Developing a leaflet media instrument to the knowledge of school children age 8-13 years in primary school of SD Negri 01 Cikini

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The number of dental caries in Indonesia has been estimated to the rank of the 8th of diseases found in health centers. Despite dental school health service has been performed in primary school since 1990, the number of dental caries in school age children is still high. However, dental caries disease is still can be prevented. One method of dental prevention is through dental health education, which is to increase the level of knowledge, attitude and practice of school children to prevent dental disease as the objectives. For dental health education, the education needs help from other health education activity. One of the equipment in media leaflet, which level of information available to schoolchildren about leaflet, is enough more than fragmentary, and what is disseminated by the dental stations to school children. Objectives: The objective of this study is to assess the knowledge of the school children to receive dental health education through leaflet media. Methods: This survey of 34 school children that receive questionnaires contain 18 questions was designed to shed light on several points. These were (1) level of subjective gain information, (2) source of information about the importance of leaflet, and (3) potential acquisition of information of leaflet, information deficit, discrepancies of information and how these come about. Results: The result describes that 92.6% of school children were interest to leaflet media, and 90.4% understand the story of the leaflet media, the understanding of all sentences in the story by schoolchildren was 90.6% While the result of post test through the same questionnaire the used in pre test indicates the score was increase significantly (p<0.05). Conclusion: This study concluded that the leaflet media had been used in this study can increase the knowledge of school children.

Keywords: Knowledge, leaflet

THE CORRELATION BETWEEN ACHIEVEMENT MOTIVATION AND STUDY ACHIEVEMENT

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The motivation to achieve a certain goal is a very important factor for studying, as this related to study achievement. A person with high achievement motivation tends to be able to maximize the use of her skills to achieve the best results. Methods: This research was carried out on the students of The Faculty of Dentistry, Trisakti University in the year 2003, by using Likert scale. The data were tested using the SPSS computer program and Pearson Product Moment Correlation test. Validity and reliability test of the questionnaires were carried out on 35 samples, for the validity test, 3 questions out of 46 questions labeled. These questions were number 5 with correlation coefficient of 0.228 and number 36 with correlation coefficient of 0.228. As a result, there were only 37 valid questionnaires with correlation coefficient ranging from 0.500 to 0.714. On the other hand, the alpha (6) score obtained from the reliability test was 0.993. This showed that the questionnaires were reliable. From the second group of questionnaires which consisted of 37 questionnaires, a data analysis was carried out for 180 samples using Pearson correlation test. Results: The result showed that there was positive correlation between achievement motivation and study achievement. The Pearson correlation score for GPA was 0.224 and for SP, was 0.234.

Keywords: Achievement motivation, study achievement

THE COMPARISON OF ORAL HYGIENE AND CARIES INDEX ON BLIND AND NON-BLIND CHILDREN IN MEDAN

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Objectives: A cross sectional study was performed to know the difference of oral hygiene and DMFT index between blind and non-blind children aged 12 and 15 years old. Methods: For each age group, 50 blind children were taken randomly from the Extraordinary School and the Blind Education Foundation and 80 non-blind children aged 12 years old were taken randomly from one elementary school whereas 30 non-blind children aged 15 years old were taken randomly from one junior high school in Medan. To measure oral hygiene score, the Oral Hygiene Index Simplified was used, and for DMFT, the Klin Index was used. Results: The results showed that at the age of 12 years old the oral hygiene index of blind children was 2.50 ± 2.70, higher compared to that of non-blind children, which was 1.93 ± 2.09, and it was statistically significant different (p<0.01). The DMFT was also higher on blind children which was 3.78 ± 2.95 as compared to non-blind children that was 2.90 ± 1.72 and statistically significant different (p<0.01) was obtained. At the age of 15 years old the oral hygiene index of blind children was 2.76 ± 2.76, also higher compared to non-blind children which was 1.84 ± 0.74 and statistically significant different (p<0.01) was found. The DMFT was also higher on blind children which was 4.53 ± 2.83 compared to that of the non-blind children, which was 3.00 ± 2.90, and statistically different (p<0.01) was also obtained.

Keywords: Blind, oral hygiene, DMFT
# The International Journal of Oral Health

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Developing on leaflet media instrument to the knowledge of school children age 8-13 years in primary school of SD Negri 01 Cikini

Risqa Rina Darwita and Iwany Amalliah

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The number of dental caries in Indonesia has been estimated to the rank of the sixth after the other disease that found in health center. Actually the dental school health services had performed in primary school since 1970, but the number of dental caries in school age children is still high. Anyway, dental caries disease is still can be prevented. One method of dental prevention is through dental health education, which outcome to increase the level of knowledge, attitude and practice of school children to prevent dental disease. For dental health education, the educator needs the equipment to help dental health education activity. One of the equipment is media leaflet, which level of information available to schoolchildren about realistic, is enough more than fragmentary, and what is disseminated by the dental students to schoolchildren. The objective of this study is to assess the knowledge of the school children to receive dental health education through leaflet media. This survey of 94 school children that receive questionnaire contain 18 questions was designed to shed light on several points. These were (1). level of subjective patient information, (2). Sources of information about the interesting of leaflet, (3). The contain story of leaflet, and (4). potential mission of information of leaflet, information deficits, discrepancies of information and how these come about. The result describes that 92.6% of school children were interest to leaflet media, and 90.4% understand the story of the leaflet media, the understanding of the sentences in the story by schoolchildren was 90.4%. While the result of post test through the same questionnaire the used in pre test indicates the score was increase significantly (p<0.05). This study concluded that the leaflet media had been used in this study can increase the knowledge of school children.
Introduction

The number of dental caries in Indonesia has been estimated to the rank of the sixth of diseases found in health centers. Despite dental school health service has been performed in primary school since 1970, the number of dental caries in school age children is still high. However, dental caries disease is still can be prevented. One method of dental prevention is through dental health education, which is to increase the level of knowledge, attitude and practice of school children to prevent dental disease.

Oral communications often fail, patients either misunderstand or forget what they have been told by health care professionals. In other instances they have not been given or not wanted any further information. However after the consultation they or their careers may feel the need to have some further written information. Written information can therefore supplement or improve oral communications and so lead to improved clinical care. Studies have shown that not all written information brings the anticipated results and this related to factors such as readability, understandability and presentation'. Albert and Chadwick- draw attention to the fact that few producers of patient literature realize what is involved in the production of a patient information leaflet. They also stress that production of good patient information leaflets is difficult, time consuming and expensive. Guidelines for leaflet text have been published which include basic rules: short words, sentences and paragraphs; avoidance of the passive voice; large print; space on the page; simple, clear and attractive material. Few leaflet producers follow them and this results in material that is often inadequate'. Leaflets must take into account the ethnic groups they are likely to serve by using the appropriate language, and being sensitive to knowledge and health beliefs of patients in each culture. Leaflets ranged from fairly non-specific, with no active advice or dental input, to very detailed literature with complex regimes. Areas that consumed us included: (a) poor dietary advice which stressed high carbohydrate intake such as sweets and sugar containing drinks with no promotion of sugar-free chewing gum and non-sugar containing drinks to alleviate xerostomia and prevent dental caries; dental health care of emphasis on the importance of oral hygiene and
the need for regular dental visits during and following treatment; (c) poor knowledge of brushing teeth. An information leaflet on patients' knowledge of oral health and willingness to support a motivation for oral health screen. Media leaflet, which level of information available to schoolchildren about realistic of oral health problem, oral health prevention and curative. The purpose of the study to assess the knowledge of school children to receive dental health education through leaflet media.

Materials and methods

Participants

The cross sectional design study with convenion random sampling include of 98 school children age among 9-13-year-olds was carried out in 2004 in primary schools of SDN Cikini 01 Pagi as part of a study project on adolescents’ oral health and behavior. All student were gave a leaflet and questionnaire. The content of questionnaire, such as dental health, describing of leaflet, etc.

Pretest and postest and simulation

Dental health education intervention using leaflet

During the intervention, all students were exposed to same kind of general oral health information available in school. The intervention was based on exposing students to oral health knowledge through a leaflet and a videotape designed for this study. The same pictures, dental models, and script were used for producing the leaflet and videotape. Their topics were based on current concepts of recommended oral health prevention.

Educational key messages were the same in both materials: the importance of oral health, role of microbial plaque, frequency and methods of proper tooth brushing and flossing, importance of regular dental attendance, a healthy diet, and proper use of fluorides. Both leaflet and videotape emphasized the immediate gains from good oral hygiene. The leaflet and videotape were designed with the assistance of communication experts. Producing the educational materials for this study was inexpensive: for the leaflet. The leaflet was pocket size with coloured pictures and illustrations for each topic to maintain the student’s attention and interest. It was delivered to the leaflet group twice: at baseline and in the sixth week of the intervention period. After distribution of the leaflets at baseline, about 10 min was allocated for students’ reading in class for the first time. This ensured that all students read the leaflet at least once. Motivation for maintaining good oral health behavior took place twice: at week 4 and week 8 of the intervention period by means of two diaries. These diaries were designed for self-recording of their frequencies.
of brushing and flossing, and of eating sweet snacks between main meals. Daily actions were recorded during 1 week. The diaries were returned to the teacher after being filled in by students; these served for motivational purposes only.

Result

Table 1. The value of pretest and posttest after read leaflet

<table>
<thead>
<tr>
<th>student</th>
<th>Knowledge criteria</th>
<th>Sig p value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bad</td>
<td>Enough</td>
</tr>
<tr>
<td>Pre-test</td>
<td>0</td>
<td>35,1</td>
</tr>
<tr>
<td>Post-test</td>
<td>1,1</td>
<td>27,6</td>
</tr>
</tbody>
</table>

Of all the students, after intervention use the leaflet their knowledge were evaluate using the same questioner as pre-test questioner, the result is indicated in Table 1, whereas a good knowledge was increase significantly after educated using leaflet (p<0,005).

Table 2, the effect using leaflet on motivated and increase knowledge student

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Effect leaflet</th>
<th>Sig p value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bad</td>
<td>Good</td>
</tr>
<tr>
<td>Knowledge</td>
<td>6,4</td>
<td>93,6</td>
</tr>
<tr>
<td>Motivated to read</td>
<td>10,6</td>
<td>89,4</td>
</tr>
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</table>

Table 2, describes that the leaflet have a good effect on motivated student to read leaflet to increase their knowledge (p<0,001)
Table 3, the opinion student about leaflet

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Effect leaflet</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>color</td>
</tr>
<tr>
<td>Interesting</td>
<td>5,3</td>
</tr>
<tr>
<td>Easy to understand</td>
<td>9,6</td>
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The opinion of student about leaflet is indicated in Table 3, whereas the picture which was involved in leaflet was interesting and easy to understand. While the color of picture not enough interesting.

Discussion

This study demonstrates that a school-based, easy-to-organize, inexpensive educational intervention can be effective in improving oral cleanliness and gingival health in student age 9-13 year-olds with poor oral hygiene. Moreover, the vast majority of students reported at least moderate self-assessed improvement in their oral health behavior after the intervention. According to a communication–behavior change model, oral health educational programmed based on an information persuasion strategy have a positive influence on individuals’ knowledge and attitudes. Health messages through educational materials such as leaflets can change individuals’ behaviors. In Iran, with its low level of oral hygiene and oral health knowledge, a communication–behavior approach seems particularly appropriate to improve the oral hygiene of adolescents. Compared with other educational studies and reviews, these improvements in oral cleanliness and gingival health were more obvious. The poor level of oral hygiene of students at baseline19 and their receiving an educational intervention for the first time may have contributed to this obvious improvement.

Emphasizing some immediate gains from good oral hygiene (such as fresh breath; clean,
white teeth; and attractive appearance) were key aspects for motivating these students to learn and maintain good oral health. In addition, the relationship between good oral health and good general health was demonstrated in this educational material. The relationship between dental caries, obesity, and a sugary diet was addressed, as well. These aspects might have had a positive effect on the good results achieved.

People have different learning styles or characteristics for processing information. Based upon differences in learning styles, various educational methods can be effective in oral health educational programmes. Written materials prove less effective than videotapes. The primary school students in the leaflet group showed more improvement in oral cleanliness and gingival health, however, than did those in the videotape group. Acceptance of a leaflet by adolescents and its stimulation of better oral health behavior have been reported in a UK study. Similarly, the Iranian students in the leaflet group assessed themselves as having greater improvement in their oral health behaviors than did the students in the videotape group. This may be due to these students being more familiar with traditional learning methods. The leaflet could be read several times and on any occasion, and all students had leaflets for themselves, but the videotape could be viewed on only two occasions.

Maintaining any improvement in the oral hygiene of primary school student calls for changes in health policy, health care system, and research. Preventive program in schools should be set as a high-priority goal by health policymakers through school health service program. Further research is, however, necessary to establish the long-term benefits of educational interventions, such as through written communication like leaflet.

**Conclusion**

This study shows that an easy-to-organize and inexpensive school-based intervention can, on a short-term basis, be effective in improving oral cleanliness and gingival health in primary school student. A similar model probably could be applied in other countries with a developing oral health system, such as leaflet media which had been used in this study can increase the
knowledge and motivation of school children to prevent oral disease through understanding about oral health care system which is describes in leaflet.

References


