

CONSUMPTION PREFERENCES OF CARCINOGENIC FOODS AND BEVERAGES AND THE IMPACT OF DIRECT EDUCATION ON TEENAGERS KNOWLEDGE AND ATTITUDES TOWARD CANCER PREVENTION

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ABSTRACT

Background: Carcinogenic substances are chemical compounds capable of inducing carcinogenesis. The Indonesia Health Survey (SKI, 2023) revealed a 3.6% cancer prevalence in Yogyakarta Special Region, where dietary factors play a significant role. Animated videos are considered effective health education media due to their interactive audiovisual combination.

Objective: To analyze the effect of animated video-based educational intervention on improving adolescents' knowledge and changing attitudes regarding cancer prevention through avoidance of carcinogenic food and beverages.

Methods: A quasi-experimental study with a pre-test posttest nonequivalent control group design. The study was conducted from April to May 2026 and involved 132 students, consisting of 66 participants in the experimental group and 66 participants in the control group. As the data were not normally distributed, non-parametric statistical tests, namely the Mann–Whitney U test and Wilcoxon signed-rank test, were used for data analysis.

Results: The Wilcoxon test showed significant improvements in knowledge and changes in attitudes in both the animated video and leaflet groups ($p=0.000$). The mean increase in knowledge scores was 1.04 in the animated video group and 1.03 in the leaflet group, while the mean attitude change scores were 13.50 and 13.03, respectively. The Mann–Whitney U test indicated no significant difference in effectiveness between animated video and leaflet on knowledge ($p=0.949$) or attitudes ($p=0.136$).

Conclusion: Both animated videos and leaflets were effective in improving adolescents' knowledge and attitudes regarding carcinogenic food and beverage consumption, with no significant difference in effectiveness between the two media.

Keywords: carcinogens, health education, animated video, nutritional knowledge, preventive attitudes

**PREFERENSI KONSUMSI MAKANAN DAN MINUMAN
KARSINOGENIK SERTA PENGARUH EDUKASI LANGSUNG
TERHADAP PENGETAHUAN DAN SIKAP REMAJA DALAM
PENCEGAHAN RISIKO KANKER**

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ABSTRAK

Latar Belakang: Zat karsinogenik merupakan senyawa kimia yang dapat menginduksi karsinogenesis. Data Survei Kesehatan Indonesia (SKI, 2023) menunjukkan prevalensi kanker di DI Yogyakarta mencapai 3,6%, dimana faktor diet berperan signifikan. Video animasi sebagai media edukasi dinilai efektif untuk meningkatkan pemahaman kesehatan karena kombinasi visual-audiovisual yang interaktif.

Tujuan: Untuk mengetahui pengaruh edukasi menggunakan media video animasi dan leaflet terhadap pengetahuan dan sikap remaja mengenai konsumsi makanan dan minuman karsinogenik sebagai upaya pencegahan kanker.

Metode: Penelitian ini adalah quasi eksperimen dengan menggunakan rancangan *pretest-posttest nonequivalen*. Dilaksanakan bulan April – Mei 2026 dengan melibatkan 132 siswa (66 kelompok eksperimen dan 66 kelompok kontrol). Analisis data tidak terdistribusi normal sehingga menggunakan uji statistik non-parametrik uji Mann Whitney dan uji Wilcoxon.

Hasil: Hasil uji Wilcoxon menunjukkan peningkatan pengetahuan dan perubahan sikap yang signifikan pada kelompok video animasi maupun leaflet ($p=0,000$). Rata-rata peningkatan pengetahuan pada kelompok video animasi dan leaflet masing-masing sebesar 1,05 dan 1,03, sedangkan perubahan sikap sebesar 12,23 dan 13,03. Hasil uji Mann Whitney menunjukkan tidak terdapat perbedaan efektivitas yang signifikan antara media video animasi dan leaflet terhadap pengetahuan ($p=0,949$) maupun sikap ($p=0,136$).

Kesimpulan: Edukasi menggunakan video animasi dan leaflet efektif meningkatkan pengetahuan serta mengubah sikap remaja mengenai konsumsi makanan dan minuman karsinogenik. Tidak terdapat perbedaan efektivitas yang signifikan antara kedua media.

Kata Kunci: preferensi, karsinogenik, pengetahuan, sikap, media video animasi