

ABSTRAK

Latar Belakang: Diabetes Melitus (DM) Tipe 2 merupakan penyakit metabolik kronis yang ditandai dengan peningkatan kadar glukosa darah akibat gangguan sekresi maupun kerja insulin. Pengendalian kadar glukosa darah yang tidak optimal dapat meningkatkan risiko terjadinya berbagai komplikasi. Salah satu upaya nonfarmakologis yang dapat dilakukan untuk meningkatkan pengendalian glukosa darah adalah melalui edukasi *self-management*, yang bertujuan meningkatkan kemampuan pasien dalam mengelola penyakitnya secara mandiri melalui pengaturan pola makan, aktivitas fisik, kepatuhan terhadap terapi, serta pemantauan kadar glukosa darah. **Tujuan:** Penelitian ini bertujuan untuk mengetahui pengaruh edukasi *self-management* terhadap kontrol gula darah pada pasien Diabetes Melitus Tipe 2 di RSUD Royal Prima Medan. **Metode:** Penelitian ini menggunakan metode kuantitatif dengan desain *quasi experiment* menggunakan pendekatan *one group pretest-posttest design*. Populasi penelitian berjumlah 71 pasien Diabetes Melitus Tipe 2, dengan sampel sebanyak 42 responden yang dipilih berdasarkan kriteria inklusi dan eksklusi. Data diperoleh melalui pemeriksaan kadar glukosa darah sebelum dan sesudah pemberian edukasi *self-management*. Analisis bivariat menggunakan uji Wilcoxon Signed Rank Test karena data tidak berdistribusi normal dengan tingkat signifikansi $p < 0,05$. **Hasil:** Hasil uji Wilcoxon menunjukkan nilai $p\text{-value} = 0,000$ ($p < 0,05$) dengan *mean rank* sebesar 21,50, yang menunjukkan adanya perbedaan yang signifikan antara kadar glukosa darah sebelum dan sesudah intervensi. **Kesimpulan:** Edukasi *self-management* berpengaruh signifikan terhadap kontrol gula darah pada pasien Diabetes Melitus Tipe 2 di RSUD Royal Prima Medan dan dapat menjadi salah satu intervensi keperawatan yang efektif dalam membantu meningkatkan pengendalian glukosa darah.

Kata kunci: Diabetes melitus tipe 2, edukasi *self-management*, kontrol gula darah, kadar glukosa darah, pendidikan kesehatan

ABSTRACT

Background: Type 2 Diabetes Mellitus (T2DM) is a chronic metabolic disease characterized by elevated blood glucose levels due to impaired insulin secretion and/or insulin action. Poor glycemic control increases the risk of various complications. One of the effective non-pharmacological interventions to improve blood glucose control is self-management education, which aims to enhance patients' ability to independently manage their disease through dietary regulation, physical activity, medication adherence, and regular blood glucose monitoring.

Purpose: This study aimed to determine the effect of self-management education on blood glucose control among patients with Type 2 Diabetes Mellitus at Royal Prima General Hospital, Medan. **Methods:** This study employed a quantitative approach using a quasi-experimental design with a one-group pretest-posttest design. The population consisted of 71 patients with Type 2 Diabetes Mellitus, and 42 respondents who met the inclusion and exclusion criteria were selected as the study sample. Blood glucose levels were measured before and after the implementation of self-management education. Data were analyzed using the Wilcoxon Signed Rank Test because the data were not normally distributed, with a significance level of $p < 0.05$. **Results:** The Wilcoxon Signed Rank Test showed a p -value of 0.000 ($p < 0.05$) with a mean rank of 21.50, indicating a statistically significant difference in blood glucose levels before and after the intervention. **Conclusion:** Self-management education had a significant effect on improving blood glucose control among patients with Type 2 Diabetes Mellitus at Royal Prima General Hospital, Medan. Therefore, it can be considered an effective nursing intervention to support better glycemic control.

Keywords: Type 2 diabetes mellitus, self-management education, blood glucose control, blood glucose level, health education