

Original Article

## SPECIAL NEEDS OF SPECIAL CHILDREN-PARENTAL VIEW

Amitha M. Hegde, Aiswarya Ann Babu<sup>2</sup>, Anshad Mohammed<sup>3</sup>, Anu John<sup>4</sup>,  
Kanwardeep Singh<sup>5</sup>, Preethi V C<sup>6</sup> & Swathi Shetty<sup>7</sup>

<sup>1</sup>Professor & HOD, <sup>2-7</sup>Post Graduates, Department of Pedodontics & Preventive Children Dentistry, A.B. Shetty Memorial, Institute of Dental Sciences, Nitte University, Mangalore Karnataka, India.

Correspondence :

Anu John

Post Graduates, Department of Pedodontics & Preventive Children Dentistry, A.B. Shetty Memorial Institute of Dental Sciences, Nitte University, Mangalore - 575 018, Karnataka, India.

E-mail : anutony09@gmail.com

### Abstract :

Individuals with special health care needs experience poor oral hygiene and periodontal status and are more likely to have unmet dental needs than any other medical needs. The study was conducted to assess the views, attitudes and perceptions of oral health and treatment needs among the parents of 250 children with disabilities at 3 special schools in Mangalore based on questionnaire method. Data collected were subjected to statistical analysis.

The educational status of the parents were assessed and it was seen that more than 50% of the parents had school education of class 10 and below. 52% of the parents felt that dental treatment is not as important medical treatment and 69 % of the parent's preferred general dentist and only 12.3% had consulted Pedodontist for any dental needs of their children. Only 11% followed a regular dental check-up and 57% of the parents interviewed visited dentist only when required. 30% of the parents reported lack of awareness as the greatest barrier faced by them in rendering dental care for their children.

There was a generalised lack of information regarding oral health and treatment needs seen among the parents of the children with special health care needs. The level of knowledge appeared to be low and the parents were not aware of the unique problems faced by these children.

Keywords : children, special health care needs, attitudes, treatment needs.

### Introduction :

Children and adolescents with disabilities appear to have poorer oral health than their non-disabled counterparts. Variable access to dental care, inadequate oral hygiene and disability related factor may account for the difference<sup>1</sup>. Studies have shown that children with disabilities are more likely to have unmet dental need than any other medical need.<sup>2,3,4</sup>

Oral health of the children with disabilities are greatly influenced by the severity of impairment and their living

conditions. Since these children have greater limitation in performing oral hygiene measures due to their potential motor, sensory, intellectual disabilities, they depend on their parents and care

givers for general care including oral hygiene.<sup>5,6,7</sup> But, many of the parents /care givers did not have the required knowledge or values to recognize the importance of oral hygiene and do not themselves practice appropriate oral hygiene and choose proper diet.<sup>8</sup> Hence the study was done to determine the parental views, attitudes and perceptions of oral health care and treatment requirements among children with disabilities attending various special schools in Mangalore.

### Materials and Methods :

The views and attitudes of the parents were evaluated to signify factors related to barriers in providing dental care and to investigate parent's expectations and their knowledge regarding dental health based on Questionnaire method. The ethical clearance was obtained from the ethical committee of A.B Shetty Memorial Institute of Dental Sciences, Mangalore, Karnataka.

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Figure 1 : Parents considering dental treatment important as medical treatment among various groups.

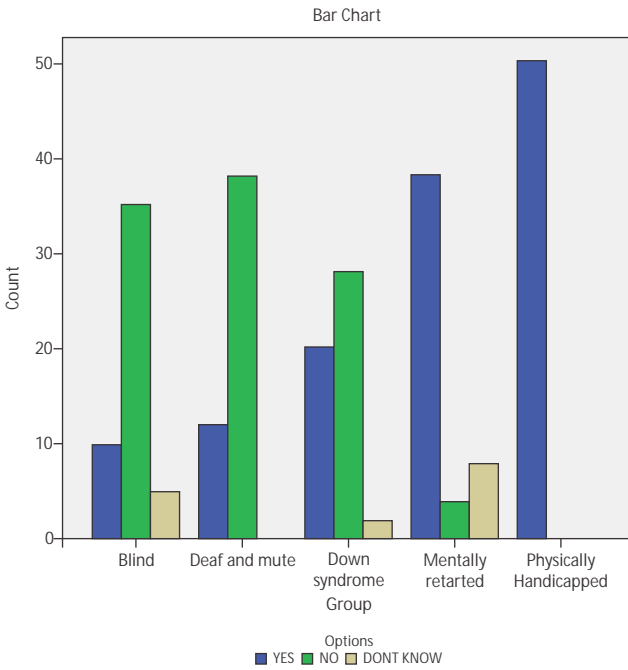


Figure 3 : Dental check-up at various intervals among the various groups

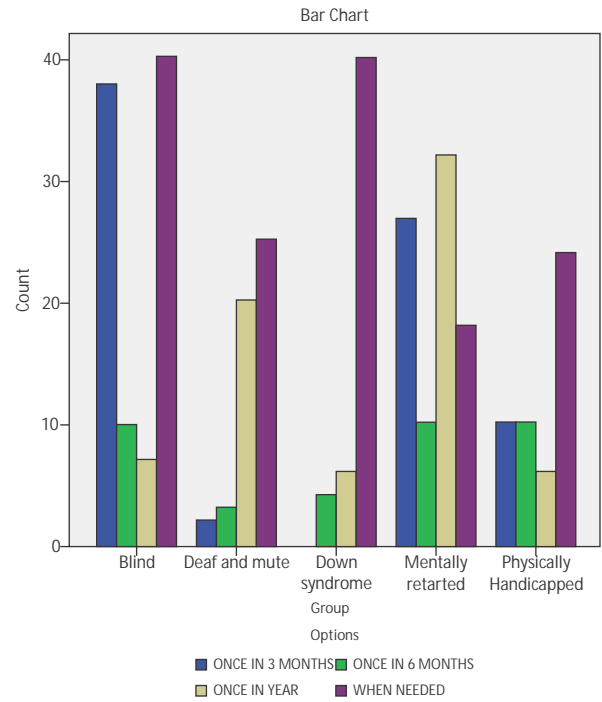


Figure 2 : Preference of the parents for dental treatment among various groups

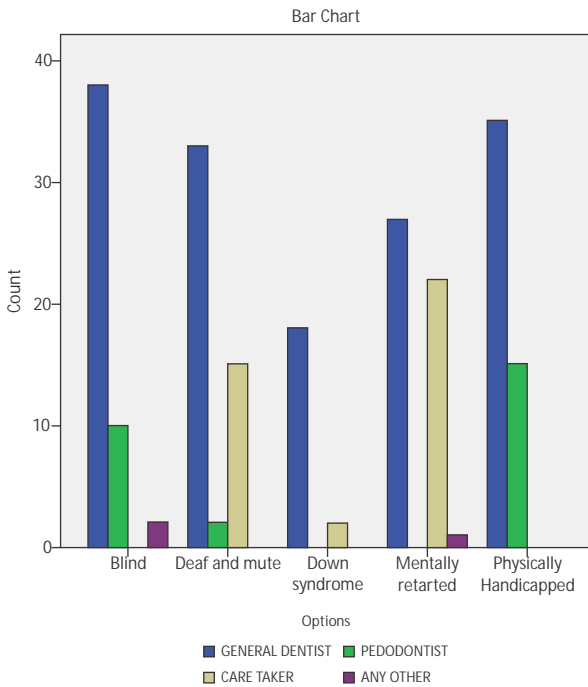
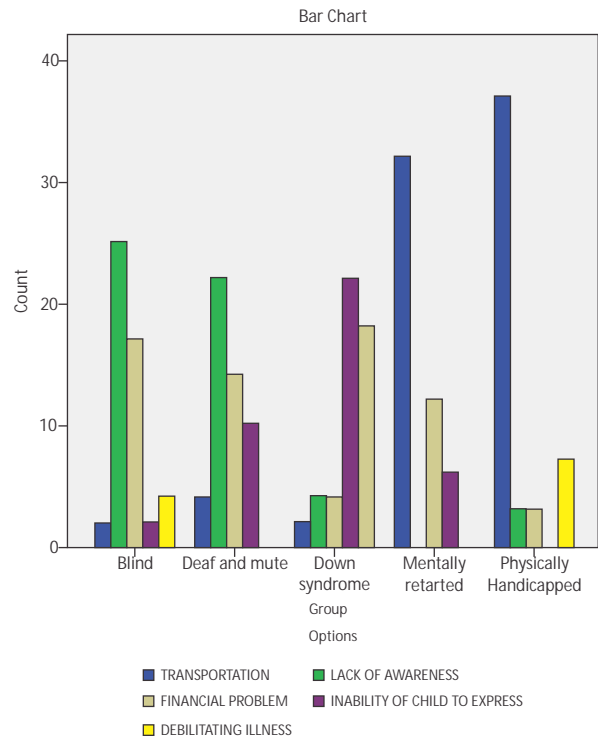


Figure 4: Obstacles faced by the parents in providing dental care



Sample design and selection

The study was conducted in 3 special schools in Mangalore among the parents of 250 children with disabilities (50-mentally retarded children, 50-deaf and mute children, 50-autistic children, 50-blind children, 50-physically handicapped children). Letters explaining the purpose of the study and inviting the parents to be interviewed were sent to the teachers of the special school along with a consent form.

Data collection

All the parents were interviewed at the school, based on a 25 item pre structured questionnaire and the answers

were recorded. It was made available in English and Kannada. Parents were encouraged to speak freely about their feelings, concerns, and beliefs regarding oral health and treatment needs of their children.

The questions included sections covering the following areas:

- Educational status of parents
- Concerns and awareness regarding oral health and treatment needs
- Access to dental services

Statistical Analysis :

Data collected were evaluated by Chi-square tests.

Table 1: Percent of parents considering dental treatment important as medical treatment among various groups.

			options			Total
			YES	NO	DON'T KNOW	
Group	Blind	Count	10	35	5	50
		% within group	20.0%	70.0%	10.0%	100.0%
	Deaf and mute	Count	12	38	0	50
		% within group	24.0%	76.0%	0.0%	100.0%
	Down syndrome	Count	20	28	2	50
		% within group	40.0%	56.0%	4.0%	100.0%
	Mentally retarded	Count	38	4	8	50
		% within group	76.0%	8.0%	16.0%	100.0%
	Physically Handicapped	Count	50	0	0	50
		% within group	100.0%	0.0%	0.0%	100.0%
Total	Count	130	105	15	250	
	% within group	52.0%	42.0%	6.0%	100.0%	

Table 2: Statistical analysis of parents considering dental treatment important as medical treatment among various groups

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	122.652	8	<0.001
N of Valid Cases	250		

Table 3: Percent of various preferences of the parents for dental treatment among the various groups.

			Options				Total
			GENERAL DENTIST	PEDODONTIST	CARE TAKER	ANY OTHER	
Group	Blind	Count	38	10	0	2	50
		% within group	76.0%	20.0%	0.0%	4.0%	100.0%
	Deaf and mute	Count	33	2	15	0	50
		% within group	66.0%	4.0%	30.0%	0.0%	100.0%
	Down syndrome	Count	18	0	2	0	20
		% within group	90.0%	0.0%	10.0%	0.0%	100.0%
	Mentally retarded	Count	27	0	22	1	50
		% within group	54.0%	0.0%	44.0%	2.0%	100.0%
	Physically Handicapped	Count	35	15	0	0	50
		% within group	70.0%	30.0%	0.0%	0.0%	100.0%
Total	Count	151	27	39	3	220	
	% within group	68.6%	12.3%	17.7%	1.4%	100.0%	

Table 4 : Statistical analysis of various preferences of the parents for dental treatment among the various groups.

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	76.416	12	<0.001
N of Valid Cases	220		

Table 5 : Percent of parents taking their children for dental check-up at various intervals.

			Options				Total
			ONCE IN 3 MONTHS	ONCE IN 6 MONTHS	ONCE IN YEAR	WHEN NEEDED	
Group	Blind	Count	0	3	7	40	50
		% within group	0.0%	6.0%	14.0%	80.0%	100.0%
	Deaf and mute	Count	2	3	20	25	50
		% within group	4.0%	6.0%	40.0%	50.0%	100.0%
	Down syndrome	Count	0	4	6	40	50
		% within group	0.0%	8.0%	12.0%	80.0%	100.0%
	Mentally retarded	Count	0	10	32	18	60
		% within group	0.0%	16.7%	53.3%	30.0%	100.0%
	Physically Handicapped	Count	10	10	6	24	50
		% within group	20.0%	20.0%	12.0%	48.0%	100.0%
Total	Count	12	30	71	147	260	
	% within group	4.6%	11.5%	27.3%	56.5%	100.0%	

Table 6 : Statistical analysis of parents taking their children for dental check-up at various intervals.

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	88.626	12	<0.001
N of Valid Cases	260		

Table 7 : Percent of various obstacles faced by the parents in providing dental care for the children.

			Options					Total
			TRANSPORTATION	LACK OF AWARENESS	FINANCIAL PROBLEM	INABILITY OF CHILD TO EXPRESS	DEBILITATING ILLNESS	
Group	Blind	Count	2	25	17	2	4	50
		% within group	4.0%	50.0%	34.0%	4.0%	8.0%	100.0%
	Deaf and mute	Count	4	22	14	10	0	50
		% within group	8.0%	44.0%	28.0%	20.0%	0.0%	100.0%
	Down syndrome	Count	2	4	4	22	18	50
		% within group	4.0%	8.0%	8.0%	44.0%	36.0%	100.0%
	Mentally retarded	Count	32	0	12	6	0	50
		% within group	64.0%	0.0%	24.0%	12.0%	0.0%	100.0%
	Physically Handicapped	Count	37	3	3	0	7	50
		% within group	74.0%	6.0%	6.0%	0.0%	14.0%	100.0%
Total	Count	77	54	50	40	29	250	
	% within group	30.8%	21.6%	20.0%	16.0%	11.6%	100.0%	

Table 8 : Statistical analysis of various obstacles faced by the parents in providing dental care for the children.

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	222.417	16	<0.001
N of Valid Cases	250		

## Results :

In the survey, the educational status of the parents was determined. We observed that 42-48% of the parents were graduates and 6- 10 % had completed their post-graduation. 52 % of the parents had school education of class 10 and below.

52 % of the parents considered dental treatment as important as medical treatment while 42 % of the parents did not consider dental treatment as important as medical treatment (Table 1, Figure 1).

69% of the parents preferred General dentist for dental treatment of their children while 12.3 % of the parents had consulted Pedodontist for dental treatment (Table 3, Figure 2).

57 % of the parents interviewed visited dentist only when required or in case of absolute necessity and 27.3 % visited dentist once in a year for check-up and only 11% followed a regular dental check up every 6 months (Table 5, Figure 3).

56% of the parents reported that their children required assistance in brushing and 37 % of the children brushed using tooth brush and tooth paste. 80 % of the children brushed once daily, only 15 % performed twice daily. Powered tooth brush was used by 1.6 % of the children.

In the study we observed that 56.4% of the children were cooperative during brushing .18.9% were uncooperative with assisted tooth brushing, while 10% were apprehensive and 14.3% showed temper tantrums during brushing as reported by the parents.

56 % of the parents felt that their children did not have a good arrangement of teeth while 35 % felt they had a good arrangement of teeth. When parents were asked about their diet preference it was noticed that 20 % of the children preferred junk food including sweet confectionaries and 52 % of the children were on normal diet. Parents revealed that children had difficulty in chewing on hard foods, hence they preferred soft diet.

The obstacles faced by them in providing dental care included lack of awareness, transportation and financial

difficulties, debilitating illness and inability of the child to express himself/herself regarding oral health problems. Most of them said that they were not aware of various oral health problems and treatment needs for their children (Table 7, Figure 4).

The attitudes of the parents with regard to oral health care and treatment needs were evaluated based on a 5 point scale.

36 % of the parents agree that their child needs special dental care while 11 % disagree and 8 % strongly disagrees.

30 % of the parents strongly agree that primary teeth have to be treated while 11 % of the parents disagree and 8.4 % strongly disagree.

34 % of the parents agrees to the statement that healthy set of teeth affects the child's lifestyle while 11.2 % disagrees and 6.4 % strongly disagrees to this statement.

## Discussion :

Children with disabilities have the right to equal standards of health and health care as the general population.<sup>9</sup> However there is evidence that they experience poorer oral health, have a greater unmet oral health need and less access to screening services than the general public.<sup>10</sup> 'Felt stigma', the shame of having a child with disabilities and the fear of being discriminated against, has been shown to be more disruptive to children's lives and well-being than the actual discrimination experienced.<sup>11</sup> Parents of children with disabilities can be isolated, not receiving the support and information necessary to enable them to access oral health care.<sup>12</sup>

In India there has been a shortfall of government policies, funds to improve the general and oral health of children with various disabilities. It was also seen that there was a lack of oral health education programs implemented in various special school centres.

This paper reports the findings of the views, experiences, attitudes and knowledge of parents regarding oral health care and treatment needs of children with disabilities.

All the parents interviewed, were from a variety of background and had a spectrum of oral health beliefs and different perceptions of oral health care. 52 % of the parents did not attend high school and there was generalised lack of information about oral health and treatment requirements. Tsami et al.<sup>13</sup> reported that education status of the parents has a positive effect on the dental care of persons with special health care needs.

The British Society for disability and oral health<sup>10</sup> has put forward that oral health may be a low priority in the context of other social and medical challenges and in our survey, 31 % of the parents agreed that their children require special dental care and expressed concerns towards dental treatment and medical treatment of the child. However, most of the parents prioritized medical treatment over dental treatment and hence this showed ignorance and preoccupation of the parents with other demanding aspects of health care needs in these children.

There was a large variation in opinions among the parents regarding preference for dental treatment among the children. It was interesting to note that 60 % of the parents had no idea about various dental specialities pertaining to children's treatment need and requirements. Parents preferred visiting dentist only when there is necessity and most of them had not experienced professional dental care / consultation till date. This may be due to considerable lack of information given to parents regarding oral health instructions from other health and social care staffs. Most of them have not received or attended oral health education programs.

In the survey, parents revealed their concerns about the behavioural problems in their children. They felt that this would limit dental treatment and would be unmanageable during treatment. Hence they preferred visiting dentist only when required.

Studies have shown that differently abled children face more complex challenges to oral health, and they may not be able to adequately apply techniques to control plaque. Hence oral hygiene care becomes the responsibility of

another person, generally parent or care givers, and they are emotionally or intellectually incapable of dealing with health problems among the children.<sup>14</sup> More than 50 % of the children required assistance in brushing and depend on parents and care givers for general and dental care. When interviewed, parents reported that 56.4% children were cooperative, 18.9 % were uncooperative and few were either apprehensive or showed temper tantrums during assisted brushing. We realised that oral health literacy were poor among the parents and they were not aware of oral hygiene practices and brushing techniques. Brushing was inadequate and 80 % of the children performed brushing once daily.

Greatest obstacle faced by most of the parents in rendering dental services to their children was lack of awareness which was evident from the study. The results of the study unveil the lack of knowledge and variant beliefs and perceptions of the parents towards oral health and unmet dental needs. Transportation and financial problems were also barriers faced by the parents in providing dental care.

The study revealed that most of the parents did not know the importance of oral health and the unique problems faced by the children with disabilities. Parents also reported their children have never received professional dental care. This also provides opportunity for the dental professional to collaborate actively with other health and social care professionals to implement screening programs to identify children who need immediate attention and provide them with fair and convenient care to a consistently high standard.

Routine check-up and health education programs can be implemented on a regular basis to educate care givers/ teachers at special school centres. Hence, teachers, and care givers can conduct seminars on health education to the parents of children with disabilities.

Conclusion :

The views and attitudes of the parents regarding oral health and treatment needs were influenced by a number of factors. The level of knowledge regarding oral health

appeared to be low and parents were not aware of the unique problems faced by these children. It was also noted that the parents had not received / attended programs on oral health. One of greatest obstacle faced by the parents in providing dental care included lack of awareness, financial and transportation facilities.

#### Recommendation

- Routine dental check-up and implementation of oral health education program at special school centres/ institutions to upgrade and create alertness regarding oral hygiene measures among the parents/care givers of

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differently abled children.

- To emphasize the need for preventive dental care which needs to be started at an early age to aim at primary dentition and later for the permanent dentition.
- Regular interval screening programs to evaluate oral health and treatment needs of differently abled children.

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