Pengaruh Edukasi Gizi dengan Media *Augmented Reality* terhadap Peningkatan Pengetahuan, Sikap, dan Praktik Pencegahan Anemia Siswi SMK Negeri 2 Kota Tegal

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ABSTRAK

Latar belakang: Edukasi menggunakan media interaktif merupakan upaya untuk meningkatkan pengetahuan, sikap, dan praktik pencegahan anemia pada remaja putri. Media audio-visual seperti *augmented reality* (AR) lebih menarik karena dibuat dengan suara, animasi, warna, dan bahasa yang mudah dipahami remaja. Sehingga dapat meningkatkan interaksi serta pemahaman.

Tujuan penelitian: Menganalisis pengaruh edukasi gizi dengan media AR dan leaflet terhadap pengetahuan, sikap, dan praktik pencegahan anemia pada siswi SMK Negeri 2 Kota Tegal.

Metode: Penelitian desain *quasy experimental* dengan *pre-posttest* pada dua kelompok kepada 64 siswi SMK Negeri 2 Kota Tegal melalui *purposive sampling*. Kelompok intervensi menerima edukasi dengan AR dan kelompok kontrol dengan leaflet selama 4 minggu. Kuesioner terstruktur digunakan untuk mengumpulkan data pengetahuan, sikap, dan praktik serta pendidikan terakhir ibu, pendapatan keluarga, dan riwayat paparan edukasi sebagai variabel perancu. Analisis bivariat menggunakan uji *Wilcoxon* dan *Mann Whitney* bagi data yang tidak berdistribusi normal, sementara *Paired t test* dan *Independent t test* bagi data yang berdistribusi normal. Analisis multivariat menggunakan uji regresi linear berganda.

Hasil: Ada perbedaan setelah edukasi pada pengetahuan kelompok AR (p=0,00) dan leaflet (p=0,001). Namun media edukasi tidak berbeda signifikan terhadap sikap kelompok AR (p=0,109) dan leaflet (p=0,071), serta praktik kelompok AR (p=0,074) dan leaflet (p=0,220). Perbedaan peningkatan skor juga tidak ditemukan pada pengetahuan (p=0,436), sikap (p=0,839), dan praktik (p=0,870) remaja putri antara dua kelompok.

Simpulan: Edukasi pencegahan anemia menggunakan media AR dan leaflet mampu meningkatkan pengetahuan, namun belum mencapai perubahan sikap dan praktik.

Kata kunci: *augmented reality*, anemia, pengetahuan, sikap, praktik

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The Effect of Nutrition Education with Augmented Reality Media on Increasing Knowledge, Attitudes, and Practices of Preventing Anemia among Students of SMK Negeri 2 Kota Tegal.

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ABSTRACT

Background: *Using interactive media for nutrition education is an effort to improve the knowledge, attitudes, and practices of adolescent girls in preventing anemia. Audio-visual media such as Augmented Reality (AR) is quiet appealing for students because it is created with sounds, animations, colors, and language that are easy to understand. This can increase student's interaction and understanding.*

Objective: *Analyze the impact of nutrition education using AR media and leaflets on knowledge, attitudes, and practices related to anemia prevention among female students at SMK Negeri 2 Kota Tegal.*

Methods: *A quasi-experimental study design with pretest and posttests on two groups of 64 female students at SMK Negeri 2 Kota Tegal through purposive sampling. The intervention group received education using AR media, while the control group received education using leaflets for four weeks. A structured questionnaire was used to collect data on knowledge, attitudes, and practices, as well as maternal education level, family income, and history of exposure to education as confounding variables. Bivariate analysis used the Wilcoxon and Mann Whitney tests for non-normally distributed data, while the Paired t-test and Independent t-test were used for normally distributed data. Multivariate analysis used multiple linear regression.*

Results: *A statistically significant difference in knowledge was observed after anemia prevention education in AR group (p=0,000) and leaflet group (p=0,001). However, the educational media did not have a significant impact on attitude in AR group (p=0,109) and leaflet group (p=0,071), nor did it affect practice in AR group (p=0,074) and leaflet group (p=0,220). Additionally, no statistically significant differences were observed in the improvement of knowledge (p=0,436), attitude (p=0,839), and practice (p=0,870) of adolescent girls between the two groups.*

Conclusion: *Using AR media and leaflets for anemia prevention education can increase knowledge but it has not yet led to changes in attitude and practice.*

Keywords*: augmented reality, anemia, knowledge, attitudes, practices*

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