Research Article

AHB Advances in Human Biology

Adv Hum Biol. 2015;5(1):39-42.

Pattern and Knowledge of Wright's Modification of Frankl's Behavior Rating Scale Followed among Postgraduate Students of Pediatric Dentistry in Ahmedabad City – A Survey

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ABSTRACT

Aim: To check the knowledge and technique of Wright's modification of Frankl's behavior rating scale among postgraduate students of pediatric dentistry in Ahmedabad city.

Materials and Method: 21 postgraduate students studying in pediatric dentistry of different colleges from Ahmedabad city were selected. A questionnaire containing various questions regarding Wright's modification of Frankl's behavior rating scale was asked to fill.

Result: The results suggested that they use this scale routinely and rate it properly but there are differences in timing of the rating.

Conclusion: All Post Graduate students in pediatric dentistry from Ahmedabad city colleges use Wright's modification of Frankl behavior rating scale routinely and correctly.

Keywords: Adolescent Behavior, Dental research, Pediatric dentistry.

INTRODUCTION

Behavior Management is defined as the means by which the dental health team effectively and efficiently performs treatment for a child. The aim is to instill a positive dental attitude and to instill a positive dental attitude by creating a long-term interest on the patient's part so as to facilitate ongoing prevention and improved dental health in the future[1]. Behavior management is main essence f or clinical practice in pediatric dentistry.

Behavior management techniques are basically divided into pharmacological and non-pharmacological behavior management. Non-pharmacological behavior management techniques are further divided into (1)aversive techniques like hand over mouth exercise and physical restraint and (2) non-aversive behavior management namely verbal communication, distraction, desensitization, tell show do, positive and negative reinforcement[2].

Pediatric dentists have various options of choosing the behavior management techniques according to the condition, situation and age of the child. Dentists must be able to assess accurately the child's dental attitudes, developmental level and temperament and to predict how the child will react to the dental treatment[3]. The dentist must establish a relationship based on trust with the child and accompanying adult to ensure active involvement

Received: Nov. 11, 2014**: Accepted**: Feb. 2, 2015
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pISSN 2321-8568
eISSN 2348-4691

with preventive regimes and treatment for the same[2].

Evaluating a child's level of anxiety before pediatric treatment is the key, since this anxiety is closely related to their behavior during dental treatment visits[4]. Management of child's behavior in the dental clinics began firstly by containment of child in the dental environment and secondly by knowledge of psychological principles and their application towards children's behavior. The literature specially describes children's behavior in dental clinics around three main things i.e. classifying behavior, elaborating factors which affect behavior and describing various forms of behavior[1]. A plethora of systems has been developed for classifying children under dental environment. Understanding behavior rating systems helps not only in academic purpose but also assists clinicians in evaluating validity of current research. It can provide systemic means for recording patient's behavior[1]. One such behavior rating system was introduced by Frankl and coworkers in 1962 (Table 1).

Table 1: Categories of behavior according to Frankl[3].

Rating 1	DEFINITELY NEGATIVE: Refusal of treatment, fearful, crying forcefully or any other overt evidence of negativity
Rating 2	NEGATIVE: Reluctant to accept treatment, uncooperative, some evidence of negative attitude but not pronounced. I.e. surly, withdrawn.
Rating 3	POSITIVE: Acceptance of treatment, at time cautious, willingness to comply with dentist, at times with reservation but patient follows dentist direction cooperatively.
Rating 4	DEFINITELY POSITIVE: Good rapport with dentist, interested in dental procedures, laughing and enjoying the procedure.

Frankl's Behavior Rating Scale's popularity for research tool is known for its functionality, quantifiablity and reliability. The only short coming of this rating is that it does not communicate about the type of negative behavior[1]. GZ Wright gave modification so as to qualify as well as categorize child's reaction. He categorized child's behavior in to cooperative, lacking cooperation, potentially cooperative. The type of negative behavior includes uncontrolled behavior, defiant behavior, timid behavior, tense-cooperative behavior and whining behavior[1]. The term "potentially co-operative" being preferred to the inaccurate term "un-cooperative". Children who lack co-operative ability include the very young with whom communication cannot yet be established (pre-co-operative), and children with specific disabilities with whom co-operation in the usual manner may never be achieved[1]. Many dentists misinterpret the behavior of the child as they rate any child who cannot co-operate as un-cooperative. The purpose of the present study was to assess the knowledge and pattern of Wright's modification of Frankl's behavior rating scale followed among post graduate students of Pedodontics and Preventive dentistry in Ahmedabad city.

MATERIALS AND METHODS

A total of 21 students who were undergoing post graduate training in Pedodontics and Preventive dentistry were selected from various colleges of Ahmedabad city. A previously validated questionnaire (Table 2) was distributed and was asked to fill by the participants so as to evaluate routine practice and knowledge of Wright's modification of Frankl behavior rating scale.

Table 2: Questionnaire used for assessing the knowledge of Wright's modification of Frankl behavior rating scale.

Q.1 When was Wright's modification of Frankl's behavior rating scale was introduced?		
a) 1978	b) 1975	c) 1976
Q.2 Do you follow Wright's modification of Frankl's behavior rating scale in your dental clinics routinely?		
a) Yes		b) No
Q.3 When do you record Wright's modification of Frankl's behavior rating scale?		
a) During initial visit	b) After every procedure	c) Overall assessment
Q.4 When do you record Wright's modification of Frankl's behavior rating scale during the child's visit to the dental clinic?		
a) Before treatment	b) After treatment	c) During treatment

Q.5 Do you think Wright's modification of Frankl's behavior rating scale reliable?

a) Yes b) No

Q.6 If a Positively behaving patient turns into negatively behaving later, then how would you rate that patient?

a) - + → B) + - → c) + + →

RESULTS

For the question 1, 66% of the subjects answered correctly the year of Wright's modification of Frankl's behavior rating scale. In case of second question, 100% of the post graduate students answered that they routinely used Wright's modification of Frankl's behavior rating scale. 43% answered as after every procedure, 33% answered as during initial visit, 24% answered as overall assessment for question three and for question four 52% of students answered that they record after the treatment, 29% of students answered that they record before treatment, 19% answered that they record during treatment. In both question 5 and 6 all the participants answered that they think that Wright's modification of Frankl's behavior rating scale is reliable and also would rate positively behaving child which turns later into negative behavior as Positive turns into negative.

Table 3: Overall percentage of answers for questions.

Question Number	Option a	Option b	Option c
1	19%	66%	15%
2	100%	0%	-
3	33%	43%	24%
4	29%	52%	19%
5	100%	0%	-
6	0%	100%	0%

DISCUSSION

The Wright's modification of Frankl's behavior rating scale is to be rated after the completion of the treatment for the child. They should be assessed in every visit and overall assessment should be noted. Any variation in changing behavior pattern also must be rated as it is very important for successful management of that child in successive visits. According to Table 3, knowledge regarding the Wright's modification of Frankl's behavior rating scale was poor. 34% of the subjects answered incorrectly. All the persons involved in the survey did follow Wright's modification of Frankl's behavior rating scale routinely. Also they answered that rating scale was reliable and they did follow the right technique for rating.

Regarding the timing of recording Wright's modification of Frankl's behavior rating scale variables in the score was noted. Although in all the appointments Wright's modification of Frankl's behavior rating scale may be recorded however it is the overall assessment which comes into play. Most of the participants answered Wright's modification of Frankl's behavior rating scale should be recorded after treatment, which should be followed routinely.

Various behavior rating scales according to various authors are Wilson 1993 as Normal or bold, tasteful or timid, hysterical or rebellious, nervous or fearful, according to Garcia-Godoy 1986 as fearful, timid, spoiled, aggressive, adopted, handicapped, cooperative[6]. Lampshire 1970 classifies child's behavior into cooperative, tense cooperative, outwardly apprehensive, fearful, stubborn, hypermotive, handicapped, emotionally immature[7].

Often in these scales, the mean which is reported as a measure of central tendency comes as a figure like 2.56. Now what exactly does a mean of 2.56 on the Frankl Scale mean? Is that a group of children whose behavior is between "negative" and "positive" categories? But the scale suggests that the behavior can only be one or the other as a separate category. Thus creates confusion and error in judgment of result[8].

CONCLUSION

Behavior rating pattern of child in the dental clinics has many advantages and disadvantages regardless of the behavior management techniques. Almost all post graduate students in pediatric dentistry use Wright's modification of Frankl behavior rating scale

routinely correctly however there are differences in the timing of rating.

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

REFERENCES

1. Oliver K, Manton DJ. Contemporary Behavior Management Techniques in Clinical Pediatric Dentistry: Out with the Old and in with the New?. J Dent Child (Chic). 2015;82(1):22-28.
2. Mahesh R, Waseem H, Siva Kumar M. Unusual behavior in children--foreign object in tooth: a report of two cases. Unusual behavior in children--foreign object in tooth: a report of two cases. Ethiop J Health Sci. 2014 Oct;24(4):369-73.
3. Frankl SH, Shiere FR, Fogels HR. Should the parent remain within the dental operatory? J Dent Child. 1962;29:150-63.
4. Ramos-Jorge ML, Marques LS, Pavia SM, Serra-Negra JM, Pordeus IA. Predictive factors for child behavior in the dental environment. Eur Arch Paediatr Dent. 2006;7(4):253-7.
5. American Academy of Pediatric Dentistry. Guideline on behavior guidance for pediatric dental patients. Pediatric Dent. 2013;35(6):175-87.
6. Garcia-Godoy FM. Parent, dentist and child classification for behavior management in the dental environment. J Pedod; 1986;10(3):273-82.
7. Lee SH, Lee NY. An alternative local anaesthesia technique to reduce pain in paediatric patients during needle insertion. Eur J Paediatr Dent. 2013;14(2):109-12.
8. Wilson S. A review of important elements in sedation study methodology. Pediatr Dent. 1995;17(7):406-12.

How to cite this article:

Kiran S, Bhatt R, Patel M, Shah N. Pattern and Knowledge of Wright's Modification of Frankl's Behavior Rating Scale Followed among Postgraduate Students of Pediatric Dentistry in Ahmedabad City – A Survey. Adv Hum Biol. 2015;5(1):39-42.