

ABSTRACT

Background: Burns are a global health problem that frequently occur, including among school adolescents. Minor burns are common in school-age children and, if not treated properly, may lead to complications. Therefore, health education using engaging learning methods is needed, one of which is interactive multimedia based on 3D PowerPoint. This study aimed to determine the effect of interactive multimedia-based education on students' knowledge and attitudes in managing minor burns at SMAN 2 Muaro Jambi.

Methods: This research employed a quasi-experimental design. The sample consisted of 190 students, divided into 95 students in the intervention group and 95 students in the control group. The research instruments were knowledge and attitude questionnaires regarding minor burn management. Univariate analysis used descriptive frequency tests, while bivariate analysis employed the Wilcoxon and Mann-Whitney tests.

Results: Univariate analysis showed that in the intervention group, the knowledge variable increased from a pretest median of 7.00 IQR (5.00–9.00) to a posttest median of 14.00 IQR (13.00–14.00). In the control group, knowledge increased from 6.00 IQR (5.00–8.00) to 10.00 IQR (9.00–11.00). For attitudes, the intervention group increased from a pretest median of 56.00 IQR (53.00–60.00) to a posttest median of 65.00 IQR (64.00–71.00), while the control group increased from 51.00 IQR (46.00–56.00) to 62.00 IQR (57.00–65.00). Bivariate test on the Wilcoxon test for the knowledge variable of the intervention group p -value (0.000), the control group p -value (1.000). The attitude variable of the intervention group p -value (0.000) and the control group (1.000). The results of the Mann-Whitney test on the knowledge variable p -value (0.000) and the attitude variable p -value (0.000).

Conclusion: Interactive multimedia is effective in improving students' knowledge and attitudes regarding minor burn management at SMAN 2 Muaro Jambi, making it a suitable educational method to enhance students' learning outcomes.

Keywords: Attitude, Interactive Multimedia, Knowledge, Minor Burns.

ABSTRAK

Latar Belakang: Luka bakar merupakan masalah kesehatan global yang sering terjadi, termasuk di kalangan remaja sekolah. Luka bakar ringan sering terjadi pada anak sekolah dan jika tidak ditangani dengan benar dapat menimbulkan komplikasi. Maka diperlukan edukasi kesehatan dengan metode pembelajaran yang menarik, salah satunya menggunakan multimedia interaktif berbasis *Powerpoint* 3D. Tujuan penelitian ini adalah mengetahui pengaruh edukasi berbasis multimedia interaktif terhadap pengetahuan dan sikap siswa dalam penanganan luka bakar ringan di SMAN 2 Muaro Jambi.

Metode: Penelitian menggunakan desain kuasi eksperimen. Sampel pada penelitian berjumlah 190 siswa pada kelompok intervensi 95 siswa dan kontrol 95 siswa. Instrumen penelitian kuesioner pengetahuan dan sikap tentang penanganan luka bakar ringan. analisa univariat menggunakan uji deskriptif frekuensi. Analisa data bivariat menggunakan uji *wilcoxon sign-rank tes* dan uji *mann-whitney*.

Hasil: uji univariat kelompok intervensi pada variabel pengetahuan pretest 7.00 IQR(5.00-9.00), posttest 14.00 IQR(13.00-14.00). kelompok kontrol pretest 6.00 IQR(5.00-8.00), posttest 10.00 IQR(9.00-11.00). pada kelompok intervensi variabel sikap pretest 56.00 IQR(53.00-60.00), posttest 51.00 IQR(44.00-57.00). kelompok kontrol pretest 51.00 IQR(46.00-56.00), posttest 62.00 IQR(57.00-65.00). Uji bivariat pada uji *wilcoxon* variabel pengetahuan kelompok intervensi p-value (0.000), kelompok kontrol p-value (1.000). Variabel sikap kelompok intervensi p-value (0,000) dan kelompok kontrol (1.000). hasil uji *mann withney* pada variabel pengetahuan p-value (0.000) dan variabel sikap p-value (0.000).

Kesimpulan: Multimedia interaktif efektif dalam meningkatkan pengetahuan dan sikap siswa mengenai penanganan luka bakar ringan di SMAN 2 Muaro Jambi, sehingga dapat dijadikan pilihan dalam metode edukasi yang menarik untuk meningkatkan pengetahuan dan sikap siswa.

Kata Kunci: Luka Bakar Ringan, Multimedia Interaktif, Pengetahuan, Sikap.