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Bridge Course Knowledge among Dental Students and Faculty Members of Private Dental College of North Gujarat, India

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ABSTRACT

Aim: To find the awareness and attitude towards bridge course by the students and faculty members of a private dental college of North Gujarat. Questionnaire based cross sectional study was conducted among all staffs and students of private dental college.

Methods and Material: A Cross-sectional study was conducted among the students and faculty members of private dental college of Gujarat during the month of July 2019. The study consisted of 300 subjects. The questionnaire consisted of 2 parts. The first part consisted of Demographic details. The second part consisted of 11 questions related to awareness and attitude of dental students and faculty members towards the amendment of Bridge course. The subjects were given questionnaire form and were asked to choose an option from the multiple-choice questions. The collected data was entered in to Microsoft excel 2014 and subjected to statistical analysis using Statistical package for Social Sciences (SPSS version 20.0). The results were evaluated by using chi square test.

Results: As compared to PG and staff members, majority of the UG students (90.55%) supported the concept of bridge course which was statistically significant. ($P \leq 0.05$) Majority of the subjects were in favour of implementation of bridge course in India.

Conclusions: It was concluded that the need of bridge course was very high for the UG students. All Dentists and dental students have to take initiative for the implementation of bridge course in India to improve the status of Dental practitioners so they can improve the overall health status of Indian population.

Keywords: Bridge course, Dental College, Attitude.

INTRODUCTION

Health is a common theme in most cultures. In facts all communities have their concepts of health, as part of their culture. According to WHO, health is a state of complete physical, mental and social well-being and not merely an absence of diseases or infirmity.[1] Health is a condition or quality of the human organisms expressing the adequate functioning of the organisms in given conditions, genetic and environment. The philosophy of health has been quite focused on the problem of determining the nature of the concepts of health, illness and disease. It is widely accepted that

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graduates of health professions programs must be critical thinkers and lifelong learners to keep pace with the ever-expanding biomedical body of knowledge.[2]

The graduates of our health professions educational systems should have a strong foundation in basic and biological science to enable them to comprehend patient's health abnormalities, the aetiology and mechanisms of these problems, and clinical problem solving. Ideally, graduates should have the ability to collaborate with diverse teams to provide competent, high-quality, evidence-based care. Many have argued that the health professions curricula offered to today's students do not foster the development of these characteristics.[3]

National medical commission (NMC) Bill 2017, was in controversy regarding bridge course for Dental doctors. There is nationwide opposition by MBBS doctors for the bridge course for Dental doctors proposed in NMC Bill 2017. According to NMC Bill 2017 they proposed a bridge course for Dental Practitioners so that Dental practitioners will be able to practise allopathic medicine after completing bridge course. As a result, this bill is not accepted and it has been left to individual states to take a decision about this.[4]

Dental practitioners have come together to support the proposed National Medical Council (NMC) Bill, which provides a bridge course that would allow them to legally practise a list of modern medicine. Approving certain amendments in the NMC Bill, the Cabinet left it to the state governments to take necessary measures for addressing and promoting primary health care in rural areas. After completed the four year-long Bachelor of Dental Surgery (BDS) course, followed by a one-year internship that too include the knowledge of both Dental as well as modern medicine and still a doctor is not allowed to practice modern medicine, then the main question arises what is the use of studying modern medicine syllabi during this 5-year course.[5]

Different people have different point of view across the country. On one hand all allopathic practitioners are opposing this bridge course but on other hand all the Dental doctors are favouring this Bill and want this bridge course to be implemented for the sake of Dental Doctors as well as patients. As we observe in daily life that every person has gone through doctor crises at least once in a life time. In most of the Government hospitals a doctor has to deal with many patients, and due to increasing number of patient's, day by day in the present era, the demand of doctors is also increased. But due to lack of doctors in our country one doctor has to deal with around 200 to 500 patients in OPD in one single day. As it is not possible to deal these number of patients on daily basis which make it more difficult to doctor in diagnosing and treating the patients and many patients left undiagnosed and untreated. Due to lack of time This clearly indicate that this crisis of doctor needs an urgent check and this demand should be fulfilled within time.[6] The World Health Organisation's (WHO) 2000 World Health report ranks India's Health care system as 112 out of 190 countries. This is a serious issue regarding demand of doctors.[7]

The present study was conducted to find the awareness and attitude towards bridge course by the students and faculty members of a private dental college of North Gujarat, India.

MATERIALS AND METHODS

Selection of patients:

A Cross-sectional study was conducted among the students and faculty members of private dental college of Gujarat during the month of July 2019. The study consisted of 300 subjects. Students from 1st year and 2nd year were excluded from the study as they had little knowledge on the clinical subjects. Moreover, they might not have thorough knowledge on the career prospective of dentistry. The informed consents were obtained from the subjects. Then the questionnaires were distributed. The questionnaire consisted of 2 parts. The first part consisted of Demographic details. The second part consisted of 11 questions related to awareness and attitude of dental students and faculty members towards the amendment of Bridge course. The subjects were given questionnaire form and were asked to choose an option from the multiple-choice questions.

Inclusion criteria:

Participants who are co-operative and ready to give written consent will be included in the study.

Third year, Final Year, Interns and Post Graduate students.
All BDS and MDS staffs.

Exclusion criteria:

The participants who are uncooperative will be excluded from the study.
First year and Second Year students.

List of materials:

Structured close ended questionnaire

Statistical Analysis:

The collected data was entered in to Microsoft excel 2014 and subjected to statistical analysis using Statistical package for Social Sciences (SPSS version 20.0). The results were evaluated by using chi square test.

RESULTS

Table 1: Distribution of study subjects in support of bridge course.

	Undergraduate (UG)		Postgraduate (PG)		Staffs		Total	
	N	%	n	%	N	%	N	%
Support	182	90.55	43	68.25	30	83.33	255	85
No Support	19	9.45	20	31.75	6	16.67	45	15
Total	201	100	63	100	36	100	300	100
Chi Square Value: 18.786						P value: ≤ 0.05		

Chi Square Test Applied: Level of significance ≤ 0.05

The data showed that 90.55% of Undergraduate (UG) students, 68.25% of Postgraduate (PG) students and 83.33% of Staffs supported the concept of bridge course. Statistically significant result was observed among study participants. (P value: ≤ 0.05) (Table 1)

Table 2: Distribution of study subjects in benefits of the needy population by the bridge course.

	Undergraduate (UG)		Postgraduate (PG)		Staffs		Total	
	N	%	n	%	N	%	n	%
Support	196	97.51	51	80.95	32	88.89	279	93
No Support	5	2.49	12	19.05	4	11.11	21	7
Total	201	100	63	100	36	100	300	100
Chi Square Value: 21.268						P value: ≤ 0.05		

Chi Square Test Applied: Level of significance ≤0.05

The data showed that 97.51% of Undergraduate (UG) students, 80.95% of Postgraduate (PG) students and 88.89% of the Staffs believed that the needy population would be benefited if the bridge course is implemented. Statistically significant result was observed among study participants. (P value: ≤ 0.05) (Table 2)

Table 3: Distribution of study subjects with regard to improve health care delivery system in India by the bridge course.

	Undergraduate (UG)		Postgraduate (PG)		Staffs		Total	
	N	%	n	%	N	%	n	%
Support	197	98.01	52	82.54	28	77.78	277	92.33
No Support	4	1.99	11	17.46	8	22.22	23	7.67
Total	201	100	63	100	36	100	300	100
Chi Square Value: 28.460						P value: ≤ 0.05		

Chi Square Test Applied: Level of significance ≤0.05

The data showed that 98.01% of Undergraduate (UG) students, 82.54% of Postgraduate (PG) students and 77.78% of Staffs believed that the health care delivery system in India can be improved by the implementation of bridge course. Statistically significant result was observed among study participants. (P value: ≤ 0.05) (Table 3)

Table 4: Distribution of study subjects on implementation of bridge course.

	Undergraduate (UG)		Postgraduate (PG)		Staffs		Total	
	N	%	N	%	n	%	N	%
Support	182	90.55	41	65.08	31	86.11	254	84.67
No Support	19	9.45	22	34.92	5	13.89	46	15.33
Total	201	100	63	100	36	100	300	100
Chi Square Value: 24.030						P value: ≤ 0.05		

Chi Square Test Applied: Level of significance ≤0.05

The above data showed that 90.55% of Undergraduate (UG) students, 65.08% of Postgraduate (PG) students and 86.11% of Staffs supported that the bridge course should be implemented in India. Statistically significant result was observed among study participants. (P value: ≤0.05) (Table 3)

The above data showed that 70.15% of Undergraduate (UG) students, 57.14% of Postgraduate (PG) students and 80.56% of Staffs believed it to be worthy to do bridge course even after completing BDS course of 5-year duration. Statistically significant result was observed among study participants. (P value: ≤ 0.05) (Table 5)

Table 5: Distribution of study subjects with regard in worthiness to do bridge course after finishing 5 year of BDS course.

	Undergraduate (UG)		Postgraduate (PG)		Staffs		Total	
	n	%	n	%	N	%	N	%
Support	141	70.15	36	57.14	29	80.56	206	68.67
No Support	60	29.85	27	42.86	7	19.44	94	31.33
Total	201	100	63	100	36	100	300	100
Chi Square Value: 6.459						P value: ≤ 0.05		

Chi Square Test Applied: Level of significance ≤0.05

DISCUSSION

According to World Health Organization (WHO) report, India ranks 67th in the list of 133 developing countries with a doctor-population ratio at 1:1700 as compared to a world average of 1.5:1000.

That means, not even 1 doctor is available for 1000 population, even after more than half century of independence; a goal still far behind as per the recommendation given by Bhore committee in 1946, subsequently modified by Mudaliar committee (1961) and Bajaj committee in 1987. Although WHO is aiming to achieve a doctor-population ratio of 1:1000, India can achieve this in 2031 within the frame work of existing colleges and state of affairs.[8] It is now also estimated that there will be still a shortage of 9.54 lakh doctors by the time India achieves that.

As an effort to allow dentists to do more medical care and physicians to do more oral health care, there has been a push to encourage collaboration between dentists and physicians, especially in the area of screening and diagnosis but also for treatment of certain conditions.

In India there are numerous dental colleges. However, the distribution is uneven. The current data suggests that there are 2,77,462 registered dental surgeons in India in the year 2020.

There has been a critical change in oral wellbeing throughout the years. There was a marked improvement between the 1980s and 1990s, from 1:80,000 to 1:42,500. At present the dentist to population ratio in India is 1:30,000.[9] Oral health enhancements of the urban population are better as compared to rural population. 70% of graduating dental students wants to build up their dental clinics in urban communities, and 30% favoured in rural regions of country.

This higher fixation of dental specialists in the urban territories prompts rivalry and this opposition may likewise prompt various social and conduct issues in dental practitioners, as contribution in deceitful and degenerate practices. As per World Health Statistics - 2014, the dentist to population ratio is 1:10000. In the year 2004, India had one dental specialist for every 10000 individuals in urban areas and one dental specialist for each 1.5 lakh individuals in the rural regions.

According to the study conducted by Y Sankalp et al, who showed that only 5% graduated dentists are working in the government sector. Besides, the salaries in these Government hospitals vary a lot among various parts of the country. Additionally, the selection process for such posts may likewise be dominated by the developing defilement and acts of neglect.[10]

The creation of dental surgeon's post at the level of Primary Health centre's or Community Health Centres is only the solution. 1,043 dentists were posted at the PHC level in various rural areas in 1986. Thus, not even 20 percent of the existing primary health centre's in India have the services of a dentist available for the population. Also, there are no set criteria for posting a dentist at the PHC level in rural areas around the country.[11]

According to the study conducted by Patton LL et al, at the dental schools in US, he found Many students who believed that dentists should take a greater role in screening for certain medical conditions, such as cardiovascular disease and other chronic diseases, and, according to at least 1 national study, they would be willing to do so.[12] Because such screening is not addressed in the medical practice acts, arguably it is not the unauthorized practice of medicine and is a potential area for expansion by dentists.

Dentists have general knowledge of the structure and function of the entire body, along with their special expertise in the oral cavity.[13,14] In our study it was found that majority of the dental students and staffs believed that dentists can provide good general treatment if they are given opportunity. This was similar with the findings of Greenberg BL

et al who found that, Although the public health forces behind enhancing the medical services provided by dentists are not as strong as those pushing to include oral health care services in the medical office, there is a movement to recognize the systemic health training and capabilities of dentists, and surveys reveal support among patients and physicians for enhanced medical care in the dental setting.[15]

In the present study, it was found that most of the dental students and staffs supported the concept of bridge course.

Our study that most of the dental students and staffs believed that the needy population would be benefited by implementation of the bridge course. This was similar with the findings of Deborah M et al, Glick M et al and Jontell M et al, who found that in the interest of improving the health care system's ability to provide early diagnosis for certain health problems, many public health officials support the role of dentists in screening, diagnosis, and even treatment of certain medical conditions.[16,17,18]

According to our study, it was found that most of the dental students and staffs believed that health care system in India can be improved by implementation of bridge course. There is already lack of general practitioners in India. Due to lack of such skilled medical professionals, the poor and the needy are suffering a lot. By implementing the bridge course, such needy people would be benefited.

Our study showed that majority of the dental students and staffs believed that the dentists could be very much benefited by implementation of bridge course. There would be a strong employment vacancy created once this bridge course is implemented. Most of the medical professionals are not willing to practice in rural areas. This might probably due to the fact that there is lack of development and facilities there. So, the dentists could get benefit to practice there. Thus, the implementation of bridge course can create many job opportunities for the dentists.

According to the study conducted by Sudhakar et al, about Dental manpower planning in India, who mentioned that unemployment of new dental graduates is certainly increased. Further, 70% of graduating dental student's preferring to establish their dental practice in cities, and 30% preferred in rural areas of country. On the observation of data from above mentioned study, it gives an impression that dentists are clustered at selected areas of India which could be probably due to the affordability of patients, availability of dental technical support, or as a personal choice. The reports were identified that registered dental surgeons are shifting their profession due to unemployment.[19]

Although the current dentist to general population ratio appears to have sufficient number of dental surgeons in the country, the declining scope of dental profession may be due to the factors such as imbalanced geographical distribution of Dental surgeons,[20] insufficient employment opportunity from the government setup, inadequate planning on dental manpower utilization, and lack of proper awareness about health insurance systems among general populations.

The implementation of bridge course is opposed by the medical professionals probably because the bridge course will provide opportunity to the non-medical professionals who are not as skilled as them. Moreover, they believe that this implementation can hinder their job opportunities. However, in our study, majority of the dental students and staffs believed that there will be no threat to the medical people if this course is implemented.

According to the Rural Health Statistics released by government of India, in 2016, there was a minor shortfall of 3244 of doctors at Primary Health centre's (PHCs), if matched against sanctioned posts; where India has currently capacity of producing 67,000 MBBS doctors per year.[21] The total number of posts sanctioned at PHC in India only 34,068 about half of the current number of MBBS doctors produced annually.

The shortfall is miniscule as compared with the capacity. As a matter of fact, there are very few sanctioned positions of doctors employed in public healthcare delivery system, given the Indian population and high morbidity levels. Apparently, there is over supply of MBBS doctors for whom there is no jobs in public sector. The private healthcare industry is largely urban based, hospital centric, and specialty driven and therefore does not

have capacity or need to employ basic MBBS doctors. As it becomes clear now, there has been a continued apathy toward employing medical practitioners in the public healthcare delivery system, more specifically in the primary care and community-based domain.

The findings of our study showed that majority of the dental students and staffs believed that the bridge course should be implemented in India.

Moreover, our study showed that most of the dental students and staffs believed that it would be worth to do bridge course of 3 years even after spending 5 years in their undergraduate life. This could probably due to the fact that after completion of their graduation, many dental graduates find it difficult to get good job opportunities. Moreover, the fees for dental post-graduation is also very high in private dental colleges in India. So most of the students opt for setting up their own clinic. Some even think of pursuing some other courses from other foreign universities. So, by implementation of bridge course, students can be benefited in terms of financially as well as occupationally. Hence most of the dental students and staffs are supporting the implementation of bridge course in India. The limitations of our study are that, it was conducted in a private dental college of Gujarat. Hence opinion of only few subjects were taken. Moreover, the opinion from only dental students and staffs were taken in this study. The study should be taken forward to include more medical and dental students and staffs and their opinion must be taken into account.

CONCLUSION

We are doctors and it's a profession that is considered on a special mission and devotion. Everyone should remember one thing that it's not the medicine that cures the patient but it's the doctor's vision which he applies on patient to give complete relief to the patient. The central government seeks to fill in the gaps availability of healthcare personnel by facilitating trained Dental practitioners to expand their skill sets through the bridge course and provide preventive and promotive allopathic care. Our study concluded that most of the dental students and staffs supported the concept of bridge course. To maintain the doctor patient ratio, the bridge course will help to address this demand and better utilisation of resources and make the health sector a bigger provider of employment for the people of the country. Moreover, it should be implemented for the betterment of the society as well as improve the healthcare of the common people.

CONFLICTS OF INTEREST

The authors declare they have no potential conflict of interests regarding this article.

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