

Mansoura University Faculty of Arts Psychology Department

## Health Beliefs, Self-Efficacy beliefs as Predictors of Self-Care Behaviors among Patients with Type 2 Diabetes

A Thesis Submitted For Partial Fulfillment The Degree Doctor Of Philosophy In Clinical Health Psychology

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#### Summery

Health Beliefs, Self-Efficacy as Predictors of Self-Care Behaviors among Patients with Type 2 Diabetes Objectives:

#### Aims of present study were:

- 1- Identifying correlation network among health Beliefs, self-efficacy self-care behaviors among patients with type 2 diabetes.
- 2- Detecting the predictive ability of health beliefs, self-efficacy beliefs of self-care behaviors among type 2 diabetes patients.
- 3- Detecting the diagnostic differences of self-care behaviors inventory, health beliefs and self-efficacy between diabetes patient and healthy persons from both sexes.
- 4- Developing test battery that has means, standard deviations, diagnostic cut of points, sensitivity and specificity in the study samples.

#### **Study problem:**

The problem of the current study can be formulated in the following questions:

- 1- Are there statistically significant correlations among study variables (health beliefs, self-efficacy beliefs, and self-care behaviors) in type 2 diabetes patient and healthy ones from both genders?
  - a- Is there a correlation between health beliefs and self-efficacy in patient in contrast to health ones?
  - b- Is there a correlation between health beliefs and self-care behaviors in patient in contrast to health ones?
  - c- Is there a correlation between self-efficacy and self-care behaviors in patient in contrast to health ones?
- 2- Do health beliefs contribute in predicting self-care behaviors in type 2 diabetes patient, in contrast to health ones?
- 3- Does self-efficacy with its components contribute in predicting selfcare behaviors among a sample of type 2 diabetics in contrast to healthy ones from both genders?
- 4- Does interaction between the two variables (health beliefs and selfefficacy) contribute in predicting self-care behaviors in type 2 diabetics and healthy ones to both genders?
- 5- Are there differences between diabetes patients and healthy ones from both sexes in the study variables?

#### Hypotheses of the study:

- 1- There are and statistically significant correlations between all study variables (health beliefs, self-efficacy beliefs, and self-care behaviors) among patients with type 2 diabetes in contrast to health ones of both genders.
  - A-There a correlation between health beliefs and self-efficacy among type 2 diabetes patient in contrast to health ones.

B- There a correlation between health beliefs and self-care behaviors among type 2 diabetes patient, in contrast to health ones.

C- There a correlation between self-efficacy and self-care behaviors among type 2 diabetes patient, in contrast to health ones.

- 2- Health beliefs contribute in prediction of self-care behaviors among type 2 diabetes patient, in contrast to health ones.
- 3- Self-efficacy contributes in prediction of self-care behaviors among type 2 diabetes in contrast to healthy ones from both genders?
- 4- The interaction between study variables (health beliefs and selfefficacy) contributes in predicting self-care behaviors among type 2 diabetics in contrast to healthy ones from both genders.
- 5- There are differences between diabetes patients, in contrast to healthy ones, in the study variables.

#### Study methodology and procedures:

**First: Study Methodology:** this study uses descriptive, correlational and comparative method. That is relevant to the aim of the study, this method describes the status quo of an attribute or phenomenon, and classifies it without controlling the variables, which means that the researcher just classifies variables and explains relationships between them. The study used the cross-section design for case group in contrast to the control group.

**Second: The Sample:** The study sample was divided into two groups, the study sample consisted of (149) participant male and female diabetics and healthy ones, and their ages ranged between (30-57) years old. **The First Group:** consisted of 73 type 2 diabetes patients (33 males and 40 females), the mean age of male patients is (54.64) years old, the standard deviation is 2.99, the mean age of female patients is (50.15) years old, the SD= 6.84. **The second group:** include 76 healthy participants (36 healthy male and 40 healthy females) the mean age of healthy males 50.17 years

old, SD= 5.42. The mean age of healthy females 47.17 years old and SD =7.21

#### Study questionnaire and tests:

- 1- Health Beliefs Inventory of by Harris, Lynn, Skyler, and Sandvire, translated by researcher.
- 2- Self-efficacy in diabetes patients prepared by Nancy Roblin, Margaret Little, and Helen McGuire, translated by Hala Saeed Abdel Hamid, modified by the researcher.
- 3- The self-care behaviors questionnaire of diabetes, prepared by the researcher (2019).

#### **Statistical Methods:**

- 1- Means and standard deviations.
- 2- "T" Test for the significance of differences between independent samples.
- 3- "F" test for significance differences between samples.
- 4- Pearson's simple linear correlation coefficient.
- 5- Half- spilt reliability method, by using Guttmann's equation.
- 6- Cronbach's alpha equation.
- 7- Sensitivity and specificity factors.
- 8- Simple linear regression analysis.
- 9- Multiple regression analysis.
- 10- Scheffet test for significance differences.

Statistical Package Software for Social Sciences 25th Edition was used.

#### Results

- There is a significant correlation between health beliefs and self-care behaviors, except the third component of health beliefs, among male diabetes patient.
- There is a correlation between health beliefs with their components expect the third and fifth ones, and diabetes self-care among healthy male and female.
- There is a correlation between self-efficacy with its five component, and self-care behaviors of diabetes patients among male and female patient.
- There is correlation between self-efficacy expect its third component and self-care among males and female patients.

- Health beliefs model predicted self-care behavior by 16% among male diabetes patient, and 22% among healthy male, 18% in female patients, and 30% in healthy females.
- Self-efficacy model predicted self-care behavior by 75% in male patients, 57% in healthy patients, 62% in female patients, and 19% in healthy females.
- Both of health and self-efficacy beliefs models predicted self-care behavior, self-efficacy and structured elements predicted by 65% in healthy males. Self-efficacy and health motivation predicted by 80% in diabetes patients. Each of self-efficacy, action factors, exercise and psychological consequences predicted by 83% in female patients, the benefits of treatment predicted self-efficacy by 34% in healthy female. After examining the significance of differences between groups,

#### the following was concluded:

- There are differences among the four groups in the seven dimensions of health beliefs.
- There are differences among the four groups in self-efficacy among diabetes patients with its five dimensions.
- There are differences among the four groups in self-care among diabetes patients with its six dimensions.
- There are not any differences due to interaction between gender and having diabetes in the measure of vulnerability to dieses and its dimension and there are not any differences due to interaction between gender and having diabetes in each of social, emotional and nutritional aspects, and communication with healthy providers, prevention and exercise, and the level of self-efficacy among diabetes patients.
- There are differences due to interaction between gender and having diabetes in each of management of low glucose in blood, and knowledge and daily care.
- There are not any differences due to interaction between gender and having diabetes in Self-care behaviors related to diet, glucose monitoring and adjusting, and taking medication and other behavior of self-care.
- There are differences due to interaction between gender and having diabetes in each of self-care behavior related to foot care and cleaning wounds, and the total degree of self-care among diabetes patients.

# Key Words: Self-Care Behaviors - Health Beliefs- Self-Efficacy – Type 2 Diabetes-males and females.