THE EFFECTIVENESS OF ORAL HEALTH PROMOTION PROJECT IN A PRIMARY SCHOOL, YALA PROVINCE, THAILAND

Rozikeen Sarae  
Sirindhon College of Public Health, Muang, Yala, Thailand  
rozikeen.sr@gmail.com

Adhiyah Mudor  
Sirindhon College of Public Health, Muang, Yala, Thailand  
mamayah_yala@yahoo.com

Napas Lappanakokiat  
Sirindhon College of Public Health, Muang, Yala, Thailand  
pena_wizard@yahoo.com

Abstract

Globally, dental caries has been one of the most prevalent diseases and more common of children living in rural areas. Good oral health practices were started the early age lead to healthy teeth and gums later in life. Promotion and prevention are the most important processes in improving the students’ oral health, which will result in decreasing occurrence of dental caries.
Objective: The general aim of this study was to evaluate the effectiveness an oral health promotion project among 1st-grade students in a primary school. The specific objectives were to assess 1) 1st-grade students’ attitudes towards oral health. 2) oral health knowledge of their parents and teachers in a primary school, Yala province.

Study Design: A cross-sectional descriptive study proceeded in a primary school, Yala province. The sample included 132 1st-grade students, 32 parents, and 6 teachers in the school. The instruments used in this study were 1) questionnaire about oral health self-care attitudes for students and 2) questionnaire about oral health care knowledge for parents and teachers. The descriptive statistic used in this study were percentage, mean, standard deviation and paired samples t-test was used to compare oral health knowledge of the parents and teachers, before and after they attended the project.

Result: The result in this study shows mean score oral health attitudes among 1st-grade students was fairly high (M= 2.54 S.D.=0.38). There were no statistically significant differences in oral health knowledge of the parents and teachers, previously and afterward they attended the project.

Conclusion: To have better oral health, every aspect including knowledge, attitude and practice should be improved altogether. The oral health promotion by interventions should be done, especially in parents who are responsible in taking care of children.

Keywords
Oral health care, Attitudes, Knowledge

1. Introduction

Oral health is one of the major public health issues affecting all groups of the population. Poor oral health during childhood is directly associated to poor oral health outcomes in adulthood, as people remain susceptible to dental caries throughout their lives (Kawashita, Kitamura, & Saito, 2011)

Oral disease qualifies as major public health problems owing to their high prevalence and significant impacts on general health, socio-economy, as well as well-being. A healthy mouth enables an individual to speak, eat and socialize without experiencing any active disease, discomfort or embarrassment. (The World Oral Health Report, 2003 and Stalla Y, Kwan L et al., 2005).
In the 6-to-12-year-old group, which has mixed dentition, almost all of them have experienced dental caries. Almost all of them have experienced dental caries. The average dmft score in this age group decreased due to exfoliation of primary teeth. However, the average DMFT accumulated when the children got older. According to the Thailand 7th National Oral Health Survey, dental caries prevalence of 5-year-old children is 78.5% with the average dmft score of 4.4 teeth/person. The region with the most caries is southern Thailand, with the average dmft score of 5 teeth/person in 5-year-old children (Department of Public Health, Department of Health, 2014).

Oral health knowledge is considered to be an essential prerequisite for health-related behavior. It has been shown that Tetsabal 5 (talad kau) students studying in 1st, 2nd and 6th grade ave DMFT score of 0.27, 0.46 and 2.87 teeth/person (Talard kau, Primary Care Unit, 2016).

According to a communication-behaviour change model. Oral health educational programmes based on an information persuasion strategy have a positive influence on individuals’ knowledge and attitudes, to prevent the oral diseases. Among these, oral hygiene is the most significant factor. The oral health concern of an individual depends on the attitude of a person. These attitudes usually reflect their own experiences, cultural perceptions, familial beliefs, and other life situations and strongly influence the oral health behavior. (Chen MS., 1986)

The purpose of this study was to evaluate the effectiveness of oral health promotion project among 1st-grade students in a primary school and was to assess oral health attitudes among 1st-grade students and oral health knowledge of their parents and teachers in a primary school, Yala province.

2. Material and Methods

A cross-sectional descriptive study was conducted in a primary school in Yala province. The letter was sent to the selected school explaining the purpose of the study and the procedures that would be followed during its conduct. The principal of the school was asked to inform the students and their parents about the study and a day was set for a primary school to collect the data. The inclusion criteria for this study were children aged 6-7 of 1st-grade students, who were able to understand and complete the questionnaire by themselves, their parents, and teachers in their school. A total of 132 students, 32 student’s parents, and 6 teachers was included in the study. Student's attitude and knowledge of their parents were assessed by using a questionnaire...
which included the following: 1) oral health self-care attitudes questionnaire of student with 3-point-Likert-scale in which the responses were favorable, average, and unfavorable attitudes and 2) oral health care knowledge of children among parents and teachers questionnaire. The topics in the questionnaire were causes and prevention of dental caries, dietary habits (especially sugar consumption), fluoride, misconceptions regarding oral health and its treatment, etc. Descriptive statistic was used by percentage, mean and standard deviation. Paired samples t-test were used to compare oral health knowledge among parents and teachers after the project had finished.

3. Result

This study assessed oral health attitudes among 1st grade students and oral health knowledge of their parents and teachers in a primary school, Yala province.

3.1 The attitude of oral health self-care of students.

This study was conducted in 132 1st-grade students, studying in a primary school. They have positive attitude of oral health self-care. Regarding the overall average score is at the high level mean of 2.45, SD = 0.38. The result showed that 72.7% of the students (n=96) had positive attitudes while the attitudes of another 27.3% (n=36) were negative. (Table 1)

Table 1: Number and percentage of oral health self-care of the students. Distribution of oral health attitude level

<table>
<thead>
<tr>
<th>Oral health attitude level</th>
<th>Distribution of responses (n, %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>96(72.7)</td>
</tr>
<tr>
<td>Negative</td>
<td>36(27.3)</td>
</tr>
<tr>
<td>Total</td>
<td>132(100.0)</td>
</tr>
</tbody>
</table>

3.2 Parents’ oral health care knowledge for their children.

Of the 38 persons who participated in this study, 32 were the students’ parents and 6 were teachers. They had completed the questionnaire. The result suggested that intervention with educational activities does increase total children’s overall knowledge of dental care.

The mean scores of the pre- and post-evaluation tests were 7.63 ±1.56 and 8.16 ±1.57 respectively. There was not a statistically significant difference between the mean scores of the pre and post evaluations (P>0.05). (Table 2)
Table 2: Comparison of mean knowledge of oral health score pre and post-evaluation tests of oral health care program in parents and teachers

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>Mean</th>
<th>standard deviation</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre – test</td>
<td>38</td>
<td>7.63</td>
<td>1.56</td>
<td>0.058</td>
</tr>
<tr>
<td>Post – test</td>
<td>38</td>
<td>8.16</td>
<td>1.57</td>
<td></td>
</tr>
</tbody>
</table>

4. Discussion

This study assessed oral health attitudes among 1st-grade students and oral health knowledge of their parents and teachers in a primary school, Yala province. The finding showed that 72.7% of the students had positive attitudes (n=96). The WHO stated that providing education on oral health in schools helps develop personal skills, provide knowledge about oral health and promote positive attitudes as well as healthy behavior. (Rivkin SG, Hanushek EA, Kain JF, 2005)

This study showed no statistically significant differences in knowledge of oral health score between pre and post-evaluation tests of oral health care program. Lack of knowledge about oral hygiene and having difficulty in accessing preventive dental care are believed to contribute to the frequency of caries therefore, underprivileged children are usually dentally neglected and more likely to have untreated dental caries. It is well known that beliefs and attitudes towards dental health impact on how parents care for the dental health of their children. (Skeie MS, Riordan PJ, Klock KS, Espelid I., 2006)

The knowledge of teachers about oral health in this study improved after being taught during the training program. However, some participants had lower scores in the post-test that could be because of their limited Thai language skills, even though the bilingual community workers were available to help with the interpretation of the workshop content and the questionnaires.

5. Conclusion

The findings of this study suggested that group of primary school students would be the appropriate target group to receive the first organized intervention to help them have better oral health status in the future, which can be achieve by improving their knowledge, and attitudes, and practices. The oral health stimulation by intervention should be done, especially in parents who are responsible in taking care of children.
As oral healthcare workers, it is clearly important to increase public knowledge of the risk factors for dental disease. However, the efficacy of such education will be limited if health programs do not directly impinge on attitudes, and take into account factors related to the environment, education, social status and economic level of targeted population. To improve oral health status need to improve knowledge, attitudes, and practices. The oral health stimulation by intervention should be done, especially in parents whose take care children.

6. Acknowledgement

Researchers would like to thank the Director of the Sirindhorn College of public health, Yala who supported this research from the beginning to the end. We also wants to say thank you on the teachers from Tetsabal 5 school for providing assistance in data collection as well as all students who have given their time for the interview. Lastly, we would like to convey our gratitude to all advisors for helping us conduct this research.

References


https://doi.org/10.1111/j.1875-595X.2006.tb00106.x


https://doi.org/10.1037/h0025848