

Correlating Parenting Styles with Children's Oral Health Care – A Cross Sectional Study

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Abstract

Aim: To analyse the influence of parenting styles in child's oral health care.

Materials and method: Sixty-three parents attended a dental hospital were requested to complete a 20 questionnaire that is regarding on how parenting styles could influence child's oral health care.

Background and reason: Parents play a large role in how a child manage their oral health care. Parenting styles may influence the health of children including child's present and future emotional health, personality and character. Various parenting styles such as authoritative, authoritarian, permissive and neglectful could reflect in child's behaviour. Parents, whom considered as primary caregivers, play a great influence in determine methods of how a child to take care of themselves and maintain the positive attitude even in the absence of their parents. Thus, parents whom are more concern in their child's live lead to a healthier generation.

Results: Data from the study revealed that majority of the parents participated in this study were authoritative followed by permissive and authoritarian. The type of parenting style is seen as one of the factors influencing the child's oral health care.

Conclusion: In a nut shell, parenting styles is seen as one of the ways that can help a child to have a better oral hygiene practices as well as their behaviour while visiting dental health care.

Keywords: Anxiety, caries, decay, fear, oral health

INTRODUCTION

The mouth is an important part of the body and dental treatment may affect and be influenced by the general physical and mental status of the patient (1). Oral health is important to general health as well as well-being. Schools can provide a supportive environment for promoting oral health-care yet parents are the best individual that can greatly influence the maintenance of healthy oral health. Therefore, parent is seen as the best person in maintaining a good oral health in children.

Each patient as well as children comes to a dental hospital for a definite reason. The children's behaviour is one of the factors influencing the effectiveness of a treatment. Dental treatment may appear as a fear situation to children that can make efficient treatment difficult if they are unable to cooperate with dental practitioner. However, children's response to dental treatment may vary depending on how they were exposed to such situation and the reaction towards dental experience can be influenced by previous experience, health condition, parenting styles, the age of the children, feeling of fear and anxiety as well as reaction to strangers (2,3).

Currently, the incidence of dental caries becoming most prevalent infectious disease in the United States and as common as other diseases including asthma and hay fever. Several researches has been conducted that shows correlation between poor oral health status and systemic disease, genetics, behavioural and environmental factor (4). Definition of childhood caries can be defined as the presence of one or multiple decayed, missing due to caries or filled tooth surfaces in any primary tooth that can be seen in children in range between birth and six years of age. The term "Severe Early Childhood Caries" refers to different types of dental caries such as "atypical" or

"progressive" or "acute" or "rampant". Thus prevention should be done as early as caries seen to progress to avoid further complications.

Variety in parenting styles may influence on how they encouraging routine oral health behaviours in their children and oral hygiene measures reinforced at home. Dental treatment may be delayed due to parent's behaviour that could not bear that the child would not be able to suffer the possible consequences of procedural measures. In a more serious case, the parents even allow children to avoid dental treatment.

Parenting styles can influence the development of mental and physical of a child (5). There are few types of parenting styles based on Baumrind's three major parenting styles. These include authoritative, authoritarian and permissive. Authoritative can be described as high warmth, high control type of parenting style yet still practicing firm control of way of child's behaviour. The parents can be said as rational and encouraging the autonomy of the child (6). The parents control the children by using explanation, reinforcement techniques and are responsive to the child (7).

Authoritarian can be described as high control, low warmth type of parenting style and the parents practice physical punishment, yelling and commands (7). This type of parenting style includes very directive technique and lack warmth as well as communication. Authoritarian parents determine the rules without objection from children. In addition, the parent try to shape and control the way of their child behave (6).

Permissive can be described as low warmth, low control type of parenting style. It is also described as neglectful style and emotionally detached parents. The parents of this

type do not force control over their children and lesser or even no commands or limits to behaviour (7).

Thus, prevention of dental caries or other oral diseases can be avoided with parental responsiveness as an encouragement to child’s needs and demands. This study is done to correlate the parenting styles and oral health state of children.

MATERIALS AND METHODS

This study was conducted to assess oral health-related knowledge, attitudes, and behaviour of the parents having children below 12-years old. The study sample was derived from 63 parents (34 fathers and 29 mothers) whose attended dental hospital accompanying their children for dental treatment in the year of 2017. The sample size calculation is obtained from G-power analysis. The parents were asked to complete a set of questionnaire regarding on how parenting styles could influence child’s oral health care.

A predesigned validated questionnaire consisting of 20 pre-tested questions as shown in Table 1 was completed by the parents of preschool and school-age children to assess the attitude and behaviour of the parents towards encouragement of undergoing dental treatment and oral hygiene measures reinforced at home. The questionnaire was divided into several sections including demographic details, parenting style type, oral health awareness and a part that was intended to collect information on the methods used to promote oral health hygiene.

The answers given for each question can determine the type of parenting styles. Answer ‘A’ might be chosen by an authoritative, ‘B’ by an authoritarian and ‘C’ by a permissive. These can be determined based on the criteria of the parenting styles on how they chose the answer. Overall, those who answered mostly ‘A’ is an authoritative, ‘B’ is an authoritarian and ‘C’ is a permissive.

RESULTS

The study sample was derived from 63 parents (34 fathers and 29 mothers), as shown in Table 2, whose attended dental hospital accompanying their children for dental treatment in the year of 2017. Data analysis gathered was done using Microsoft Word 2013. Of these participants, 28% were parents of preschool-age children and 72% were parents of school-age children from public elementary school. Fathers had age ranging from 21-60 years old and mothers had age ranging from 19-59 years old.

Based on the questionnaire answered by the parents, they were categorized into authoritative, authoritarian and permissive. As depicted in Figure 1, 49 (78%) of the parents were authoritative, 6 (9%) were authoritarian and 8(13%) were permissive.

As shown in Figure 2, almost half of the participants answered ‘yes’ regarding whether their children ever complained about their oral health whereas 14 parents answered ‘no’ and 20 of them were not sure if their child has experienced any oral health problems.

‘No’ is mostly answered by the parents regarding any harmful oral habits of their child which calculated

approximately 43% followed by ‘yes’ about 20 parents confirmed it while 16 of the parents were not sure if their children has any harmful oral habits.

Nearly 30 participants have answered ‘no’ that any oral symptom that can be ignored while 20 of them were answered ‘not sure’ and only about 24% of the parents chose ‘yes’ that oral symptoms can be ignored.

‘Yes’ scored the most with 30 parents approximately 50% agreed that there is connection between oral health and overall health. ‘No’ scored the least where only 9 of them chose this answer whereas 24 of the parents were not sure if there is any relation between oral health and overall health.

Table 1: Number of participants

Number of parents	Fathers	Mothers
63	34	29

Table 2: Types of parenting styles

Parenting styles	Frequency	Percent
Authoritative	49	78
Authoritarian	6	9
Permissive	8	13

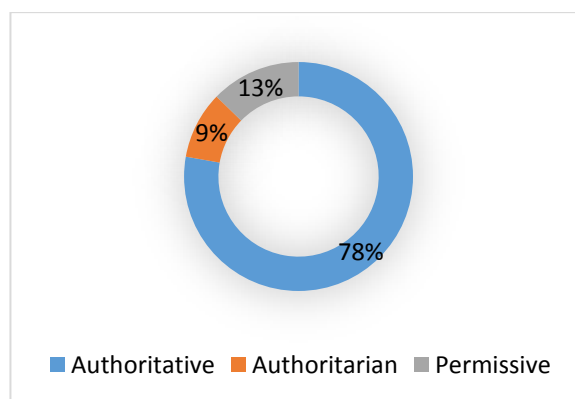


Figure 1: Number of Participants

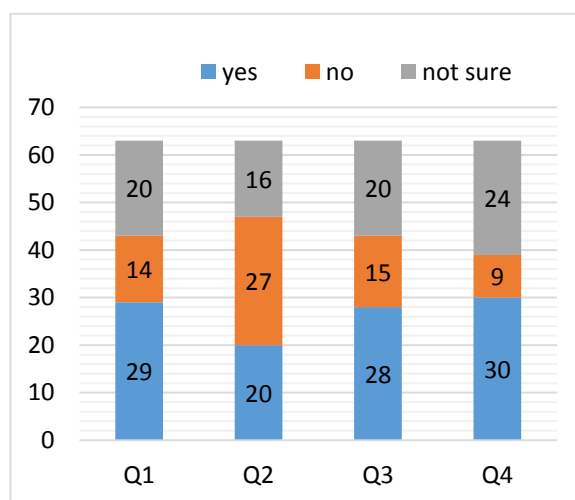


Figure 2: Number of Parents

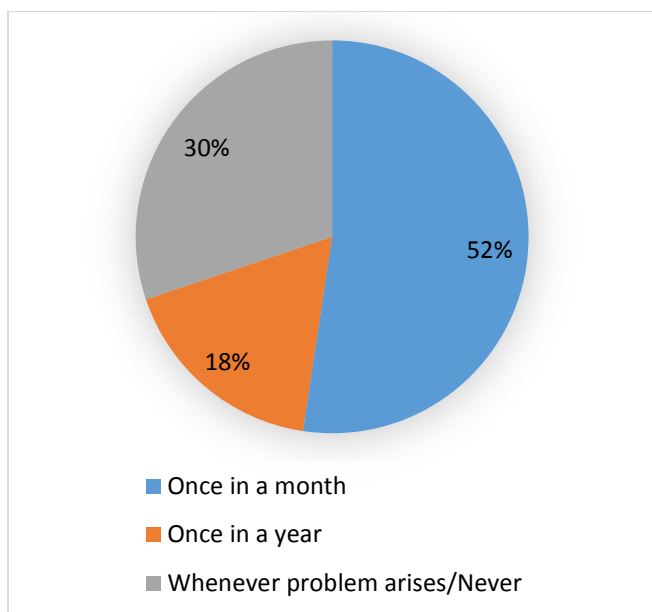


Figure 3: How often in last 12 months did your child experience pain or discomfort in their teeth and gums?

Figure 3 shows how often in a year the children experience pain or discomfort in their teeth and gums. More than 50% parents answered ‘many times’ followed by ‘never know’ scored the second highest which is about 25% and the least recorded by ‘occasionally’ that is approximately 24%.

As depicted in Figure 4, ‘once in a month’ scored the highest, approximately 52% chosen by the parents on frequency of bringing the children to a dentist for routine check-up followed by ‘whenever problem arises/never’ recorded about 30% and the least scored by ‘once in a year’ which is about nearly 20%.

Figure 5 shows percentage of the children have complained about pain, sensitivity, bleeding or swelling in the mouth to their parents. Approximately 54% selected ‘yes’ that their children have ever complained about oral health problems while 46% chose ‘no’.

Most of the parents chose to ‘bring their children to clinic’ whenever they feel pain or having any health problems. As shown in Figure 6, more than 50% of the parents would do so whereas 27% chose to ‘ignore’ followed by 13% answered to ‘give the children painkiller’.

Less than 50% of the parents always asked their children to brush the teeth before going to sleep as shown in the Figure 7. Besides, 32% of them only ‘sometimes’ and about 25% of the parents never asked their kids to brush the teeth before going to sleep.

Almost 50% of the parents change their child’s toothbrush only when the bristles change colours. 23% of the parents change the toothbrush every three months while the others never change the toothbrush of their children. The data is shown in Figure 8.

Most of the parents, approximately 64% asked their children to brush the teeth twice daily as shown in Figure 9. The others asked their children to brush the teeth once

daily and even never asked to do so about 19% and 17% respectively.

There are few methods that parents encourage in their child’s oral hygiene practices. As shown in Figure 12, ‘brushing, flossing and mouthwash’ was the highest score which is 40%, followed by ‘none’ and ‘brushing and mouthwash’ that are about 33% and 27% respectively.

About 51% of the participants used fluoride toothpaste for their children whereas the others did not sure what type of toothpaste they are using with 49% answered this. The data is shown in Figure 11.

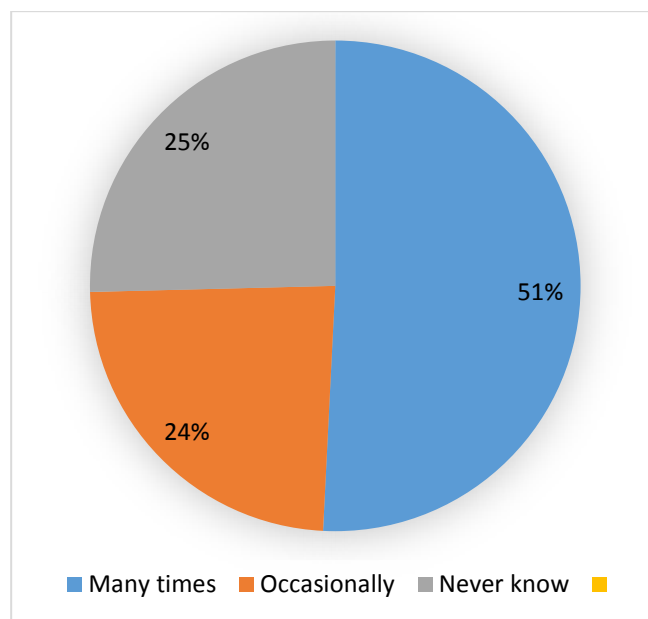


Figure 4: How frequent do you bring your children to a dentist for routine check-up?

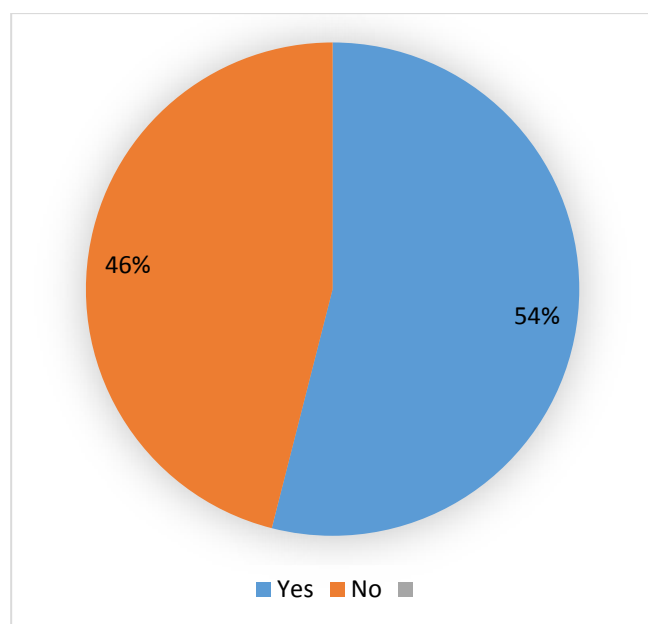


Figure 5: Have your children ever complains about pain, sensitivity, bleeding or swelling in the mouth?

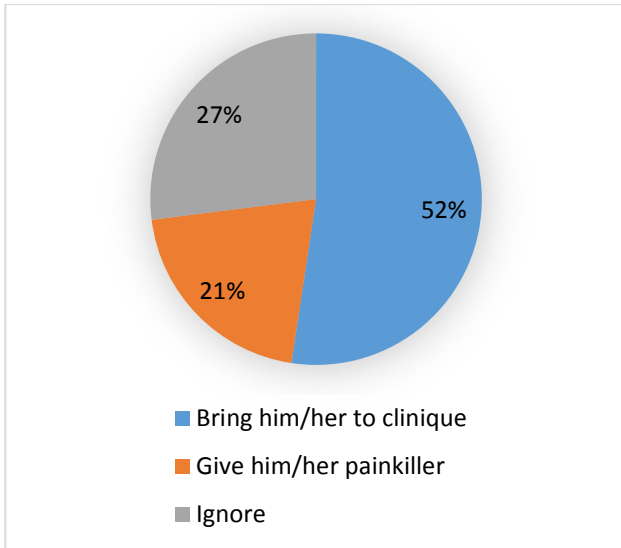


Figure 6: Method to solve the problem

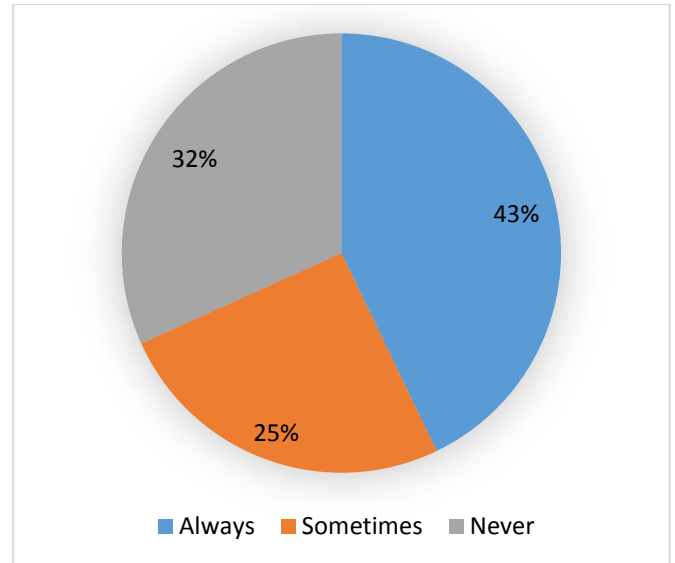


Figure 9: How many times do you asked your children to brush the teeth?

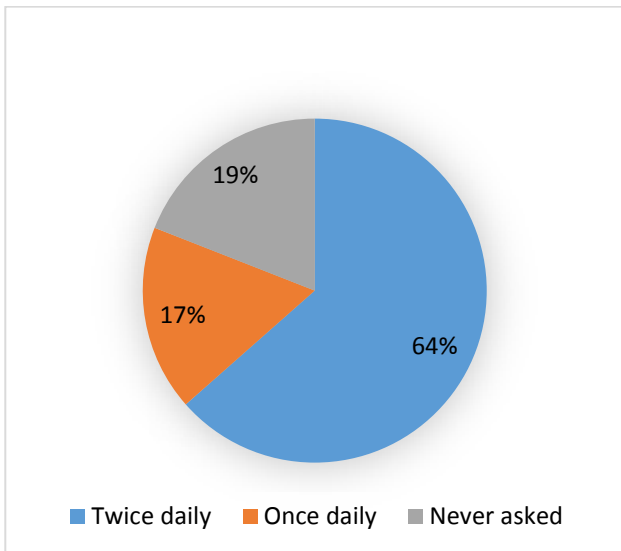


Figure 7: Have you ever asked your children to brush the teeth before going to sleep?

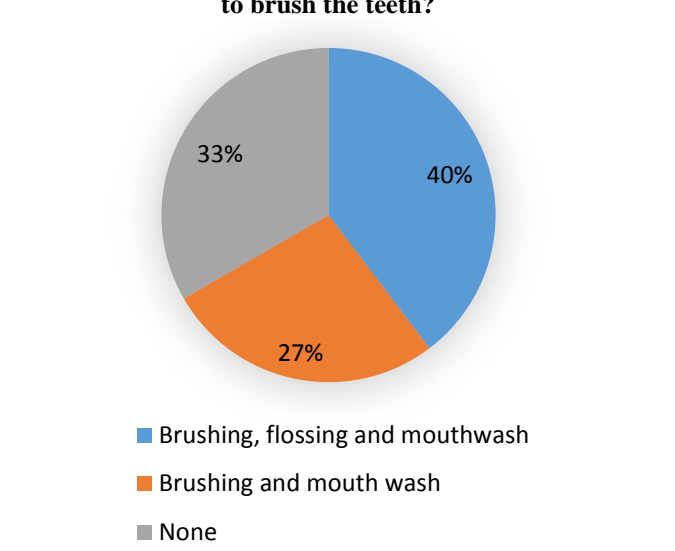


Figure 10: Methods do you encourage in your child's oral hygiene practices?

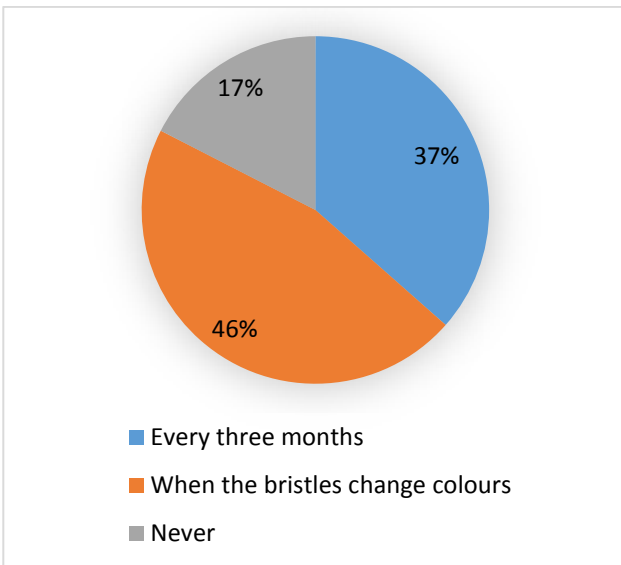


Figure 8: Frequency of changing child's toothbrush

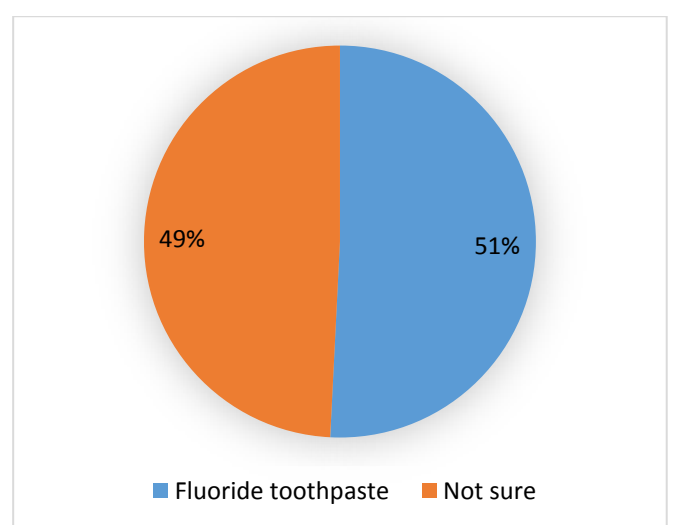


Figure 11: Type of toothpaste do you encourage for your children

DISCUSSION

Baumrind's types of parenting styles such as authoritative, authoritarian and permissive typologies are currently broadly models of parenting styles. Based on the questionnaires answered by the parents they were categorized into authoritative, authoritarian and permissive. As shown in Figure 1, almost 80% of the participants were authoritative, less than 10% were authoritarian and approximately 13% were permissive. Based on these results, it has shown that most of the parents participated this study were concern about their children's oral health care as every matters were taken into considerations. On the other hand, there were small number of parents who were not taken their children's oral health seriously.

As shown in Figure 2, mostly answered 'yes' that they were aware that their child have ever complained about their oral health. On the other hand, number of parents were not even sure that their kids have ever complained about their oral health were also high that were the major contribution for permissive type of parenting style.

There are few types of oral habits such as thumb sucking, finger biting, or finger sucking, tongue thrusting, lip biting, or lip sucking, bruxism, mouth breathing. These oral habits, if persist beyond certain developmental age, can influence developing teeth, occlusion and surrounding oral tissues (8). As shown in Figure 2, most of the parents were aware whether their children is having any oral habits that may become harmful. The responses suggestive of that the parents were categorized into authoritative, which is high warmth, high control, the parent exhibits firm limit-setting, but still compassion and warmth (9).

There are many oral symptoms that may lead to a severe condition. Examples of oral symptoms are gingival enlargement, gingival ulceration and bleeding, oral infection and many more. Gingival enlargement may occur due to local inflammatory conditions which include poor oral hygiene, food impaction, or moth breathing. This condition may be worsen if there is any systemic condition such as hormonal changes or drug therapy (10,11). As shown in Figure 2, most of the parents realize that there is no oral symptoms that can be ignored as they were aware consequence that may arise due to symptoms shown in the oral cavity.

Oral health and overall health may be correlated in most conditions. For instance, some oral complication are associated with leukemia along with other symptoms shown other than in oral cavity. The patients can present with the symptoms of related to anemia, neutropenia, and thrombocytopenia (12,13). Gingival hyperplasia is an oral symptom associated with chronic leukemia and generally resolves completely or at least partly with the effective treatment of leukemia chemotherapy (14,15). Figure 2 shows awareness of parents that there is connection between oral health and overall health. However, there were also high number of parents who were not sure that oral health is correlated with overall health.

As shown in Figure 4, many parents bring their children to a dentist for routine check-up once in a month. This is a good prevention as regular visits allow dentist to figure out

early signs of any diseases. On the other, there were quite high number of parents chose to bring their child to dental clinique only when problem arises. This may create problems later as the condition may be worsen at the time of dental check-up.

Most of the children have complained about oral health problems such as pain, sensitivity, bleeding or swelling in the mouth. This is shown in Figure 5. To overcome this problem, as shown in Figure 6, many of the parents chose to bring their children to clinique to find out what is the problem and to relieve the pain. However, there were also parents who gave painkiller to relieve the pain. The later should be avoided and do dental check-up is better choice as dentist may find out early signs of any diseases (16).

As depicted in Figure 7, many parents encourage their children to brush the teeth before going to sleep. This is a good practice as there are few steps that can be practiced to reduce the risk of caries including brushing the teeth twice per day (17). In spite of that, there were also parents that were not encourage their child to brush the teeth before going to sleep. This may lead to plaque accumulation on the teeth that can cause caries formation (18).

The knowledge of what type of toothbrush should be used and frequency of changing toothbrush is also very vital in order to prevent dental caries as well as periodontal problems (19). The frequency of changing child's toothbrush can be seen in Figure 8. In addition, frequency of brushing teeth daily also influence the child's oral health care. Brushing one's teeth twice per day is one of the steps can be taken to reduce risk of caries. The frequency of child's brushing teeth can be seen in Figure 9. As many of the parents encourage their child to brush the teeth twice daily, the risk of caries can be prevented from the earlier ages.

There are few oral hygiene practice that can be practiced in child's routine such as proper brushing, flossing, limit sodas, coffee and sweet drinks, use mouthwash and many more. As shown in Figure 10, most of the parents encourage to brush, use floss and mouth to maintain healthy oral health though quite high number of parents not encourage any oral hygiene practices. It is crystal clear that oral hygiene practices is correlated with oral health status of an individual. The oral hygiene practices can influence the caries as well as periodontal status (20,21).

The type of toothpaste may influence the oral health status. One of them is fluoridated tooth paste. As shown in Figure 11, almost similar percentage of parents use fluoridated toothpaste and not sure of what type of tooth paste they are using. Fluoridated tooth paste is better used as it contains a proven active ingredient for the prevention of tooth decay (22). The use of proper toothpaste can prevent dental carries that may contribute to tooth loss when the tooth is severely decay. As tooth loss is a last stage of a tooth and frequent episode in people with lack or uncared oral cavity (23), it can be prevented by practicing regular good oral hygiene.

CONCLUSION

Parenting styles may influence the physical and emotional development of children as well as oral health status of the children. Parental responsiveness is seen as parental warmth and supportiveness to the need or demands of a child. The way of parenting styles may influence child's behaviour on how they manage their own oral health or how on they react with dentist during dental check-up. Based on this study, it can be concluded that authoritative parenting can maintain good oral health in children.

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