehealth services among adults with diabetes is scarce. Prior to implementation of telehealth services for adults with diabetes, it is necessary to examine influencing factors of telehealth services. Objective: This study aimed to investigate factors influencing telehealth services for diabetes care in Nepal. Methods: This study used a mixed-method study design which included a crosssectional survey among adults with diabetes and semi-structured interviews among key healthcare professionals of Nepal. The study was conducted in a medical out-patient department of a tertiary hospital of Nepal. The survey adapted a previously validated questionnaire, while semi-structured questions for interviews were developed from literature review and experts consultation. All interviews were audio-recorded, and inductive content analysis was used to code transcripts and develop themes. For a survey, a descriptive analysis, chi-square test, and Mann Whitney U test were used to analyze the data. Results: One hundred adults with diabetes were participated in a survey, and seven healthcare professionals were recruited for interviews. In a survey, just over half of the participants (53%) were male, and others were female. Almost all participants (98%) owned a mobile phone, and 67% of them had a computer with internet access at home. Majority of participants had experience in using Facebook messenger (95%), followed by Viber (60%) and Zoom (26%). Almost all of the participants (96%) were willing to use telehealth services. There were significant associations between female sex and participants living 10 km away from the hospital with their willingness to use telehealth services. There was a significant association between participants' self-perception of good health status with their willingness to use video-conference calls and phone calls to use telehealth services. Seven themes were developed from interview data which are related to predisposing, reinforcing, and enabling factors influencing telehealth services for diabetes care in Nepal. Conclusion: In summary, several factors were found to influence the use of telehealth services for diabetes care in Nepal. For effective implementation of a sustainable telehealth services for adults with diabetes in Nepal, these factors need to be considered.

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