



IMPACT OF CORONAVIRUS RELATED LOCKDOWN ON UNDERGRADUATE INDIAN MEDICAL STUDENTS

Education

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ABSTRACT

COVID-19 related lockdown has disrupted academic education of the students world-wide. Among these, the worst hit, are the medical students, as they are not only deprived of lectures but also clinical environment and patient exposure. This study was conducted to assess the effects of the lockdown on Indian undergraduate medical students with respect to their academics, and also as members of the society.

An online questionnaire was forwarded to undergraduate medical students of our college. A total of 486 students responded. We found that most of the students acknowledge their academic loss due to the lockdown, but are also playing an active and important role towards building a healthy and safe domain by educating the society while being amidst them.

KEYWORDS

Corona, Indian medical students, undergraduate medical students

INTRODUCTION

COVID-19, an acronym for Coronavirus disease 2019, was declared as a global pandemic by WHO on 11th March, 2020. India reported its first case in Kerala on January 30. On March 24, 2020, Prime Minister Modi announced 21-day lockdown in India which was further extended in subsequent four phases till 30 May. As per few reports, the infection rate in India (expressed by the metric, called the R-Naught or R-Zero – and written as R_0) had fallen from 1.83 on 6 April to 1.55 on 11 April, validating the three-week lockdown. Seeing the effectiveness of such restrictions, governing authorities suggested all academic institutions and schools to remain shut till 30 June, 2020 and vacant hostels to be converted into quarantine zones. Though these containment measures have been effective in limiting the disastrous effects of corona virus, however, they have also created anxiety and stress due to lack of traditional classroom based teachings and uncertainty of exams and academic curriculum especially among students who are bound at their respective homes.

Such lockdown has challenged the centuries old, lecture based teaching in academic institutions. Now teachers across the globe are scratching their heads to find ways to educate and engage students via a screen, in a manner that can equate to face-to-face teaching. Innovative solutions for teaching and learning are the need of the hour. School students in Hong Kong started to learn at home, via interactive apps. In China, 120 million Chinese got access to learning material through live television broadcasts. In one Nigerian school, standard asynchronous online learning tools (such as reading material via Google Classroom) were provided.

Among these, the worst hit, are the medical students, as they are not only deprived of lectures but also clinical environment and patient exposure, which forms the essential backbone of the medical education. It is imperative to find alternate ways of teaching in a medical institution that will supplement classroom teaching, self-learning, without compromising the quality of healthcare providers in the given scenario.

We conducted this survey to assess the positive and negative effects of this lockdown on undergraduate Indian medical students in context to their role as future doctors and as members of the society. This survey was conducted during the lockdown period.

MATERIALS AND METHODS

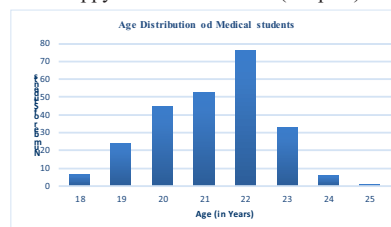
This was a cross-sectional, questionnaire-based study carried out by

Department of Ophthalmology, approved by ethical committee of college.

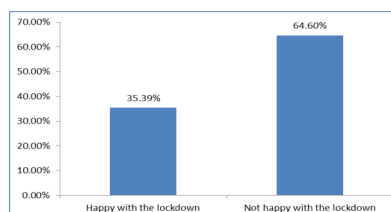
An online survey questionnaire was created by using google forms. The link of this questionnaire was sent via WhatsApp and other social media platforms to the undergraduate students of our college. When a student accessed the link, they were directed to the survey where a set of twenty-four questions appeared sequentially, which the participants were to answer, mostly being multiple choice questions. However, two questions with one line answers were also included in the questionnaire. The only personal information they had to share was their age. The information collected was automatically processed to the spreadsheet and the responses were evaluated via auto generated excel sheet. Every second respondent was included in the study.

Results

A total of 486 medical students were interviewed via a questionnaire, out of which 243 respondents were included in the study. The mean age of participants was 21.209 years (Graph 1). About 64.6% [$n=157$] of students were not happy with the lockdown. (Graph 2)



Graph 1: Age distribution of the students



Graph 2: Happiness factor associated with the lockdown among medical students

During the lockdown, the students were spending most of the time using social media (more than 4 hours per day) followed by helping parents and engaging in hobbies (Table 1).

Table 1: Distribution of time spent by the students in this lockdown with respect to various activities.

Time	Helping parents	Studying	Social Media	Hobbies
< 1 Hour	82	72	71	103
1-4 Hour	128	155	93	106
>4 Hour	33	16	79	34

Among the hobbies, most students sorted to cooking (70%) (n=242), followed by indoor games (63%) (n=240). A positive response to the loss of academic training was agreed upon by 95.88% (n=233) of the students, both completely (n=149) and partially (n=239), with the loss being as high as more than 50% when compared to pre-lockdown era. The survey also shockingly revealed that about 81.06% (n=197) of students were not able to contribute even 15 hours per week to their study. About 73.3% (n=178) of students sorted to internet for studying. Many students were sorting to more than one method for learning. (Table 2)

Table 2: Preferred method of academic training chosen by the students in this lockdown

Source of studies	Number of students	Percentage of students
Internet	178	73.3%
Textbook	127	52.26%
Notes	72	29.62%
Webinar/ Group video discussions	39	16.04%

Among the available training options such as internet, self-study by textbook, webinars or group video discussions etc., 70.8% (n=172) of the students still feel that the gained benefit was almost nil when compared to classroom teaching. With reference to the lockdown, 48.97% (n=119) students feel that their college teachers are encouraging them for studies by solving their queries. As high as 89.6% (n=239) of students feel deprived of the clinical postings and that its absence is affecting their learning. Contrary to our belief, 53.9% (n=131) student denied any mental stress experienced by their parents and 50.6% (n=124) denied any mental stress being suffered by them. There was a definite sleep pattern disturbance in 61.7% of the students. Our survey revealed that this lockdown has helped them bond more with their family while staying at home as compared to pre-COVID times, by doing household chores, cooking (70%) (n=170) etc. When inquired about as to how this lockdown has affected them as a medical student, there was a unanimous response of grave loss of academic training and absolute nil clinical correlation due to lack of clinical posting which may affect their medical career. These aspiring medical students when asked about the roles they play in the family, there were multiple responses including but not limited to emphasising the role of social distancing, making their family aware of the importance of masks and sanitizers, explaining the mode of infection, encouraging them to follow the instructions issued by government, by busting myths and rumours circulating on social media and by alleviating any fears or panic created due to minor ailments such as common cold or allergy. Most of the students were unclear regarding when their academic session will resume.

DISCUSSION

In our survey, we found that a positive correlation exists between this lockdown and the loss of academic training in medical students. Although the students are engaging with alternate tools of education including webinars, group discussion, internet, text books, etc., yet there was a big affirmation to the superiority of classroom teaching over these methods.

Times like this, as of lockdown, has challenged the traditional method of classroom teaching, spoon feeding topics and stressing students to be present at attendance based lectures. Its a definite need of the hour to experiment with innovative methods of teaching and learning to cope up with loss of academic training in this lockdown. It is also a golden period for the students to realise self-responsibility of their academic curriculum. It is not wrong to say that there will be a challenging learning curve for both the teachers and the students to handle these new modes of tele-education. But if we adapt to these new innovative measures, it will only aid the current education system and hence Prove to be beneficial in the long term.

Such an era has given time to medical students to explore other aspects of life such as new hobbies etc., while living in quarantine with their parents, which is otherwise not much available in this profession. This will help them in developing an all-rounder personality. In hostels, students are only entitled to perform as per their curriculum, the rest activities are however optional. When these students are staying at home, with their parents, they will not only realise their academic responsibilities, but also stand up for other roles like a son/daughter, sister/brother, grandson/granddaughter which will add up for them to evolve as young, responsible and social citizen.

When a student is pursuing medical stream, they enter a medical institute, stay at the campus, they essentially learn that their life revolves around patient care. They are trained to diagnose the disease in patient, conducting ward rounds, monitoring investigation, treating and managing them. Their entire life revolves around making patients healthy and disease free. When a medical student takes these qualities with him/her home during this lockdown, they impart such quality to their immediate family members as well as inform other members of society.

CONCLUSION

Our study concludes that majority of medical undergraduates are of the opinion that they have suffered major academic loss because of the lockdown but also agree to its need in the face of present scenario. Medical fraternity is currently among the front-liners in this corona war. Even though lockdown has taken a toll on their academic front, the medical undergraduate students who are not posted in the line of duty are still contributing towards a healthy and safe domain by educating the society by being amidst them and hence watching out for the society.

With time, we have to embrace this as a new way of life and look for the positive ventures our futures behold.

Conflict of interest : None

Financial disclosure: Nil

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