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Original Article

Dentistry Section

Career Satisfaction among Dental Public Health Specialists in India – A Cross-sectional Survey

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ABSTRACT

Introduction: The satisfaction in career is an important indicator for the growth of the discipline and the profession. An empirical investigation of satisfaction in career and amendments needed in course and profession may help in growth of discipline.

Aim: To assess career satisfaction among Dental Public Health (DPH) specialists working in India and analyze their perspective on changes required in the profession.

Materials and Methods: Questionnaire for this cross-sectional survey was adapted from Minnesota Job Satisfaction Survey which included 40 enquiries to understand the reasons for choosing public health dentistry as career, competencies of public health dentists, satisfaction as a public health dentist and changes required in the profession. The questions were both open and closed end type. Updated electronic mail details of all registered public health dentists were collected from the head office of Indian Association of Public Health Dentistry. Each participant was contacted by electronic mail and consent to

participate were sought. Reminders were e-mailed thrice during three months. A total of 580 participants were contacted. A total of 183 responses were received, among which 179 consented.

Results: Nearly half of the respondents felt they are yet to achieve the accomplishment from the present career as public health dentist. Only 46.9% felt that there is advancement in the profession as career. Nearly three-fourth of respondents could not attain recognition as a public health dentist. A 45.8% of respondents were of the opinion that career in public health dentistry would provide them a steady employment and 53.1% of public health dentists would envision as satisfied in their career in next 10 years. Nearly 85% felt public health dentistry training needs a major course correction.

Conclusion: There has been some reservation or skepticism about the future of the specialty as the jobs are in declining stage. This information provides insight about success and failures of public health dentistry as profession which would be needed for planning the dental manpower.

Keywords: Career choice, Career ladder, Employment, Post graduate

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. Career satisfaction implies doing a job one enjoys, doing it well and being rewarded for one's efforts [1]. It is a sense of accomplishment and triumph; and is in general perceived to be directly correlated to efficiency as well as to personal health [2]. It is an indicator of a person's attitude towards his profession and for the latter affects behaviour assessment of career satisfaction [3]. The relationship has important theoretical and practical implications. Satisfaction of the doctors plays a great role in their performance and therefore is reflected as satisfaction and compliance among their patient [4].

Many young dental graduates had a considerable amount of interest in pursuing postgraduation in this speciality [5]. However, there has been some reservation or scepticism about the future of the specialty as the jobs are in declining stage.

This bimodal growth of the discipline has led us to find out the reasons behind growth of public health dentistry as career and a profession. The satisfaction in career is an important indicator for the growth of the discipline and to the profession. This information provides insight and information about success and failures as profession which would be needed for planning the dental manpower.

Postgraduate students were found interested in career as DPH professionals in India in previously conducted studies [5,6]. Across the world associations have been accounted between job contentment, efficiency, non-attendance and earnings among healthcare workers [7]. Therefore, it is important to understand the job satisfaction among public health dentists in India. Considering the significant role that DPH specialists play in an integrated, complex oral health care system, it is imperative for health care policy makers

like Dental Council of India (DCI), speciality associations and dental school directors to have a good understanding of the factors causing career satisfaction among DPH specialists. This knowledge will help to provide postgraduates of DPH speciality with adequate career counselling, frame policies that will enhance the work environment, improve compensation or reimbursement methods, and increase satisfaction levels in India. The purpose of this study was to conduct an empirical investigation on career satisfaction and amendments required in profession.

MATERIALS AND METHODS

Study Design: The study was a cross-sectional survey using questionnaire. Survey was conducted among Public Health Dentists in India from April to July 2015. The questionnaire was sent via e-mails.

Questionnaire: Questionnaire was adapted from Minnesota Job Satisfaction Survey [8] and necessary changes (content and face validity) were made to suit the requirements of the study. The questionnaire included 40 enquiries to understand the reasons for choosing public health dentistry as career, competencies of public health dentists, satisfaction as a public health dentist and changes required in the profession. The questions were mixed type - open and closed ended.

Sample Size: This study was exploratory in nature, to assess the responses from all participants, that is, public health dentists in India. Study does not require having a sample size since it is a whole population study. So, the study population were all public health dentists registered in Indian Association of Public Health Dentistry (IAPHD) working within India and willing to participate in the online survey.

Informed Consent: Informed consent for participation in study

was obtained from all the participants through electronic mail. Informed consent also consisted of participant information sheet which explained the study details and confidentiality issues.

Ethical Clearance: The study was approved and ethical clearance was obtained from institutional ethical committee at Amrita Institute of Medical Sciences, Amrita Vishwa Vidyapeetham, Cochin, Kerela, India.

Variables Evaluated: Variables were collected to assess the demographic characteristics of the participants, the reasons for choosing public health dentistry as career, the competencies and satisfaction in career and suggestions for changes required in profession

Data Collection: Updated electronic mail details of all registered public health dentists were collected from the Indian Association of Public Health Dentistry head office [9]. Each participant was contacted by electronic mail and consent to participate were sought. Reminders were e-mailed thrice during three months. A total of 580 participants were contacted. Among them, 183 responses were received out of which 179 public health dentists consented to participate in survey.

STATISTICAL ANALYSIS

The data was coded, tabulated and analyzed using SPSS version 17 for windows. Analysis was done using descriptive statistics and expressed in form of frequency and tables.

RESULTS

Total of 580 of the public health dental specialists were contacted. A 31.6 % responded out of which 30.8% consented to participate. Total 73.2% participants were in the age group of 27-37 years and 56.4% of respondents were males, 21.2% had more than 10 years of career in public health dentistry profession. [Table/Fig-1] describes the demographic characteristics of the participants.

A total of 40.2 % chose the profession because of their interest and 33% chose as it is easier to secure placements. Passion towards serving community (37.4%) was one of the fascinations to choose the profession. Of the total 14% chose public health dentistry as their first choice and 29.1% were having oral surgery as second choice. [Table/Fig-2] describes various reasons for choosing public health dentistry as a career.

Total 52% participants had acquired competencies for public health work. Nearly half of respondents felt that they are yet to achieve the accomplishment from the present career as public health dentist. Only 46.9% felt that there is advancement in this profession as

183 179 131 48 101 78	0 31.6 30.8 73.2 26.8 56.4 43.6
179 131 48 101	30.8 73.2 26.8 56.4
131 48 101	73.2 26.8 56.4
48	26.8 56.4
101	56.4
-	
78	43.6
-	
41	22.9
65	36.3
73	4.07
38	21.2
141	78.8
58	32.4
68	38
F0	29.6
	141 58

S. No	Question	Response	n	%
1	Reasons for choosing public health dentistry as career	Did not get other dental disciplines	31	17.3
		Easier to get job	59	33
		Likes public health job	72	40.2
		Other	17	9.5
		Less than 2 years	33	18.4
2	How long have you been in your present job?	2 to 5 years	78	43.6
		6 to 10 years	43	24
		above 10 years	25	14
	What was your	Нарру	120	67
3	first impression when you joined	Ignorant	42	23.5
	MDS in public health dentistry?	Other	17	9.5
4 you		Passionate towards Public Health dentistry and service minded	67	37.4
	What fascinated you to join public health dentistry?	Fascinating salary and Job opportunities	28	15.6
		No other choice/has to pay less to complete MDS in Public Health dentistry	17	9.6
		Non Response	67	37.4
	What does public	Just a career or another job	113	63.1
	health dentistry mean to you?	Other	66	36.9
		Only Public Health Dentistry	25	14.0
		Any Clinical Speciality	14	7.8
		Orthodontics	29	16.2
	What was your	Paedodontics	26	14.5
6	other choice for MDS other than public health dentistry?	Oral and Maxillofacial Surgery	52	29.1
		Conservative Dentistry and Endodontics	16	8.9
		Prosthodontics	6	3.4
		Oral Medicine and Radiology	2	1.1
		Periodontics	4	2.2
		Oral Pathology	5	2.8

[Table/Fig-2]: Reasons for choosing public health dentistry as career.

S. No	Question	Response	n	%
	Do you agree that MDS public health dentistry	Yes	93	52
1	has given required competencies (skills) for public health Professionals that are sufficient to your present job?	No	86	48
		Yes	45	25.1
		No	29	16.2
2	Do you agree that you have accomplished from present job as public health dentist?	Yet to achieve	92	51.4
		Will not be achieved	13	7.3
	At your present job, do you agree that there is advancement in your career or growth in public health dentistry?	Yes	84	46.9
3		No	63	35.2
		Not sure	32	17.9
	Do you agree that you have fair chances to tell others what you do in present job as public health dentist?	Yes	90	50.3
4		No	24	13.4
		Sometimes	65	36.3
	Do you agree that your present job has given liberty to do your own things independently as	Yes	75	41.9
5		No	47	26.3
	duties of public health dentist?	Sometimes	57	31.8
[Table/Fig-3]: Competencies of public health dentist.				

career. [Table/Fig-3] describes the competencies acquired for public health dentistry as a profession.

Nearly three-fourth of respondents were unable to secure due recognition in career. Total 45.8% were in the opinion that career in public health dentistry would provide steady employment. Total

S. No	Question	Response	n	%
	Do you feel you are getting enough	Yes	51	28.5
1	recognition for work related public health dentistry?	No	128	71.5
2	Do you feel you are rightly being compensated for the work as public health dentist?	Appropriate	53	29.6
		Not appropriately	65	36.3
		Partially compensated/ Over compensated	61	34.1
3	Do you agree that the job or career in public health dentistry gives you steady	Agree	82	45.8
		Not sure	54	30.2
	employment?	Disagree	43	24.0
4	Would you recommend public health dentistry career for younger graduates in Dentistry?	Yes	82	45.8
		No	56	31.3
		Maybe	41	22.9
5 a	How you would envision yourself in another ten years in practice of public health dentistry?	A very satisfied Public Health Dentist	95	53.1
		Dissatisfied	32	17.9
		Change career	28	15.6
		Other	24	13.4
	Have you ever thought of practicing	Yes	97	54.2
6	Public health dentistry other than teaching professions?	No	48	26.8
		No Response	34	19
_	Given choice would like to change the	Agree	79	44.2
7	career from public health dentistry to other?	Disagree	100	55.8

53.1% of public health dentists would envision as satisfied in their career in next 10 years. Nearly 54% have thought of practicing public health dentistry as career rather than teaching in college. A total 44.2% of public health dentists were willing to change the career given a choice. [Table/Fig-4] describes about satisfaction in

career of public health dentists.

Nearly 84% felt public health dentistry training needs a major course correction. Community based training (36.9%) and increased public health modules (25.7%) are the major changes required in course. About 67% of respondents were in the opinion of retaining three years post graduate course curriculum in public health dentistry. Nearly 69% respondents felt that public health dentistry is more of theoretical than practice oriented. The opinion was divided equally among respondents regarding blanket cessation of postgraduate course in public health dentistry. Nearly 46% respondents did not have any credible answers for improving the profession [Table/Fig-5].

DISCUSSION

Public health dentistry as a profession is still at its infancy in India. When we examine the origin of dental public health as profession, it was due to history of dental fluorosis [10], which in turn led to advent of the use of fluoride in dentistry. The wider prevalence of dental caries and the socioeconomic burden of disease are the factors that led to the need and growth of the dental public health.

In India there is accelerated growth of dentistry in last decade enormously to an extent, it houses large number of the dental schools and with highest dental graduates output in world [11]. In parallel, dental public health also grew in terms of teaching to dental graduate schools and specialists. The oral health care system is unable to meet the increasing dental graduate and even the dental specialist output in terms of employment [11]. Also, there is lack of public dental health programs where the unemployed professionals can be employed. Only option is that all dental public health specialists are employed in Indian dental school as faculty, teaching the graduates. There are nearly 1100 DPH specialists in India [9].

S. No	Question	Response	n	%
1	Do you agree that public health dentistry training needs a course correction?	Agree	151	84.4
		Disagree	28	15.6
2	What aspect of training in public health dentistry needs to be amended?	Knowledge	5	2.8
		Skills	42	23.5
		Activities (Community training)	66	36.9
		More Public health modules to be included	46	25.7
		Other	20	11.2
	Do you agree that Public		59	33.0
3	health dentistry curriculum needs to tapered to two years or lesser?	Disagree	120	67.0
	Do you agree that Public	Agree	31	17.3
4	health dentistry as a specialty is not relevant and needs to be combined or replaced with general MPH?	Disagree	148	82.7
	Do you agree that Public	Agree	124	69.3
5	health dentistry is more theory based rather than practice oriented?	Disagree	55	30.7
	Do you agree that Public health dentistry training you have achieved is relevant to Indian community needs?	Agree	68	38
6		Disagree	111	62.0
	Do you agree that increase	Agree	88	49.1
7	in number of specialists in Public health dentistry would contribute to increased oral health care or promotion for underserved population?	Disagree	91	50.9
	Do you agree that there	Agree	59	33
8	should be blanket cessation of post-graduation in public	Not sure	58	32.4
	health dentistry?	Disagree	62	34.6
	How effectively public health profession can be improved?	Improving many areas like public health, human resources, communications, statistics, research methodology	21	11.7
9		More community activities, improving practical skills	22	12.3
		Improving and following curriculum, understanding PHD more and improving team work among ourselves	25	14.0
		More funding and opportunities from government	11	6.1
		Others	17	9.5
		No answer	83	46.4

[Table/Fig-5]: Changes required in profession.

Ideally DPH specialists promote oral health by: assessing the oral health needs of the community; developing and implementing oral health policy and providing programs and services that address oral health issues [12]. However, many DPH specialists are working as faculty which is not their main ideal characteristic of the profession. DPH specialists in India at present are threatened over issue of lack of opportunities, stagnation of growth due to increased output of DPH specialists and lack of opportunities other than teaching profession [13]. It has become more of a teaching profession rather than public health practice. Teaching needs latest inputs from the public health practice. In view of current scenario, we examined career satisfaction among DPH specialists working in dental schools all over India. This is probably the first study to report the satisfaction among professionals in this speciality and the study findings provide insights to amendments that may be required in the profession.

Though five attempts were made to contact all 580 registered DPH specialists through online electronic mail, we could achieve a response rate of only 30.8%. However, with a reported average response rate of 24.8% for email surveys [14], we achieved a better response. Despite having active email accounts, online surveys are not acceptable to many. Lack of prior experience in completing online survey forms could be another reason for the low response rate.

Majority of the respondents chose DPH as career since they are interested and fascinated towards public health job. This is similar to findings from other studies conducted in India [5,6]. Efforts have been noted among public health dentists to acquire new skills and knowledge recently [15].

Career satisfaction also means to acquire required competencies of profession and accomplishment as professional. There is contrary view in the present study that even though respondents were having required competencies but could not accomplish as DPH specialists. This signifies that as DPH professionals are limited to teaching profession. There is lack of opportunities at dental school to use their full competencies to practice public health. Teaching needs latest inputs from the public health practice which is not happening.

Nearly 63% of participants have experienced lack of advancement in their DPH career. Career advancement is one of the most important elements for employee satisfaction and retention. This can be because the term professional advancement is perceived among persons in different perspectives. It could mean gaining experience in multiple professional fields and creating a unique and versatile role for oneself or attaining a senior position in a dental school.

Still other ideas of career advancement can be like starting an NGO, becoming dental public health consultant or acquire more complex technical expertise capabilities like doing PhD. The career advancement is unfortunately unexplored in the field of the DPH. Few universities [16] in India are offering PhDs in DPH, but unsure of the prospects. Many would aspire for additional responsibilities that lead to an evolution or a changing of their roles in teaching career in DPH. When career paths are dim or non-existent, individuals tend to be less motivated, less focused and more uncertain, which is seen among DPH specialists in India.

Nearly 72% of DPH specialists failed to get enough recognition as professional. Satisfaction is the rewards a person gets while doing their job. Rewards can take a monetary form (money) or be a more intangible reward, like the feeling a person might get when doing a job that helps others or making difference for others like doing some changes in oral health of the people or contribute a small change in oral health policy. These changes are not unfolding in DPH profession, so the specialists might have felt the lack of recognition. It can also be because of Westernized concepts acquired in DPH may be difficult to interpret and practice in the Indian settings. Also it can be attributed to lack of appreciation of importance of the dental public health concepts among the dental fraternity in India [11,13,17], which in turn reflects on the DPH specialists. In India, DPH professionals often, suffer from an identity crisis wherein their role is curtailed to that of a case finding or doing outreach programs for dental school to increase the patients for student clinics [13], which is contrary to their competencies which may attribute to lack of recognition.

Many respondents agreed that DPH career provided them with steady employment. An aspect of career satisfaction that is not really reward-related is job security. Some people obtain career satisfaction from knowing that they are stable. There are individuals who feel this as the most important aspect of a job. Having a stable job makes them feel secure, which helps to promote career satisfaction. When compared to other dental specialities, which are already saturated in teaching jobs, DPH provides a steady employment.

There were many respondents who thought of practicing the DPH rather than teaching profession. This view is sensible since DPH

practice is the core function of DPH specialists. Practicing DPH is more challenging and satisfying than teaching. There are two basic views of satisfaction and performance. One is that satisfaction leads to performance, and other is performance leads to satisfaction. However, either view, performance to their core function is important for DPH specialists.

Many respondents were in the opinion that the DPH needs course and curriculum corrections. They felt that the skills in public health, community orientation and public health modules are important amendments required in DPH course. This can be attributed to the deficiencies in the current public health dentistry curriculum that revolves around case finding, needs assessment, data collection, and analysis [12,13].

There is a passion among DPH specialists to acquire new skills and knowledge and also few opting for modules and courses outside their postgraduate courses. This indicates poor design of our curriculum and also that the output product is short of necessary standards and competencies desired [15]. There is a need to broaden the subject spectrum from being merely assessment oriented. The policy making process entails collaboration, decision making skills, ability to make choice of goals and ability to resolve conflicts and negotiations. The assurance component involves implementation of legislative mandates, statutory responsibilities, implementation of programmes, evaluation of programs and provide quality assurance, inform and educate the public [18].

An amalgamation of these three core areas, namely assessment, advocacy and policy making to the curriculum on the lines followed in some of the developed nations can provide a strong foundation for DPH profession in India [15].

RECOMMENDATION

- 1. Since public health dentistry curriculum has a separate paper on public health, community and field training activities in public health has to be incorporated into curriculum.
- 2. Integration of public health modules like health system analysis, national health program, and health economics in public health dentistry curriculum would enhance the competencies of a public health professional.

LIMITATION

Online surveys are not an acceptable method to many. This contributed to the low response rate in survey.

CONCLUSION

Nearly half of respondents felt that they are yet to achieve the accomplishment from the present career as public health dentist. Only 46.9% felt that there is advancement in this profession as career. Nearly three-fourth of respondents were unable to secure due recognition for the work related public health dentistry. Overall satisfaction level among public health dentist was low due to job insecurity and unemployment. The regulatory bodies need to take into account of the course correction of DPH in India.

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