

THE EFFECTIVENESS OF JIGSAW PUZZLE GAME MEDIA ON KNOWLEDGE OF CARIOGENIC FOODS IN ELEMENTARY SCHOOL CHILDREN

Vifany Nareswari Putri Sarifan¹, Taadi², Diani Sulistiawati³
¹²³Jurusan Kesehatan Gigi Poltekkes Kemenkes Yogyakarta
Jl. Kyai Mojo No.56 Pingit, Yogyakarta
Email : vifanynps@gmail.com

ABSTRACT

Background : Elementary school-aged children are a group at high risk for dental caries, partly due to the consumption of high-sugar cariogenic foods. Children's limited knowledge of cariogenic foods can increase their risk of dental caries due to poor food choices. Health education is necessary to improve children's knowledge, but the presentation of the material must be tailored to the characteristics of elementary school-aged children. One educational tool that can be used is an interactive and engaging jigsaw puzzle game, which is expected to enhance children's knowledge of cariogenic foods.

Objective : To determine the effectiveness of jigsaw puzzle games as a teaching tool for elementary school children's knowledge of cariogenic foods.

Methods : This study employed a pre-experimental design with a one-group pre-test post-test design. The study population consisted of 100 students from grades 3, 4, and 5 at Jetis Public Elementary School. The study sample consisted of 40 students who received education using a jigsaw puzzle game. Their level of knowledge about cariogenic foods was measured before (pre-test) and after (post-test) the intervention. The data were analyzed using the Shapiro-Wilk normality test and the Wilcoxon Signed-Rank Test.

Results : The results of the study showed that after the intervention, the majority of respondents in the treatment group had "good" knowledge (90%), while in the control group the figure was 60%. The results of the Wilcoxon test indicated a significant difference between the pre-test and post-test scores in both groups ($p=0.000$).

Conclusion : Jigsaw puzzle games are an effective tool for improving elementary school students knowledge of cariogenic foods. There was a significant increase in knowledge following education using jigsaw puzzle games.

Keywords : jigsaw puzzle game, knowledge, cariogenic foods, elementary school children, dental caries

EFEKTIVITAS MEDIA GAME *JIGSAW PUZZLE* TERHADAP PENGETAHUAN MAKANAN KARIOGENIK PADA ANAK SEKOLAH DASAR

Vifany Nareswari Putri Sarifan¹, Taadi², Diani Sulistiawati³
¹²³Jurusan Kesehatan Gigi Poltekkes Kemenkes Yogyakarta
Jl. Kyai Mojo No.56 Pingit, Yogyakarta
Email : vifanynps@gmail.com

ABSTRAK

Latar Belakang : Anak usia sekolah dasar merupakan kelompok yang rentan mengalami karies gigi, salah satunya akibat konsumsi makanan kariogenik yang tinggi gula. Rendahnya pengetahuan anak mengenai makanan kariogenik dapat meningkatkan risiko terjadinya karies gigi karena pemilihan makanan yang kurang tepat. Pendidikan kesehatan diperlukan untuk meningkatkan pengetahuan anak, namun penyampaian materi perlu disesuaikan dengan karakteristik usia sekolah dasar. Salah satu media edukasi yang dapat digunakan adalah game *jigsaw puzzle* yang bersifat interaktif dan menarik sehingga diharapkan mampu meningkatkan pengetahuan anak tentang makanan kariogenik.

Tujuan : Mengetahui efektivitas media game *jigsaw puzzle* terhadap pengetahuan makanan kariogenik pada anak sekolah dasar.

Metode : Penelitian ini menggunakan desain pra-eksperimen dengan *one grub pre-test post-test design*. Populasi penelitian berjumlah 100 siswa dari kelas III, IV, dan V SD Negeri Jetis. Sampel penelitian berjumlah 40 siswa yang diberikan edukasi menggunakan media game *jigsaw puzzle*. Tingkat pengetahuan makanan kariogenik diukur sebelum (*pre-test*) dan sesudah (*post-test*) intervensi. Data dianalisis menggunakan uji normalitas *Shapiro-Wilk* dan uji *Wilcoxon Signed Rank Test*.

Hasil : Hasil penelitian menunjukkan bahwa sebelum diberikan edukasi menggunakan media game *jigsaw puzzle*, seluruh responden berada pada kategori pengetahuan rendah (100%). Setelah diberikan edukasi, sebagian besar responden mengalami peningkatan pengetahuan dengan 36 responden (90%) berada pada kategori pengetahuan baik dan 4 responden (10%) berada pada kategori pengetahuan sedang. Hasil uji *Wilcoxon Signed Rank Test* menunjukkan terdapat perbedaan yang signifikan antara nilai *pre-test* dan *post-test* setelah pemberian edukasi menggunakan media game *jigsaw puzzle* ($p=0,000$).

Kesimpulan : Media game *jigsaw puzzle* efektif dalam meningkatkan pengetahuan makanan kariogenik pada anak sekolah dasar. Terdapat peningkatan pengetahuan yang signifikan setelah diberikan edukasi menggunakan media game *jigsaw puzzle*.

Kata kunci : game *jigsaw puzzle*, pengetahuan, makanan kariogenik, anak sekolah dasar, karies gigi.