

Children's Caries-related Behaviors in Elementary Schools Attending Health Promoting School Accreditation System

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Background:

The Health Promoting School (HPS) Program was first implemented in Taiwan in 2004. This HPS program contains six main issues, including healthy weight, smoking-free campus, oral healthcare, vision care, sexuality education and safety medication use. In 2011, the Taiwan Bureau of Health Promotion conducts the Health Promoting School Accreditation System (HPSAS) to evaluate the effect of HPS program on health-related behaviors among school staff and students. Dental caries is one of the most common preventable childhood diseases worldwide. The caries experience index of children was relatively high (79%) in Taiwan. Our aim is to understand if students in a HPSAS certified school are associated with their oral hygiene behaviors.

Method:

This was a cross-sectional study. The self-reported questionnaire was used to collect data of healthy behavior in 2012. The target population was the fourth grade students from 141 schools randomly selected from attending HPSAS; the comparison group was selected by stratified-paired sampling method from 46 schools without attending HPSAS. Overall a total of 8900 (7570 certified and 1330 non-certified school students) completed the questionnaire. Logistic regression models analyzed the association between HPSAS certified schools and caries-related behaviors among primary school students.

Results:

The results show that the frequency of oral hygiene practices (i.e. tooth brushing and regular dental check-ups) among students from HPSAS certified schools was higher than those from non-certified schools. The significantly higher dental floss use was found in HPSAS certified schools (51.69% vs. 47.92%, $P=0.011$). After adjusting

for gender, parents' marital status and education level, the certified school students were more likely to use dental floss (OR = 1.15, 95% CI :1.02-1.30). In addition, both father's and mother's education level play an important role to enhance the oral health behavior among school children.

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