

An Assessment of Common Concerns of Post Graduate MDS Students, Due to Pandemic Covid-19 Lockdown-A Questionnaire Study

^{*1}Dr. Dhruvi Pandya, ²Dr. Udita Thakkar, ³Dr. Nikunj Patel and ⁴Dr. Kalpesh Patel

^{*1}Post graduate student, Department of Orthodontics and Dentofacial Orthopaedics, Manubhai Patel Dental College, Bhavnagar University, Gujarat, India.

²Reader, Department of Orthodontics and Dentofacial Orthopaedics, Manubhai Patel Dental College, Bhavnagar University, Gujarat, India.

³Professor, Department of Orthodontics and Dentofacial Orthopaedics, Manubhai Patel Dental College, Bhavnagar University, Gujarat, India.

⁴Head of the Department, Department of Orthodontics and Dentofacial Orthopaedics, Manubhai Patel Dental College, Bhavnagar University, Gujarat, India

Abstract

Aim: To assess the common concern of post graduates MDS students in all dental department, due to the COVID-19 lockdown **Objective:**

- To identify the common concerns of the postgraduate MDS students due to this COVID-19 lockdown
- To assess if the students feel that their post graduate program is getting affected due to the lockdown.
- To assess the worry and concern about their ongoing patients in college.
- To assess their attitude towards college and work environment.

Materials and Methods: A self-designed questionnaire was used in this study. It included data regarding demographic data, information about reasons and timing for study, interest to participate in research. 245 students participated in the study with 20% relative precision and 95% confidence. An online survey tool (Google forms) was utilized in this study. The final developed questionnaire after content validity was mailed to the post graduate students of all departments of Gujarat.

Result: The findings from this study are quite interesting. An unambiguous majority of participants felt that their Post Graduate training program was getting compromised. 46.1% of participants worried to get infected due to COVID-19. 44.6% of participants was not sure about completing their quota according to DCI guidelines. An indisputable majority of the participants believed that these 6-8 months of lockdown had impacted their clinical practice.

Conclusion: This questionnaire helped in assessing the mental stress on post graduate students due to this COVID-19 pandemic in context with a varied list of parameters. Covid-19 lockdown has definitely affected post-graduate students creating perplexity and apprehension in their minds regarding the pending cases and academic work.

Keywords: Post graduates, pandemic situation, covid-19, educational concerns

Introduction

Corona virus disease (Covid-19) is a contagious disease caused by severe acute respiratory syndrome corona virus 2 (SARS-CoV-2). The first case was identified in Wuhan, China, in December 2019. It has since spread worldwide, leading to an ongoing pandemic and is considered to be the 5th documented pandemic after the 1918 flu ^[1, 2]. The virus that causes Covid-19 spreads mainly when an infected person is in close contact with another person. To forbid the spread of this infectious disease, countries have put a stoppage to all the human activities slow down the entire world ^[3].

The entire world is paralysed by the effect of the Covid-19 pandemic leaving everything to a deadlock and incertitude. This pandemic has affected every section of the society.

Sudden disruption of our daily routine and work due to the pandemic of Covid-19 lockdown has left us in dread ^[4]. This lockdown has been extended for more than 5-6 months in India and has left post graduate students in suspense regarding the rebound to our degree. They had no idea as to how they are going to run over to work after the lockdown has been raised ^[5, 6].

Pursuing post-graduation in dentistry involves a complete, whole hearted fidelity and time to complete academic work and follow- up of patients ^[7]. The students pursuing post graduations has been hit by this lockdown especially those studying in MDS, who find their future obfuscated due to the discernment of completion of academic work and treatment of assigned patients.

Table 1: 4-point Likert scale

To the best of our knowledge, only one study has addressed the concerns running in the mind of students pursuing postgraduation. This questionnaire study aimed to identify the concerns of the postgraduate students due to this COVID-19 lockdown.

Aim

To assess the common concern of post graduates MDS students in all dental department, due to the COVID-19 lockdown

Objectives

To identify the common concerns of the postgraduate MDS students due to this COVID-19 lockdown.

- To assess if the students feel that their post graduate program is getting affected due to the lockdown.
- To assess the worry and concern about their ongoing patients in college.
- To assess their attitude towards college and work environment.

Materials and Methods

Study Design

Cross-Sectional Study-(An Online Questionnaire Study)

An online questionnaire was prepared using Google forms. Appropriate permission was taken from the Scientific Advisory committee and Institutional ethics committee. Ethical committee clearance reference number is MPDC_221/ORTHO-44/21

Place of Study

The study was conducted at the Department of Orthodontics And Dentofacial Orthopaedics, Manubhai Patel dental college and hospital, Vadodara, Gujarat

Sample Size

- Assuming 30% concern due to covid-19 among MDS Post graduates students.
- 245 students participated in present study with 20% relative precision and 95% confidence ^[8].

Material and Equipments for the Study

- Laptop with internet connection.
- Google forms
- Web based questionnaire

A self-designed questionnaire was used in this study. It included data regarding demographic data, information about reasons and timing for study, interest to participate in research.

• Validation of questionnaire: The Content Validity Index (CVI) developed by Mary R Lynn (1986) was used to estimate the validity of the items. Content validity was undertaken to ascertain whether the content of the questionnaire is appropriate and relevant to the study purpose. The formulated questionnaire was given to seven experts specialized in orthodontics for content validity. Each reviewer has independently rated the relevance of each question using a 4-point Likert scale. (Table 1.)

1.	Not Relevant
2.	Somewhat Relevant
3.	Relevant
4.	Very relevant

A rating of three or four indicates the content is valid and consistent. Further, suggestions for improvement was taken into consideration and final questionnaire was modified based on content validity.

• **Construct Validity:** The final developed questionnaire after content validity was mailed to the post graduate students of all department of Gujarat.

An online survey tool (Google forms) was utilized in this study. A participant information sheet, an informed consent form and questionnaire was sent to all the participants. A reminder mail was given to all those post graduate students who did not respond in 4 weeks after sending of the questionnaire.

Responses which were received till 12 weeks were included for evaluation.

The reliability of the Questionnaire (Table 2.) was evaluated using test-retest reliability. Therefore, questionnaires were re-sent to 20 participants with purpose of getting insignificant difference in results.

Table 2: Survey related questionna	ıre
------------------------------------	-----

	Questionnaire	
1.	Do you feel, your post graduates program is getting compromised due to this lockdown?	
2.	Do you feel, you have insufficient time left to complete your thesis dissertation work?	
3.	Do you have a fear to get infected due to Covid-19 virus?	
4.	Do you feel, post graduates program should be extended for 6 months?	
5.	Do you feel, your college is taking complete precaution in this pandemic?	
6.	Do you feel, you can complete your quota according to DCI guidelines?	
7.	Do you feel, you are not getting enough patient exposure due to COVID-19?	
8.	Do you feel, this 6-8 months of lockdown will impact on your postgraduate clinical practice?	

Results

The findings from this study are quite interesting. The results of this questionnaire based survey highlighted certain key features

1. An unambiguous majority of participants felt that their Post Graduate training program was getting compromised due to this lockdown.

On statistically evaluating the results, an unequivocal group of participants of 46.9% did feel that their PG course was getting affected and compromised as the lockdown wasted a lot of their clinical and college time, however a small minority of 26.1% did not sure that their PG curriculum was affected in any way. (Figure 1.)

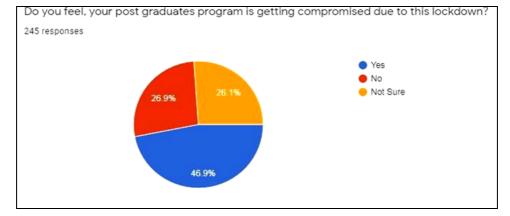


Fig 1: Statistical result of close ended question 1

2. The next question was whether they had insufficient time left to complete their thesis dissertation work. Many of post graduate students believed that they can complete their thesis dissertation work on their time frame. 44.5% polled for a 'No', 22.4% of the participants pooled for a 'Not Sure' and intermediary group of 33.1% was polled 'Yes' for insufficient time left for their thesis dissertation work. (Figure 2.)

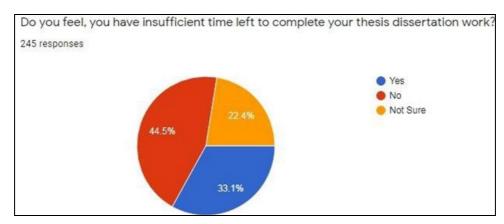


Fig 2: Statistical result of close ended question 2

3. The participants were then asked whether they had a feared to get infected due to COVID-19. An unequivocal majority of participants feared the risk of the COVID-19 infection.

46.1% of participants worried to get infected due to COVID-19 and 30.6% of participants did not worry about the contracting with COVID-19. (Figure 3.)

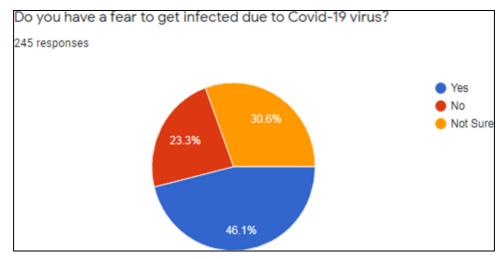


Fig 3: Statistical result of close ended question 3

4. On asking participants to whether post-graduation program should be extended. A vast majority of them did not want to extend their post-graduation program for more 6 months.

The results received was that a vast majority 43.3% of students did not want to extend their program but intermediary group of participants, 29.4% wanted to continue their program for more 6-8 months. (Figure 4.)

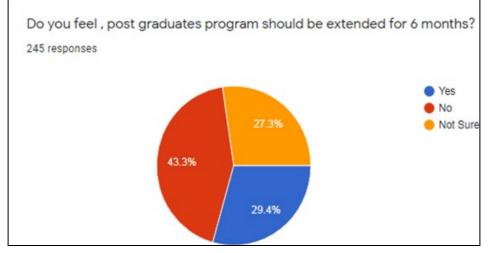


Fig 4: Statistical result of close ended question 4

5. The participants were then asked whether colleges were taking complete precaution against COVID-19 virus. The most of the participants felt that their colleges were taking complete precautions against this COVID-19.

56.7% were felt that their colleges were taking proper precautions. (Figure 5.)

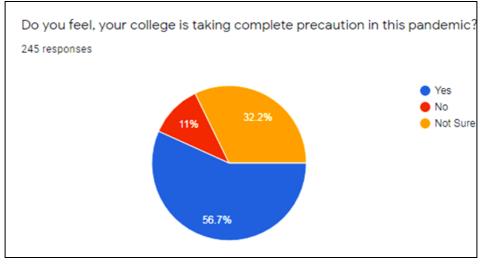


Fig 5: Statistical result of close ended question 5

6. A huge number of students worried about completing their quota according to DCI guidelines.

The result was completely baffling. 44.6% of participants was not sure about completing their quota according to

DCI guidelines and 19.6% had gave up to complete their quota. (Figure 6.)

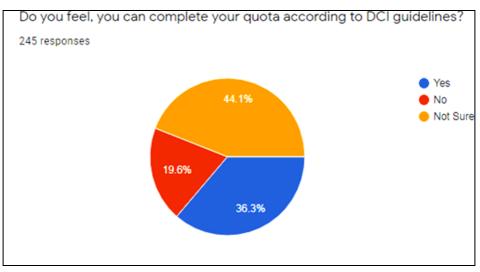


Fig 6: Statistical result of close ended question 6 < 151 >

7. Then the question asked was whether they were getting enough patients during this pandemic. Many participants felt that they were getting enough number of patients even in this pandemic situation. An average result was received by participants. According to the chart; yes, no and not sure was 32.7%, 36.7% and 30.6%, respectively. (Figure 7.)

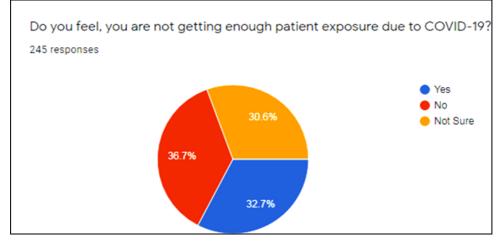


Fig 7: Statistical result of close ended question 7

8. On asking post graduate students whether this lockdown would impact on clinical practice. An indisputable majority of the participants believed that these 6-8 months of lockdown had impacted their clinical practice. The result was one sided. About half number (49.8%) of participants was worried for their clinical practice which had made an impact on their education. (Figure 8.)

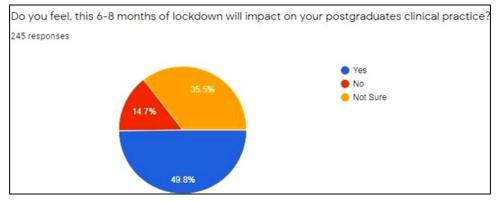


Fig 8: Statistical result of close ended question 8

9. Participants were then asked if they were worried about their ongoing cases at college. Many participants worried about their ongoing cases.

An inconvertible majority of 55.1% agreed on it. However, 16.7% did not agree on it. (Figure 9.)

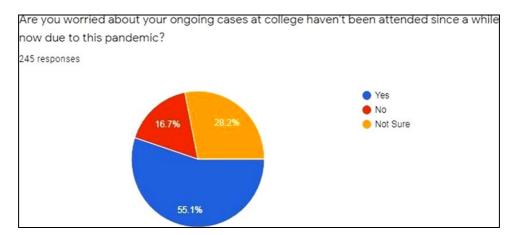


Fig 9: Statistical result of close ended question 9

10. The next asked question was about whether it would affect your exam or not or not sure. An incontrovertible majority of the participants felt that their exams would be affected due to this COVID-19.

The result was skewed at one side. A vast number of participants 56.7% was giving heady answer and 26.1% of participants was not sure whether COVID-19 would affect

their exams or not. However, 17.1% of students was completely denying for an impact. (Figure-10)

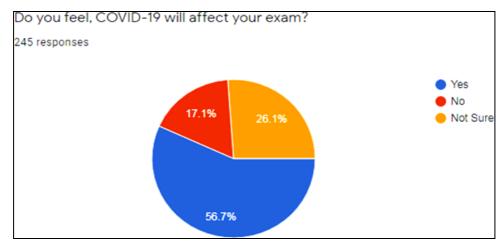


Fig 10: Statistical result of close ended question 10.

Discussion

The COVID-19 pandemic has significantly affected health care delivery all over the world. This is particularly so in the area of dental care because of the high level of exposure of dentists and patients in the course of providing care in the dental clinic setting ^[9]. Hence, there have been significant disruptions to dental care all over the world as the profession grapples with establishing standard protocols for care during this period. Thus, assessing the impact on post graduates in particular, with a view to mitigating these effects is important at this time for the specialty. To achieve this, it is important to get the perspectives of residents, as they are in the best position to highlight the impact of the pandemic.

Very few supportive studies are done regarding the concerns of post graduate students during this pandemic by different Authors. Lishoy et al [8] study's aim was to understand the concerns of the students pursuing MDS in Orthodontics and Dentofacial Orthopedics about their work, academics and the effect of the lockdown on their future, they performed a questionnaire study. The Questionnaire was circulated to 110 Post graduate students pursuing MDS in Orthodontics and Dentofacial Orthopedics who were currently in the 2nd year of their Postgraduate training program and concluded that Covid-19 lockdown has definitely affected post-graduate students creating a lot of confusion and apprehension in their minds regarding the pending cases and academic work. Martina at el. also concluded that Italian dentists were mostly scared to return to their daily activities because they considered their jobs a high risk to them and their families. Dentists with an exclusive/prevailing orthodontic activity were forced to increase their working day.

Many factors were found to be associated with mental health of post graduate students. The sample was a good representation of different age ranges, different regions of residence, different levels of distress and different dental activities. In this study, we found that students were more likely to have mental distress, which might be attributed to the biologic nature of their responses to stressors and risk factors. With COVID-19 declared as a worldwide pandemic, a nationwide lockdown was implemented overnight in India on March 24, 2020. With no prior warning or anticipation, patient appointments were temporarily ceased as institutions and clinics were indefinitely closed. Residents were clueless about when they could return to their work. Each and every institute was forcibly shut down for more than 6 months. Postgraduate students were lagging in their academic and clinical work which directly lead to mental breakdown. Intending to get an idea as to how this lockdown affected the treatment progress, as well as understanding the difficulties faced, the results revealed that most Postgraduate students were concerned about their restriction to clinical work.

Moreover, it was interesting that students with higher distress levels were those with more anxiety about returning to work, more inclined to do their clinical activities and research work. This critical situation has highlighted the difficulties that postgraduates had to face during their activities, and as a vicious circle in which more psychological distress led to more fear and anxiety, that led to a decrease in psychological wellness. Shutting down, even temporarily, is a cause for concern not just for patients but for students that reported a high level of concern about the academic impact of the quarantine on dental practices, as well as those of their staff members. In addition to the academic concern, some have expressed their intention to continue the day-to-day practice.

This study presents some limitations. It is a survey-based study; hence information is self-reported, and the collection time was only three months. However, it also presents some strengths, such as the high number of participants, the good distribution of the factors. This study can thus be considered as an exploratory study to get a generalized idea on the impact of the lockdown on post graduate residents and can thus help in the future better understanding of specific education-related problems.

Conclusion

This questionnaire helped in assessing the mental stress on post graduate students due to this COVID-19 pandemic in context with a varied list of parameters. Covid-19 lockdown has definitely affected post-graduate students creating perplexity and apprehension in their minds regarding the pending cases and academic work.

Acknowledgement

I would like to thank all the Post graduate participants, my colleagues and my dear friends from various colleges for their contribution towards this survey, by helping me with their valuable inputs and insights while filling up and submitting the web based online questionnaire.

IJRAW

References

- 1. Liu YC, Kuo RL, Shih SR. COVID-19: The first documented coronavirus pandemic in history. *Biomed J*. 2020; S2319-4170(20):30044–5.
- 2. Yao W, Wang T, Jiang B, Gao F, Wang L, Zheng H *et al.* Emergency tracheal intubation in 202 patients with COVID-19 in Wuhan, China: lessons learnt and international expert recommendations. *BrJ Anaesth.* 2020;
- 3. Sohrabi C, Alsafi Z, Neill O, Khan N, Kerwan M, Al-Jabir A, *et al.* World Health Organization declares global emergency: A review of the 2019 novel coronavirus (COVID-19). *Int J Surg.* 2020;
- 4. Peng X, Xu X, Li Y, Cheng L, Zhou X, Ren B, *et al.* Transmission routes of 2019-nCoV and controls in dental practice. *Int J Oral Sci.* 2020; 12(1):1-6.
- 5. Olum R, Chekwech G, Wekha G, Nassozi DR, Bongomin F. Coronavirus Disease-2019: Knowledge, Attitude, and Practices of Health Care Workers at Makerere University Teaching Hospitals, Uganda. *Front Public Health*. 2020; 8:181.
- 6. Meng L, Qiu H, Wan L, Ai Y, Xue Z, Guo Q *et al.* Intubation and Ventilation amid the COVID-19 Outbreak. *Anesthesiol.* 2020; 132(6):1317-32.
- Ng K, Poon BH, Puar THK, Quah JLS, Loh WJ, Wong YJ, et al. COVID-19 and the Risk to Health Care Workers: A Case Report. Ann Int. Med. 2020; 172(11):766-7.
- Lishoy R, Bhushan J, Vanessa V, Hidhaya S K, Rashi L, Priyal R, Marisca P, Aljeeta K. An assessment of common concerns of 2nd year post graduate students pursuing M.D.S in orthodontics and dentofacial orthopedics, due to the COVID-19 lockdown. *Indian J. Orthod Dentofacial Res* 2020;6(3):184-190
- Turkistani K.A. Precautions and recommendations for orthodontic settings during the COVID19 outbreak: a review [published online ahead of print May 13, 2020]. *Am J Orthod Dentofacial Orthop.* 2020; https://doi.org/10.1016/j.ajodo.2020.04.016.