

Original Research

Assessment of knowledge and attitudes among Indian dental students of subjects with special health care needs

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ABSTRACT:

Background: Special health care needs (SHCN) 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 present study was conducted to assess knowledge and attitudes among Indian dental students of subjects with special health care needs. **Materials & Methods:** 450 undergraduate dental students of both genders were provided with a questionnaire. It consisted of three sections. The first section focused on the students' background such as age, gender, and marital status, and professional year, the next part was based on student's knowledge regarding patients with special needs and SCD. Third section assessed the students' general attitude toward patients with special needs. The items were taken from the previously tested dental student attitude toward the handicapped scale (DSATHS), wherein "handicapped" was reinstated as "special care patients" and "handicapping conditions" with "special needs." **Results:** Out of 450 subjects, males were 180 and female were 270. Response for special care dentistry is a specialization was given by 54%, 23% and 23%, special precaution needs to be taken was 95%, 5% and 0, curriculum cover this topic was 60%, 26% and 14%, technique to deal such patients is taught practically was 35%, 10% and 55% and are you aware of special chair for these patients was 24%, 20% and 56% as yes, don not know and no respectively. Response regarding parking space was yes, don not know and no given by 40%, 20% and 40%, for wheel chair was given by 34%, 15% and 51%, for wheel chair lift was given by 80%, 5% and 15%, separate counter and OPD by 25%, 30% and 45% and for sedation and anaesthesia by 30%, 20% and 50% respectively. **Conclusion:** A positive attitude and knowledge levels was seen among dental students toward special care patients.

Key words: attitude, knowledge, Special health care needs

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INTRODUCTION

Special health care needs (SHCN) 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.^{1,2} Special care dentistry (SCD) deals with the provision of oral care for individuals with impairment or disability, such as physical, sensory, intellectual, mental, medical, emotional, social, or any

combination. It mostly refers to patients with mental or developmental disabilities.³

In India, around 6.6 million (24.5%) children are having SHCN. Individuals with SHCN have a higher risk for oral diseases.⁴ Broadly, SCD includes individuals: (a) where an impairment of oral structure or function leads to disability, (b) with conditions that directly or indirectly influence oral health, and (c) who are affected by "environmental factors" that impact oral status. Difficulties faced in accessing dental care SHCN were untrained dentists, inadequate

reimbursement, patient's behavioral problems, etc. Although various studies have been reported, there is not of much information regarding the oral healthcare access among CSHCN in India.⁵

It was found that there are over 26 million people with disability in India, accounting for 2% of the overall country. The recent evidence confirms poor oral health in this group of population and encounters problems in availing dental treatment due to direct and indirect effects of their disabilities.⁶ This necessitates oral health professionals to be compassionate, patient, and empathetic individuals with a constant desire to be successful in treating this population.⁷ The present study was conducted to assess knowledge and attitudes among Indian dental students of subjects with special health care needs.

MATERIALS & METHODS

The present study comprised of 450 undergraduate dental students of both genders. All were selected after they agreed to participate in the study.

RESULTS

Table I Distribution of subjects

Total- 450		
Gender	Male	Female
Number	180	270

Table I shows that out of 450 subjects, males were 180 and female were 270.

Table II Knowledge responses concerning special care dentistry

Questionnaire	Yes	Do not Know	No	P value
Special care dentistry is a specialization	54%	23%	23%	0.05
Special precaution needs to be taken	95%	5%	0	0.01
Curriculum cover this topic	60%	26%	14%	0.03
Technique to deal such patients is taught practically	35%	10%	55%	0.04
Are you aware of special chair for these patients	24%	20%	56	0.05

Table II, graph I shows that response for special care dentistry is a specialization was given by 54%, 23% and 23%, special precaution needs to be taken was 95%, 5% and 0, curriculum cover this topic was 60%, 26% and 14%, technique to deal such patients is taught practically was 35%, 10% and 55% and are you aware of special chair for these patients was 24%, 20% and 56% as yes, don not know and no respectively. The difference was significant (P< 0.05).

Graph I Knowledge responses concerning special care dentistry

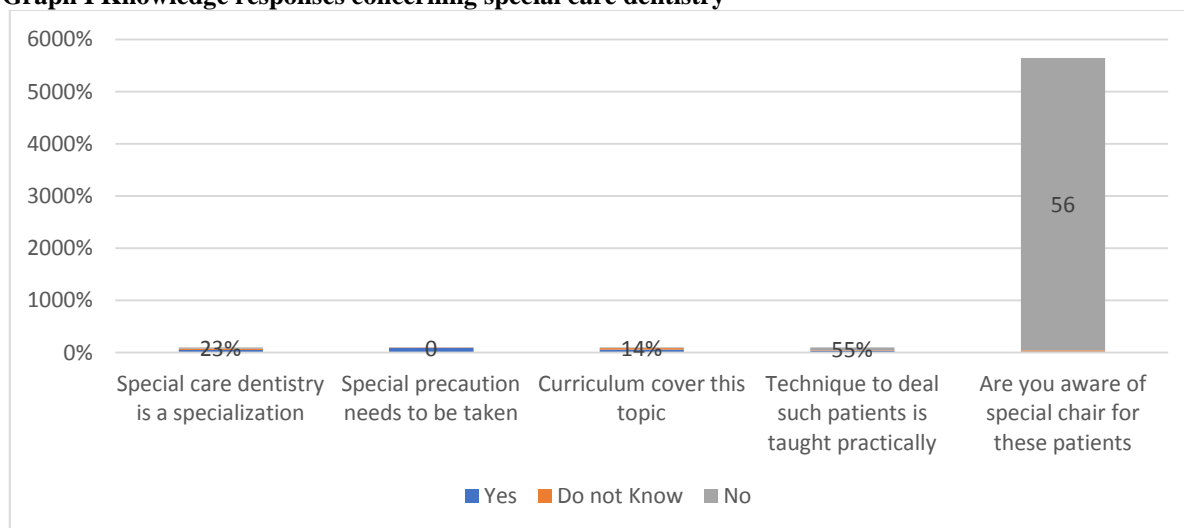
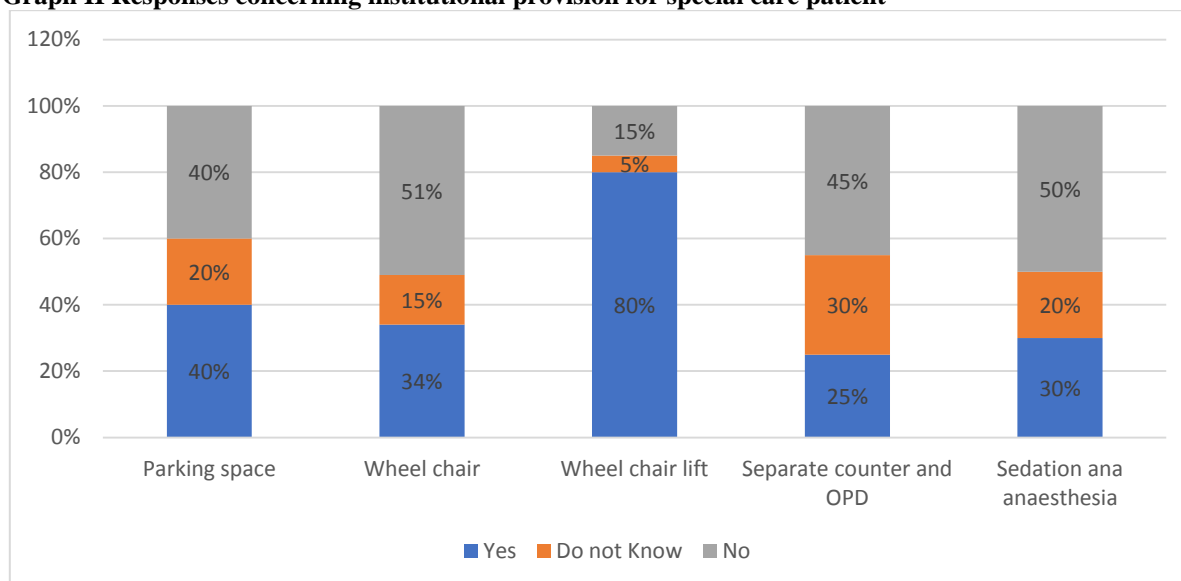


Table III Responses concerning institutional provision for special care patient

Questionnaire	Yes	Do not Know	No	P value
Parking space	40%	20%	40%	0.12
Wheel chair	34%	15%	51%	0.45
Wheel chair lift	80%	5%	15%	0.01
Separate counter and OPD	25%	30%	45%	0.15
Sedation and anaesthesia	30%	20%	50%	0.17

Table III, graph II shows that response regarding parking space was yes, don not know and no given by 40%, 20% and 40%, for wheel chair was given by 34%, 15% and 51%, for wheel chair lift was given by 80%, 5% and 15%, separate counter and OPD by 25%, 30% and 45% and for sedation and anaesthesia by 30%, 20% and 50% respectively ($P < 0.05$).

Graph II Responses concerning institutional provision for special care patient

DISCUSSION

Oral health is a primary division of overall health. As the oral cavity is the doorway for the human being body, any damage to oral health can be evident not only in the oral cavity but also in other parts of the body.⁸ As prevention is better than cure, preventive procedures are being executed within various divisions of society. According to a report of the World Oral health Organization (WHO), Global Data Bank, over 15% of the nations in the globe confirm an average of 4.5 decayed, missing, or filled teeth for each child up to 12 years old.^{9,10} To manage the growing load of oral diseases, some developing countries freshly introduced school-based oral health education and prevention programs which intend to improve oral health behavior and status of the child population.¹¹ The present study was conducted to assess knowledge and attitudes among Indian dental students of subjects with special health care needs.

In present study, out of 450 subjects, males were 180 and female were 270. Kapoor et al¹² in their cross-sectional survey was carried out in among 117 students of a tertiary care government dental hospital assessed knowledge, attitude, and institutional provisions pertaining to special care patients. The study sample included postgraduate students (28.3%), undergraduate students (47.8%), and interns (23.9%).

All of them felt that some special precautions are to be taken while treating a patient with special needs, whereas only half considered SCD as a different specialty. The majority (60%) were unaware regarding the availability of any special equipment for the disabled. However, they had some idea regarding the institutional provisions for special care patients.

We found that response for special care dentistry is a specialization was given by 54%, 23% and 23%, special precaution needs to be taken was 95%, 5% and 0, curriculum cover this topic was 60%, 26% and 14%, technique to deal such patients is taught practically was 35%, 10% and 55% and are you aware of special chair for these patients was 24%, 20% and 56% as yes, don not know and no respectively. Rajan et al¹³ investigated knowledge, attitude, and practices of dental practitioners in Thiruvananthapuram, India regarding dental management of children with special healthcare needs (CSHCN). A structured questionnaire was given to 400 dental practitioners. The response rate was 94%. An estimated 73.8% treated children, 66.5% showed willingness to treat CSHCN, and 70.8% had attended CSHCN in their practice. A partial knowledge in dental management of CSHCN was reported by 67.5%. An estimated 36% had undergone training in special care dentistry (SCD) but 45% were not sure whether they can provide

dental care with the graduate-level training. Knowledge regarding guidelines for CSHCN was known to 19.5% and that regarding timing of the first dental visit was known to 69% of participants. Tooth extraction (43.1%) and a subsequent caries treatment (39.1%) were the most frequently done procedures, and nonpharmacological management (46.5%) was the mostly used behavior management technique. Among the barriers faced by dentists in treating CSHCN, time consumption (55.6%) and lack of training (55.1%) were commonly enlisted. Further training and improved facilities would motivate the respondents in providing better care to CSHCN.

We found that response regarding parking space was yes, don't know and no given by 40%, 20% and 40%, for wheel chair was given by 34%, 15% and 51%, for wheel chair lift was given by 80%, 5% and 15%, separate counter and OPD by 25%, 30% and 45% and for sedation and anaesthesia by 30%, 20% and 50% respectively. Madasari et al¹⁴ conducted a cross-sectional questionnaire, translated and cross adapted to Indonesian, was distributed online through Whatsapp to dentists registered in Jakarta late 2019. A total of 250 dentists participated in this study, of them 173 general practitioners and 77 specialist dentists. Most respondents reported that they did not have SCD component during undergraduate dental school and did not provide treatment to patients with special needs in their clinical practice. Most respondents have poor perception of SCD, however, most of the respondents showed motivation and interest towards SCD training. Dentists in Jakarta involved in this study had poor perception of SCD. More efforts should be performed to improve SCD education and awareness.

CONCLUSION

Authors found that positive attitude and knowledge levels was seen among dental students toward special care patients.

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