

Possible Future Career Challenges And Associated Factors Among Dental Students And Interns studying in a Dental college In Central India.

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ABSTRACT: Introduction: Dental students and graduates face a variety of challenges as they enter dental profession. This study is aimed at a assessing the opinions of the dental students and graduates about their perceived future career in challenges in dentistry and the associated factors.

Materials and Methods: A cross sectional study of 450 students representing private dental college, Nagpur, India. The participants responded to a questionnaire conducted online

Conclusion: The career motivations of the dental students and graduates seemed to relate to the need for post graduate education. Getting a government job and establishing a private clinic were the most common career challenges.

Keywords : Dental challenges, Dental students, post graduation, Dentists.

INTRODUCTION

Dentists being important part of medical community, are very important for the welfare and well being of the society, hence they hold a very vital place in the community. There are various factors for selecting career which are complex and complicated and dentistry is not an exception^(1,2). A person should try and indulge himself into his profession of interests as this will reduce his/her chances of failure in the future.

Career options for new graduate dentists are changing because of economic and management challenges in traditional practice , difference in interests , skills and desires and also lifestyle expectations⁽³⁾.

People come from different socio economic background and their priorities and perception regarding profession vary⁽⁴⁾. Some people make their career decisions following the footsteps of their parents and/or elder siblings and find themselves in a line of work without truly understanding their profession further making their career challenging. Reasons for choosing dentistry as a career include the ease of employment, can be self employed and also good income sources are there^(5,6,7).

In India around 26,000 dentists graduate per year. This count reached to as high as 30,570 in 2010 wherein only 8,000 students graduated in 1970⁽³⁾. Over a period of expectations, outlooks and beliefs of students and graduates change, so

studying the expectations and mindset about the future challenges of students and interns in a dental college is important due to the precious investment of time and money⁽⁸⁾. Research into motivation and expectations of the emerging work force is vital to inform professional and policy decisions^(9,10).

A worldwide Covid - 19 outbreak has occurred which spreads through droplets/ and direct contact. Because of this ongoing corona virus pandemic dentistry is at its lowest^(11,12) and Dentists are most prone to infections due to novel corona virus and their transmission due to wide use of rotary instruments which generate aerosols which maybe a causative agent of Covid – 19⁽¹³⁾. This study also involves the possibility of fear and anxiety of getting infected with the novel Corona virus and how do they perceive it as a future challenge⁽¹⁴⁾.

It is normal for health care providers to face difficult challenges as they enter the workforce, these challenges may arise as a part of transition from student to practitioner³. According to former acting DCI president Dr. Mahesh Verma, “Over the years, we have created a huge manpower of dentists and job avenues have shrunk. There is not much opportunity for today’s pass outs, except if they want to start their own practice, which too isn’t easy . it needs money, space infrastructure and right attitude,” as mentioned in the article⁽¹⁵⁾.

It is critical in dental field for students to know the challenges associated with their future career as there is a rare chance that a dentist will change their career after entering the profession. The ideal dentist population ratio according to WHO was recorded as 7500⁽³⁾: 10,000 population. However, in India the overall ratio is 1:30,000 followed by one according to World health statistics report there should be 1 dentist for every dentist per 10,000 population in urban areas and one in 2.5 lakh in rural areas as in 2004^(16,17).

These numbers project the need of our profession in general and also show the uneven distribution of ratios in places which actually require dentists to where the saturation of dental professionals is crossing limits.

More than 1 million unqualified dental health care providers or “Quacks” are reported in India⁽¹⁷⁾. Majority of the population of India resides in rural areas (74%) in its 7 million villages⁽¹⁸⁾ and for them quacks are easily approachable and accessible due to low cost of treatment and immediate service¹⁹. These quacks mostly learn their technique by working as an assistant and by observing the dentists and thus this poses as a major challenge to the dental profession^(20,21). Meeting these different challenges requires the developing and reforming dental schools which are both scientifically and clinically up to date as it will stimulate and motivate students to take up research as a career and also encourage students to keep learning life long⁽²²⁾.

Hence, this study is being performed to extract the attitude of future dental professionals towards dentistry and challenges faced by them.

AIM

The aim of this study is to know and understand the possible future career challenges and associated factors among dental students and interns.

OBJECTIVES

To know the opinion of dental students regarding their future in dentistry.

MATERIALS AND METHODOLOGY

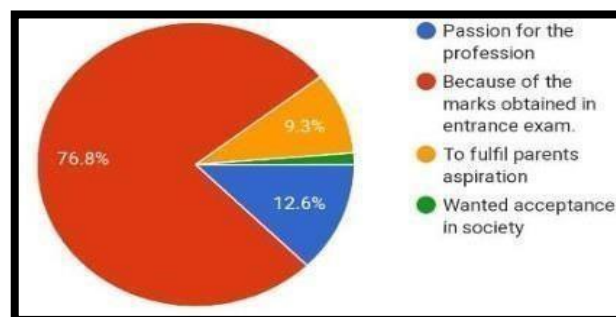
The subjects of this study were the students of the VSPM DCRC , Nagpur, Maharashtra. A total of

453 students participated in the online survey between time period of 8th August 2020 to 15th August 2020. A list of students was collected from each academic year for sending the google forms . A cross sectional study was conducted based on the available career opportunities and associated potential challenges for dental students and interns. A 22 item questionnaire was prepared and circulated among 1st year to final year students including interns through social media and email. The questionnaire comprised of five sections examining their vision of dentistry (i.e. why they had chosen it as a career), short-term career aspirations, long-term career aspirations, influences on their career and their personal details . All students were offered the opportunity to complete a questionnaire. The students and the interns were reminded twice and the responses were collected. Descriptive analysis was performed to calculate frequencies of categorical variables.

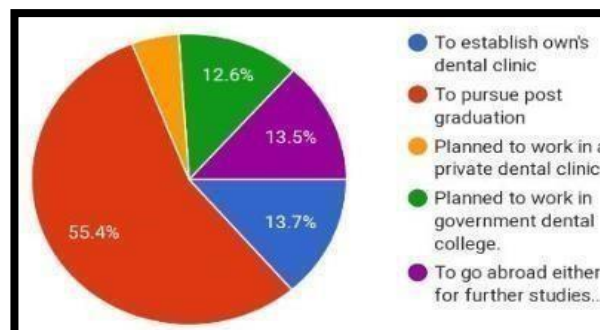
RESULTS

A total of 453 students completed the questionnaire. The age of respondents ranged from 18- 29 years .The sample consisted of 82.1% of females and 17.7 % males and 0.2% preferred not to say. 24.9% respondents were from final year followed by 23% from third year , 20.3 % were interns and 15.9 % were first and second years each.

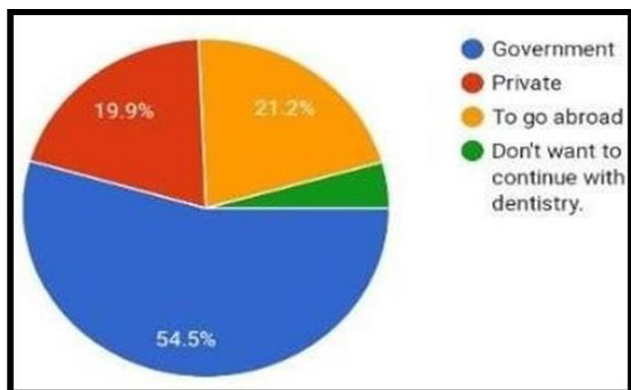
1.Why did you choose



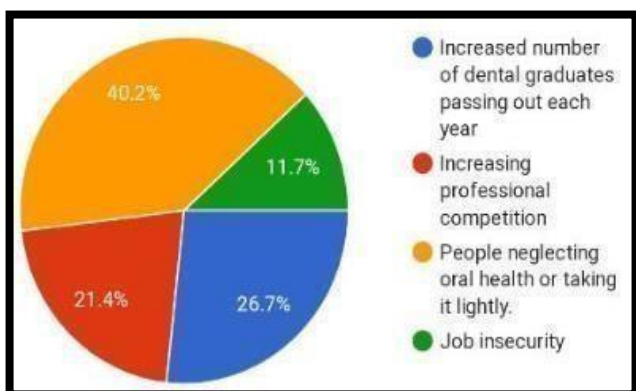
2.Aspiration after



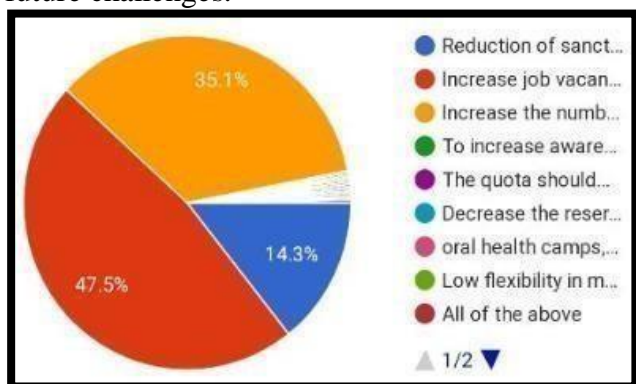
3.If given an option, in which sector would you want to work?



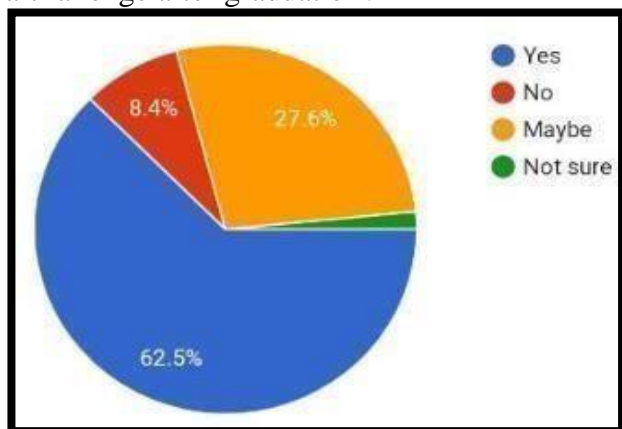
4.What do you think is the major challenge in dentistry as a profession?



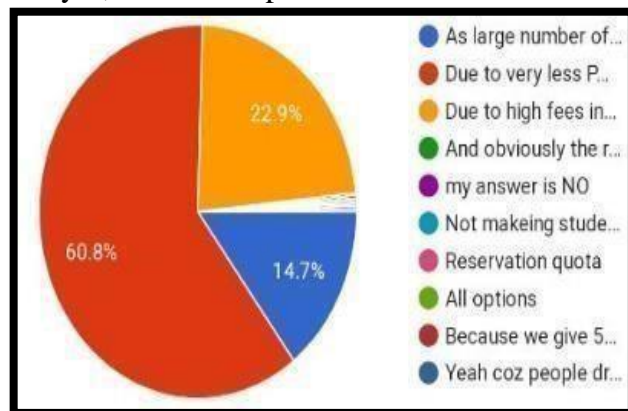
5.Suggestions of remedial strategies to meet future challenges.



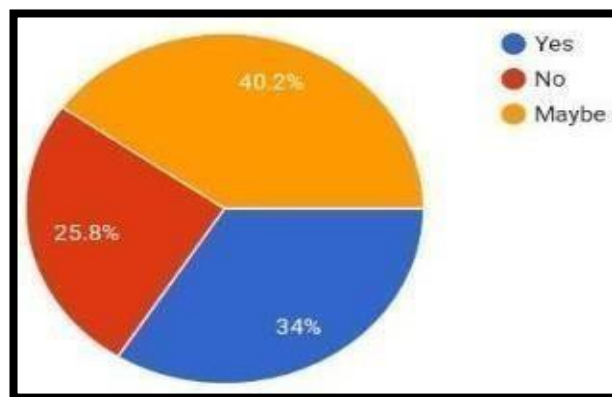
6.Do you think pursuing Post Graduation is a challenge after graduation?



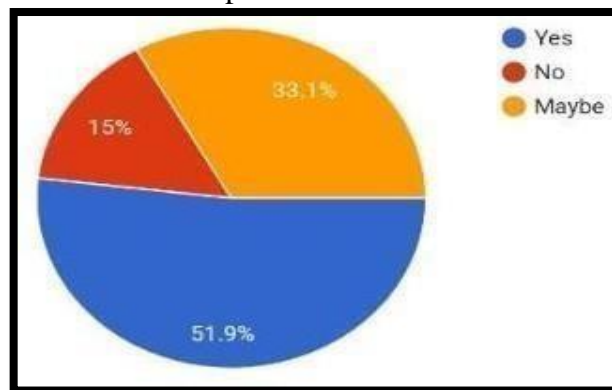
7.If yes, what is the possible reason for it?



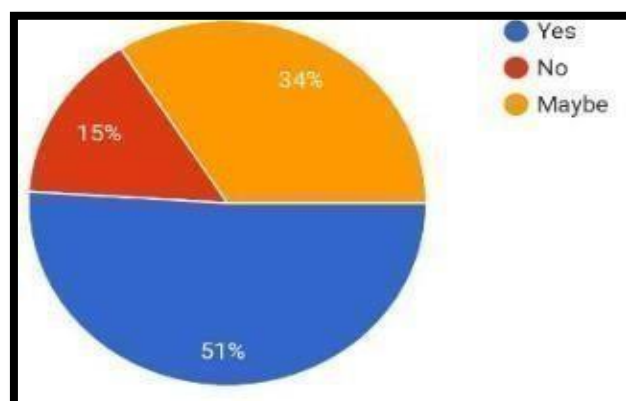
8.I think I will have difficulty in finding job in private clinic.



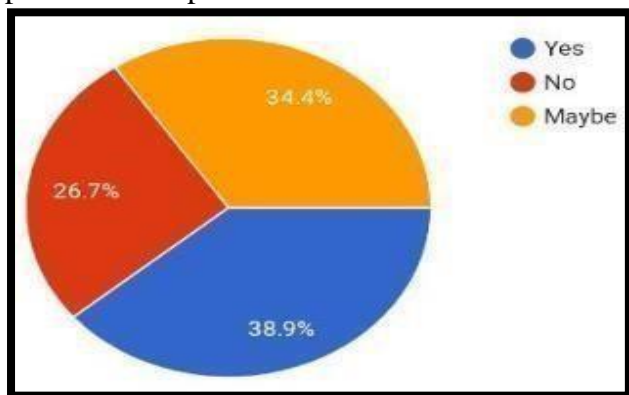
9.I think I will have difficulty in getting job in armed forces hospital.



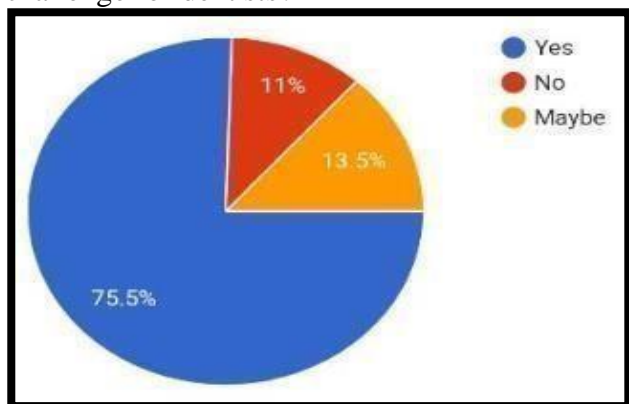
10.I think it will be challenging to get an admission abroad(for PG).



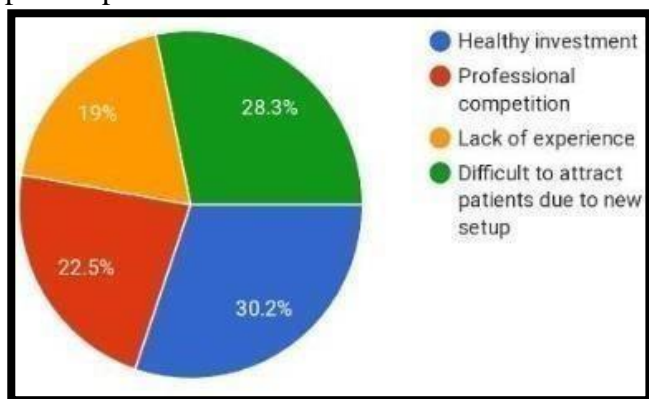
11. I think it is difficult to establish my own private dental practice.



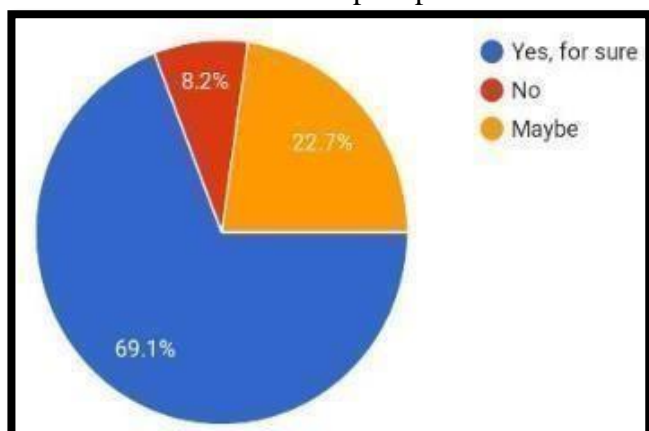
12. Is lack of awareness about oral health a challenge for dentists?



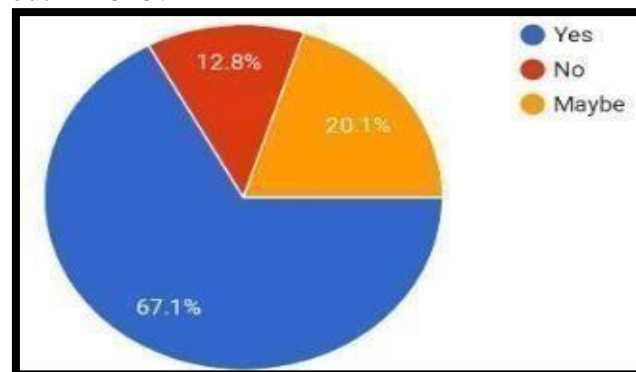
13. What is the main difficulty in establishing private practice?



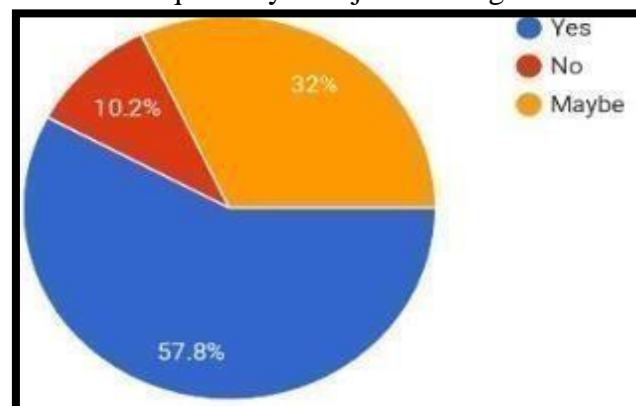
14. Will dentistry be further more challenging even for the established dentists post pandemic?



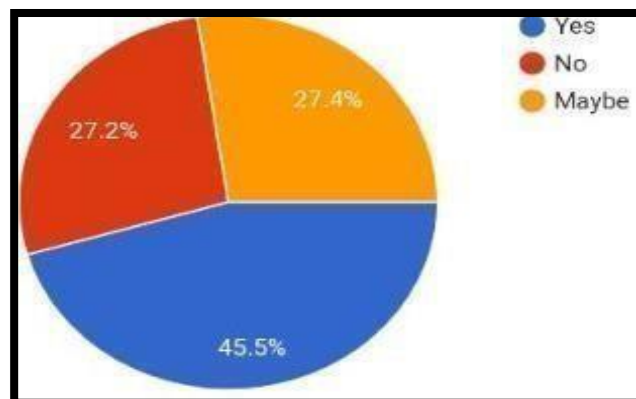
15. Cancelled postings due to Covid-19 pandemic will affect the confidence level of interns passing out in 2020?



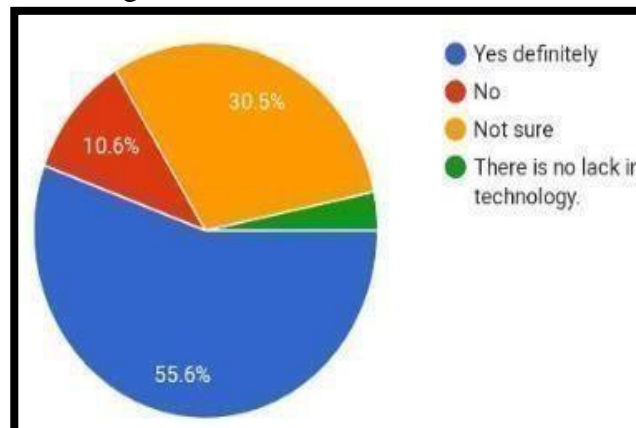
16. Is dental quackery a major challenge in India?



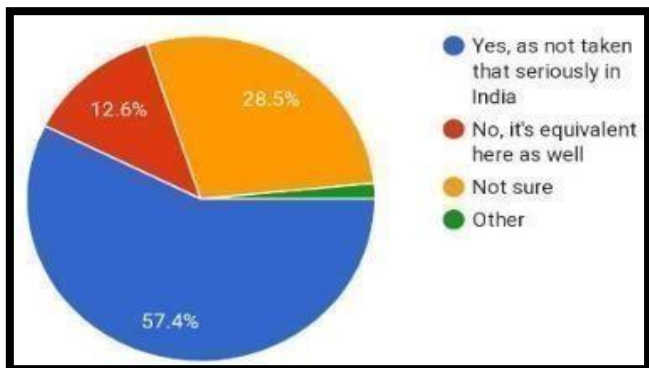
17. Will you be willing to work in a dental clinic due to fear of infection of Covid 19?



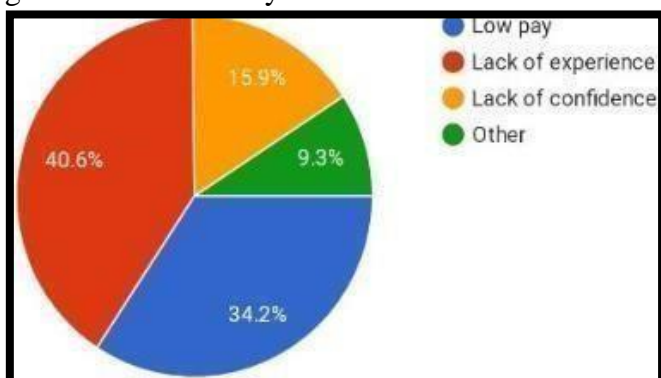
18. Due to lack of advanced technology, will it be a challenge for an Indian dentist to work abroad?



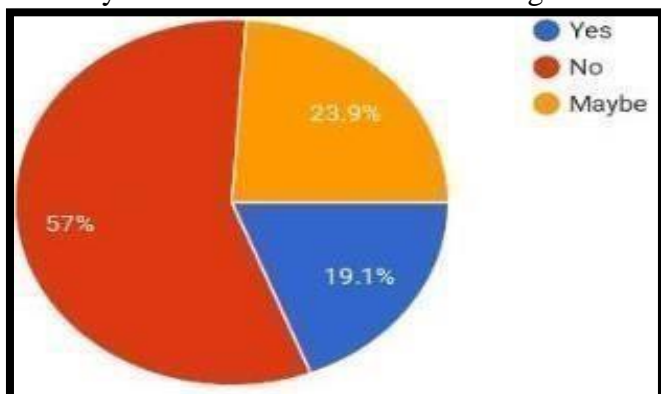
19. Does “research” in India has less scope and future than if done in abroad?



20. What do you think is a challenge for recent graduates in dentistry?



21. Would you change your profession other than dentistry at this time due to these challenges?



22. Would you suggest you friends or siblings to opt for dentistry as a profession?

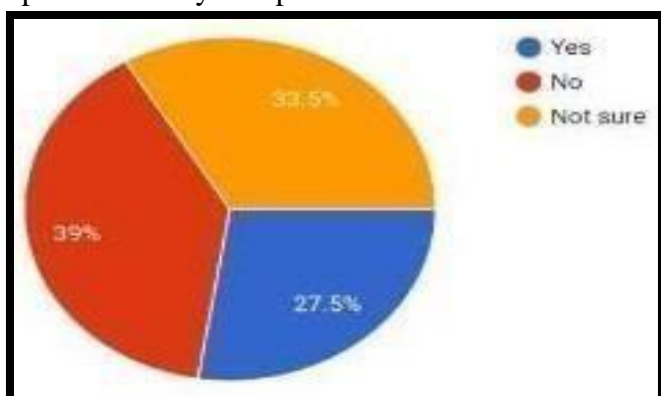


Chart 1 : The majority of the respondents 76.8% choose dentistry because of the marks obtained in the entrance exam followed by passion for

profession by 12.6% , 9.3% choose to fulfil their parent’s aspiration and very few choose because they wanted acceptance in society.

Chart 2: as per the data collected 55.4% aspire to pursue post graduation after completion of their graduation which was followed by 13.7% wants to establish their own dental clinic , 13.5 % population desire to go abroad either for further studies or to work , 12.6% students plan to work in government dental college followed by least percentage of 4.8% who want to work in a private dental clinic.

Chart 3: maximum students i.e., 54.5% want to work in the government sector in future which is followed by 21.2% wish to go abroad for work and 19.9% desire to work in private sector and very less 4.4% do not want continue with dentistry.

Chart 4: 40.2% students feel that people neglecting oral health or taking it lightly as a major challenge in dentistry as a profession following which is 26.7% who feel increased number of dental graduates passing out each year as the major challenge to profession and 21.4% find increasing professional competition as the challenge and 11.7 % find job insecurity challenging.

Chart 5: about 47.5% respondents think increasing the job vacancies might help to relieve these challenges, 35.1% of them feel that increasing the number of PG seats might meet the future challenge and 14.3% speculate that reduction of sanctioned UG seat shall aid in meeting the future challenges. Apart from these some of them feel developing the skills, increasing the oral health awareness can be remedial to meet the challenges.

Chart 6: Majority 62.5% think that pursuing post graduation after graduation is most challenging whereas 27.6% students are confused about it and find it difficult to decide and 8.4% do not find pursuing post graduation as a challenge. On the other hand very less 1.5% are not sure about it.

Chart 7: bulk of the population 60.8% think that it challenging for them to pursue postgraduate is due to very less no. of PG seats available whereas 22.9% find it tough due to high fees in the private colleges and 14.7% think it is stressful due to large number of students applying for it while rest of them find it challenging due to various reasons

like because of presence of reservation quota or else they think it requires large time investment.

Chart 8: 40.2% of the students who were surveyed feel that it might be difficult for them to find a job in a private clinic, while 34% of the people were sure that it will be difficult and the rest 25.8% don't think this as the case and are confident that they will surely find a job in the private clinic.

Chart 9: When it comes to the Armed forces, 51.9% of the students surveyed are sure that it is a tough task to find a job in the Armed forces. 15% of the people are not agreeing to the question and think that it is possible and the rest 33.1% are not sure.

Chart 10: Majority I.e. 51% people feel that it is going to be tough to find a seat abroad for pursuing Post Graduation. 34% of the students were not sure about it and the remaining 15% opted for the option that said that its not difficult.

Chart 11: This chart asked whether it is difficult to establish own's dental practice, and 38.9% students agreed to it and 26.1% of them opted for no as an answer while the rest 34% were unsure.

Chart 12: 75.5% of the children surveyed agreed that lack of awareness about oral health is a challenge for dentistry. 11% of them did not agree to it while 13.5% of the people were in doubt.

Chart 13: 30.2% of the people think that a healthy investment, while 28.3% of them think that attracting people to a new setup, 22% feel that professional competition and remaining 19% of them think that the lack of experience are the main challenge of establishing a private practice.

Chart 14: 69.1% of the surveyed people think that dentistry will be further more challenging even for the established dentists post pandemic while 8.2% of the respondents disagree with it and the rest 22.7% people were not sure about it.

Chart 15: 67.1% of people feels cancelled posting due to covid-19 will affect the confidence level of interns while 12.8% of them did not agree to it and 20.1% people are not sure about it.

Chart 16: 57.8% people says dental quackery is a major challenge in india,32% people are not sure while 10.2% people says it is not a major challenge.

Chart 17: majority 45.5% are willing to work in clinic during this Covid 19 pandemic,27.2% are not interested because of fear of infection while 27.4% are not sure.

Chart 18: 55.6% people feels working in abroad is a challenge for Indian dentist due to lack of advanced technology,30.5% are not sure about it,10.6% feels disagree to it

Chart 19: 57.4% says research in India has less scope as not taken seriously in India, 12.6% disagree to it says research is given equal importance in India,28.5% are not sure about it.

Chart 20 : Majority 40.6% says lack of experience is a challenge for recent graduates in dentistry, 34.2% low pay is a challenge, 15.9 % peoples think lack of confidence is a big challenge 9.3% thinks some other reason may be the problem.

Chart 21 : 57% disagree to change the profession due to many challenges 19.1% wants to change the profession while 23.9% are not sure about to it.

Chart 22 : 39% people will not suggest their friends or siblings to opt for dentistry as a profession 33.5% are not sure about it, 27.5% says will suggest to opt dentistry as profession.

DISCUSSION

In India there are a variety of options in medical sciences to pursue based on the marks obtained in premedical entrance exam, like medicine , dentistry, physiotherapy, nursing etc.

Dentistry is one of the important fields of medical sciences and needs high marks in the entrance exam to get⁽²³⁾. Dentistry is a long five year course which includes four year of study and one year of internship to learn and strengthen the clinical skills and also to serve the patient. At the end of internship many students are in a dilemma as they have a plenty of career options to choose from like- Whether to continue dentistry or quit it and opt for field like – administrative services, management, law etc. If continuing with dentistry there are further options like – undergoing PG , establishing one's own setup or clinical practice , finding a job in public / private sector or going abroad for either working/ further studies and some may even indulge themselves in research. While pursuing all of these there are various challenges one might face and our study focusses on these challenges encountered by dental

graduates. According to our study around 76.8% students chose dentistry because of the marks obtained in the entrance exam while 12.6 % were found have passion for the profession and another 9.3% wanted to fulfil their parent's aspiration and a minority chose because they wanted acceptance in the society. A study conducted by H.V Smith revealed that 1/3rd of the participants chose dentistry according to their decision but about 2/3rd of them opted for it because of the marks obtained ⁽²⁴⁾. In a study by B.K Galra , around 57.39% of the undergraduate students wanted to pursue post-graduation and take up teaching or research. Administrative service (13.48%) was ticked as the 2nd option and starting a private practice in urban area was the 3rd choice among the participants. Also more number of undergraduate students 62.17% wanted to go abroad for work and wished for some career counselling in this regard. This may be due to the better financial incentives abroad.⁽²⁵⁾ According to study by Karunya Ravi and Pradeep Kumar most of study population considered doing post graduation to be mandatory. In the study, 58.11% chose post graduation due to their prior interest in the subject while only 6.83% chose for job security ⁽²⁶⁾. Another study conducted stated that around 40% first year and nearly 70% final year dental students are interested in pursuing PG⁽²⁷⁾ Whereas in our study, we found that 55.4% of the students wanted to do postgraduation and 13.7% of the people wanted to start a private practice after graduation and 13.7% wanted to go abroad for further studies and career options. As per the similar study in Saudi Arabia, future plans after graduation, 67.9% planned to work at a government dental clinic or hospital ,while 49.5% planned to work at a private clinic⁽²⁸⁾

In USA research is a very important part of any dental education be it DDS (Doctor of Dental Surgery) or specialization. Unlike in India where entrance examination marks is the only criteria to secure the seat in MDS program and here research experience does not play any crucial role in getting a seat like in the USA. In our study we found that 57.4% feel that research is not taken seriously in India and have no scope making it challenging while 12.6% students think research here is equivalent to any other country like USA and be easily taken up whereas 28.5 % have absolutely no idea and interest in research hence do not find it challenging.⁽²⁹⁾

A study conducted in Saudi Arabia found out the major threat(59.3%) was the increase in number of

dental institutions ⁽³⁾whereas our study demonstrates the lack of confidence as a major threat(40.6%) to recent dental graduates followed by low pay given to them(34.2%) .

A study conducted in Tamil Nadu by B. Meena Priya stated that, around 70% of the participants were not interested to change the profession while 30% wished to change and quit dentistry ⁽³⁰⁾ whereas in our study 57.7% wanted to continue with dentistry, 23.9 % were confused about it and 19.1% wanted to change the profession.

In a similar study conducted in Bhuvaneshwar, students when asked about them advising their friends/ siblings to take up dentistry, 81.74% said yes , they would suggest them while 18.26% denied them from taking up dentistry as a career . In our research , about 39% would suggest their friends/ siblings to opt for dentistry while 27.5% would not advice them to do so . On the other hand 33.5% were not sure about it.

CONCLUSION

The students we are training now are the dentists of the future. In order to influence the future, we need to undertake the change now. The study found that most dental students perceived challenge in establishing a private clinic, getting government job, and securing an admission into speciality program in the country. The findings of the study may be utilized by dental institutions to provide courses that prepare students to effectively handle future career challenges.

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