ORAL HEALTH KNOWLEDGE, ATTITUDE AND PRACTICES BY PARENTS OF THE CHILDREN ATTENDING KSUCD CLINICS

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ABSTRACT

The objective of the present study was to determine the oral health knowledge, attitude and practices of the parents of children attending the King Saud University College of Dentistry (KSUCD) Clinics in Riyadh. The information about the parents' oral health knowledge, attitude and practices was collected through a specially designed self-administered questionnaire. A total of 73 parents, 54 (74.0%) fathers and 19 (26.0%) mothers completed the questionnaire. Almost all (98.6%) the parents thought that good dental health was important for optimal general health and that routine check-up dental visits help in maintaining good dental health. While six in every ten (60.3%) parents thought that teeth should be cleaned three times daily, only four in ten (41.1%) parents actually brushed thrice daily. Majority of the parents understood the main causes of dental caries such as poor oral hygiene (93.2%) and high sugar intake (84.9%), but more than one-fourth (28.8%) did not think the frequent intake of soft drinks as a caries risk factor. A majority (82.2%) of parents claimed that they observed their children's diet (82.2%) and dental health (78.1%). About one-fourth (24.0%) of the parents responded that they did not spend time with their children about how to maintain good dental health. It can be concluded that the parents' knowledge about oral health is generally satisfactory with some exceptions and their attitude towards oral health is positive. But, there are shortcomings in the area of preventive practices.

Key words: Oral health knowledge, attitude, practices, parents.

INTRODUCTION

Health behaviors are shaped early in life. Parents and school teachers can play an important role in grooming healthy habits in children. There have been several studies in Saudi Arabia on the oral health knowledge and attitude of school teachers, but the same information is scarcely available about parents. Al-Tamimi and Petersen (1998) in their study of oral health situation of schoolchildren, mothers and school-teachers in Madina City reported a diffuse dental knowledge among the mothers. The same study reported a positive attitude of mothers towards dental prevention.

Comprehensive dental health services are provided to children that attend the King Saud University College of Dentistry (KSUCD) Clinics in Riyadh, Saudi Arabia. The prevention component is an important part of the services and special emphasis is placed on prevention. In postgraduate and undergraduate pediatric dentistry clinics, the students spend first ten minutes of each appointment on oral health education such as oral hygiene and dietary advice. The parents of these children are involved in these prevention sessions and are expected to supervise and monitor their children at home regarding the prevention advice provided to them in the clinics.

In order to instill healthy preventive oral habits, the parents themselves need to have a good knowledge and attitude towards oral health. In addition, the good knowledge and attitude must translate into good...
oral hygiene and dietary practices in order to have beneficial effects on dental health\textsuperscript{10}. The parents thus serve as role model for their children. The purpose of the present study was to determine the oral health knowledge, attitude and practices of the parents of the children attending the KSUCD Clinics in Riyadh, Saudi Arabia.

**SUBJECTS AND METHOD**

A sample of parents (fathers and mothers) attending the KSUCD clinics with their children were selected for the study. The information about their oral health knowledge, attitude and practices was collected through a specially designed self-administered questionnaire. The following areas were covered in the questionnaire:

- Demographic information such as age, gender and educational level
- Importance of good dental health
- Routine dental check-ups
- Oral hygiene and dentifrices
- Possible causes of dental caries
- Monitoring of their child's diet & dental health

All the information was entered into a computer utilizing FOXPRO Program. Statistical package for social sciences (SPSS) was utilized to calculate the descriptive statistics and statistical tests. The ANOVA test was used to analyze any difference between means. The Chi-square test was used to see any significant difference in practices of parents.

**RESULTS**

A total of 73 parents, 54 (74.0%) fathers and 19 (26.0%) mothers attending the KSUCD clinics with their children completed the questionnaire. The mean age of the parents was 36.9 (SD 8.5) years ranging from 23 to 58 years. About one in ten (11.0%) parents had primary education, 13.7% middle school education, 27.4% secondary school education and about half (46.6%) of the parents had university education. There was no significant difference in any of the above variables in relation to the parents age, gender and level of education.

Almost all the parents thought that good dental health (98.6%) was important for optimum general health and that regular check-up dental visits (98.6%) help in maintaining good dental health (Table 1). Almost all the parents (94.5%) thought that the frequency of routine dental check-up visits should be every six months, but two-thirds (67.1%) actually practiced a 6-month routine dental check-up visits. About one-fifth (16.4%) made a visit only when there was some dental problem such as pain or swelling (Fig. 1).

All the parents thought that tooth cleaning using brush/miswak was important for good dental health. While six in every ten parents (60.3%) thought that the teeth should be cleaned three times daily, only four in ten parents (41.1%) actually brushed thrice daily (Fig. 2). A majority of parents (61.6%) were using toothbrush, about one-fourth (26.0%) miswak and 12.4% were using both toothbrush and miswak for tooth cleaning (Table 1). All (100%) those using toothbrush used toothpaste and thought that fluoridated toothpaste was more useful in caries prevention.

Regarding the caries risk factors, majority of the parents understood the main causes of dental caries such as poor oral hygiene (93.2%) and high sugar intake (84.9%) but more than one-fourth (28.8%) did not think frequent intake of soft drinks as a caries risk factor (Table 1). A great majority (82.2%) of parents claimed that they observed their children's diet (Table 1). About one-fifth (21.9%) of parents did not observe their children's dental health (Table 1) and about one-fourth (24.0%) did not spend time with their children about how to maintain good dental health (Table 1).
TABLE 1: DISTRIBUTION OF RESPONSES TO VARIOUS QUESTIONS

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is good dental health important for optimum general health?</td>
<td>Yes</td>
<td>98.6</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>1.4</td>
</tr>
<tr>
<td>Do regular check-up dental visits help in maintaining good dental health?</td>
<td>Yes</td>
<td>98.6</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>1.4</td>
</tr>
<tr>
<td>Oral hygiene aids you use?</td>
<td>Toothbrush</td>
<td>61.6</td>
</tr>
<tr>
<td></td>
<td>Miswak</td>
<td>26.0</td>
</tr>
<tr>
<td></td>
<td>Both</td>
<td>12.4</td>
</tr>
<tr>
<td>Which of the following can cause tooth decay?</td>
<td>Poor oral hygiene</td>
<td>93.2</td>
</tr>
<tr>
<td></td>
<td>High sugar intake</td>
<td>84.9</td>
</tr>
<tr>
<td></td>
<td>Soft drinks</td>
<td>71.2</td>
</tr>
<tr>
<td>Do you observe your children’s diet?</td>
<td>Yes</td>
<td>82.2</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>17.8</td>
</tr>
<tr>
<td>Do you observe your children’s oral health?</td>
<td>Yes</td>
<td>78.1</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>21.9</td>
</tr>
<tr>
<td>Do you spend time with your children about how to maintain good dental health?</td>
<td>Yes</td>
<td>76.0</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>24.0</td>
</tr>
</tbody>
</table>

DISCUSSION

Parents play a major role in grooming healthy habits in their children. There is a high possibility that the children whose parents have sufficient oral health knowledge and a positive attitude are likely to adopt healthy oral health habits. The children look at their parents as role models. Therefore, it is important that in addition to appropriate oral health knowledge and positive attitude, the parents also practice the healthy oral health habits such as oral hygiene practices and good eating habits. The present study therefore provides useful information about the various aspects that are essential for parents to become good role models for their children. The results of the study will also help in designing the oral health promotion programs.

The general educational level of parents was high, which reflects the type of population that utilizes the services of KSUCD clinics. There is a possibility that the gender differences may diminish as the educational levels increase. It is not surprising therefore, that there were no significant differences in parents’ knowledge, attitude and practices in relation to gender and education.

Almost all the parents surveyed were aware of the importance of good dental health and regular dental check-up visits to maintain good dental health. But, about one-fifth of them actually made a dental visit only when there was some dental problem such as pain or swelling. This indicates a discrepancy between the knowledge and the actual practice. There is a need for continuous reinforcement of good preventive habits from the dental health care workers.

All the parents knew that tooth cleaning with brush/miswak was important for good dental health. But again there was a discrepancy in the opinion about the optimum tooth cleaning frequency and the actual practice. Nevertheless, more than three-fourth were cleaning their teeth two times or more daily.

More than two-thirds of the parents were using toothbrush. It is probably beneficial for the dental health to combine the toothbrush/toothpaste method with the traditional miswak method in view of the benefits reportedly associated with the use of miswak. But very few parents were utilizing the both traditional miswak and toothbrush. This once again may reflect the background of these parents. Most of them have high educational level and have probably learnt from various sources that the toothbrush/toothpastes are the best means of cleaning teeth.

The knowledge of the parents regarding the caries risk factors was good with the exception of frequent intake of soft drinks. Tamimi and Petersen (1998) in their study at Madina City reported that substantial proportion of mothers were unaware of the harmful effects of sugary drinks including soft drinks. The soft drinks are high in sugar content and are acidic in nature. The frequent intake of these drinks may cause dental erosion and eventually develop dental caries. Wyne and Khan (1995) also reported a frequent intake of soft drinks in high dmft young children in Riyadh. There is a definite need for providing more information to the parents in this particular area.

A majority of parents in the present study claimed that they observed their children’s diet. However, the practice could only be beneficial if the parents are aware of harmful effects of practices such as frequent intake of soft drinks. A considerable number of parents did not routinely observe their children’s dental health. In addition, one-fourth of parents did not spend time with their children about how to maintain good dental health.
health. A study in China also showed similar results where a large percentage of children did not receive any support from their parents in daily tooth cleaning.6

The results of the present study indicate that the parents' knowledge about oral health is generally satisfactory with some exceptions and their attitude towards oral health is positive. But, there are shortcomings in the area of preventive practices. The results are in agreement with the study by Al-Tamimi and Petersen (1998)7 where reported a diffuse oral health knowledge and positive attitude of mothers towards prevention and participation in oral health education of children. A study by Hood et al10 in United Kingdom also showed similar results where parents were well-informed about the causes of caries but were less sure of preventive methods.

Keeping in view the seriousness of the caries problem in Riyadh9,14, there is a need for appropriate utilization of parents in dental disease prevention. The very fact that these parents have children with dental disease, indicates that they lack in the area of actual positive practices. Nevertheless, the attitude is positive and their knowledge could be further enhanced through guidance from the dental health care workers. A continuous reinforcement will be required to put the knowledge and positive attitude into practice.

The usefulness of questionnaire surveys in exploring parental attitudes has been reported15. However, the results of questionnaire surveys should be viewed with caution. There is possibility of a bias created by the tendency for favorable responses to the questions, especially when the respondents are aware that the survey being carried out by dentists from a reputed dental institution. Furthermore, there is no certain way of knowing that when this oral health knowledge was acquired by parents. It is likely that the knowledge about oral hygiene practices and causes of dental caries was recently acquired through interaction with their child's dentist.

CONCLUSIONS

- Almost all the parents thought that good dental health (98.6%) was important for optimal general health and that routine check-up dental visits (98.6%) help in maintaining good dental health.

- A great majority of the parents (94.5%) thought that the frequency of routine dental check-up visits should be every six-months, but two-thirds (67.1%) of them actually practiced a six-month routine dental check-up visits.

- The majority of the parents understood the main causes of dental caries with the exception of frequent intake of soft drinks.

- The results indicate that the parents' knowledge about oral health is generally satisfactory with some exceptions and their attitude towards oral health is positive. However, there are shortcomings in the area of preventive practices.

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