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APPLIED KNOWLEDGE, ATTITUDE AND APPLICATION OF BEHAVIOURAL GUIDANCE TECHNIQUES IN ROUTINE OPD PATIENTS WITH DENTAL PHOBIA

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Abstract

Background: Dental fear and anxiety are thought to be the primary cause of dental neglect, which can have a negative impact on a person's oral health as well as their general health, including their psychological well-being and quality of life.
The current trial's objectives included evaluating the options available for treating such patients, the expertise and understanding of dentists in handling dental fear and anxiety in adult participants, and identifying the need for more training.
Methods: The 82 dentists who participated in the study completed a unique survey and questionnaire trial. The results were developed via statistical analysis of the collected data.
Results: Of the dentists surveyed (n=51), 62.19% (n=51) agreed that individuals should be educated and motivated, whereas one respondent (1.21%) thought that muscular relaxation was largely unsuccessful. According to 56.09% (n=46) of dentists, the most successful method was music and less waiting time in the clinic. 4 dentists (4.87%) believe that spreading out therapy across several appointments is a highly ineffective strategy.
Conclusion: Within its limitations, the study demonstrated that the use of several behaviour modification approaches can be successful in reducing adult patients' dental anxiety and fear.

Keywords: Adult Patients, Behaviour Modification Techniques, Dental Anxiety, Dental Fear

INTRODUCTION

In order to give children with excellent dental care by reducing their dental fear and anxiety, pediatric dentistry frequently employs a variety of behaviour guiding approaches, including empathy, communication, listening, and/or flexibility. These aids in preserving trust and fostering a favourable attitude toward dental and oral health treatment.[1]

If necessary, these approaches should likewise be used on adult patients with just minor alterations Adults seeking dental care frequently experience dental anxiety and worry.[2] DFA is also regarded as the primary cause of dental neglect, which can have a negative impact on a person's oral health as well as general health, including psychological well-being and quality of life. Anxiety and negative events had or heard contribute to DFA. Delayed dental treatment owing to FDA also puts an additional financial burden on adult subjects.[3]

Dental phobia and anxiety affect anyone regardless of prior positive or bad experiences, not just those who have had them. Adult patients don't communicate their worry and dread as openly as children do, and they don't show any symptoms or gestures of fear that would cover up real reactions. Dental professionals find it challenging to encourage and guide such mature subjects as a result.[3,4]

Therefore, teaching behaviour modification strategies and coping mechanisms to everyone seeking dental care should be a routine practice for dental professionals. It should aim to provide individuals who are seeking dental care positive reinforcements to help them avoid fear and anxiety. Behaviour modification approaches make use of psychology's basic ideas, resulting in very effective dental care and high subject approval.[5]

Dentistry focuses only on pediatric patients for behaviour modification, despite the fact that these treatments have shown beneficial in both adults and children. Modern adult modification is predominantly pharmaceutical, which has hazards and is less acceptable than non-pharmacologic approaches due to subject control and interference with coping mechanisms. These methods in adults ought to be founded on mutual trust, benefiting both the patient and the dental professional.[6]

The current study sought to determine the need for additional training in dental phobia management among adult participants, as well as to assess the competency and knowledge of dentists addressing such patients' dental fear and anxiety.

MATERIALS AND METHODS

The current non-experimental cross-sectional trial sought to determine the need for additional training in dental phobia management among adult participants, as well as the expertise and knowledge of dentists in treating such patients. The random sample strategy was used in this investigation. The research comprised dentists who held a BDS degree or higher in good standing and were members of the Dental Council of India. Only dentists who have been in business for at least a year were considered. Dentists who mostly treated adults were invited to take part in the study. The study excluded pediatric dentists and dentists who relied on pharmaceutical treatment of fear and anxiety.

Due to the fact that each dentist saw a varied volume of patients, the dentist population that was included was heterogeneous. 82 dentists made up the final research population. The study's methodology was based on a survey and questionnaire that were adapted from two worldwide models: the first, Dentists' abilities with scared patients: education and treatment6, and the second, from another. Since this study was an experimental survey and questionnaire, ethical forum approval was sought. The term of behaviour modification was included at the top of the survey form when it was given to dentists, not to educate them but to make it clear. Orthodontists, periodontists, endodontists, oral pathologists, oral radiologists, public health dentists, and prosthodontists were among the 82 dentists that were involved in the study.

Dental students, interns, and retired practitioners were not included. Dentists who refused to participate or gave their assent were also excluded. The results were developed via statistical analysis of the collected data.

RESULTS

The current non-experimental cross-sectional trial sought to determine the need for additional training in dental phobia management among adult participants, as well as the expertise and knowledge of dentists in treating such patients. Dentists had two weeks to complete the survey questionnaires, and those who did not answer were disqualified.

23 females and 59 men made up the study sample of 82 participants, with 79.26% (n=65) having been in practice for 10 years or more, 14.63% for 6–10 years, and 7.31% for less than two years. BDS dentists made up 40.24% of the participating dentists, while MDS dentists made up 59.75%.

The current study evaluated the participating dentists' knowledge of the numerous methods that are now used to change the behaviour of people who have dental anxiety and dread. Table 1 presents the findings. Maximum subjects were aware of the education/motivation approach, with 93.9% (n=77) dentists knowing about it, followed by 90.24% (n=74) dentists knowing about signaling, and the least amount of subjects were aware of the muscular relaxation technique, with 40.24% (n=33) dentists knowing about it. Dental professionals accounted for 80.48% (n=66), 85.36% (n=70), 73.17% (n=60), and 65.85% (n=54) of the respective awareness for behaviour shaping, distraction, successive approximation, and diaphragm breathing.

The study examined if any of the strategies might be used in a dental office to lessen patients' anxiety and fear of the dentist. The study also assessed the efficacy of several techniques used by dentists' clinic to lessen dental patients' anxiety. Table 2 provides a summary of the findings. Most dentists (62.19%; n=51) agreed that teaching and encouraging patients is a highly successful way to lessen dental fear and anxiety, whereas one dentist (1.21%) said successive approximation and muscle relaxation were extremely unhelpful. 12.19% of dentists (n=10) thought that relaxing the muscles was unsuccessful. Additionally, 56.09% (n=46) dentists indicated that music in the dental office and shorter wait times in the clinic were the most successful in-office strategies. According to 4 dentists (4.87%), who are shown in Table 2, attempting therapy across several appointments rather than a single visit appears to be a highly unsuccessful strategy.

The study also evaluated the participant dentists' interest in and belief that learning these techniques properly would enable them to use them in daily practice. Additionally, it assessed their perceptions of the ideal healthcare provider to conduct such training (Table 3).

To apply patient education effectively in daily practice, 36.58% (n=30) of dentists advise undergoing training. Diaphragmatic breathing was rated as the least preferable (by 28.04% of dentists; n = 23) and the least effective (by 4 dentists; 4.87%). Additionally, a large majority of dentists (74.39%; n=61) suggested receiving instruction from a licensed dentist, whereas just 52.43% (n=43) favoured motivating speakers. Motivational speakers were rejected by 47.56% (n=39) of dentists as unsuitable for training.

DISCUSSION

The current non-experimental cross-sectional trial sought to determine the need for additional training in dental phobia management among adult participants, as well as the expertise and knowledge of dentists in treating such patients.

Maximum subjects were aware of the education/motivation approach, with 93.9% (n=77) dentists knowing about it, followed by 90.24% (n=74) dentists knowing about signaling, and the least amount of subjects were aware of the muscular relaxation technique, with 40.24% (n=33) dentists knowing about it. Dental professionals accounted for 80.48% (n=66), 85.36% (n=70), 73.17% (n=60), and 65.85% (n=54) of the respective awareness for behaviour shaping, distraction, successive approximation, and diaphragm breathing.

In 2009, Farhat-McHayleh N et al[7] and Sharath A et al[8] reported comparable findings citing similar reactions. Most dentists (62.19%; n=51) agreed that teaching and encouraging patients is a highly successful way to lessen dental fear and anxiety, whereas one dentist (1.21%) said successive approximation and muscle relaxation were extremely unhelpful. 12.19% of dentists said it was useless to relax their muscles. Additionally, 56.09% of dentists indicated that music in the dental office and shorter wait times in the clinic were the most successful in-office strategies. According to four

dentists, attempting therapy over the course of several visits rather than just one looks to be a very unproductive strategy.

These were in line with the conclusions reached by Newton JT et al[9] in 2000 and Ogle OE et al[10] in 2012, who found that these strategies were successful in lowering dental participants' anxiety and apprehension. To apply patient education efficiently in daily practice, 36.58% of dentists advise obtaining training. Diaphragmatic breathing was rated as the least preferable (by 28.04% of dentists; n = 23) and the least effective (by 4 dentists; 4.87%).

Also, a high percentage of dentists recommended training by the qualified dentist by 74.39% (n=61) subjects and only 52.43% (n=43) preferred training by motivational speakers. 12.19% of dentists said that relaxing the muscles was ineffective. Additionally, according to responses from 56.09% of dentists, the most successful in-office strategies were music in the dental office and shorter wait times. Four dentists believe that spreading out therapy across several visits rather than just one is a very unsuccessful strategy.

These results supported Newton JT et al[9] and Ogle OE et al[10] findings from 2000 and 2012 that these strategies were successful in lowering dental participants' anxiety and apprehension. To utilize it effectively in daily practice, 36.58% of dentists advise obtaining training in patient education. Diaphragmatic breathing was considered the least effective by 28.04% (n=23) dentists and was also rated as such by 4 dentists (4.87%).

CONCLUSION

This qualitative study suggests that DFA in children and adolescents has multifaceted manifestations, impacts, and origins. Our findings support the value of epidemiological studies using various parameters to gain a better understanding of health issues.

Within its limitations, the study demonstrated that the use of several behaviour modification approaches can be successful in reducing adult patients' dental anxiety and fear.

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TABLES

Technique	Aware (n=82)	Not aware (n=82)
Education/ Motivation	93.9% (n=77)	6.09% (n=5)
Signaling	90.24% (n=74)	9.75% (n=8)
Behaviour Shaping	80.48% (n=66)	18.29% (n=15)
Distraction	85.36% (n=70)	13.41% (n=11)
Muscle Relaxation	40.24% (n=33)	59.75% (n=49)
Successive Approximation	73.17% (n=60)	26.82% (n=22)
Breathing/Relaxation	65.85% (n=54)	34.14% (n=28)

Table 1: Awareness of participant dentists towards various behaviour modification techniques

Technique	Highly Effective	Effective	Ineffective	Highly Ineffective
Education/ Motivation	62.19% (n=51)	35.36% (n=29)	2.43% (n=2)	0
Signaling	58.53% (n=48)	39.02% (n=32)	2.43% (n=2)	0
Behaviour Shaping	50% (n=41)	45.12% (n=37)	4.87% (n=4)	0
Distraction	51.21% (n=42)	46.34% (n=38)	2.43% (n=2)	0
Muscle Relaxation	34.14% (n=28)	52.43% (n=43)	12.19% (n=10)	1.21% (n=1)
Successive Approximation	43% (n=35)	51.21% (n=42)	4.87% (n=4)	1.21% (n=1)
Breathing/Relaxation	43.90% (n=36)	47.56% (n=39)	8.53% (n=7)	0
In-office strategy	**Highly Effective**	**Effective**	**Ineffective**	**Highly Ineffective**
Music	56.09% (n=46)	40.24% (n=33)	3.65% (n=3)	0
Local Anesthesia	46.34% (n=38)	41.46% (n=34)	10.97% (n=9)	1.21% (n=1)
Less Waiting Time	56.09% (n=46)	39.02% (n=32)	3.65% (n=3)	1.21% (n=1)
Education	53.65% (n=44)	4.87% (n=4)	40.24% (n=33)	1.21% (n=1)
Multiple Visits	36.58% (n=30)	43.90% (n=36)	14.63% (n=12)	4.87% (n=4)
Relaxation	40.24% (n=33)	53.65% (n=44)	6.09% (n=5)	0

Table 2: Effectiveness of different techniques and in-office strategies in reducing dental fear and anxiety perceived by study participants

Technique	Highly Effective	Effective	Ineffective	Highly Ineffective
Education/ Motivation	36.58% (n=30)	50% (n=41)	10.97% (n=9)	2.43% (n=2)
Signaling	34.14% (n=28)	51.21% (n=42)	10.97% (n=9)	3.65% (n=3)
Behaviour Shaping	31.70% (n=26)	52.43% (n=43)	13.41% (n=11)	2.43% (n=2)
Distraction	31.70% (n=26)	52.43% (n=43)	14.63% (n=12)	1.21% (n=1)
Muscle Relaxation	29.26% (n=24)	14.63% (n=12)	53.65% (n=44)	2.43% (n=2)
Successive Approximation	30.48% (n=25)	53.65% (n=44)	14.63% (n=12)	1.21% (n=1)
Breathing/Relaxation	28.04% (n=23)	52.43% (n=43)	14.63% (n=12)	4.87% (n=4)
Preferred Trainer	**Suitable**		**Not Suitable**	
Dentist	74.39% (n=61)		25.60% (n=21)	
Motivational Speaker	52.43% (n=43)		47.56% (n=39)	
Psychologist	71.95% (n=59)		28.04% (n=23)	

Table 3: Preference of participants towards technique and trainer regarding behaviour modification