# How Dentists Account For Social Responsibility: A Questionnaire Survey Among The Dental Graduates Of Mysore City, India.

Dr. Rachna Raj<sup>1</sup>, Dr. Vikas Vaibhav<sup>2</sup>, Dr. Thippeswamy HM.<sup>3</sup>, Dr. CVK Reddy<sup>4</sup>, Dr. Mobeen Khan<sup>5</sup>

<sup>1</sup>Lecturer. Department of Public Health Dentistry, Patna Dental College & Hospital, Patna <sup>2</sup>Associate professor. Dental Department, Vardhman Institute of Medical sciences, Pavapuri <sup>3</sup>Reader. Department of Public Health Dentistry, JSS Dental College and Hospital, JSS University, Mysore <sup>4</sup>Professor. Department of Public Health Dentistry, JSS Dental College and Hospital, JSS University, Mysore <sup>5</sup>Senior Lecturer, Department of Oral Medicine and Radiology, Chandra Dental College & Hospital Barabanki, Uttar Pradesh Correspondence Author: Rachna Raj, , Dental Foundation, 107, Road No.4, Rajendra Nagar, Patna. (State: Bihar), India.

**Abstract:** In India, the literature regarding social responsibilities among dentists is scarce, hence the present study was undertaken to analyze how private dental practitioner in Mysore City account for their professional obligation towards society. A total of 172 private dental practitioner were there in Mysore City, out of which 136 gave consent to participate. A 13 –item questionnaire was used. It was self-completed by the participants. For the data analysis, the ratings were assigned weight value of 1,2,3,4 and 5, respectively. The Total Weight Value (TWV) for each item of the questionnaire was obtained through the summation and the Indices for Social Concern (SCI) for each of the questionnaire item were arrived and the mean of the index was calculated. Eight of the 13 questionnaire items had SCI higher than the mean value of SCI (4.29) showing areas of great social concerns: 'Dental institutes should participate in community outreach activities' had the highest SCI score (4.60) followed by 'Dentist should have habit of reading scientific journals' (4.57). The lowest score was for 'Language/finance/Transportation are barrier to the dental care access' (3.78). In the present study, private dental practitioner, Dentists.

Date of Submission: 26-01-2019

Date of acceptance: 09-02-2019

## I. Introduction

\_\_\_\_\_

India is drawing the world's attention, not only because of its population explosion but also because of its prevailing as well as emerging health profile and profound political, economic and social transformations.<sup>1</sup>

After 54 years of independence, a number of urban and growth-orientated developmental programs have been implemented, unfortunately, due importance has been given to oral and dental health in the policy of national health Planning .<sup>1,2</sup> Health is still a state subject and most of the states in the country are suffering from financial burden even for subsistence rather than providing quality health care. Mostly the health care is looked after by the private sector and individual practices.<sup>3,4</sup>

The growth of private oral healthcare sector has been largely seen as a boon, however it adds to ever increasing health inequality. The dominance of the private sector not only denies access to poorer sections of society, but also skews the balance towards urban-biased, tertiary level health services with profitability overriding equality, and rationality of care often taking a back seat. The increasing cost of oral health care that is paid as 'out of pocket' payments is making oral health care unaffordable for a growing number of people.<sup>5</sup>Over that, the dentists of today are of the opinion that dentistry is primarily a business and they are practicising at a market place providing services to only those who can afford dental treatment.<sup>6</sup>

A country like India, where nearly 716 million rural people (72% of the total population), half of which are below the poverty line (BPL) and 7.2% are in the age group of above 60+ and where there is no concept of dental insurance raises a question who is socially responsible for this disadvantaged and socially marginalized people who has the greatest burden of all disease.<sup>1,7-9</sup>

Fifteen years ago Entwistle asked, "Are we creating socially responsible dental professionals?" and raised a series of related questions that are equally relevant today around issues affecting barriers to care, such as poverty, cultural sensitivity, and the practice of dentistry in a market society.<sup>10</sup>

In developed countries, the concept of social responsibility has been considered in education and moral development <sup>11</sup>but in our country, the topic of social responsibility is taught in B.ED. Course, and not as a part

of dentistry.<sup>6</sup> Hence the present study was undertaken to analyze how private dental practitioner in Mysore City account for their professional obligation towards society.

## **II. Material And Methods**

The present study was a descriptive one using survey among private dental practitioner who were practicing in Mysore City. List of names and address of private dental practitioner was obtained from various sources like dental colleges in Mysore city, dental materials and instrument suppliers, Indian Dental Association (Mysore Branch).

A total of 172 private dental practitioner were there in Mysore City, out of which 136 gave consent to participate. The questionnaire was developed from items generated from the review of the relevant literature.<sup>6, 9-</sup><sup>11</sup> The questionnaire was divided into two sections: Section A solicited information on demographic factors

(Age and Gender), educational qualification (BDS/MDS), kind of work along with dental practice (Consultant, Academician, Government services), years of practice and Section B, there were 13 item questionnaire eliciting social responsibility. The respondents were asked to rate each of the questionnaire items using Likert scale<sup>12</sup> of 'Not concerned', 'Slightly concerned', 'Concerned', 'Highly concerned' and 'Extremely concerned'. All the study participants self completed the questionnaire.

For the data analysis, the rating were assigned weight values of 1,2,3,4 and 5, respectively. The total weight value (TWV)<sup>13</sup> for each item of the questionnaire was obtained through the summation of the product of the number of responses for each rating to a questionnaire item and the respective weight value.

The indices for social concern (SCI),<sup>13</sup> for each of the questionnaire items were arrived at by dividing the summation of the TWV for each variable (social concerns) by the total number of respondents (n=136). The concern index (SCI) ranged from 1 to 5; the closer the value to 5 the higher the assumed variable concern among private dental practitioners.

The mean value of index was calculated by the addition of the concern index generated from each of the variables/groups of the questionnaire divided by the number of questionnaire item (Total Questionnaire =13). The deviation about the mean of each variable, variance and standard deviation (SD ) to measure the scatter around the mean was also calculated .The coefficients of variations were calculated to measure the scatter in the data relative to the mean in percentages. The above is also expressed mathematically below: 5

TWV =  $\Sigma$  Pi. Vi.

i =1

Where, TWV is the total weight value, Pi is the number of respondents rating a questionnaire item i and Vi is the weight assigned to questionnaire item i.

CI = TWV/N = mean of the study population

5

Where N, is the number of study population, is 136 and CI is concerned index.

Average CI=  $\Sigma$  CI / n

i =1 Where n is the number of questionnaire items, is 13.

Coefficient of variation =  $\{SD | Avg. CI \times 100\%\}$ 

Where SD is standard Deviation.

SPSS for Windows version 16.0 (SPSS Inc., New York, USA) was used for the statistical analysis.

## **III. Results**

The response rate was 79.06% (n=136). Over a two third were between the age group of 20-40 yrs (86%) and the majority were qualified as master in dental surgery (57.4%). Table 1 depict more than half of the participants i.e. 53.8% were female and majority of the practitioners i.e. 65.6% were attached to dental colleges.

Table 2 depicts the social concerns expressed by the study participants. Eight of the 13 questionnaire items had SCI higher than the mean value of SCI (4.29) showing areas of great social concerns: 'Dental institutes should participate in community outreach activities' had the highest SCI score (4.60) followed by 'Dentist should have habit of reading scientific journals' (4.57). The lowest score was for 'Language/finance/Transportation are barrier to the dental care access' (3.78). The mean value of social concern index was 4.29 and coefficient of variation was 6.5%.

## **IV.** Discussion

We explored in this study how dentists who are intimately involved in clinical practice make sense of social responsibility within their profession.

The finding from the present study revealed that dentists are still concerned with their duty to serve everyone and not just those who are socioeconomically advantaged which is in very contrast to the opinion that

dentistry is primarily a business and services are provided to one who can afford  $it^6$ . This may be explained as the findings of the present study are mainly based on answers obtained from dentists through questionnaire administration. An over-report of favorable attitude may be expected from this study as people have the tendency to give socially acceptable answer.

Among the social concerns, 'Dental institutes should participate in community outreach activities' was the greatest concern for the dentists. This was not unexpected as the number of dental colleges especially the private dental colleges are increasing in India and dental workforce generated each year is high, these institutes can share the responsibility of state in fulfilling the oral health needs of the people.

Great concern was also shown on 'Dentist should have habit of reading scientific journals'. This finding is in contrast to the finding of Bhaskar DJ. Et.al.<sup>6</sup> (2011) where very few dental graduates said that they would read the dental literature for the betterment of their knowledge. Since in our study, it was not asked which scientific journal you have read last and when, it is quite difficult to draw a concrete conclusion in this regard.

The least concern was for 'Language/finance/Transportation as barrier to the dental care access'. This is in contrast to the finding of Bhaskar DJ. Et.al. (2011) <sup>6</sup> where all the participants agree that finance is the biggest constraint. This may be due to the fact that dentist of today are not sensitized to socio-culture factors and they work like machine without much interaction with patients. Hence, to make the emerging dental graduates more socially responsible, resident internship training programme in community dentistry is essential to develop such communication skills and understanding towards society where people of different culture, language, cast, creed and socioeconomic status stay.

The degree of concern of dentists to all variables was very close to the mean values. This means that their responses cluster around the mean values as shown by the coefficient of variation for each variable. In other words, their responses to questionnaire items were very close for each variable.

Although the present study shows that the private dental practitioner are socially responsible, still in the situation where dentistry is growing like a business and ethics are not applied in day-to-day dental practice and the role and responsibilities of each dentists for improving the health of the community through treatment, education ,strategies, and services, and foster access to quality oral healthcare, sound public health, and primary preventive measures for all people including the poor ,underprivileged and underserved is lacking, a step should be taken towards integrating chapter on social responsibility and its implication in dentistry in dental curriculum.

## V. Limitation Of This Study

The item scale used in the present study was generated from a literature review of previously conducted studies. This may not have been ideal for use without subjecting to reliability and validity test, which would have proved beyond a reasonable doubt the validity of their responses.

## **VI.** Conclusion

The present study shows that private dental practitioner were socially responsible towards the society. Further studies are required to know the application of social responsibility in dentistry.

## **Conflict of Interest and Source of Funding**

I would also like to express my heartfelt thanks to JSS University for financial assistance to conduct this study. There are no potential conflicts of interest with respect to the authorship and/or publication of this article.

	Table 1. Occ	upational status	and gender
Kind of work	Male (%)	Female (%)	Total
Clinician	27(19.8)	19(13.9)	46(33.7)
Clinician & Academician	19(13.9)	37(27.3)	56(41.2)
Clinician, Academician & Consultant	16(11.8)	17(12.6)	33(24.4)
Clinician & Goverment Job	1(0.7)	0(0)	1(0.7)
Total	63(46.2)	73(53.8)	136(100)

Table 2. Questionnaire items on social responsibility									
Item $(n = 136)$ 1 2	3	4	5	ΤW	v	SCI	(SCI – M	IeanSCI)	
1. Understanding psychosocial, cultural, and environmental	0	0	4	61	71	611	4.49	0.20	
factors of the community help in better communication									
with patient.									
2. A country like India, where 70% population is in rural	10	18	4	49	55	529	3.89	-0.40	
areas, rural posting should be made mandatory for getting									
graduate degree.									
3.Dental institutes should participate in community outreach	0	1	0	51	84	626	4.60	0.31	
activities and adopt school, senior citizen home,									
special care children, orphanage etc, to give free treatment.									

4.Private practitioner, should involve voluntarily in public	1	6	6	71	52	575	4.23	-0.06		
awareness and education programmes to motivate people to										
change their personal as well as social behavior with respect										
to orodental health.										
5.Primary health workers should be trained to deliver primary oral health care.	2	7	18	49	60	566	4.16	-0.13		
6. Dentist should take part in rallies related to oral health related awareness programmes.	0	20	9	74	33	528	3.88	-0.4	1	
<ol> <li>Government as well as private practitioner/dental institutions oral health care to under privileged.</li> </ol>	3	0 0	3	3 6	7 66	607	4.47	0.18	should	provide
8. The government, media and health providers should		0	0	3		69	64	605	4.45	0.16
provide factual and balanced health and health related										
information to the people and awaken their interest on										
the basis of which they can make informed decisions.										
9. Philanthropic organizations should be promoted to deliver	0	1	16	51	68	594	4.37	0.08		
oral health care to poor.										
10.Dentist should have habit of reading scientific journals regularly.	0	1	5	45	85	622	4.57	0.28		
11.Dentist should attend dental conference/continuous dental education programmes regularly.	0	0	3	67	66	607	4.47	0.18		
12.Government should promote more Preventive and promotive	<u> </u>	2	6	49	8 80	614	4.51	0.22		
programmes than curative programmes.		2	0		5 00	014	4.51	0.22		
13.Language/finance/Transportation are barrier to the dental care access.	3	28	7	50	6 42	514	3.78	-0.49		
1 = Not concerned: 2 = Slightly concerned: 3 = Concerned:	1	– Hig	hlv co	ncerne	d. 5	– Evtr	emely co	ncerned		
T = Tot concerned. $2 = singhtly concerned.$ $3 = concerned.TWV = Total Weight Value$	-	- mg	iny coi		u. J	– LAU		neemeu		
SCI = Indices for social concern										
Mean SCI = $55.87/13 = 4.29$										
Variance = $.081$										
SD = 0.28										
Coefficient of variation = $\{ SD / mean SCI \times 100\% \} = 6.5\%$										
Coefficient of variation = [DD / filear DCI < 100 / 0] = 0.5 / 0										

#### References

- [1]. Patil AV, Somasundaram KV, Goyal RC Current health scenario in rural India. Aust. j. Rural Health 2002; 10(2): 129–135
- [2]. Chinmaya BR, Shaik Hyder Ali KH, Srivastava BK, Pushpanjali K. Oral health status and treatment needs in Chitradurga, India and strategies to meet the needs. Archives of Oral Sciences & Research 2011;1(1):14-25.
- [3]. Parkash H Shah N. National oral health care programme: Implementation strategies .Directorate General of Health Services, Ministry of Health and Family Welfare, Govt. of India, New Delhi 2000.
- [4]. Parkash H Shah N. National oral health care programme: Implementation strategies .Directorate General of Health Services, Ministry of Health and Family Welfare, Govt. of India, New Delhi.2001.
- [5]. Sobha Tendon. Challenges to the Oral Health Workforce in India J Dent Educ 2004; 68(7 Suppl): 28-33.
- [6]. Bhaskar DJ, Manjunath TR, Aswini YB. Dentist and social responsibility: A questionnaire survey among the dental graduates of Nellore city. J Indian Dental Association 2011; 5(1):87-89.
- [7]. Petersen PE. The world oral health Report 2003: Continuous improvement of oral health in the 21<sup>st</sup> century the approach of the WHO global oral health programme. Community Dent Oral Epidemiol 2003.31 (Suppl 1):3-24
- [8]. Ravi SS Toor, Jindal R. Dental insurance! Are we ready? Indian journal of Dental Research 2001;22(1):144-147.
- [9]. Park K. Preventive and Social Medicine.21<sup>st</sup> ed. M/s Banarsidas Publisher.2011.
- [10]. Entwistle BA. Are we creating socially responsible dental professionals? J Dent Educ 1992; 56(2) : 109-11.
- [11]. Swaner LE. Educating for personal and social responsibility: a review of literature. Liberal Education, Summer-Fall 2005.
- [12]. Likert R. New pattern of management. New York: McGraw Hill, 1961.
- [13]. Ojo O Olbkola, Adedigba MA, Naidoo S, Adejuyigbe E, Fakande I. Social, Psychological and Health concerns among people living with HIV/AIDS in Nigeria. Oral Health Prev Dent 2009;7: 355-362.

Rachna Raj. "How Dentists Account For Social Responsibility: A Questionnaire Survey Among The Dental Graduates Of Mysore City, India." IOSR Journal of Dental and Medical Sciences (IOSR-JDMS), vol. 18, no. 2, 2019, pp 19-22.