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ATTITUDE OF DENTISTS TOWARDS PROVIDING ORAL HEALTH CARE TO PATIENTS WITH SPECIAL HEALTH CARE NEEDS (PSHCN) IN MANGALORE, INDIA

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ABSTRACT

Aims: The objectives of this study were to investigate the attitudes, practices and demographics of dentists towards providing oral health care to Patients with Special Health Care Needs (PSHCN). **Settings and Design:** A cross-sectional questionnaire study was conducted to assess the attitude of dentists towards providing oral health care to PSHCN in Mangalore. **Methods and Material:** The study population consisted of 264 dentists who filled a self- administered 12- item questionnaire, representing a 73.7% response rate. The questionnaire was validated and the reliability of the questionnaire was assessed. **Results:** Out of the 264 dentist respondents, 17.4% were General Practitioners and 82.6% held a Master's degree in Dentistry. 170 dentists (64.4%) treated patients with special health care needs whereas 94 dentists (35.6%) did not. Facilities at the dental practices to accommodate these patients were limited. 60.2% dentists think that the present dental academic course does not prepare the dentist to treat patients with special health care needs. 89% and 96% of dentist respondents thought that CDE and hands on training respectively would improve the practitioner's ability to care for these individuals. **Conclusion:** The data collected indicates that majority of dentists surveyed in Mangalore City treat PSHCN. This study highlights the importance of identification of factors associated with dentists' willingness to see PSHCN and to overcome barriers in utilization of dental services by PSHCN.

KEYWORDS: Attitude; special needs; dentists; oral health; dental care; questionnaire

INTRODUCTION

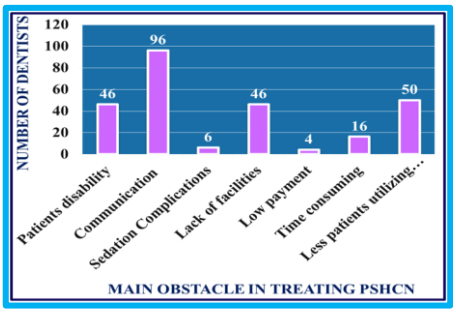
The American Academy of Pediatric Dentistry defines special health care needs as those which include any physical, developmental, mental, sensory, behavioral, cognitive, or emotional impairment or limiting condition that requires medical management, health care intervention, and/or use of specialized services or programs. The condition may be congenital, developmental, or acquired through disease, trauma, or environmental cause and may impose limitations in performing daily self-maintenance activities or substantial limitations in a major life activity. Health care for individuals with special needs requires specialized knowledge acquired by additional training, as well as increased awareness and attention, adaptation, and accommodative measures beyond what are considered routine.[1] Special needs consist of a wide array of diagnosis like autism, attention deficit hyperactivity disorder, intellectual disability (ID), epilepsy, migraines, traumatic brain injury (TBI), blood problems, cystic fibrosis, cerebral palsy, muscular dystrophy, Down syndrome, arthritis, physical handicap, vision, speech and hearing problems etc. Census revealed that over 26 million people in India are suffering from one or other kind of disability.[2] Patients with special health care needs (PSHCN) are among the most underserved in our society; they have more dental disease and difficulty in obtaining dental care than any other segment of the population.[3] Individuals with Special Health Care Needs may be at an increased

Table 1: Distribution of dentists according to speciality based on treating patients with special health care needs

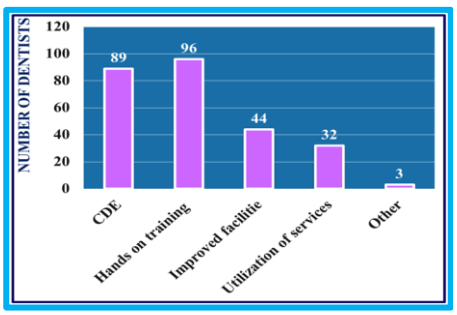
SSPECIALTY	TREATING PATIENTS WITH SPECIAL HEALTH CARE NEEDS		TOTAL N (100%)
	YES	NO	
GENERAL PRACTITIONER	22(47.8%)	24(52.2%)	46
ORAL SURGEON	19(95%)	1(5%)	20
PROSTHODONTIST	22(62.9%)	13(37.1%)	35
PUBLIC HEALTH DENTIST	8(66.7%)	4(33.3%)	12
OMDR	13(100%)	0	13
PEADODONTIST	28(71.8%)	11(28.2%)	39
ORTHODONTIST	29(69%)	13(31%)	42
PERIODONTIST	10(41.7%)	14(58.3%)	24
ENDODONTIST	10(41.7%)	14(58.3%)	24
ORAL PATHOLOGIST	7(77.8%)	2(22.2%)	9
TOTAL	**170(64.4%)**	**94(35.6%)**	**264**

TABLE 2: Distribution of dentists according to the techniques used to manage patients with special health care needs (PSHCN)

SR NO	TECHNIQUES USED TO MANAGE PSHCN	NUMBER OF DENTISTS (PERCENTAGE)
1.	General Anesthesia-	27 (15.9%)
2.	Tell Show Do	121 (71.2%)
3.	Positive Reinforcement	90 (52.9%)
4.	Immobilization	23 (13.5%)
5.	Other [Mouth Prop]	1 (0.6%)



Graph 1: Distribution of dentists according to their main obstacle in treating PSHCN



Graph 2: distribution of dentists according to their response to the way to improve a practitioner's ability to treat PSHCN

risk for oral diseases throughout their lifetime.[4-6] A literature search revealed that dentists traditionally have been reported as being reluctant to provide dental services to people with disabilities and also that significantly inadequate level of comprehensive dental services are provided to these patients.[7-12] Improving attitude towards access, treatment, and quality of care of PSHCN is a critical public health issue for the profession; that requires joint efforts by dentists and the community. Relatively few studies have revealed the attitudes and practices of dentists regarding management of PSHCN and on their views to improve provision of oral healthcare to this population. Hence this survey was planned to assess the attitudes, practices and demographics of dentists in Mangalore city with regards to management of PSHCN and to identify the barriers in treating this population. Identification of such barriers can be the first step in addressing the oral health needs of these patients and providing them the utmost oral health care.

MATERIALS AND METHODS

A cross-sectional descriptive study was conducted among dentists practicing in Mangalore, Karnataka to assess their attitude towards providing oral health care to PSHCN. A self-administered 12- item questionnaire and cover

letter were designed for the study. The ethical clearance for the study was obtained. Written informed consent was obtained from the participating dentists. The questionnaire was validated and the reliability of the questionnaire was assessed by two stage pilot study of 20 dentists. All consenting dentists present in Mangalore city during the time of the study and practicing clinical dentistry were included in the study. Demographic details like name, age, and address were not recorded to ensure anonymity. The survey asked for demographic information, such as the: gender, degree/qualification, speciality of the dentist, number of years practicing dentistry and type of dental practice.Of the 358 registered dentists only 264 dentists could be reached and consented to participate in the study. Hence the final study population consisted of 264 dentists, representing a 73.7% response rate. The questionnaire was adapted and modified from a similar survey conducted in Nebraska general dentists.[13] It consisted questions like Do you treat PSHCN in your clinic, how many of your patients are PSHCN, do you treat PSHCN of the age group below 18 years, do you refer the PSHCN that come to your clinic, what facilities do you have at your clinic, what type of dental treatments do you offer the PSHCN visiting your clinic, behavior management techniques used in your clinic while dealing with PSHCN, do you think the present dental academic course prepares the dentist to treat PSHCN, have you attended any CDE or hands on training in treating PSHCN, what do you think is the main obstacle in treating PSHCN, and what according to you would improve the practitioner's ability to care for PSHCN. Descriptive statistics were used for the analysis of the data obtained. Chi-square test was used to find the association between degree of the dentist, speciality of dentist and number of years of dental practice with treatment of PSHCN. A P value of <0.05 was considered significant. Appropriate statistic tests were applied using SPSS version 13.

RESULTS

Of the 264 dentist respondents 62.1% were male and 37.9% were female. Among the 264 dentists, 17.4% were General Practitioners and 82.6% had a MDS degree. There was significant correlation between degree and percentage of PSHCN treated by the dentist (P=0.014). When asked about the type of dental practice, most respondents 117 dentists had a Solo Practice, while 103 dentists were a part of a Group Practice and 44 dentists had an institution based dental practice. Maximum respondents were general practitioners followed by orthodontists, pedodontists, prosthodontists, periodontists, endodontists, oral surgeons, oral medicine, diagnosis and radiology, public health dentists and oral pathologist. Distribution of study population on the basis of speciality is depicted in Table 1. There was a highly significant correlation between the type of speciality and treatment of PSHCN by the dentist (P=0.0005). On the basis of the years of experience in dental practice, the majority of the dental population (42.5%) had less than 5 years of experience, 82 dentists (31%) had 6-10 years of experience, 50 dentists (18.94%) had 11-15 years of experience, 17 (6.4%) dentists with 16-20 years and only 4 dentists with an experience of more than 20 years of dental practice. Chi-square test revealed a significant relationship between years of experience and percentage of PSHCN treated by the dentist (P=0.015). Out of the 264 dentist respondents, 170 dentists (64.4%) treated patients with special health care needs whereas 94 dentists (35.6%) did not. Of the 170 dentists, 151 dentists (88.8%) treated PSHCN below 18 years, while only 19 dentists (11.9%) did not. Most practitioners (71.76%) who responded to this survey reported that: less than 5% of their patients' were PSHCN. 107 dentists (62.9%) referred their PSHCN as per requirements to pedodontist, pediatrician, craniofacial unit etc. The dentists were asked about the facilities at their dental clinics to effectively treat and manage PSHCN. 56 dentists (32.9%) had none of the facilities that are essential to accommodate PSHCN at their clinic. While 66 dentists (38.8%) had provisions to move the patient from wheel chair to dental chair and 29 dentists (17.06%) had general anaesthesia facilities at their clinic. 87 dentists (51.2%) had lifts to their clinic when the clinic was not located on the ground floor. 19 dentists (12%) used immobilization devices at their clinic. Distribution of dentists according to the techniques used to manage patients with special health care needs (PSHCN) showed that maximum dentists used the TELL SHOW DO technique to manage these patients (Table 2). When asked if the present dental curriculum

prepares the dentists to treat PSHCN, 159 dentists (60%) answered no while 105 dentists (40%) answered yes. The majority of dentists (80%) reported to never have attended any CDE or hands on training on the topic of management of PSHCN. The dentists felt that the main obstacle in treating patients with special health care needs were barriers like communication difficulties, less number of patients utilizing dental services, level of patients disability, lack of necessary equipment, time consuming, complications of sedation and concern with low payment (Graph 1). They reported that conducting CDE and hands on training on this topic along with improved facilities and infrastructure to treat these patients will help overcome the barriers in treating these patients (Graph 2).

DISCUSSION

This study reports the findings of a questionnaire-based survey of dentists regarding their attitude towards treatment of PSHCN. According to this study 64.4% of dentists treated patients with special health care needs (PSHCN). Baird WO *et al*.,[14] investigated the availability of facilities for physically disabled people at dental practices (n=123) in Leicestershire and found that the facilities for this population was poor and lacking which was also found in this study. Salama FS *et al*.,[13] conducted a similar survey of Nebraska General Dentists (n=371). The results of this survey stated that nearly 97% of the dentists treated PSHCN as compared to the 64.4% in this study. Another study[15] had similar findings to the present study, in which 66% Irish dentists claimed to treat these patients. While the study conducted in Ontario reported a large percentage (88.9%) of general dentists who reported treating PSHCN.[16] Most general dentists did not think their dental education had prepared them to treat PSHCN which was also reported in a study conducted by Dao LP *et al*.[17] The major barrier in treating patients with special health care needs according to the dentists was communication difficulties, while only a few (1.5%) found concern with low payments an obstacle. This is contradictory to the findings of Milano M and Seybold SV (2002)[18] who reported insufficient financial reimbursement as a major reason cited for not providing dental services to more of these patients. This study found significant correlation between degree of the dentist, speciality of dentist and number of years of dental practice with treatment of PSHCN while Salama FS *et al*.,[13] found no statistically significant relationship among these parameters. The dentists reported that conducting CDE and hands on training on management of PSHCN will help overcome the barriers faced by dentists in treating these patients. Similar finding was also reported in other studies conducted among dentists.[12-16] The limitation of this study was that the data collected in this study was subject to response bias and recall bias, also the variation in the speciality and years of experience of the participants. Also this study included 44 dentists (16.7%) who had an institution based dental practice, which might have resulted in higher than actual reporting for facilities in dental practices to accommodate PSHCN. Inspite of the limitations this study, it was successful in exploring the barriers and necessities to improve the practitioners' ability to care for PSCHN. Further research can be carried out evaluating the change in perceptions, attitudes, and behaviours of dentists after receiving education and training for treating these patients. Incorporation of evidence-based education and hands on training programmes for management of PSHCN from undergraduate training ought to be established.

CONCLUSION

If inequalities in provision of oral health care among the PSHCN are to be successfully reduced steps must be taken to make dental practices more accessible with necessary facilities, and to increase the knowledge of the dentist regarding management of PSHCN by conducting CDE and hands on training with a focus on community-based prevention.

CONFLICT OF INTEREST & SOURCE OF FUNDING

The author declares that there is no source of funding and there is no conflict of interest among all authors.

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