

New insights into improving the oral health of visually impaired children.

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ABSTRACT

Comprehensive dental care for 150 blind school children was carried out. The main goal of this oral hygiene programme was to create awareness to enable them to be independent in their oral hygiene care.

Key Words : Comprehensive programme, Prevention, Visually impaired.

INTRODUCTION

“The best & the most beautiful things in the world cannot be seen or even touched. They must be felt with the heart. – Hellen Keller.” Special and medically compromised patients present a unique population that challenges the dentists skills and knowledge. WHO has defined handicapped person as “one who over an appreciable period is prevented by physical or mental conditions from full participation in the normal activities of their age groups including those of a social recreational, educational and vocational nature”. The handicapped patients differ from normal patients with regard to professional relationship between patient and the dentist. Therefore with adequate training and understanding of the various medical complications and handicapping conditions and with adequate alteration in the dentist's treatment protocol these patients can be managed well'. Providing comprehensive dental care for the visually impaired is not only rewarding but is also a community service that health care providers are obligated to fulfill. This has been severely hampered by the attitudes and behavior of uninformed members of the society.

1. Unsolicited & inappropriate assistance by strangers
2. People talking in a loud voice as if the person were deaf
3. Addressing questions to sighted companions
4. Verbalizing pity.

The true ability and talents of the blind are often underestimated. Hence, a comprehensive dental care for the visually impaired children was taken in one of the school.

MATERIALS AND METHOD

150 subjects 93 boys and 57 girls were selected from Shree Fiamana Maharishi Academy for the blind which is a non-

governmental organization, started on 18th June 1969 by Thirumurthy. Soulabhya' is one of the project which aims at rehabilitation of visually impaired children from rural and semi urban areas. The main goal of this oral hygiene programme was to create adaptations and routines that allow them to be totally independent in oral hygiene care. Comprehensive dental care for the visually impaired children was taken up with three recurring themes that are woven through for treating these patients'.

Concepts of normalization : Interaction strategies used to communicate with & while treating these patients.

Behavior management : Suggestions & recommendations for the dental team as how to encourage the patients to develop & improve oral hygiene skills.

Team approach : It allows full development of the role of each person involved in providing oral health care.

Programme schedule included

Interaction with the kids to obtain familiarization, provide a relaxed environment, assess their knowledge & attitude and to evaluate the child carefully in order to determine the degree of self help that the patient is capable of achieving.

Case history books were maintained for each child including their oral hygiene practices. Preventive programme was provided and dental treatment was rendered.

RESULTS

Of the 150 subjects examined, 56 (37.3%) were affected by dental caries and 107 (71.3%) by gingivitis. Table 1 shows distribution of subjects according to their oral hygiene practices. It was observed that 85.33% of the subjects used toothbrushes, where as 14.67% used finger for cleaning teeth. Tooth paste and tooth powder were used by 73.33% and 22.67% of the subjects respectively. 89.33% and 10.67% of the subjects cleaned their teeth once and twice daily. Horizontal method was used by 92% of the subjects where as 8% used vertical methods to clean the teeth.

DISCUSSION

Of the utmost importance when working with special or medically compromised children is emphasizing the need for excellent preventive dental care. Teaching good oral hygiene practices to the blind children requires a special approach with time and patience. Most programme teach reliance on auditory instruction, memory and more effective use of the

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Sl.No.	Oral Hygiene Practices		
A	Type of cleaning	Brush 128 (85.33%)	Finger 22 (14.67%)
B	Material used	Dentifrice 116 (73.33%)	Tooth Powder 34 (22.67%)
c	Frequency of Cleaning	Once daily 134 (89.33%)	Twice daily 16 (10.67%)
D	Method of cleaning	Horizontal 138 (92%)	Vertical 12 (8%)

Table No 1 : Distribution of subjects according to their oral hygiene practices

tactile/other senses. Patients were assisted in exploring oral structures of the mouth. Plastic models of the mouth were used effectively as instructional aids. Dental health education was provided to all the children. Dental health education material was converted to Braille. Since they are unable to self-monitor the effectiveness it was recommended that the child should establish a specific sequence of brushing to assure that all the areas are brushed adequately.

A special brushing method with music was taught to the children. Change in the music was the indication for them to change the brushing surface so as to cover all teeth surfaces. Refinements and corrections were accomplished by physical and verbal guidance.

Guidelines while providing dental treatment for visually impaired'.

1. Creating a casual & relaxed environment.
2. Child should be allowed to touch & feel the dental chair, dental equipments and instruments
3. A brief step-by-step description should be given of the dental treatment planned for the appointment.
4. Allow the patient to hear the sound of the dental equipments before the actual implementation.
- 5 As they usually develop a keen sense of taste and smell. Inform the patients when such materials are to be applied.

The understanding of the abilities and limitations of those suffering from this handicap will help us to facilitate the provision of quality dental care. Similarly close association and consultation with other members of the multidisciplinary team and with a thorough knowledge and recognition of various specialties and treatment modalities, we can best achieve comprehensive health care^{3,4}.

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New insights into improving the oral health of visually impaired children. Nurhasmadiar Nandini. Journal of the Indian Society of Pedodontics and Preventive Dentistry. Oral health status and treatment needs of children and young adults attending a day centre for individuals with special health care needs. Folakemi A. Oredugba, Yinka Akindayomi. BMC oral health. New insights into improving the oral health of visually impaired children. Article. Jan 2004. Aim The present study was conducted with the aim to assess the effectiveness of Oral Health Education programme on Oral Health Status of visually impaired children in New Delhi. A specially designed oral health educational programme consisting of audio aid, Braille booklet and individualized training was implemented to educate and motivate visually impaired children for maintaining their oral [Show full abstract] health. Methods and results A total sample size of 120 children in the age group of 5-15 years was selected and questionnaire based on WHO criteria 2013 was administrated.