

# APPLICATION OF HEALTH BELIEF MODEL TO EXPLAIN DENTAL AND ORAL PREVENTIVE HEALTH BEHAVIOR AMONG PRIMARY SCHOOL CHILDREN IN PONOROGO, EAST JAVA

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## ABSTRACT

**Background:** Prevalence of decayed, missing, and filling teeth in children are high. Studies have indicated that health belief model in oral health education for increasing the likelihood of taking preventive oral health behaviors is applicable. The purpose of this study was to investigate factors associated with dental and oral preventive health behavior among primary school children using Health Belief Model.

**Subjects and Method:** A cross sectional study was carried out at 25 elementary schools in Ponorogo, East Java, Indonesia, from January to February 2020. Schools were selected by multistage proportional stratified random sampling. A sample of 200 students was selected randomly. The dependent variable was dental and oral health behavior. The independent variables were knowledge, teacher role, attitude, perceived susceptibility, perceived seriousness, perceived benefit, cues to action, self-efficacy, and perceived barrier.

**Results:** Dental and oral preventive health behavior in elementary school students increased with high knowledge (OR= 7.27; 95% CI= 2.20 to 24.08; p= 0.001), strong teacher role (OR= 3.88; 95% CI= 1.22 to 12.36; p= 0.022), positive attitude (OR= 5.57; 95% CI= 1.72 to 18.01; p= 0.004), high perceived susceptibility (OR= 6.63; 95% CI= 2.13 to 20.65; p= 0.001), high perceived seriousness (OR= 6.28; 95% CI= 2.03 to 19.41; p= 0.001), high perceived benefit (OR= 6.69; 95% CI= 1.84 to 24.38; p= 0.004), strong cues to action (OR= 3.81; 95% CI= 1.20 to 12.14; p= 0.024), and strong self-efficacy (OR= 4.29; 95% CI= 1.39 to 13.21; p= 0.011). Dental and oral preventive health behavior decreased with high perceived barrier (OR= 0.21; 95% CI= 0.06 to 0.71; p= 0.011).

**Conclusion:** Dental and oral preventive health behavior in elementary school students increases with high knowledge, strong teacher role, positive attitude, high perceived susceptibility, high perceived seriousness, high perceived benefit, strong cues to action, and strong self-efficacy. Dental and oral preventive health behavior decreases with high perceived barrier.

**Keywords:** dental and oral preventive health behavior, health belief model

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