Extended abstract title: WDEC 2020: Effect of Counteracting Lifestyle Barriers through Health Education in Egyptian Type 2 Diabetic Patients- Asmaa Fathy, consultant of public health

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Abstract

BACKGROUND: Egypt is among the world top 10 countries in diabetes prevalence. It is the first country among the MENA region. Healthy lifestyle education and support help people with diabetes to improve health outcomes. Many physical and psychological barriers can hinder patients from following a healthy lifestyle.

AIM: This study aimed to examine the effect of lifestyle modification educational sessions in helping Egyptian patients to overcome main barriers of diabetes self-management through improving nutritional behaviors, physical activity, medication compliance, and blood glucose monitoring.

METHODS: A cohort study included 205 patients with type 2 diabetes. Baseline assessment of patients' lifestyle behaviors and barriers performed using personal diabetes questionnaire of Louisville University, employing both anthropometric and blood glucose assessment. Interventional lifestyle health education was provided weekly through multiple integrated techniques, followed by a post-intervention assessment to evaluate the effect of the health education sessions. Statistical analysis was done to identify any statistically significant difference before and after the health education intervention.

RESULTS: There was a significant improvement of the post-education mean scores of the studied behaviors when compared with the pre-education scores of the participants' behaviors ($p < 0.001$). There was also a significant reduction in the barriers facing patients to diabetes self-management including nutritional barriers ($P < 0.001$), medication compliance barriers ($P < 0.001$) with a percent change (43%), physical activity barriers ($p < 0.001$), and blood glucose monitoring ($p < 0.001$) with a percent change (44%).There was a statistically significant positive correlation between improvement of medication compliance ($P = 0.027$), blood glucose monitoring($P = 0.045$), and glycated hemoglobin of the study participants

CONCLUSION: lifestyle modification education of type 2 diabetic patients can overcome the main barriers of following a healthy lifestyle and improve their anthropometric measures and blood glucose level.

Bottom Note: *This work is partly presented at 2nd World Congress on Diabetes and Endocrinology July 31-August 1, 2020, Webinar*

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