

**PROGRAM STUDI D-III KEPERAWATAN FAKULTAS
KEPERAWATAN
INSTITUT KESEHATAN PAYUNG NEGERI PEKANBARU
Penelitian, Juli 2025**

Mayang Mulani

**Efektivitas Program Edukasi Kesehatan Berbasis Web Tentang Dampak
Minuman Manis Terhadap Resiko Diabetes Melitus Pada Anak Sekolah Di
SMAN Pekanbaru**

XII + 42 Halaman + 10 Tabel + 1 Sekma + 10 Lampiran

ABSTRAK

Prevalensi Diabetes Melitus (DM) pada anak dan remaja terus meningkat seiring dengan perubahan pola hidup, khususnya konsumsi minuman berpemanis. Rendahnya kesadaran serta pengetahuan siswa terhadap risiko konsumsi gula berlebih menjadi latar belakang perlunya upaya edukatif yang inovatif dan terjangkau. Penelitian ini bertujuan untuk mengetahui efektivitas program edukasi kesehatan berbasis web terhadap peningkatan pengetahuan siswa mengenai bahaya minuman manis dalam mencegah risiko DM. Penelitian ini menggunakan desain quasi-eksperimen dengan rancangan one group pre-test and post-test design. Lokasi penelitian dilakukan di SMA Negeri 2 Pekanbaru pada bulan Mei 2025, dengan jumlah populasi sebanyak 796 siswa kelas X dan XI. Sampel yang digunakan berjumlah 267 siswa yang dipilih melalui teknik stratified random sampling. Instrumen yang digunakan berupa kuesioner pengetahuan dan respon siswa terhadap materi edukasi. Hasil penelitian menunjukkan bahwa sebelum diberikan edukasi, sebanyak 61,9% siswa berada pada kategori pengetahuan sangat baik, sementara sisanya tergolong cukup hingga kurang. Setelah diberikan edukasi berbasis web melalui platform digital interaktif, terjadi peningkatan pengetahuan secara signifikan, di mana 85,8% siswa berada pada kategori sangat baik, dan tidak ada lagi yang berada pada kategori kurang. Uji Wilcoxon menunjukkan adanya perbedaan bermakna antara skor pre-test dan post-test, serta uji korelasi Spearman menghasilkan nilai $r = 0,732$ ($p = 0,000$) yang menunjukkan hubungan kuat dan signifikan. Dengan demikian, edukasi kesehatan berbasis web terbukti efektif dalam meningkatkan dan mempertahankan pengetahuan siswa terkait konsumsi minuman manis dan pencegahan DM.

Kata kunci : Edukasi Berbasis Web, Diabetes Melitus, Minuman Manis, Siswa, Pengetahuan

Daftar Bacaan : 32 referensi (2019-2025)

**PROGRAM STUDI D-III KEPERAWATAN FAKULTAS
KEPERAWATAN
INSTITUT KESEHATAN PAYUNG NEGERI PEKANBARU
Research, July 2025**

Mayang Mulani

The Effectiveness of a Web-Based Health Education Program on the Impact of Sugary Drinks on the Risk of Diabetes Mellitus Among School-Aged Children at SMA Negeri 2 Pekanbaru

XIII + 42 Pages + 10 Tables + 1 Scheme + 10 Attachments

ABSTRACT

The prevalence of Diabetes Mellitus (DM) among children and adolescents continues to rise due to lifestyle changes, particularly the high consumption of sugar-sweetened beverages. The lack of awareness and knowledge among students regarding the risks of excessive sugar intake highlights the need for innovative and accessible health education efforts. This study aimed to determine the effectiveness of a web-based health education program in increasing students' knowledge about the dangers of sugary drinks in preventing the risk of diabetes. A quasi-experimental design with a one-group pre-test and post-test approach was used. The study was conducted at SMA Negeri 2 Pekanbaru in May 2025, involving a population of 796 students from grades X and XI. A total of 267 students were selected as samples using a stratified random sampling technique. Data collection instruments included knowledge questionnaires and student responses to the web-based education content. The results showed that before the intervention, 61.9% of students were in the “very good” knowledge category, while the rest were in the “fair” to “poor” categories. After receiving the interactive digital web-based education, a significant improvement was observed: 85.8% of students achieved the “very good” category, and none remained in the “poor” category. The Wilcoxon test showed a statistically significant difference between pre-test and post-test scores, while the Spearman correlation test yielded $r = 0.732$ ($p = 0.000$), indicating a strong and significant relationship. Thus, web-based health education effectively enhances and sustains students' knowledge regarding sugary drink consumption and diabetes prevention.

Keywords: Web-Based Education, Diabetes Mellitus, Sugary Drinks, Students, Knowledge

Reading List : 32 references (2021-2025)