

# THE EFFECT OF "BOTAGI" MEDIA ON KNOWLEDGE AND MOTIVATION FOR DENTAL CARIES CARE AMONG ELEMENTARY SCHOOL STUDENTS

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## ABSTRACT

**Background:** According to the Indonesian Health Survey (SKI), the prevalence of dental caries is 62.6% among children aged 5–9 years, with 3.2% having filled cavities, and 48.8% among children aged 10–14 years, with 2.8% having filled cavities. A preliminary study at Jomblangan Elementary School showed that 60% of students did not understand dental care, and 80% lacked the motivation to maintain oral health.

**Objective:** To determine the effect of the "BOTAGI" media on students' knowledge and motivation regarding dental caries care.

**Methods:** This study employed a quasi-experimental design with a Non-Equivalent Control Group Design. The population consisted of all students at Jomblangan Elementary School, with a total sample of 78 respondents selected using total sampling. The independent variable was the "BOTAGI" media, while the dependent variables were knowledge and motivation regarding dental caries care. Data were collected using a pretest-posttest questionnaire.

**Results:** In the experimental group, good knowledge levels increased from 22 students (56.4%) at the beginning to 28 students (71.6%) after the intervention. Motivation levels also improved, with 20 students (51.3%) initially categorized as having moderate motivation, which increased to 28 students (71.8%) in the high motivation category. The Mann-Whitney test for knowledge yielded  $p = 0.022$ , and the Wilcoxon test yielded  $p = 0.004$ . For motivation, the Independent t-test showed  $p = 0.045$ , and the Paired t-test showed  $p = 0.008$ . Conclusion: The use of the "BOTAGI" media has a significant effect on improving knowledge and motivation in dental caries care among elementary school students.

**Keywords:** Media, motivation, knowledge, caries, students

# PENGARUH MEDIA “BOTAGI” TERHADAP PENGETAHUAN DAN MOTIVASI PERAWATAN KARIES GIGI PADA SISWA SEKOLAH DASAR

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## ABSTRAK

**Latar Belakang :** Berdasarkan data Survei Kesehatan Indonesia (SKI), persentase angka kejadian karies gigi sebanyak 62,6% dan angka ditumpat karena berlubang sebesar 3,2% terjadi pada anak usia 5-9 tahun serta angka kejadian karies sebesar 48,8% dan angka ditumpat karena berlubang 2,8% di usia 10-14 tahun. Hasil studi pendahuluan di SD Negeri Jomblangan menunjukkan bahwa 60% siswa belum memahami perawatan gigi dan 80% belum memiliki motivasi merawat gigi.

**Tujuan :** Diketahuinya pengaruh media “BOTAGI” terhadap pengetahuan dan motivasi perawatan karies gigi pada siswa sekolah dasar.

**Metode :** Desain penelitian ini adalah *Quasi Eksperiment* dengan rancangan *Non-Equivalent Control Group Design*. Populasi penelitian adalah seluruh siswa sekolah dasar SDN Jomblangan dengan sampel sebesar 78 responden. Pengambilan sampel menggunakan teknik total sampling. Variabel penelitian ini, yaitu media “BOTAGI” sebagai variabel bebas serta pengetahuan dan motivasi perawatan karies gigi sebagai variabel terikat. Instrumen penelitian menggunakan kuesioner *pretest-posttest*.

**Hasil :** Pengetahuan awal kelompok eksperimen pada kriteria baik sebanyak 22 (56,4%), dan pengetahuan akhir meningkat dalam kategori baik sebanyak 28 (71,6%). Motivasi awal kelompok eksperimen pada kriteria sedang sebanyak 20 (51,3%), dan motivasi akhir meningkat menjadi tinggi sebanyak 28 (71,8%). Hasil uji *Mann Whitney*  $p=0.022$  dan uji *Wilcoxon*  $p=0.004$  pada variabel pengetahuan serta uji *Independent*  $p=0.045$  dan uji *Paired*  $p=0.008$  pada variabel motivasi.

**Kesimpulan:** Ada pengaruh pada penggunaan media “BOTAGI” terhadap pengetahuan dan motivasi perawatan karies gigi pada siswa sekolah dasar.

**Kata Kunci:** Karies, media, motivasi, pengetahuan, siswa