



Past, Present and Future of Public Health Dentists - A Cross Sectional Questionnaire Study on Masters of the Subject

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Abstract

Background: Although many departments of dentistry have promising careers, public health dentists often find themselves at crossroads when looking for growth opportunities after post-graduation. This suggests the need to assess the awareness among public health dentists regarding various career prospects in India and also to assess the challenges faced by them in pursuing their opportunities.

Methodology: A cross sectional study was conducted among 600 public health dentists who completed their masters between 2015 and 2018. A 13-item questionnaire was developed and administered using Google forms which consisted of information regarding demographics and awareness of various career prospects and challenges faced by them in pursuing their opportunities. Updated electronic mail details of all registered public health dentists were collected from the Indian Association of Public Health Dentistry Directory (IAPHDD). Each participant was contacted by electronic mail and reminders were sent thrice, once in every 15 days.

Results: A total of 350 responses were received of which 51.4% (N = 180) were females, 48.6% (N = 170) were males. About 35.4% (N = 124) choose academics as their first preference for employment. About 40.9% (N = 143) faced inadequate opportunities in getting employed and about 59.7% (N = 209) felt that they were not getting equal opportunities when compared to other specialities in dentistry.

Conclusion: Public health dentists are facing inadequate opportunities and there is a need to create avenues for their employment.

Keywords: Public Health Dentistry, Career, Attitude.

Introduction

Career satisfaction is the extent to which a person is content with the rewards obtained out of the job, particularly in terms of intrinsic motivation. This implies doing a job one enjoys, doing it well and being rewarded for one's efforts. It is a sense of accomplishment and triumph; and in general, perceived to be directly correlated to efficiency and personal health. It indicates person's

attitude towards his profession and for the latter affects behaviour assessment of career satisfaction. Across the world, associations have been accounted between job contentment, efficiency, non-attendance, and earnings among healthcare workers. These can be considered as constructs of career satisfaction. The choice of a career is a critical decision that has an obvious impact on future life pattern [1].

Public Health Dentistry is an unique branch among the dental specialties in which it not just focuses on dental and oral health among individuals but also address the needs of community in toto. It is that part of dentistry providing leadership and expertise in population-based dentistry, oral health surveillance, policy development, community-based disease prevention, and health promotion. In recent decades, great emphasis has been placed on the main responsibility of healthcare professionals, including dentists, to promote the health of the public. The success of these efforts requires dentists to be committed to an ethical attitude of public service [2,3].

Public health dentistry as a speciality in India is given less priority by the dental students as their choice in post-graduation. On the contrary, studies done by Naidu GM., et al. (2015) and Singh G., et al. (2011) concluded that dental Postgraduate students were interested in choosing career as DPH professionals in India [4,5].

Although many departments of dentistry have promising careers, public health dentists often find themselves at crossroads when looking for growth opportunities after post-graduation. The present study was conducted to assess the awareness among public health dentists regarding various career prospects in India and also to assess the challenges faced by them in pursuing their opportunities.

Materials and Methods

A cross-sectional questionnaire-based study was conducted among recently graduated public health dentists (2015-2018) in India from 1st March 2019 to 30th April 2019. A 15-item self-administered Questionnaire was developed based on previous literature. The questionnaire consisted of demographic details and various domains regarding awareness and challenges. The face validity was established by giving the questionnaire to the five experts of public health dentistry and having them evaluate if the questions effectively captured the topic under investigation and five questions which weren't clear were deleted. A pilot study was conducted on sample of 30 participants by sending emails which were collected from the Indian Association of Public Health Dentistry Directory (IAPHDD) who were not included in the main study to determine the sample size and to measure content validity of the questionnaire. The internal consistency was found to be good (Cronbach's alpha = 0.75). After the pilot study a final of 10 item questionnaire was prepared by using google forms. Updated electronic mail details of all registered public health dentists were collected from the Indian Association of Public Health Dentistry Directory (IAPHDD). Each participant was contacted by electronic mail and voluntary

willingness from the subjects to participate in the study was considered as consent. Reminders were e-mailed thrice, once in every 15days. Ethical clearance was obtained from institutional ethical committee of Sri Sai College of Dental Surgery Vikarabad, Telangana, A total of 600 participants were contacted of which, and 350 responses were received.

Statistical analysis

The data was coded, tabulated and analyzed using Statistical Package for Social Sciences (SPSS 25.0 version) for windows. Analysis was done using descriptive statistics and expressed in form of frequency and tables.

Results

Total of 600 public health dentists were contacted of which 58.3% have responded. Among 350 participants 180 (51.4%) were females and 170 (48.6%) were males. A majority of 55.7% public health dentists were employed, while (49) 14% were unemployed and (73) 20.9% were looking for employment as show in table 1.

Characteristics		N	%
Gender	Female	180	51.4
	Male	170	48.6
Year of completion of MDS	2015	95	27.2
	2016	75	21.4
	2017	72	20.6
	2018	108	30.8
Present status of employment	Employed	195	55.7
	Unemployed	49	14
	Looking for Employment	73	20.9
	Others	33	9.4

Table 1: Demographic characteristic of the participants.

A Majority of (126) 36% chose the profession because of their interest in subject and (78) 22.3% preferred due to Lack of choice. About (163) 46.6% felt happy, (86) 24.6%felt that they are scared immediately after completion of MDS in public health dentistry. When asked about first preference of employment (124) 35.4% participants choose academics, (68) 19.4% preferred other career options like biostatistician, hospital administrator, public health field, research officer, medical coding as show in table 2.

Mixed responses were received when the participants were asked the reason for choosing the sector in which they are employed. 96 (27.4%) gave the reason as job security, 50 (14.3%) as

Questions	Responses	N	%
Reason for choosing public health dentistry as your specialty in post-graduation	Good Career growth	55	15.7
	Interest in Public Service	77	22.0
	Interest in Subject	126	36.0
	Lack of Choice	78	22.3
	Others	14	4.0
How did you feel immediately after completion of MDS in public health dentistry	Happy	163	46.6
	Ignorant	40	11.4
	Sad	45	12.9
	Scared	86	24.6
	Mixed feelings	16	4.6
After finishing MDS what was your first preference for employment	Academics	124	35.4
	Clinical Practice	78	22.3
	Government Sector	80	22.9
	Others	68	19.4

Table 2: Reasons for choosing public health dentistry as career.

financial security. Most of the participants i.e., 124 (35.4%) made an attempt to get employed in academics and unfortunately only 15 participants (4.3%) made an attempt to have a career in public health field. A majority of 143 (40.9%) participants experienced inadequate opportunities in getting employed, while 43 (12.3%) participants had inadequate guidance.

To make the specialty more lucrative for fresh graduates, 175 (50%) participants recommended the need to create avenues for employment and 41 (11.7%) participants recommended to orient the specialty towards clinical dentistry. About 209 (59.7%) participants responded they were not getting equal opportunities when compared to other specialties in dentistry, while 185 (52.9%) participants were not satisfied with public health profession and 177 (50.6%) were not willing to suggest public health dentistry as a specialty for colleagues and juniors, shown in the table 4.

Discussion

The choice of a professional career is a critical decision for adolescents as it impacts their future life. It is influenced mainly by advice from parents, relatives, friends and teachers [11]. Societal esteem for the chosen profession, the need for prestige and high social status and income are factors that may also influence an individual’s career choice [12]. Career satisfaction is an important indicator for the growth of the discipline and profession. Dentistry occupies an important position in society as a licensed health care

Questions	Responses	N	%
What was the main reason for the above choice	Financial Security	50	14.3
	Good Career growth	73	20.9
	Job Security	96	27.4
	Personal Interest	115	32.9
	Others	16	4.6
What are the various fields of employment that you have made an attempt for?	Academics	124	35.4
	Clinical practice	78	22.3
	Government Sector	80	22.9
	Biostatistician	24	6.8
	Public Health Field	15	4.3
	Research officer	20	5.7
	Hospital administrator	5	1.4
	Others	3	0.8
What are the challenges/barriers you have faced in getting employed?	Inadequate Guidance	43	12.3
	Inadequate Opportunities	143	40.9
	Inadequate Salaries	86	24.6
	Others	78	22.3

Table 3: Various attempts and challenges faced by public health dentists.

Questions	Response	N	%
What do you think should be done to make the specialty more lucrative for fresh graduates to join	Create Avenues for Employment	175	50.0
	Join with Public Health Professionals	64	18.3
	Major Changes in the MDS Curriculum	49	14.0
	Orientation towards Clinical Dentistry	41	11.7
	Others	21	6.0
Are you getting equal opportunities as other specialities in dentistry	No	209	59.7
	Yes	112	32.0
	Don’t know	29	8.3
Are you satisfied with your public health dentistry profession	Yes	148	42.3
	No	185	52.9
	Don’t know	17	4.9
Are you Willing to suggest public health dentistry specialty for pursuing post-graduation to your colleagues/juniors?	Yes	134	38.3
	No	177	50.6
	Don’t know	39	11.1

Table 4: Recommendations and levels of satisfaction.

worker [6,7]. It is considered as one of the sought after professions in the present day scenario. In India, after graduation, there are two options either to become a clinician or pursuing masters in a dental specialty. Awareness about job opportunities is one of the major factors which influence the choice of specialty by many students. Many studies had concluded that most of the fresh graduates are interested in opting for any other clinical department but not DPH. This is because most of the current postgraduates of the specialty might have created a negative impact on them as they are not aware of the job opportunities after completion of the program. Understanding the need, the present study is conducted to assess the awareness about job opportunities among fresh postgraduates of DPH and also assess the challenges faced by them. Chandrashekar J stated the key function of public health dentists is to expertise in advocacy of oral health and policymaking not just assessment of skills [13].

In the present study female participants (51.4%) were slightly more compared to male participants. This implication is determined in a study by GM Naidu et al in which the majority of female participants (46.4%) showed higher interest in public health dentistry as a career when compared to male participants (6.25%).

SWOT analysis made on the dental health workforce in India by Halappa M., *et al.* suggests that there is an alarming situation of inadequate job opportunities because of a mismatch between dentist's production and job availability in the public health sector. This is in agreement with the present study where 34.9% of the participants were unemployed. There is existing literature published regarding the career opportunities of dentists in general in India while there is very minimal research done assessing the career opportunities of dentists who had chosen public health dentistry as a specialty [14].

In a study done by Sharma N et al, it was observed that only one-third (33.52%) of the respondents had a positive attitude toward selecting Public Health Dentistry as their future career, which is in agreement with the present study where only 15% participants responded that DPH as a specialty has good career growth [10]. This might be because of a lack of proper job opportunities after completing their post-graduation.

Ravi K., *et al.* conducted a study in which only 4.27% of participants responded that they had an interest in taking up a master's in public health dentistry before counseling. The majority of participants showed interest in pursuing post-graduation in any of the clinical dentistry which is a common outcome of many related studies, which can be compared with the present study where 22% of participants chose public health dentistry as a specialty because of their interest [8]. An increase in the number of people who opted for public health dentistry with interest might be because of

increased opportunities in various fields. Most of the participants responded that they had no other choice than to take DPH as a specialty. Similarly in the study done by Hiremath SS., *et al.* only 29% of participants had a prior interest in the specialty before opting.

Chandrashekar J., *et al.* conducted a study on career satisfaction among public health dentists in India reported that overall satisfaction among the public health dentists in which the majority of participants (84.4%) suggested a change in the curriculum of the specialty. Whereas in the present study 14% of participants advised bringing changes in the present curriculum to make the specialty more lucrative for fresh graduates. This indicates the need for constantly updating the curriculum to make the specialty more remunerative.

Despite having scope in various sectors of employment, such as biostatistician, research officer, chief editor, public health field (WHO, UNICEF), a hospital administrator or working for NGOs, most of the postgraduates from public health dentistry have chosen academics as their first preference (about 35.4%) due to lack of awareness about the career opportunities. This shows an insight into the need for the amendment's to be made in the specialty which further creates awareness and avenues for their employment. This is in agreement with a study done by Hiremath SS et al in which 48.2% of respondents choose teaching job as a frontline choice as plans after M.D.S which is not a very encouraging trend.

The present study focuses on challenges faced by public health dentists and the need for the development of strategies to overcome them. Keeping this in mind newer avenues like being a part of an NGO, dental public health consultant and acquiring better clinical skills would create more opportunities.

In this study, 50.6% of postgraduates were not willing to suggest the fresh graduates take public health dentistry as a specialty. This behavior implies the results of a study by Chandrashekar J et al, in which 30% of participants responded that they are not willing to suggest DPH as a specialty for juniors. Broadening the scope of public health dentistry by emphasizing including clinical orientation in the curriculum is needed.

Recommendations

The present study recommends that academics/teaching as the future prospects regarding this specialty in the minds being satisfied with the subject but still wants to change their subject needs urgent attention, keeping one eye on the future of the subject, innovative and strategic areas of Allianz and collaborations with other fields should be sought during and after post-graduation for the students and post-graduation in larger interest of the field for long term sustenance of the opportunities and interest.

Conclusion

Public health dentists are facing inadequate opportunities and there is a need to create avenues for their employment. Understanding the role of public health dentist would itself create an interest in the fresh graduates and also awareness about the career opportunities. To make the specialty more lucrative for new graduates, 175 (50%) suggested creating employment opportunities, and 41 (11.7%) suggested focusing on clinical dentistry. About 209 (59.7%) participants said they were not given equal opportunities as other dental specialties, while 185 (52.9%) said they were dissatisfied with their job. A systematic change in the curriculum could enable the public health dentist to contribute to the public health in a larger way and making it possible to incorporate oral health as a part of general well-being of the community.

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