Factors Associated with Non - adherence to Life Style Modifications among Type 2 Diabetes Mellitus Patients in Palestine

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Abstract :

Background :Non-adherence to lifestyle modifications is a considerable issue related to the management and consequent complications in patients with diabetes mellitus (DM). The aims of this study were to estimate the frequency and identify reasons of non-adherence to lifestyle modifications among Palestinian type 2 diabetic patients.

Methods: A cross-sectional study was conducted among patients with type 2 DM in Nablus city by using the Summary of Diabetes Self-Care Activities-Arabic (SDSCA-Arabic) instrument and the Arabic version of Michigan diabetes knowledge test. A convenience sample was collected between July 2015 and September 2015. SPSS program was used for data analysis.

Results: The sample included 410 participants; the mean age was 61±9.70 years, only 95 (23.2%) had a controlled blood glucose level (glycosylated hemoglobin \leq 7%). The self-management activities from the most practiced to the least practiced (scale range 0-7) were medications (Mean: 6.28 ± 1.64); foot care activities (Mean: 5.04 ± 2.43); diet activities (Mean: 4.44 \pm 2.69); exercise activities (Mean: 3.96 \pm 1.97); and blood glucose monitoring (Mean: 0.58) ± 1.28). When the patients were classified to adherent and non-adherent, a good percentage of patients were adherent to foot care (84.1%, \geq 3 days/week), exercise (80.0%, \geq 3 days/week), medications (75.9%, 7 days/week) and diet (73.2%, \geq 3 days/week). The participants were least adherent to blood glucose testing $(2.2\%, \ge 5 \text{ days/week})$. The majority of participants had acceptable knowledge (63.2%, n=259) whereas 28.8% (n=118) and 8.0% (n=33) had good knowledge and low knowledge respectively. Adherence to medications was significantly poorer in patients < 38 years and patients having diabetes for < 8 years. Those who had good knowledge showed higher commitment level to blood glucose monitoring. Obese, smoker and rural participants were less likely to adhere to an appropriate diet. Regarding regular exercise, obese participants and those with uncontrolled blood glucose level were less engaged in exercise practice. Finally, smokers were less likely to be adherent to foot care activities (p values <0.05).

Conclusion :The recommended lifestyle modifications were found to be accepted in many aspects. However, there is a room for improvement. Effective education and counseling strategies are recommended with focus on the recognized factors that may affect adherence.