

SUMMARY

Diabetes is a serious and costly public health problem in the world today. It is a leading cause of disability and a major contributor to medical care costs in most countries, and its prevalence is still increasing both nationally and worldwide. Self-efficacy is an important predictor for health behaviors of patients with diabetes and therefore has important theoretical and practical application for health promotion in this population.

The aim of the present study is to evaluate the effect of an educational program on self efficacy for patients with type 2 diabetes mellitus. This had been achieved through:

1. Assessment of patients' needs to manage safely the five aspects of diabetes good control.
2. Assessment of self efficacy of patients through (Diabetes Management Self Efficacy Scale).
3. Design and implement an educational program according to the patients' needs.
4. Evaluate the outcome of the educational program according to the five aspects of diabetes management, self efficacy and glycemic control.

The study was conducted at outpatient clinic at Benha University Hospital in kaluobia governorate. The study was applied on 50 adult patients with type 2 diabetes mellitus aged between 20-50 years selected randomly from both sexes without disabilities and who can at least read and write.

Data were collected through: (1) *An interviewing questionnaire* including socio-demographic data (sex, age, marital status, education and occupation), Medical history (duration of diabetes, associated chronic diseases, Prescribed medications, Findings of laboratory tests, Findings of physical medical examination, and patient's present, past, and family history),

(2) *knowledge's and practice interviewing questionnaire* including: Patient's knowledge about diabetes mellitus (definition, causes, symptoms, and the five aspects of diabetic care), patient's practice during the five aspects of diabetes care (Diet, exercise, medication, SMBG, and hygienic care).

(3) *Diabetes Management Self-Efficacy Scale (DMSES)*. The scale was developed by *van der Bijl, 1999*. It consists of 20 items modified to 15-items, it had acceptable reliability and validity.

The pilot study was applied on 5 patients (10%) with type 2 DM within the selected criteria and then excluded from the study after tools modification. The study was done to test the content validity, applicability, clarity, arrangement of the items, and time needed for each sheet.

The selection of the patients, collection of data , and application of the educational program lasted over a period of 12 months starting from September (2010) to august (2011).

The results of the study showed that:

- More than three quarters of the patients were in a middle age ranged between 40 and 50 years old.

- Female patients represented about two thirds of the studied sample.
- Minority of the studied sample had completed university degree.
- Most of patients had diabetes for more than five years.
- More than three quarters of the studied sample had positive family history of diabetes, most of them had first degree relation.
- More than three quarters of the studied sample were suffering from diabetic complications (hypertension, nephropathy, neuropathy, retinopathy, heart disease, and delayed wound healing)
- About three quarters of the patients had moderate obesity.
- There was a strong positive relation with a highly statistically significant difference between duration of diabetes and complications found.
- There was a positive correlation with a statistically significant difference between mean scores of random blood glucose & HbA1c levels before implementing the educational program.

After implementation of the educational program:

- A1c levels had been improved significantly (an extremely significant difference was found in mean scores of hemoglobin A1c levels after applying the educational program)
- There was a highly statistically significant difference in total knowledge, practices, and self efficacy scores of diabetic patients after applying the educational program.

Results of this study concluded that after pretest, patients had lack of knowledge regarding to diabetes, poor practices, low self efficacy, and high levels of A1C. But after implementation of the educational program,

remarkable improvements were occurred in knowledge, practice, self efficacy, and A1C levels.

As a result of this study, the following recommendations were suggested:

- Further programs with continuous follow up for diabetics should be applied in all health care centers to help them to improve their self care behaviors and self efficacy.
- Conducting separate studies about preventive measures to control diabetes.
- Encouragement of routinely check up (cardiology, nephrology, ophthalmology) with monitoring of A1C every three months would have a great effect on early detection and/or delaying the onset of long term diabetic complications.