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The outcome of diabetic retinopathy health education program in patients with type 2 diabetes mellitus: a quasi-experimental study

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Abstract

Diabetic retinopathy (DR) may develop into sight-threatening DR and vision loss if early intervention is not carried out. This study was aimed to assess the effectiveness of DR health education program for patients with type 2 diabetes mellitus (T2DM). The quasi-experimental research design was applied. The intervention group underwent a web-based DR health education program while the control group was followed up the usual way at an ophthalmology clinic for 1 year. Data were analysed using descriptive statistics, repeated measures ANOVA and general linear model to evaluate the mean difference between groups. A total of 180 patients with T2DM were enrolled in the study, with equal number in the control and intervention groups, respectively, with 28% of dropout rate. There was a significant mean difference in knowledge score [F (1178) = 116.57, P = 0.001], diabetes self-care [F (1178) = 116.57, P = 0.001] and visual-related quality of life [F (1178) = 12.70, P = 0.001] between the control and the intervention groups. The intervention group scored the highest in all three categories. Educational interventions positively affected adherence to self-care and visual-related quality of life in type 2 diabetic patients as shown in this study. DRHEP should be considered an added benefit in T2DM management, starting with comprehensive care enrollment. © 2025 The Author(s).

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