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Short Communication

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

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ABSTRACT

Background: The fight against the novel coronavirus and the disruption in our daily routine and practise due to lockdown has been mentally exhausting especially for ambitious students pursuing higher studies. The lockdown period came in suddenly giving no chance to be prepared for the worst. Post-graduate students of Orthodontics and Dentofacial Orthopedics could be badly hit by this lockdown period disrupting the entire treatment course of patients undergoing orthodontic treatment, which needs monthly visits to the orthodontist.

Materials and Methods: 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, we 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 Post graduate training program.

Results: In the present study it was found that around 61.3% of participants panicked about the workload of patients they possibly might have to deal with once college resumed and 29% students were worried about the risk of contracting the infection after resuming to work after the lockdown is lifted. Additionally, around 68.4 & 73.6% students were insecure about the completion of their undergoing cases and thesis till the end of the term respectively and around half of the students were worried that the patients may not turn up for the exam due to the lapse in treatment. A small proportion of students (15.8%) are apprehensive of being homesick after college resumes.

Conclusion: 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. The uncertainty to cope with it, is still the question left unanswered.

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1. Introduction

COVID-19 is a highly contagious infectious disease as it rapidly spreads and continuously in the human population and is considered to be the 5^{th} documented pandemic after

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the 1918 flu. ^{1,2} To curb the spread of this infectious disease, countries have put a halt to all the human activities slowing down the entire world. ³

The entire world is paralysed by the effect of the COVID-19 pandemic leaving everything to a standstill and uncertainty. It is rightly said that, "Uncertainty is the most

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stressful feeling". Abrupt disruption of our daily routine and work due to the pandemic of COVID -19 lockdown has left us in dismay. ⁴ This lockdown has been extended for more than 3-4 months and has left us in suspense regarding the repercussions to our degree. We have no idea as to how we are going to resume to work after the lockdown has been lifted. ^{5,6}

This pandemic has affected every section of the society. Pursuing post-graduation in dentistry involves a lot of dedication and time to complete academic work and follow-up of cases especially in the field of orthodontics as it involves follow-up of patients every month. The section of students pursuing post-gradations has been badly hit by this lockdown especially those studying in 2nd MDS orthodontics, who find their future obfuscated due to the apprehension of completion of academic work and treatment of assigned patients.

Fighting against such an unprecedented situation, budding orthodontists are trepidatious regarding the willingness of the ongoing patients to continue treatment due to lapse of the treatment, 8,9 on which they had worked and planned for the completion of their post-graduation term. Second year post-graduation is considered to be the preparation year for the final term with regards to the completion of dissertations and record-keeping of on-going cases for the presentation for the final term.

To the best of our knowledge, nobody has addressed the concerns running in the mind of students pursuing post-graduation especially in the second year which is a peak year for final year preparation. This questionnaire study aimed to identify the concerns of the IInd M.D.S postgraduate students in orthodontics and dentofacial orthopedics in this COVID-19 lockdown.

2. Aim

To assess the common concerns of 2nd year Post Graduate students pursuing M.D.S In Orthodontics And Dentofacial Orthopedics, due to The COVID-19 lockdown.

3. Objectives

- 1. To assess the common concerns of 2nd year PG students pursuing MDS in Orthodontics due to the lockdown.
- 2. To assess their attitude towards resuming back to college and work environment
- 3. To assess the worry and concern about their ongoing orthodontic cases in college
- 4. To assess the area which concerns them the most to resume back to
- 5. To assess their ability to deal with patients once college resumes.
- 6. To assess if the students feel that their post graduate program is getting affected due to the lockdown.

4. Materials and Methods

A cross sectional study was conducted over a duration of 1 month. An online questionnaire was prepared using google forms. Appropriate permission was taken from the Scientific Advisory committee and Institutional ethics committee.

4.1. Selection Criteria

4.2. Inclusion Criteria

Post Graduate students currently pursuing MDS in Orthodontics and Dentofacial Orthopedics and are in the 2^{nd} year of their training program.

4.3. Exclusion criteria

- 1. Other dental students
- 2. Post graduate students from other branches of MDS
- 3. Post graduate students from 1st or 3rd year of MDS in Orthodontics

4.4. Sample Size

110

4.5. Sample size calculation

4.6. Method

A google form of the questionnaire was created to assess the common concerns of 2nd year Post Graduate students pursuing M.D.S In Orthodontics and Dentofacial Orthopedics, due to the COVID-19 lockdown. The questionnaire along with a brief synopsis explaining the aims and objectives of the study was sent to the relevant ethical clearance committees. After receiving clearance from the Scientific Advisory Committee and the Institutional Ethics Committee, the questionnaire was circulated amongst the participants.

Participants of this study were the students pursuing MDS in Orthodontics and Dentofacial Orthopedics and who are in the 2nd year of their post Graduate program. The participants were approached by the principal investigator via personal connections and whatsapp groups. The aims and objectives of the study were explained in a message accompanying the online questionnaire link. 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 Post graduate training program. Informed consent was taken from all the participants before solving the questionnaire. Timely reminders were sent as well. The participation was completely voluntary and all the participants had an option of opting out of the study by not filling the questionnaire.

The questionnaire consisted of a total of 10 questions. They were aimed to assess the common concerns of 2nd

Table 1:

Sample Size for Frequency in a Population

Population size(for finite population correction factor or fpc)(N):

Hypothesized % frequency of outcome factor in the population (p):

Confidence limits as % of 100(absolute +/- %)(d):

Design effect (for cluster surveys-DEFF):

1000000

93%+/-5

11

Design effect (for cluster surveys-DEFF):

Sample Size(n) for Various Confidence Levels

Confidence	Level(%)	Sample Size
95%		220
80%		43
90%		71
97%		123
99%		173
99.9%		282
99.99%		395

Equation

Sample size n = $[DEFF*Np(1-p)]/[(d^2/Z^2_{1-\alpha/2}*(N-1)+p*(1-p)]$

Results from OpenEpi, Version 3

year post graduate students pursuing M.D.S Orthodontics due to the COVID-19 lockdown.

4.7. Questionnaire

The questions were a mix of multiple choice, short answer and checkbox type questions. After some questions about the informed consent, gender and age the following questions were asked:

- 1. Are you in your 2^{nd} year of MDS? (Figure 2)
- 2. How long has it been since you last attended your patients at college? (Figure 3)
- 3. Do you feel your cases would not get completed before your final exams due to this COVID-19 lockdown? (Figure 4)
- 4. On a Scale from 1 to 10, how worried are you to resume back to college and work environment? (Figure 5)
- 5. Resuming to which of the following panics you the most? (Figure 6)
- 6. Do you feel your Post Graduate Program is getting compromised due to this lockdown? (Figure 7)
- 7. How worried are you because your ongoing cases at college haven't been attended since a while now? (Figure 8)
- 8. Do you feel your important patients for exam might not turn up for the remainder of the treatment? (Figure 9)
- 9. Do you feel there is going to be a lot of patient, college or department pressure on you once college resumes? (Figure 10)
- 10. Do you feel you have insufficient time left to complete your Thesis dissertation work? (Figure 11)
- 11. Do you feel you might have lost the touch of dealing with cases due to such a long break? (Figure 12)

12. How worried are you of being homesick once you resume back to work? (Figure 13)

5. Results

The results of this questionnaire based survey highlighted certain key features-

- 1. Majority of the participants had not attended their ongoing treatment cases at college since 3 4 months.
- Majority of the participants felt that their cases would not get completed before their final exams due to this COVID-19 lockdown
- There was a certain amount of apprehension and worry amongst the participants to resume back to college and work environment.
- 4. Amongst the area of concern and panic, an unequivocal majority of participants worried about the patient workload once college started and a few participants feared the risk of contracting the COVID-19 infection once the routine started.
- An unambiguous majority of participants felt that their Post Graduate training program was getting compromised due to this lockdown.
- An indisputable majority of the participants were also worried because their ongoing cases at college weren't attended since a while
- 7. Majority of the participants feared that their important cases for their final exams would not turn up for the remainder of the treatment.
- 8. An incontrovertible majority of the participants felt that there is going to be a lot of patient, college and departmental pressure once college resumed after the lockdown.
- 9. A vast majority of them also feared that their thesis dissertation work would not get competed due to

- insufficient time left.
- Many participants also felt that they might have lost the touch of dealing with patients and cases due to such a long beak.

6. Discussion

Post Graduate curriculum of MDS is a very crucial 3 year period during the span of which every post graduate student is prepared and trained rigorously to be moulded into a good specialist in that particular branch This questionnaire based survey was a unique study as it aimed to particularly address the actual worries and concerns running in the minds of Post graduate students pursuing MDS in the field of Orthodontics and Dentofacial Orthopedics. Firstly, a sample size was estimated based on previous studies done on similar lines. The sample size was calculated using OpenEpi Version 3. The sample size was estimated to be 110. A Questionnaire was then fabricated on Google Forms which was then circulated to the participants via various Whatsapp groups. Ethical clearance for the study was obtained from the Institutional Ethics committee. We got responses from 110 participants who filled the questionnaire and were willing to participate in the study after giving their consent. The consent of the participant was recorded on Google forms itself. The Questionnaire was circulated to 110 Post graduate students pursuing MDS in Orthodontics and Dentofacial Orthopedics and were currently in the 2nd year of their Post graduate training program. After 110 participants filled the google questionnaire form, the data was collectively analyzed. The questionnaire structure was segregated into two sections. 1st, the Informed consent followed by general information of the patient. 2^{nd} , a few questions pertaining to the 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. On analyzing the data, we received informed consent from all 110 participants. The participants involved in the study belonged to various age groups ranging from 25 to 35 yrs. However, they all were currently in the 2^{nd} year of their PG training program in the speciality of Orthodontics. On statistically evaluating the results, it was noted that, a majority of 52.6% of the participants had not attended their ongoing patients at college since 3 months, 26.3% of them did not attend their patients since 4 months and 15.8% of them last attended their patients at college more than 4 months ago (Figure 3). The next question was to assess the fear and concern of the participants in context with their final exams. We asked them if they felt whether their cases would not get completed before their final exams due to this COVID-19 lockdown. 68.4% polled for a YES, 10.5% of the participants polled for a NO and an intermediary group of 21.1% polled that they weren't sure if they felt their cases would get completed before their exams (Figure 4). This question clearly implicated

that a vast majority of the post graduate students were very concerned about where they stood clinically. They all clearly felt that they have lost a considerable period of valuable time during which they haven't attended their ongoing cases at college and they feel that their cases might not get completed before their final MDS exams. On asking the participants to rate from a scale of 1 to 10 about how worried they were to resume back to the work environment and college after this period of lockdown, with 1 being not worried and 10 being very worried, we got mixed results (Figure 5). 31.6% of the participants gave a rating of 5, indicating their neutral attitude about neither being worried nor being stress free. Another 31.6% of the population gave a rating of 8 which indicated their inclination towards being a little more on the worried side and 26.3% of the population gave a rating of 10 which implicated that this group of participants was very worried about resuming back to college and work environment. They were very apprehensive and nervous about getting back to routine, which led us to asking another very apt question. We asked the participants that resuming back to which of the activities panicked them the most (Figure 6). The results were completely baffling. A vast majority of 61.3% of the participants panicked by the thought of the amount of patient workload they possibly would have to deal with after the lockdown once things get back to normal. 29 % of the participants panicked about contracting the COVID-19 infection once they resumed back to work. A small percentage of the population of 10.5% panicked about their thesis and library dissertation work as their submission dates were round the corner and there were a very limited number of months left for completion of the same. The participants were then asked whether they felt if their Post Graduate Program was getting compromised due to the lockdown. An unequivocal group of participants of 89.5% 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 10.5% did not believe that their PG curriculum was affected in any way (Figure 7). The participants were then asked about how worried they were because their ongoing clinical cases at college weren't attended for a while now. These participants were asked to rate from a scale from 1 to 5, with 1 being not worried and 5 being very worried. Not a single participant rated about not being worried and a vast majority of 57.9% of the participants rated a 5, suggesting that they were very worried because their ongoing patients had not been attended since a long time (Figure 8). On asking the participants if they felt whether their important patients for their final exams might not turn up for the remainder of the treatment, we got perplexing results. An unambiguous majority of 52.6% agreed and the 2^{nd} most majority of participants of 31.6% strongly agreed that they did feel that their important cases might not turn up for

the remainder of the treatment (Figure 9). This pointed out the fear, worry and apprehension that the students have been dealing with during this entire period of lockdown. The participants were then asked whether they felt there was going to be a lot of patient, college or departmental pressure on them once college resumed. 47.4% of the participants strongly agreed to this question and 42.1% of the population agreed, however there was a small percentage of the population of 10.5% who disagreed to this question (Figure 10). Majority of 73.7% of the participants felt that they had insufficient time left to complete their thesis dissertation work before the deadline, whereas 26.3% of them felt that there was sufficient time left before the submission date of their thesis dissertation work (Figure 11). Participants were then asked if they felt that they have lost the touch of dealing with the patients and cases due to such a long break due to the lockdown. An incontrovertible majority of 52.6% agreed whereas 36.6% of the participants disagreed to this question, however 10.5% of the population strongly agreed to this point (Figure 12). The final question asked in the questionnaire survey was about how worried the participants were of being homesick once they resumed back to work. The results were skewed equally on both sides with almost 50% of the participants polling that they would not feel homesick and another 50% polling that they would experience homesickness once they resumed back to work (Figure 13). This questionnaire based study implicitly helped in assessing the fear, worries and concerns running in the minds of 2nd year Post Graduate students pursuing MDS in Orthodontics in context with a varied list of parameters. Ways to sort out these concerns, cope up with the fear, worry and apprehension and proper planning of the leftover time for these students in their Post-graduation curriculum stands a mandate.

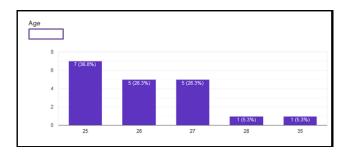


Fig. 1:

7. Conclusion

This questionnaire based study implicitly helped in assessing the fear, worries and concerns running in the minds of 2^{nd} year Post Graduate students pursuing MDS in Orthodontics in context with a varied list of parameters. Ways to sort out these concerns, cope up with the fear, worry and apprehension and proper planning of the leftover time

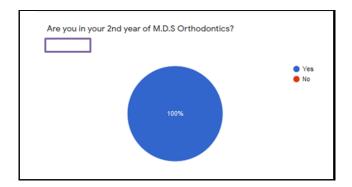


Fig. 2:

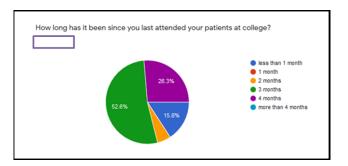


Fig. 3:

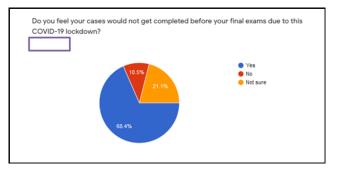


Fig. 4:

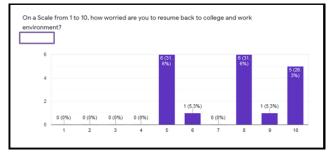
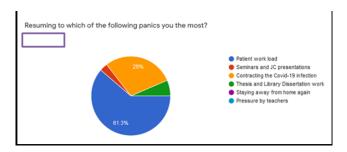


Fig. 5:



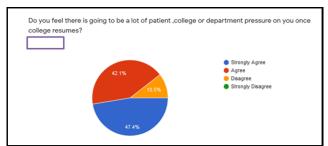
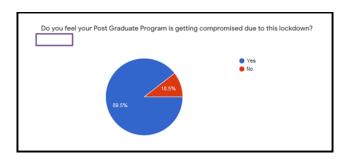


Fig. 6:

Fig. 10:



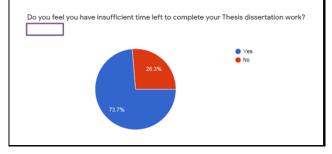
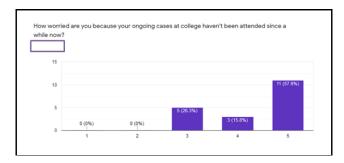


Fig. 7:

Fig. 11:



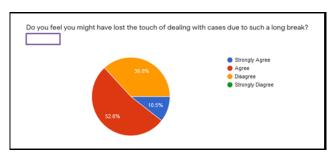
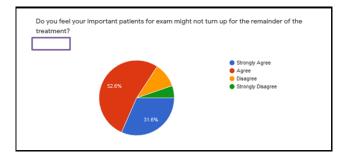


Fig. 8:

Fig. 12:



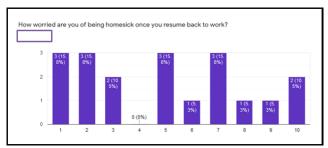


Fig. 9: Fig. 13:

for these students in their Post-graduation curriculum stands a mandate. 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. The uncertainty to cope with it, is still the question left unanswered.

8. Acknowledgement

I would like to thank all the 2nd year Post graduate students of the batch 2018-19, my colleagues and my dear friends from various colleges all over India for their contribution towards this survey, by helping us with their valuable inputs and insights while filling up and submitting the questionnaire. They have been a great source of motivation to me throughout this lockdown period by their persistent efforts in sharing knowledge and helping each other constantly within our fraternity.

9. Source of Funding

None.

10. Conflict of Interest

None.

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