

Model Perilaku Kesadaran Diri Dalam Pengendalian Kadar Gula Darah Pasien Diabetes Mellitus Type 2 Berbasis Media Video Animasi

Carles¹, Ermi Girsang¹, Ali Napih Nasution¹

¹Faculty of Medicine, Dentistry and Health Sciences, Universitas Prima Indonesia Medan, Indonesia

Corresponding author: ermigirsang@unprimdn.ac.id

ABSTRAK

Diabetes Mellitus Tipe 2 (DMT2) merupakan masalah kesehatan global yang prevalensinya terus meningkat. Pengelolaan mandiri yang efektif melalui peningkatan kesadaran diri pasien menjadi kunci dalam mengontrol kadar gula darah dan mencegah komplikasi. Video animasi berbasis kearifan lokal berpotensi menjadi intervensi edukasi yang efektif, terutama di wilayah dengan keterbatasan akses informasi kesehatan. Penelitian ini bertujuan untuk mengembangkan model perilaku kesadaran diri dalam pengendalian kadar gula darah pada pasien diabetes mellitus tipe 2, berbasis media video animasi di daerah pesisir. Desain penelitian yang digunakan adalah eksperimen kuasi dengan pendekatan Nonequivalent Control Group Design. Populasi penelitian ini adalah pasien DMT2 di Provinsi Riau, dengan sampel sebanyak 600 orang yang dipilih menggunakan teknik purposive sampling. Instrumen yang digunakan adalah kuesioner dan video animasi sebagai perlakuan. Data dianalisis menggunakan uji Wilcoxon Signed Rank Test dan analisis jalur (path analysis). Video animasi secara signifikan meningkatkan kesadaran diri pasien DMT2 dalam pengendalian kadar gula darah di seluruh wilayah penelitian. Hasil uji Wilcoxon menunjukkan signifikansi statistik ($p < 0.05$) di semua wilayah. Nilai Z dan p-value untuk masing-masing wilayah adalah: Pekanbaru ($Z = -7.773$, $p < 0.0005$), Pelalawan ($Z = -3.776$, $p < 0.0005$), Dumai ($Z = -2.933$, $p = 0.003$), Bagan ($Z = -4.183$, $p < 0.0005$), dan Bengkalis ($Z = -3.977$, $p < 0.0005$). Namun, di Siak, hasil uji Wilcoxon tidak signifikan ($Z = -1.144$, $p = 0.253$). Pengaruh intervensi secara keseluruhan tergolong lemah, ditunjukkan oleh nilai R Square yang rendah (0.04 - 0.10). Intervensi video animasi efektif dalam meningkatkan kesadaran diri pasien DMT2 di wilayah perkotaan dan pesisir. Meskipun demikian, rendahnya nilai R Square mengindikasikan bahwa faktor lain selain intervensi video animasi juga berperan penting dalam kesadaran diri pasien. Penelitian lebih lanjut diperlukan untuk mengidentifikasi dan mengukur faktor-faktor tersebut.

Kata kunci: Diabetes mellitus tipe 2, Video animasi, Kesadaran diri, Pengelolaan kadar gula darah, Edukasi kesehatan

Self-Awareness Behaviour Model in Controlling Blood Sugar Levels in Type 2 Diabetes Mellitus Patients Based on Animated Video Media

Carles¹, Ermi Girsang^{2*}, Ali Napih Nasution²

¹Faculty of Medicine, Dentistry and Health Science, Universitas Prima Indonesia, Medan

²Center of Excellence for Phytodegenerative and Lifestyle Medicine, Faculty of Medicine, Dentistry and Health Science, Universitas Prima Indonesia, Medan

Corresponding author: ermigirsang@unprimdn.ac.id

ABSTRACT

Type 2 Diabetes Mellitus (T2DM) is a global health issue with a steadily increasing prevalence. The ability to self-manage effectively, supported by enhanced patient awareness, is paramount in ensuring optimal blood sugar control and averting complications. Animated videos grounded in local wisdom have the potential to serve as an effective educational intervention, especially in regions with limited access to health information. This study aims to develop a behavioural model of self-awareness in controlling blood sugar levels in patients with type 2 diabetes mellitus, based on animated video media in coastal areas. The research design used was a quasi-experiment with a Nonequivalent Control Group Design approach. The population of this study were T2DM patients in Riau Province, with a sample of 600 people selected using purposive sampling technique. The instruments used were questionnaires and animated videos as treatment. Data were analysed using Wilcoxon Signed Rank Test and path analysis. Animated videos significantly increased self-awareness among T2DM patients regarding blood sugar control across all study regions. Wilcoxon test results showed statistical significance ($p < 0.05$) in all regions. The Z-values and p-values for each region are as follows: Pekanbaru ($Z = -7.773$, $p < 0.0005$), Pelalawan ($Z = -3.776$, $p < 0.0005$), Dumai ($Z = -2.933$, $p = 0.003$), Bagan ($Z = -4.183$, $p < 0.0005$), and Bengkalis ($Z = -3.977$, $p < 0.0005$). However, in Siak, the Wilcoxon test results were not significant ($Z = -1.144$, $p = 0.253$). The overall effect of the intervention was classified as weak, as indicated by the low R Square values (0.04 - 0.10). The animated video intervention is effective in improving self-awareness of T2DM patients in urban and coastal areas. However, the low R Square value indicates that other factors besides the animated video intervention also play an important role in patient self-awareness. Further research is needed to identify and quantify these factors.

Keywords: Type 2 diabetes mellitus, Video animation, Self-awareness, Blood sugar management, Health education