Factors Affecting Children's Behavior at Dental Clinic

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INTRODUCTION

"Man is the enemy of what he ignores" is a statement often heard, and is entirely true. Ignorance of a thing leads to fear from it, and fear from a certain event leads to avoiding and not repeating it. However, if a person has to deal with the event, this might lead to negative psychological reactions (disturbances) such as fear, dislike, and rejection. These reactions or disturbances may range between mild to severe, which may express themselves at first by weeping and crying then end by losing consciousness and hysteric convulsions. Yes, this can really happen at the dental clinic or at any place a person finds himself in a certain psychological crisis. The degree of the reaction of any person depends on his ability to absorb and bear the shock. Yes, the shock!! Can the child's visit to the dental clinic be a shock? Yes it can. But it can also be a blessing. It all depends on the dentist and his skill at handling and dealing in a well-studied psychological manner, with the new visitor who comes to that unknown world which is called the dental office.

Let us place the dealing of the dentist with the child and the results of that dealing in the form of an equation similar to the chemical equations that we know and let us see the reaction's outcomes:

Skillful dentist + child + sound and smooth psychological handling and treatment = high quality treatment + record short time + friendship, love and an absence of fear forever. Yes, this is how dealing and treatment in child dentistry should be. The easiest way to achieve this equation is the psychological approach. We strongly believe, and this is our personal opinion, that this is the best way to deal with the child, particularly if the child is of a normal cognitive and intellectual standard, with an ability to understand. These abilities normally exist in children between 3 – 6 years of age. The purpose of this research is to study some variables influencing children's cooperative behavior at the dental clinic. In this study, we will highlight three major factors specifically in order to identify their effects on the behavior of the children at the dental clinic. These three factors are:

(1) Preparing the child at home before visiting the dental clinic.
(2) The presence or absence of the mother of the child at the dental clinic.
(3) Using the psychological approach (T.S.D. technique)* in dealing with the child.

* { Tell, show and do}

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Materials and Methods

Sixty children, 36 – 60 months old, from among those who come to the children's unit at the school health center of the ministry of health in the State of Kuwait were selected. For most of these children, that was their first visit to the dental clinic. Most of them came from middle class families, and enjoyed good, normal physical and mental health.

The children were put in three groups of twenty children each. As far as possible, care was taken to ensure that the children in each group were homogeneous in terms of age and sex, i.e. that the number of females would be equal to the number of males in the three groups.

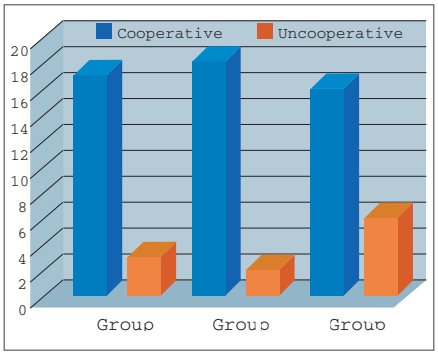
We agreed with the parents and took their permission to having their children participate in this scientific study. We asked them to increase their children awareness and prepare them both psychologically and mentally for the visit to the dentist's, by explaining to them the benefits of the continuous prevention and treatment of their teeth and the harm that would result from failure to keep their teeth clean. We also requested the parents to put their children to bed early, the night before the visit, so that they may have enough sleep following a light dinner. We also recommended to the parents not to promise their children any gifts to encourage them to agree to go to the dentist, but to postpone this until after the visit.

Each group was given a code: A, B, and C, and each child was given 30 – 45 minutes for the visit so that the dentist could use the TSD technique for dealing with and controlling the child. Two variables and their effects on the child's behavior at the clinic were studied. The order of the variables within each group was as follows:

Group A: Preliminary psychological preparation at home prior to the visit + the presence of the mother at the operatory room.

Group B: Preliminary psychological preparation at home prior to the visit - the presence of the mother at operatory room.

Group C: No preliminary psychological preparation at home prior to the visit - the presence of the mother at the operatory room.



Flow chart showing the three groups in the study

In this study, as we have stated before, we used the TSD technique in order to find out the effectiveness of this psychological technique in the presence of the other two variables, namely the preliminary preparation at home prior to the children's visit to the dentist's and the presence of the mother at the operatory room. All the children in all three groups whose behavior was controlled, were subjected to simple treatment measures, namely clinical examination by using mirror and explorer, oral prophylaxis and applying the fluoride.

Before starting the treatment steps, and as a part of the psychological treatment plan which aims at gaining the child's confidence and breaking the barrier of fear, we were very careful to call each child by his name and invite him kindly to sit on the dental chair. At the same time, the tools to be used were prepared in a simple manner that children like. Each tool was given a pleasant name of a famous cartoon character to bring it close to the mind and imagination of the child. The child was invited to touch and feel those tools by hand. Also, the child was given the chance to hear the unpleasant sounds of surgical suction and the cleaning drill. The child was allowed to experience the feeling of the water and air used in washing and drying, in order to introduce him/her to the general nature of the thing they would be experiencing. Furthermore, the dentist explained to the child the necessary treatment steps, elaborately, but simply and in a language appropriate to the mental ability of the child.

A part of these steps was carried out in the presence of the mother, (group A), and the other part, in her absence (group B and C). It is worth mentioning that, in the events where the mother was present, her role was one of a witness only. She was not allowed to interfere with the work of the dentist or try to influence the behavior of the child, unless she was asked to do so. We asked the mothers about their own educational level, in an attempt to identify the positive or negative effect on the child's behavior. We also watched the mother's emotional behavior (maternal anxiety) and the degree of tension in her face. If we found her too tense, we would ask her to step out of the clinic and wait in the waiting room.

This study lasted fifteen days. Children were seen at the rate of 4 cases a day. After each child in each different group was studied, remarks were recorded concerning the behavior of each child for further subjective study.

Results

Remarks concerning each group were recorded as follows:

Group A

Response was different, depending on the age difference. Older children were more able to respond than younger children. Somehow, females responded more positively than males. A number of three-year-old children looked around themselves more frequently looking for their mother, and occasionally cried. There were three cases of total absence of cooperation. Response was generally high.

Group B

Response was varied, depending on age, as it was the case in the previous group. Females were more positive than males. The absence of the mother from the beginning - in this group – was useful, because there was less movement and turning around by the child. This

helped carry out the work more quickly. There were two cases of total absence of cooperation. Response was generally high.

Group C

In this group, regardless of age, almost all the children were more afraid, tense and hesitating. A longer time was needed to control the children in this group in order to convince them to accept the treatment and to make them feel secure, compared to the other two groups. Females were, as usual, more positive than males. The older children were more cooperative than the younger ones, as was the case in the previous two groups. There were six cases of total absence of cooperation. Response in this group was average compared to the other two groups. More time and effort was needed to control the children and to accomplish the treatment.

Discussion

The results we arrived at were most important in identifying the factors that affect the behavior of children at the clinic. The study has proved beyond doubt that the preliminary preparation of the child by the mother, in a studied mental and psychological way, is important and effective in reducing the fear of the child.[1,2,3] This was very clear in the first and second groups, where the child was prepared psychologically before the visit. The children in the third group, who were not prepared at home by their parents, needed more time and effort to control and calm. We believe, this is because man is enemy of what he does not know. It is important to inform the child about the nature of the dentist's work, and the damage that will result from not going to the dentist. For this reason, it is advised that the child's first visit to the dentist take place before any teeth problems start.

With regard to age as a factor affecting the child's behavior at the clinic, we found that there is a direct relationship between age and positive conduct of the child at the clinic. This means that a 6-year-old child is more cooperative and responsive to the doctor's instructions than a 3-year-old child. This is so because of the increased cognitive, mental, conceptual and psychological growth.[4,5] An elder child is more able to communicate and respond to the dentist's directions. However, there are exceptions to every role, as can be seen in the higher degree of cooperation by younger children in the first two groups in which there was preliminary preparation prior to their visit to the dental clinic. This means that age is not the only factor affecting the child's cooperation in the dental clinic, but there are several others. Other factors include such as the educational and cultural level of the parents, the social status of the child within the family and among his brothers.[6] Is he an only child or not?. Generally, we found that the older the child was, the easier it was to deal with him.

With regard to the factor of sex, we found that females were more responsive than males regardless of the preliminary preparation or presence or absence of the mother at the clinic. This might be because of the more quiet nature of females. This result is different from that reached by Frankl and others.[3] The effect of the presence of the mother on the conduct of the child at the clinic was of two different and opposite effects.[3,6,7,8] Sometimes we found that it was necessary for the child to be treated in the presence of his mother, in view of the age of the child, his medical and mental status and whether the mother was anxious or not.[6,9,10,11] We allowed the mother to be with us as a witness or observer only, with no right to affect the child's behavior or interfere with the dentist's work. Meanwhile, when the mother was too anxious, we would ask her to step out of the clinic until we finished our work to avoid any negative effect on her child. Older children were more independent and self-confident. Their behavior was more settled than that of younger children. The presence or absence of their mother did not make any difference. Also, we found that keeping the mother away from the child during the treatment was much better than being with him.[6,7] This is because the doctor had to use certain techniques, such as voice control and / or HOME technique (Hand Over Mouth Exercise) to control the unpleasant behavior of an uncooperative child.[12] The mother might think that these are punitive measures used with her children, and so she would tend to interfere and sometimes request to stop the treatment.

In addition, in this study, we made two interesting observations: the first is that when the mother was more afraid and anxious, her child would also be more afraid, especially among the younger children.[6,7,8,13,14] This is because the fear of the dentist is an acquired rather than native one. Many studies demonstrated many years ago that parents can and do convey their negative attitude (fear) to their children.[5]

The second is that the children who studied at foreign schools were more responsive and better equipped to adapt to the situation, compared with those who studied at government school. This underlines the necessity of increasing awareness in children.

In this research, we preferred to use the psychological approach rather than other approaches such as the pharmacological approach and/or restricting the movement of the child. We did encounter some children who were too difficult to be controlled by psychological means, particularly within the third group who were not prepared for the visit at home. The existence of uncooperative children is a normal sign, because no doctor can possibly control the behavior of 100% of the children within a period of 30 – 45 minutes. This is because the image of fear, whether that fear was acquired or expressed by the child as a result of unpleasant experience, can stay with a child for a long time, and for this reason a number of uncooperative children were treated under general anesthesia.

We now return again to the reason why we chose the psychological way rather than other available ways; this is because we strongly believe that psychology plays an important role in the child's management and treatment in the dental clinic. "Man is the enemy of

what he ignores", and for this reason the doctor's duty is psychological in the first place and one of the treatment in second place. Unless the doctor is able to gain the confidence and love of the child, he cannot treat him properly. The dentist should be kind and pleasant when he meets the child. He should call him by his name from the start in order to break the barrier of fear in the mind of the child. He should also understand the child's language and be able to understand and analyze his psychology before starting the treatment, and he should be kind but firm.

Because a child likes to be the object of interest, the dentist should praise the child and his clothes, without exaggeration. That will make the child feel that the doctor is a friend, and will establish a good link of love and confidence between them.[16]

The TDS technique is the most successful approach followed by many dentists in dealing with children and has been proven successful.[17] However, it is not effective with all children, and not all dentists can use it successfully. Why? Because its success depends on several factors, foremost among which is the personality of the dentist, his understanding of child psychology, his language skill and his ability to use this skill in talking to the child and opening and maintaining a conversation with him as a first start toward a successful treatment. It is worth mentioning here that language is the magical key to the hearts of all people in general, and the children in particular. For this reason we do not recommend dealing with dentists who do not understand the child's language and who cannot communicate successfully with children. This failure is a serious obstacle to sound doctor-child communication and conversation.

Conclusions

We came up with the following results through this study:

The responsibility for the child's health and treatment is a joint one, between the home and the clinic. The well-studied preparation at home by the parents has a huge positive effect on making the child accept the treatment.

The presence of the mother and its effect on the child's cooperation is controversial. We recommend the absence of the mother at the clinic in general. We would allow it only under certain unusual psychological circumstances of the mother, or in light of the child's age, and physical and mental health. Another factor is the skill and ability of the doctor in dealing with the child in the presence of the mother. Keeping the mother separated from the child helps the mechanism of treatment and gives the doctor a large area for maneuvering in order to win the battle.

The difference in sex and age is an influencing factor in general to a moderate extent. In this study, females were found to be more responsive than males. The educational level of the mother and\or child is also important. The psychological approach proved to be ideal and most successful because it seeks to address the cause of fear in the child and seeks to change the child's concept of the dentist. Furthermore, it is the most secure way from both the psychological and physical point of view.

In short, this research is only a small, faithful step toward getting to know the psychology of children and trying to overcome the difficulties faced by the dentist at the clinic. Dentists should give the psychological aspect in treating children more attention. The subject merits more detailed study and research.

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