Influence of Belief System on Adherence to Diabetes Self-Care Management: Pilot Study

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Introduction

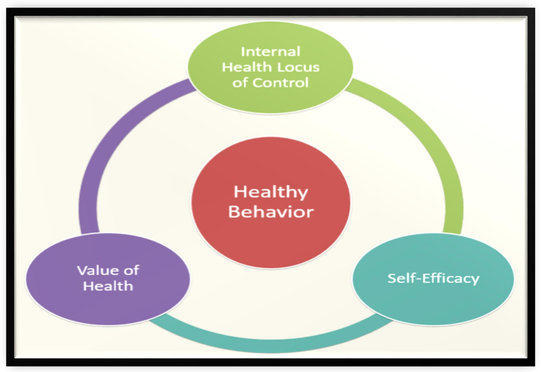
- The prevalence of Type 2 Diabetes Mellitus (T2DM) has increased among the adult population in Saudi Arabia, along with the development of secondary health problems.
- Some Saudis with T2DM fail to perform their diabetes self-care management.
- A person's belief system has been found to influences their health behaviors
- No studies were found that examined the relative association between the belief system of Saudi adults with T2DM and their diabetic self-care management.

Purpose

To examine the relative contribution of self-efficacy, Health Locus of Control (HLoC), and outcome expectancy on the level of adherence to diabetes self-care activities for adults with T2DM in Saudi Arabia.

Theoretical Framework

Modified Social Learning Theory
(Wallston, 1992)



Methodology

Design

- Descriptive correlational design

Sample

- A convenience sample (N = 30)
- Recruited from King Abdulaziz Medical City in Riyadh, Saudi Arabia
- Inclusion criteria:
- ≥ 18 years
- Diagnosed with T2DM
- Arabic speaker
- Living in Saudi Arabia

Instruments

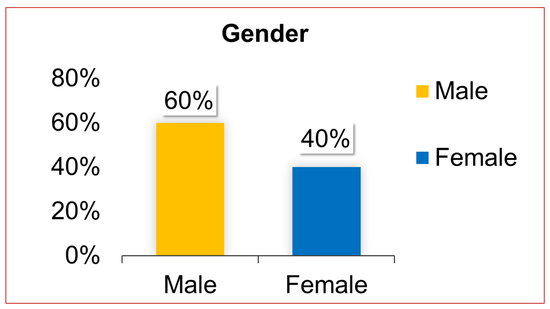
Self-reported questionnaire:

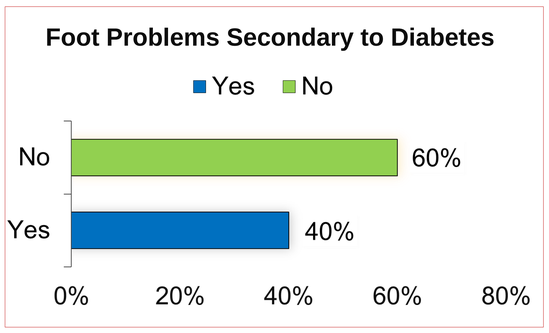
- Arabic version of Form C of the Multidimensional HLoC Scale (Wallston, Stein, & Smith, 1994).
- Arabic version of God Locus of Health Control Scale (Wallston et al., 1999).
- The Arabic version of the Part III of the Multidimensional Diabetes Questionnaire (Talbot, Nouwen, Gingras, Gosselin, & Audet, 1997).
- The Arabic version of the Revised and Expanded Summary of Diabetic Self-Care Activity Scale (Toobert, Hampson, & Glasgow., 2000).

Data Analysis

- Hierarchical multiple regression
- Descriptive Statistics

Result





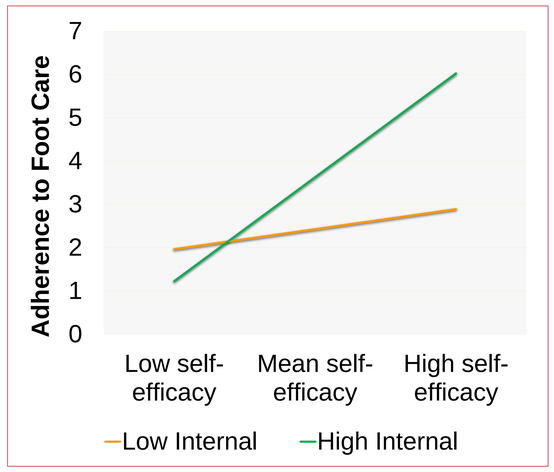
Interaction between Self-Efficacy and God HLoC

God HLoC		Self-Efficacy		Adherence to Medication
High	X	Low	=	Low
Low	X	Low	=	High

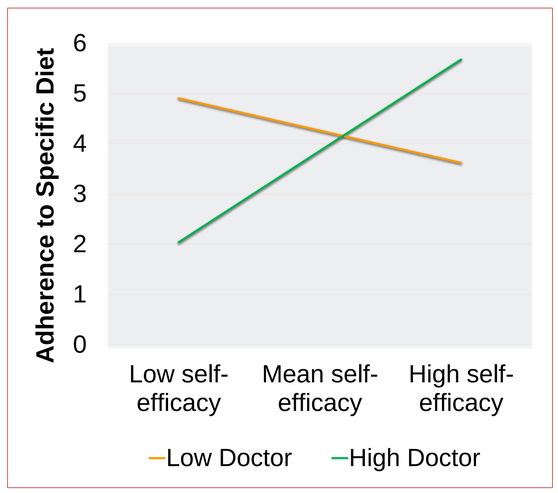
Interaction between Outcome Expectancy and Chance HLoC

Chance HLoC		Outcome Expectancy		Adherence to Blood Glucose Testing
High	X	High	=	Low
Low	X	High	=	High

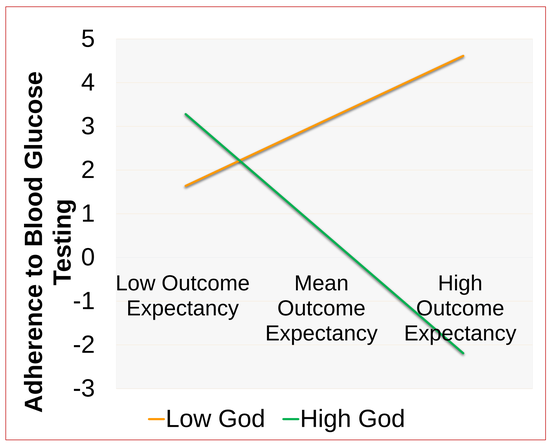
Interaction between Self-Efficacy and Internal HLoC



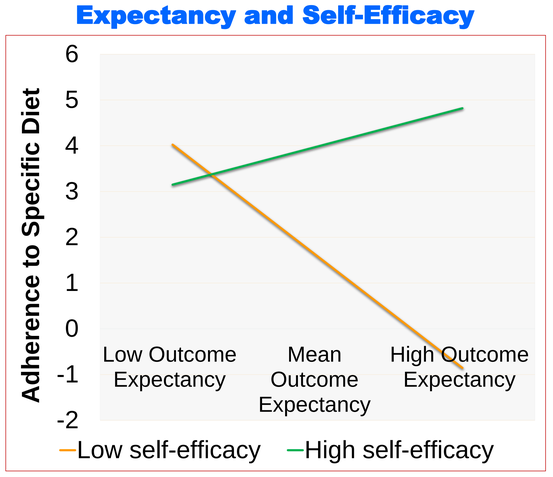
Interaction between Self-Efficacy and Doctor HLoC



Interaction between Outcome Expectancy and God HLoC



Interaction between Outcome Expectancy and Self-Efficacy



Discussion

- People's beliefs influenced their diabetes self-management.
- Cultural beliefs of Saudi participants with T2DM potentially influences their adherence to treatment
- Interactions between beliefs significantly influenced participants level of adherence to blood glucose testing, diet, foot care, & meds.
- Findings from this study suggest the need for health care providers to assess the beliefs of people with T2DM at healthcare visits regarding diabetes management.

Future Research

- Further explore the belief systems of Saudi adults on their adherence to self-care activities with a larger sample and across multiple locations in the country.
- Conduct a culturally-based intervention program aimed to promote healthy behaviors in adults with T2DM in Saudi Arabia.
- A valid and reliable scale needs to be developed for measuring the value of health perception(s).

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