

# 15<sup>th</sup> Global Diabetes & Obesity Conference

November 14-15, 2016 Dubai, UAE

## Diabetes Education Program for Type1 Diabetic Patients in Tulkarm Directorate of Health

Osam. Rashed

Tulkarm Directorate of Health, Israel

**Background:** In the Palestinian community, lifestyle changes, rapid urbanization and socioeconomic development, stress, smoking, and changes in food habits increased the risk of non-communicable diseases especially diabetes mellitus. Diabetic complications can be prevented if the glycemic status of diabetic patients is maintained within. nearly normal range. Therefore, patient education is critical in controlling blood glucose levels within the normal range.

**Objective:** This study aimed at measuring the effect of diabetes educational intervention program for type. diabetic patients attending the Diabetic Clinic in Tulkarm Directorate of Health.

**Methods:** quasi-experimental study with pre- and post-test was carried out through the Diabetic Clinic in Tulkarm Directorate of Health based on educational intervention program. In total, sample of 215 patients attended. group-based four hours educational intervention session about diabetes. The program included explaining diabetes mellitus- symptoms, risk factors, types, treatment and complications and main aspects of self-care of the disease (foot care, eye care, and blood glucose monitoring), main aspects of dietary management, weight reduction, blood pressure, smoking cessation, periodic investigations, home monitoring and importance of physical activity. Knowledge evaluation questionnaire were evaluated pre- and post- study. Anthropometric measurements such as body weight (WT), body mass index (BMI) and laboratory tests such as fasting blood glucose (FBG), hemoglobin A1C (HbA1c), cholesterol (Chol), and triglycerides (TG) were measured at the beginning and at the end of the study. Significance of the results was assessed by paired t- test at 95% confidence interval.

**Results:** The participant's mean age was 51.07 that ranged between 31 and 70 years. Of the 215 participants, 41.4. were males and 58.6% were females. The mean weight before intervention was 80.81kg. 14.95 (82.6 for males and 79.5 for females) that decreased to 78.9±14.33 (81.1 for males and 77.3 for females) after educational intervention program. BMI also decreased significantly after educational intervention. The mean fasting blood sugar was 188.65±71.45 mg/dL before educational intervention that decreased to 177.7±66.11 mg/dL after the educational intervention (p=0.049). The mean glycosylated haemoglobin was 8.57± 1.21 before educational intervention that decreased to 7.95±1.42 after educational intervention. The mean value of cholesterol before educational intervention 183.27± 37.74 mg/dL that decreased to 169.57±34.23 mg/dL after educational intervention. The mean triglycerides value decreased after educational intervention from 209.85±171.04 mg/dL to 183.28±152.4 mg/dL (p. 0.025). The mean score of knowledge questionnaire before educational intervention was 60.6±20.65 that increased to 78.1±13.4 after conducting educational intervention.

**Conclusions:** Diabetes education was found to be effective on BMI, FBG, HbA1c, Chol,TG, and knowledge.

**Recommendations:** Diabetes education is cornerstone in the management and care of diabetes and should be an integral part of health planning involving patient's family, diabetes care team, community, and decision makers in the education process.

palestinerashed@yahoo.com