



## PERCEPTION OF DENTAL PROFESSIONALS AND STUDENTS REGARDING DENTAL OUTREACH PROGRAMS IN LUCKNOW CITY

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### Abstract:

**Introduction:** The disintegration in the oral diseases can be prevented by making an early identification, investigation and providing the desired treatment which is possible by introducing dental outreach programs. **Aims & Objectives:** The aim of the study was to understand attitudes, perceptions, and knowledge of dental professionals and students towards their role in dental outreach programs. **Materials & Methods:** A descriptive cross sectional study was conducted to determine the

perception of dental professionals and students on dental outreach programmes. The study was carried out online through Google forms, with the population of dentists available at colleges and private dental clinics. A total of 5 colleges were selected in the city of Lucknow. The first section of the questionnaire asked about the subject's demographic information, such as age, gender, occupation, and department of practitioners and postgraduate students. The second portion of the questionnaire assessed their perspective on dental outreach programmes. **Results:** The majority of dental professionals and students who responded to the survey were under 30 years old, accounting for 82.4 percent of the total. When dental professionals and students were asked about the benefits of these dental outreach initiatives for post graduate students, 83.74% agreed, while 16.26% disagreed. Data was collected & statistical analysis was done using SPSS (Ver. 26). **Conclusion:** This study helped in understanding the awareness, knowledge and perception of dental outreach program amongst the dental professionals and students. By identifying the barriers and providing appropriate education and intervention, dental service usage can be enhanced.

### INTRODUCTION

An outreach program is complete entanglement between the community and the health institutions or organizations. It is an attempt by the organizing members to impart its objectives, opinions, skills and practices to the target population or general population thereby generating awareness and

improving oral health. Dental outreach programs are generally non-profitable programs, which may be government or non-government and are directed towards the cost effectiveness and benefit of the community using the community itself as a resource.<sup>1</sup>

To this effect, the completely equipped mobile dental unit with faculty and students take oral health care into underserved areas providing preventive and other levels of dental care services. This mobile dental unit travels to remote places serving population that has barriers to accessing dental care.

Apart from treatment, oral health education is also provided to these populations to empower and enable them to take better care of their oral health.<sup>2</sup>

The disintegration in the oral diseases can be prevented by making an early identification, investigation and providing the desired treatment which is possible by introducing dental outreach programs. The community-based dental outreach programs play a very crucial role in declining discovery-delivery disconnect by introducing awareness through health education and dental adumbrating services to the community members. These programs are found to be very effective for diminishing health unevenness.<sup>3</sup>

The utilization of dental services can be improved by identifying the barriers and by providing appropriate education and intervention.<sup>4</sup>

An assessment of dental professionals' attitudes and perceptions towards dental outreach programs, and their involvement in education, counseling, diagnosis and treatment planning, needs to be understood to develop an effective training dental outreach program. The aim of the study was to understand attitudes, perceptions, and knowledge of dental professionals and students towards their role in dental outreach programs, to understand their self-reported requirements in relation to skills and knowledge prior to training, and to understand their self-reported learning from training.<sup>5</sup>

## **MATERIALS & METHODS**

A descriptive cross sectional study was conducted between October 2021 to November 2021 in Lucknow city among dental professionals and students (interns and post graduates) of all the dental colleges in Lucknow city. This study was conducted to determine the perception of dental professionals and students on dental outreach programmes. The study was carried out online through Google forms, with the population of dentists available at colleges and private dental clinics. A total of 5 colleges were selected in the city of Lucknow.

### **INCLUSION INDEX:**

All dental professional or student (interns and post graduates) willing to participate in the study were included in the study. The questions were related to the experience and satisfaction level of the dental professionals and students in outreach dental camps and answers were recorded using a Nominal scale.

### **EXCLUSION CRITERIA:**

All the Google forms received after the allotted time i.e. after November 2021 were disregarded.

A total of 1015 Google forms were received from dental professionals and students. Faculty members at government and private dental colleges, as well as private dental clinic practitioners, are all dental professionals. Dental students comprise all postgraduate departments' internship and postgraduate students. The faculty of the Department of Public Health standardised and fine-tuned an 11-closed-ended-question questionnaire. The pilot study was run on 30 people to draw the face of validity of the questionnaire and they were not included in the main study.

The first section of the questionnaire asked about the subject's demographic information, such as age, gender, occupation, and department of practitioners and postgraduate students. The second portion of the questionnaire assessed their perspective on dental outreach programmes. Ethical clearance was obtained from the ethical committee of the institution. The information gathered during the data collection was strictly kept confidential. Data was collected & statistical analysis was done using SPSS (Ver. 26).

## RESULTS

**Table 1:**

Age group Distribution		Frequency	Percent
Valid	Below 30 years	840	82.7
	31-40 years	155	15.3
	41-50 years	10	1.0
	50 years and above	10	1.0
	Total	1015	100

**Table 2:**

Gender wise distribution		Frequency	Percent
Valid	Male	680	66.9
	Female	335	33.1
	Total	1015	100

**Table 3:**

Educational qualification wise distribution		Frequency	Percent
Valid	UG Student	565	55.7
	PG Student	240	23.7
	Practitioners	60	5.9
	Faculty	150	14.7
	Total	1015	100

**Table 4:** Questionnaire used in the survey with the relevant p value on applying chi square test.

S.No	Question	Options	P value
1.	Do you think Dental camps help create an awareness among the general people	a. Yes b. No	0.005** (Age) 0.001** (Gender) 0.001** (Occupation)
2.	How affective is organizing camps for the general people	a. Very effective b. Moderately effective c. Not effective	0.043* (Gender)
3.	What are the types of camps organized by dental hospitals	a. Schools b. Govt. organizations c. Non govt organizations d. All of the above	0.006** (Occupation)
4.	What are the various modes of education in dental camps	a. TV b. Oral Health posters c. Models d. Skits/dramas e. All of the above	
5.	Are you aware that Dental treatment is provided in the Dental camps along with education of the general population	a. Yes b. No	

6.	Which type of treatment if provided in the dental camps	a. Preventive b. Curative	
7.	Are you aware of the Door-to-door campaigning	a. Yes b. No	
8.	Are you aware about the distribution of oral hygiene aids in dental outreach programs?	a. Yes b. No	0.007** (Occupation)
9.	Do you think the distribution of oral health aids helps the general population in adapting the necessary dental habits?	a. Yes b. No	
10.	What according to you are the barriers faced by the general people who are unable to attend these outreach programs	a. Physical barriers b. Psychological barriers c. Cultural barriers d. Environmental barriers e. All of the above	
11.	Apart from UG dental students do you think PG students also get benefitted by these outreach programs?	a. Yes b. No	

\*p<0.05 is statistically significant, \*\*p <0.01 is statistically highly significant

**Table 5:**

Do you think Dental camps help create an awareness among the general people		q1		Total
		Yes	No	
age	Below 30 years	450	390	840
	31-40 years	130	25	155
	41-50 years	10	0	10
	50 years and above	10	0	10
Total		600	415	1015

**Table 6:**

Do you think Dental camps help create an awareness among the general people		q1		Total
		Yes	No	
gender	Male	360	320	680
	Female	240	95	335
Total		600	415	1015

**Table 7:**

How affective is organizing camps for the general people		q2		Total
		Very Effective	Moderately Effective	
gender	Male	680	0	680
	Female	325	10	335
Total		1005	10	1015

**Table 8:**

Do you think Dental camps help create an awareness among the general people		q1		Total
		Yes	No	
occupation	UG Student	205	360	565
	PG Student	215	25	240
	Practitioner	35	25	60
	Faculty	140	5	145
	5.00	5	0	5
Total		600	415	1015

**Table 9:**

What are the types of camps organized by dental hospitals		q3		Total
		Schools	Govt organizations	
occupation	UG Student	370	195	565
	PG Student	145	95	240
	Practitioner	15	45	60
	Faculty	120	25	145
	5.00	0	5	5
Total		650	365	1015

**Table 10:**

Are you aware about the distribution of oral hygiene aids in dental outreach programs?		q8		Total
		Yes	No	
occupation	UG Student	410	155	565
	PG Student	195	45	240
	Practitioner	25	35	60
	Faculty	135	10	145
	5.00	5	0	5
Total		770	245	1015

**DISCUSSION**

Public health dentistry is a para-clinical branch of dentistry that focuses on oral health prevention through a variety of dental outreach activities. With breakthroughs in both diagnosis and treatment, dentistry is evolving dramatically.<sup>6,7</sup> The purpose of this study was to assess and comprehend dental professionals' and students' attitudes, perceptions, and knowledge regarding their roles in dental outreach programs.

The majority of dental professionals and students who responded to the survey were under 30 years old, accounting for 82.4 percent of the total. This could be attributed to the study's larger number of interns and postgraduate students. Male professionals and students were more eager to respond to the survey than female professionals and students, with 66.9% males and 33.01 percent females.

When asked 'Do you think dental camps help create an awareness among general people?' in the study, responses varied by age, with those under 30 years old scoring significantly higher than those over 30 years old (p=0.005). Males' agreement was highly significant statistically more than females (p=0.001), which could be attributed to the males' motivation having a greater impact, as shown in a study by Kailash et al.<sup>6</sup> Undergraduate students agreed more than the rest of the dental professionals and postgraduate students combined on the basis of occupation. A study done by Lynch *et al.*, have reported that students showed enthusiasm for training in an outreach environment. Similarly a study done by Coe *et al.* reported that 63% more students participated in the community services and developed the need for it.

In addition, when asked about the effectiveness of the dental camps, the males found the camps significantly highly effective than the females, where some females even found the study moderately effective (p=0.043, p<0.05). This can again be due to higher motivation in males than females.<sup>6</sup>Others studies show similar data where involvement of males was higher than the females.<sup>8,9,10</sup>

Interns and postgraduate students involved in the survey found that school-based dental camps were significantly better organized than other sites and more than other dental professionals, as these were the persons who participated more actively in outreach programs than the rest (p=0.006, p<0.01). A similar study was done by Pawar et al to show the effectiveness of these programs at schools.<sup>7</sup>Hebbal et al study also showed the increase number of dental out reach programs organized

in schools.<sup>11,12,13</sup>

When asked if the distribution of oral health aids assists the general public in adopting necessary dental practices, interns and postgraduate students agreed more than other dental professionals. This could be owing to their increased involvement in these outreach activities than others, where they get to directly observe the general public's response ( $p=0.007$ ,  $p<0.01$ ).

When asked what kind of treatment was delivered in dental outreach programs, 96.05% of dental professionals and students stated it was preventive, while just 3.95% claimed it was curative. According to statistics from Western studies, dental examination (44.4%), tooth restoration (35.0%), and dental cleaning were the most common reasons for oral care (32.1%).<sup>14</sup>

When questioned about the barriers that persons who are unable to attend these outreach programs experience, 95.1% of dental professionals and students said physical barriers are the most challenging, followed by 4.9% who said psychological barriers are the most problematic. Access to oral health facilities is difficult due to poor transportation, residing in rural areas, disability, and poor systemic health, all of which have been widely characterized in the dental literature as barriers to oral health care utilization. One of the biggest hurdles identified in the literature<sup>15</sup> is the high cost of dental treatment. Tooth loss is an extension of old age, eating tobacco prevents caries, dental diseases can be cured by medicines alone, tooth extraction causes vision loss, and oral prophylaxis causes loosening of teeth have all been proven to be barriers to dental service utilization among the rural population<sup>16</sup>

When dental professionals and students were asked about the benefits of these dental outreach initiatives for post graduate students, 83.74% agreed, while 16.26% disagreed. In a similar study, 56% of participants agreed that participating in outreach programs helped them understand the material from their lectures and readings, 47% of participants had definite career plans to implement community service in the future, and 51% of participants disagreed that outreach programs experience was not directly linked to developing clinical skills.<sup>17</sup> According to J E. De Castro et al.<sup>18</sup> students who received their training in an outreach facility graduated with higher examination board scores (94%) than those who received their training in a more regular dentistry school setting (88%).

## CONCLUSION

An outreach program's three main goals are to increase learning, promote civic involvement, and develop communities through addressing societal needs. This study helped in understanding the awareness, knowledge and perception of dental outreach program amongst the dental professionals and students. By identifying the barriers and providing appropriate education and intervention, dental service usage can be enhanced.

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19. An outreach program is complete entanglement between the community and the health institution or organizations. It is an attempt the community itself as a resour The department of Public Health Dentistry, have been conducting oral health screening and treatment camps throughout the year among diverse populations particularly special groups like school children, elderly population, and differently abled groups. The aim is to provide oral health education and treatment where it is needed the most.