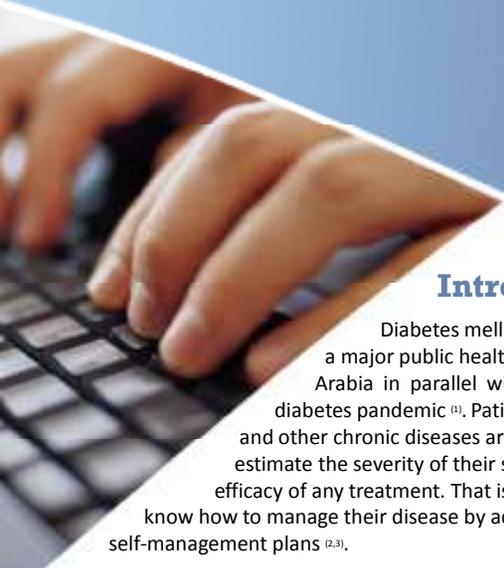




Diabetic Patients' Willingness to Use Tele-Technology to Manage their Disease

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Introduction

Diabetes mellitus is emerging as a major public health problem in Saudi Arabia in parallel with the worldwide diabetes pandemic (1). Patients with diabetes and other chronic diseases are often the best to estimate the severity of their symptoms and the efficacy of any treatment. That is why they need to know how to manage their disease by adopting continuing self-management plans (2,3).

To date, no studies have been conducted in Saudi Arabia which measure patients willingness to use tele-technology to self monitor and manage diabetes. And as a study by Saudi researchers Elhadd, Al-Amoudi, and Alzahrani (2007) indicated, "Diabetes is well studied in Saudi Arabia; however, there is little research conducted in the area of education and health care delivery" (4).

Objectives

General objective:

✓ Evaluating diabetic patients' willingness to use tele-technology to manage their disease.

Specific objectives:

- ✓ Determining the effect of patients' demographic characteristics on their willingness to use tele- technology.
- ✓ Determining the effect of diabetes type and ability to access the internet on patients' willingness to use tele- technology.
- ✓ Identification of patients' expectation from the internet-based self management system.

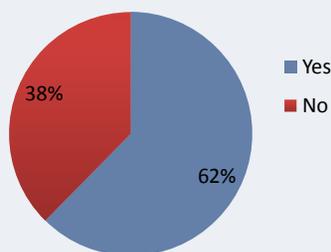
Methodology

- ✓ **Study Setting:** National Guard Health Affairs in Dammam.
- ✓ **Study Design:** Exploratory cross-sectional design.
- ✓ **Target Population:** All diabetic patients age 18 and over, attending the diabetes education clinic at the National Guard Health Affairs in Dammam during the study period.
- ✓ **Sampling Technique:** Convenience sampling.
- ✓ **Sample Size:** 96 completed questionnaires.
- ✓ **Data Collection Tool:** A questionnaire that consisted of 22 items under 6 domains.
- ✓ **Independent Variables:** Patients' age, gender, social status, level of education, income, occupation, diabetes type, internet access, and previous use of documentation methods.
- ✓ **Dependent Variables:** Patients' willingness to use tele-technology.

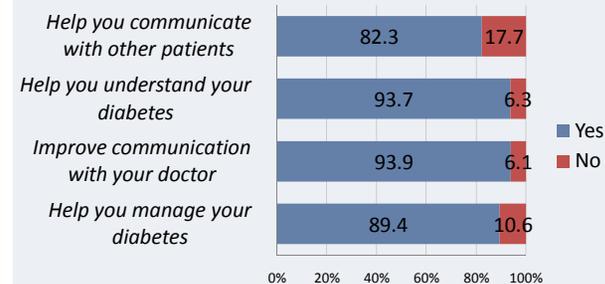
Results

The results of this study showed that the majority of patients (62.4%) were in favour of using tele-technology to self monitor their diabetes, whilst only about one third of patients (37.6%) indicated unwillingness to do so. Additionally, only (11.3%) of patients were happy to monitor their conditions daily, whereas more than half (53.8%) preferred to do it once a week. Also, the study found that only 5 out of the 9 factors that were measured had a statistically significant effect ($P < 0.05$) on the participants' answers, these factors included the patients' age, education level, occupation, diabetes type, and the ability to access the internet.

The Participants' Willingness to Use an Internet Based Self-Management System



The Participants' Expectations from an Internet Based Self-Management System



Conclusion

The findings of this study suggest that in general, diabetic patients could be ready to play a more active role in their care if they were given the opportunity. Results from this research could serve as a base for future studies to develop targeted interventions by implementing a trial version of an internet-based diabetes self management system on a sample of the population. Patients with chronic illnesses need to be made in charge of their own health so that the level of healthcare and health awareness can be improved across the country.

References

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