

Suyog Chandrashekhhar Savant*, Sahana Hegde**, Ravi V. Shirahatti***, Deepti Agarwal****

ABSTRACT

Background: Mumbai consists of culturally diverse people whose views and requirements of the dental treatment vary widely and can be influenced by cultural factors.

The objective: Hence a need was felt to know whether the dentists have knowledge, attitude and appreciate the importance of providing culturally sensitive oral health care to their patients while making oral health care provision.

Basic research design: A cross sectional study design with a self administered structured questionnaire was used which had questions on to knowledge, attitude and practice. 420 dental participants from Mumbai responded to the questionnaire.

Results: It was found that 45% of the participants could not define culturally sensitive oral health care provision. However, more than 95% claimed to provide culturally sensitive health care provision.

Conclusion: The knowledge, attitude and practices of the dental practitioners was found to be poor although they gave importance to cultural competency.

KEYWORDS: Cultural competency, Cultural sensitivity, Oral health care.

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INTRODUCTION:

Mumbai, is the most populous city in India and is the second most populous city in the world. According to extrapolations carried out by the World Gazetteer in 2010 census, the population of Mumbai was 11,914,398 with diverse culture loving people, living in either fully integrated or multicultural societies. The number of migrants to Mumbai from outside Maharashtra during the 1991–2001 decade was 1.12 million, which amounted to 54.8% of the net addition to the population of Mumbai. Sixteen major languages of India are spoken here, the official language being Marathi. Other languages are Hindi, Gujarati and English. The religions represented in Mumbai include Hindus (67.39%), Muslims (18.56%), Buddhists (5.22%), Jains (3.99%), Christians (3.72%), Sikhs (0.58%), with Parsis and Jews making up the rest of the population. Individuals' views and requirements of the dental treatment vary widely and can be influenced by cultural factors (Egede, 2006). As increase in the exposure to diversity occurs, health care providers may therefore need to develop skills in intercultural competency and sensitivity.

“Cultural competency” is the ability to identify and challenge one’s own cultural assumptions,

values and beliefs, the development of empathy for people viewing the world through a different cultural lens, and the application of specific communication and interaction skills that can be learned and integrated into clinical encounters (Bennett et al, 2005). This definition focuses on an outcome, and includes attention to obvious language differences in the consultation, as well as how culture influences attitudes, expressions of distress, and helps seeking practices (Formicola et al, 2003). Consequently, it is suggested that clinical procedures and policies should reflect these. Showing respect for patients' cultural beliefs and attitudes is an important component, especially when their views opposes or differs from the professionals' views. Emphasis should be given to a genuine willingness and desire to learn about other cultures, rather than simply being a managerial requirement (Bhui et al, 2007).

Health professionals are more aware of the challenges they face while providing health care to a culturally and racially diverse population (Bhui et al, 2007). Studies revealed that cultural competency has an important role to play if one has to get to the roots of health care disparities (Nowak et al, 2004; Hewlett et al, 2007; Lopez et al, 2008; Melamed et al, 2008; Pilcher et al, 2008; Rubin et al, 2008). Despite concerns about ethnic disparities of access

*Asso. Prof, **Prof and Head, ***Reader, **** Reader

DEPARTMENT OF PUBLIC HEALTH DENTISTRY, BHARTI VIDYAPEETH DENTAL COLLEGE, NAVI MUMBAI.

ADDRESS FOR AUTHOR CORROSPONDENCE : DR. SUYOG CHANDRASHEKHAR SAVANT, TEL: +91 9920747899

to culturally appropriate health care, and calls for cultural competency training to be mandatory, there is little information about the effectiveness of cultural competency training in health settings (Bhui et al, 2007). Moreover it is well established that in order to provide culturally competent care, knowledge of cultural beliefs, values and practices is necessary, otherwise health practitioners can easily fall prey to inappropriate management and poor compliance by the patients.

Due to lack of previous studies conducted in this regard in Mumbai, this study was intended to know if the dental practitioners in Mumbai were culturally competent enough to treat the patients of diverse culture. The study focused on the knowledge, attitude and practices of dental practitioners based on cultural diversity of their patients while making oral health care provision.

METHODS

A structured, self administered questionnaire with 16 questions was used to assess the knowledge, attitude and practices of 420 dental practitioners out of 840. Participants who were registered under the Indian Dental Association (IDA) from Mumbai branch were selected through convenience sampling. There were 5 questions on knowledge, 6 questions on practice and 5 questions on attitude. The questionnaire was exclusively developed based on the textbook (Scully and Wilson, 2006) which gave importance to culture of the patients, discussed the importance of differences which existed between the health care provider and recipients, which was vital for providing the quality health care that met patients' needs. The questionnaire study was conducted with participants consent and assurance of confidentiality. Name and professional qualification about the participants was noted. The survey instrument (questionnaire) was checked for its face and content validity by a panel of six subject experts from Department of Preventive and Social Medicine of Dr. D. Y. Patil Medical College, Pune and four experts from Dr. D. Y. Patil Dental College and Hospital, Pune. Based on the content validity ratio of 0.62, the items in the questionnaire were modified or deleted. Pre-testing of the questionnaire was done on 10 participants chosen from the IDA list through convenience sampling. Pre-testing was done to check the wording, clarity as well as comprehensibility of the adopted

questionnaire. Pre-testing also helped to interpret the meaning of each question in an appropriate manner. The questions had multiple choices and the participants had to select from suitable options. Reliability estimates, calculated from the full set of responses to the questionnaire using Cronbach's coefficient alpha with the use of SPSS (version 10.0) was found to be 0.92 after which study was conducted. A calibrated clerk was asked to deliver and get the completely filled questionnaire back for data analysis. After getting the approval from the ethical committee of Dr. D.Y. Patil Dental College and Hospital the study was undertaken. Number and percentage distribution of participants' responses were calculated based on responses.

RESULTS

Out of 457 self administered questionnaires, 420 questionnaires were completed and included for the analysis. 346 participants had Bachelor's degree (BDS) and 74 participants had Master's degree (MDS) in dentistry. 37 questionnaires were excluded from data analysis as they were incompletely filled. The response rate was 91.90%.

Table 1 shows the results of questionnaire study which assessed the knowledge, attitude and practices of 420 dental practitioners based on cultural diversity of their patients while making oral health care provision.

DISCUSSION

The results of the self administered questionnaire were based on participants' knowledge and attitude about cultural competence and importance they gave while practicing in a multicultural society.

When the participants were asked about what comprised culturally sensitive oral health care, only 45% of participants provided all the relevant replies stating that providing education, respectful care and informing them about the health issues was important.. The reason might be because there might not be genuine willingness and desire to learn about other cultures when there are difference of opinions between the dentist and patient (Bhui et al, 2007). A similar study revealed that dental students could not identify a cultural group which they felt they knew well in terms of oral health status (Wagner and Redford-Badwal, 2008). This opinion was also voiced in other studies by (Scully and Wilson, 2006; Bhui et al, 2007) which stated that

meeting patients' personal, religious, cultural needs and enabling patients to make their choices and respecting them was important for dental practitioners.

97% of participants overwhelmingly stated that they observed diverse culture among the patients who visited them. However this response contradicted with the answers they chose as the indicators of culture. Participants were able to acknowledge, accept and value the importance of diverse culture but they did not know what comprised culturally sensitive oral health care. Dress, lifestyle, language and diet were chosen as the correct indicators of culture (Scully and Wilson, 2006) by only 9.02% of participants. Some dress codes are specific to certain cultures. Muslim males prefer to wear kameez or purdah in females, Hindu ladies prefer to wear saris, Sikh- the turbans and so on. Similarly, lifestyle is also a relative indicator of different cultures. Some diseases like oral cancer are related to lifestyle. Use of tobacco is a common lifestyle in South Asians. Areca nut chewing is common in people from South and South East Asian population (Scully and Wilson, 2006).

28% dentists indicated language as a part of cultural indicator. When patients and providers speak the same native language, patients are more likely to report positive physical and mental health outcomes. Alternatively, patients' inability to communicate in their native language could lead to delays in care, fewer or missed appointments, non adherence to therapy, and medical error (Taylor, 2004). Moreover studies have supported the fact that language forms an important part of the cultural competency (Rubin, 2004; Taylor, 2004; Lopez et al, 2008; Melamed et al, 2008; Pilcher et al, 2008). Hence there is a need to increase dentists' perception in this regard.

The fourth indicator was diet because culture plays an important role in diet. Scully and Wilson, (2006) stated that people with low intake of well nourished food like green leafy vegetables or fruits have acute ulcerative gingivitis. Also vitamin B12 deficiency was most commonly seen in Hindus.

The results suggested that the participants were able to acknowledge, accept and value the importance of cultural competency but were not able to identify the indicators completely. Dental participants believed that cultural sensitivity in

dental practice was important (Rowland et al, 2006), but they lacked knowledge about the cultural groups they were likely to see in practice (Wagner and Redford-Badwal, 2008). Incorporating concepts of cultural competency into dentistry and teaching it in dental school environment might be an important step in resolving these issues.

95% of participants considered cultural factors and cultural background while providing acceptable oral care to patients. There is a growing body of evidence of studies which supports the need for cultural competence among health professionals to positively influence clinical consultations and health outcomes (Bennett et al, 2005). Studies have revealed that beliefs, values and traditions are critical factors in etiology of illness and disease and those related to health and healing (Wagner and Redford-Badwal, 2008).

93% of participants replied that cultural concerns of patients were important. This opinion was similar to the report provided by The Institute of Medicine (IOM) 'Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care' which recommended that cross-cultural education should be integrated into the training of all current and future health professionals (Formicola et al, 2003; Pilcher et al, 2008). If the cultural issues of the patients were not addressed properly, then it might lead to patients' dissatisfaction, poor adherence and adverse health outcomes. In addition, lack of empathy for patient's cultural values can result in stereotyping and biased treatment by a health care provider (Melamed et al, 2008).

Only 24% of participants were aware of the commonly used agents of animal derivatives. However, 99% and 82% of participants replied correctly the presence of animal derivatives in bone graft and suture materials and waxes respectively. Alginates, analgesics, bone fillers, mouth washes, haemostatic materials, tooth pastes, waxes, periodontal brushes and prophylactic pastes, may contain animal derivatives (Scully and Wilson, 2006). The reason may be dental products are mostly categorized into cosmetic category as a result of which they do not undergo rigorous trials unlike the pharmaceutical products which are meant for human consumption.

Only 8% of 92% participants prescribed

alcohol containing products (mouth wash/ mouth rinse) to patients based on cultural background. The reason may be some of the religious groups object to some constituents present in dental health care products that are not accepted but are not barred either if the product is designed to enhance health. These objectionable oral health products are licensed as pharmaceutical products to avoid religious and ethnic group restrictions. Example of it are alcohol containing mouthwashes. (Scully and Wilson, 2006) have stated briefly the objections that different religions may have in this regard.

87% of participants checked the contents of dental products and its derivatives before treating patients. 13% of participants did not check contents. However only 15% of participants replied that dental products had specifications which contradicted the previous response of 87% which stated that they checked the dental specifications. Had they checked the specifications, most of the participants would have known that the dental products of animal origin do not have mention of the derivatives written on the product. The reason was alcohol containing mouthwashes and dental products like sutures and waxes fell into cosmetic category which did not undergo rigorous trials (Scully and Wilson, 2006). No studies were found to compare with the mentioned results.

32% of participants replied that their patients expressed concerns regarding the content of dental products used that might be detrimental to their cultural beliefs. This question was asked as patients' views, reactions to illness, health needs and expectations of treatment were influenced by many factors of which cultural beliefs are one (Scully and Wilson, 2006).

6% of participants stated they prescribed alcohol containing mouthwash/ mouth rinse against alcohol free products with animal derivatives in dental prescriptions even if they were against the cultural belief of the patients. This reply was based on the fact that although convictions and beliefs govern a patients' life and health care providers should be sensitive to it, but when there are conflicts in religious beliefs, patients beliefs and health care providers' beliefs then, the interest of the patients must be put first and foremost (Scully and Wilson, 2006).

For the last question, 92% of participants stated

it was relevant to reveal the information regarding the animal and alcohol content of the dental products which might be sensitive to ones cultural beliefs.

The studies on cultural competency were in relation to ethnic and racial diversity (Formicola et al, 2003; Mouradian et al, 2003; Novak et al, 2004; Taylor, 2004; Egede, 2006; Rowland et al, 2006; Scully and Wilson, 2006; Bhui et al, 2007; Hewlett et al, 2007; Gregorczyk and Bailit; 2008; Melamed et al, 2008; Rubin et al, 2008, Wagner and Redford-Badwal, 2008). and communication skills (Formicola et al, 2003; Rowland et al, 2006; Scully and Wilson, 2006; Gregorczyk and Bailit 2008; Melamed et al, 2008; Pilcher et al, 2008; Rubin et al, 2008; Wagner et al, 2008; Hewlett et al, 2009) Questions on social behavior, religion and ethnicity that form important part of the culture were not discussed in the study. The results of the study has external validity and can be generalized. However since there was paucity of literature comparison of the present study with other studies could not be done. None of the studies reviewed had questions related to alcohol and animal derivatives present in the dental products. There were lack of references for studies which were carried out to test the knowledge, attitude and practices of the dentists in relation to the use and knowledge about the dental products.

CONCLUSION

The knowledge of the dental practitioners about the culturally sensitive oral health care was found to be poor. Although they gave importance to provide culturally sensitive health care provision, they could not replicate it in practice due to the lack of knowledge.

RECOMMENDATIONS

If dentistry has to reduce oral health disparities related to cultural diversity, then dentistry will also need to recognize how its systems of care and its individual practitioners are influenced by bias, stereotyping, and beliefs about minorities resulting due to lack of cultural competency (Formicola, 2003). Dental educators should partner with social scientists, anthropologists and researchers to develop and evaluate educational programs to improve the cultural competence of health professionals (Saha et al, 2008). Cultural

competency training (Rubin, 2004; Wagner JA and Redford-Badwal, 2008) should be started at an undergraduate college level and should be included in their curriculum (Hewlett 2009) which will help the dental practitioners to cope better with future challenges in training and practice (Melamed et al, 2008).

Questionnaire to assess knowledge, attitude and practices of 420 dental practitioners based on cultural diversity of their patients while making oral health care provision.		
	Numbers	Percentages
1. What comprises of culturally sensitive oral health care?		
a. Provide respectful care, educate and inform the patients on health issues.	371	88.33%
b. Meet patients' personal, religious, cultural needs.	344	81.90%
c. Enable patients to make own choice and respect them.	233	55.47%
d. Participants who selected the first three options	192	45.71%*
e. Don't know.	4	0.95%
2. Do you observe diverse culture among the patients who visit you?		
a. Yes	409	97.38%*
b. No	11	2.62%
If yes, are any one/these the indicators?		
a. Dress	105	25%
b. Lifestyle	215	51.90%
c. Language	116	27.61%
d. Work profile	100	23.80%
e. Diet	387	92.14%
f. Don't know	6	1.42%
Correct responses (a,b,c,e)	38	9.04%*
3. Do you consider the cultural factors while treating the patients?		
a. Yes	400	95.23%*
b. No	20	4.77%
4. Should the cultural background of patients be considered while providing acceptable oral care to patients?		
a. Yes	400	95.23%*
b. No	20	4.77%
c. Don't know/did not understand	1	0.24%
5. Should cultural concerns come in the way of oral health care provision?		
a. Yes	392	93.34%
b. No	27	6.42%*
c. Don't know	1	0.24%
6. Are you aware of commonly used agents of animal derivation in dentistry?		
a. Yes	100	23.8%*
b. No	312	74.29%
c. Don't know	8	1.91%
7. Which of these products may contain animal derivatives?		
a. Bone graft and suture material.	418	99.52%*
b. Alginate.	17	4.04%
c. Wax.	344	81.90%*
d. Mouthwash and toothpastes.	5	1.19%
e. All of above	3	0.71%

8. Do you prescribe alcohol containing products (mouth wash / mouth rinse) to your patients based on cultural background? a. Yes b. No c. Did not understand	34 385 1	8.1% 91.67%* 0.23%
9. Are you aware of alcohol free mouthwash / mouth rinse? a. Yes b. No	409 11	97.38%* 2.62%
10. Do you check contents of dental products and its derivatives before treating patients? a. Yes b. No	368 52	87.61%* 12.39%
11. Do the dental products have specifications whether the dental products contain derivatives of animal origin? a. Yes b. No c. don't know	61 205 154	14.52%* 48.81% 36.67%
12. Has any of your patients expressed concerns regarding the content of dental products that might be detrimental to their cultural beliefs? a. Yes b. No	134 286	31.90%* 68.10%
13. Do you make patients aware of the kind of treatment provided to them that might be detrimental to their cultural beliefs? a. Yes b. No	400 20	95.23% 4.77%*
14. If the cultural belief is against the use of alcohol would you still prescribe alcohol containing mouthwash/ mouth rinse against alcohol free mouthwash? a. Yes b. No c. Did not understand	26 393 1	6.19% 93.57%* 0.24%
15. Do you prescribe the products containing animal derivatives in dental prescriptions to your patients? a. Yes b. No c. Don't know	26 390 4	6.19% 92.86%* 0.95%
16. Is it relevant to reveal the information regarding the animal and alcohol content of the dental products which might be sensitive to ones cultural beliefs? a. Yes b. No c. Don't know d. Not necessary	385 6 10 10	91.67%* 1.43% 2.38% 2.38%

*Highlighted results are discussed in the discussion.

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