

Readiness for technology usage and its associated factors among selected peri-urban diabetic population in Colombo District, Sri Lanka

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Technology plays a pivotal role in management of chronic diseases, such as diabetes. Assessing technology readiness and its associated factors specially among diabetic patients are vital. This can gain substantial benefits to improve health outcomes of diabetic patients by identifying the targeted interventions. This study aimed to assess readiness for technology usage and its associated factors among selected peri-urban diabetic population in the Colombo District, Sri Lanka. A descriptive cross-sectional study was conducted among 422 randomly selected diabetic patients from three selected divisional hospitals in the Colombo District. Data were collected using a pre-tested, researcher-developed, interviewer-administered questionnaire. Technology readiness was measured using 11 items (total score is 17). The scores were converted to percentages and categorized as low (0–49%), moderate (50–70%) and high (71–100%). Independent sample t-tests, one-way ANOVA and chi-square tests were performed using SPSS version 26. A p value < 0.05 was considered as statistically significant. Ethical approval was obtained from the Ethics Review Committee, Faculty of Medicine, University of Colombo. Majority of the participants were females (60.4%) and married (85.3%). The majority had internet device availability (66.4%) and internet access availability (65.4%). However, 43.4% of individuals had never used internet for health-related purposes. Language (62.1%) and cost (60.4%) were the main barriers in using internet. Among the participants, 47.9% had low readiness while 35.3% of them had high readiness for technology usage. The mean readiness for technology usage score was 7.82 ± 5.52 . Age, marital status, educational level, occupation and monthly income were significantly associated with the readiness for technology usage ($p < 0.05$). The findings indicate that the technology readiness level is low among the majority of diabetic patients, a significant technology readiness gap. Interventions; patient motivation, supplying technological devices at low prices, workplace-based digital training, workshops, reducing data package costs and introducing apps for disease management could help in bridging this gap.

Keywords: *Diabetic patients, Readiness for technology usage*