

RESEARCH ARTICLE

Effect of the present situation of coronavirus disease-2019 pandemic on the academic and personal life of undergraduate medical and paramedical students

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Received: June 25, 2020; Accepted: July 18, 2020

ABSTRACT

Background: Coronavirus disease-2019 (COVID-19) was declared a pandemic by the WHO (WORLD HEALTH ORGANIZATION), on March 11, 2020. There is no doubt in the fact that this infection has marked its great effects on various aspects of one's life, may it be a personal, familial, social, economic, psychological, academic, professional, financial, emotional, either directly or indirectly. At present, a number of studies are being done so as to study the impact of coronavirus on the different spheres of our life, either directly affecting their own health or of family members, or indirectly, by influencing thorough lockdowns, quarantine, or isolation. **Aims and Objectives:** Due permission was taken from the screening ethical committee. Thereafter, this study was conducted on the students of medical, dental and nursing courses, in our institute, as these three professions are the only ones that are at the frontline as far as provision of health-care services to the public is concerned. **Materials and Methods:** This was a cross-sectional study that was carried out on undergraduate students of three courses from our own university, i.e., M.B.B.S, B.D.S., and B.Sc. Nursing. The participation was only voluntarily. The subjects were asked a questionnaire, including 18 questions regarding the impact of this corona infection on their personal and academics part of their life. **Results:** According to the results of this online study, this infection has markedly affected the personal and academics of these students as they are attending lectures through online mode only, but even then the majority of them are really much determined to continue pursuing their respective courses. **Conclusion:** Throughout the world, right now, no specific treatment is available for this infection, though a number of researches are being carried out to know about this novel virus, its characteristic features in details, response to various drugs and vaccines that are now undergoing a number of trials, everywhere in the world.


KEY WORDS: World Health Organization; Lockdown; Personal; Academical; Quarantine; Isolation

INTRODUCTION

The 2019 novel coronavirus (2019-nCoV) infection first of all emerged in December 2019, in China, in the city of Wuhan.^[1]

Since then the spread of this virus has been very fast and now it has also covered almost all the countries of the world.^[2] At present, it has become a major global health concern as it has affected more than 11.2 million people in 28 countries/regions.^[3]

New terminology was given to the virus causing this epidemic by the World Health Organization (WHO) on February 11, 2020, as 2019-nCoV: Coronavirus disease (COVID-19). Previously, provisionally named 2019-nCoV was renamed as severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2), by the International Committee on Taxonomy of Viruses.^[4]

Access this article online	
Website: www.njppp.com	Quick Response code 
DOI: 10.5455/njppp.2020.10.07188202017072020	

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The virus is named so because, under an electron microscope, it appears to have a crown like structure. Crown in Latin language is called as Corona. This crown is made of glycoprotein on the virus envelope.^[5]

This virus that has positive stranded RNA as its genome, causes the illness, that may vary from as mild as the common cold, to much severe forms just similar to SARS and middle east respiratory syndrome.^[5]

Earlier animal-to-human transmission was thought of as links that were connected between wild animal market and most cases in Wuhan, China. Later, the emergence of more and more cases initiated the process of increasing number of studies concluding towards possible human-to-human transmission of SARS-CoV-2 through droplets or direct contact.^[6]

One study has proved that anxiety of college-going students about the impact of coronavirus on the studies.^[7]

Another study has also mentioned that their stress is related to this virus impact on their employment.^[8]

Either because of compulsion during lockdown or as a precautionary measure, the gradually increasing distance between people has also led to an increase in stress. Furthermore, this kind of behavior is expected to rise if interpersonal communication continues to be deficit in this way ahead also.^[9,10]

Global travel has been playing a major role in its high and fast transmission leading to posing this as a great threat worldwide.^[11] It was the sixth public health emergency of international concern on January 30, 2020, by the WHO. Earlier other diseases in the same list are as – H1N1 in 2009, polio in 2014, Ebola (West Africa) in 2014, Zika in 2016 (Brazil), and Ebola in 2019 (The Democratic Republic of Congo). Hence, all over the globe, much cooperation is required among the health sector and government to plan and execute the new strategies to combat this infection. The public needs to be patient enough in many aspects as, through this way only, virus spread can be minimized or prevented.^[12]

Many aspects of the effects of this pandemic of coronavirus have been covered, like on health (of oneself and others family members too), social life, psychology, familial, and economics. However, the personal and academic part of the students remains uncovered. That is why this topic has been thought of.

It is a study having the novel idea, with the aim and objective to acknowledge all of us; about the COVID- 19 effects on these two much important spheres of medical and paramedical students.

MATERIALS AND METHODS

The proposed study was sent to Screening Ethical Committee of the Institute. The Ethics Clearance, was obtained, along with the undertaking that their each and every information will be anonymized and randomly coded so as to ensure delinking with any identity of the participant and will not involve any collection of materials. For waiver of informed consent, approval is accorded by the Screening Ethics Committee. Afterwards, this cross-sectional study was started. It was very well informed that participation would be purely on volunteer decision. The students of three courses counted a toll of 500 subjects. They participated in this online survey that included a questionnaire which comprised 18 questions. Out of these, 15 questions were in multiple-choice questions (MCQs) form (i.e., MCQ, having further two or three or four options, depending on the framing of the question) and three questions were in short answer type also, where they had to think on and then fill the answer of their own, even more than one answer was allowed. The idea was just to assess their subjective view on COVID-19 impact on their personal and academical life. They were allowed to attempt the whole questionnaire in only one chance. After which they could not modify their submitted results. The whole survey took 25 days.

RESULTS

In our study, 34.8% of participants were boys, and 65.2% of participants were girls.

It is definitely surprising that the majority 92.4% of the participated students, even in this serious situation when corona pandemic is all around us, did not regret at all, about their decision of choosing their careers. Another 7.6% did regret the same.

About 86% of subjects rather, were motivated, from the sacrifices made by the corona warriors, to proceed further in their profession/academics with more enthusiasm and zeal. Only 5% were rather depressed. About 8% did not comment over it.

About 92.4% of students were not willing to change their careers if given a chance to do so.

As far as the aspect of joining the research work related to vaccines and drug development against corona infection is concerned, only 58% were willing, rest 42% did not want to go for the same.

According to 91.7% participants in the study, there is much need of research work in medical virology of specific treatment and vaccine development against coronavirus.

About 68% participants still think that they would rather continue to suggest their friends and family members to pursue these medical and paramedical professions.

They definitely missed the routine activities that were used to be part of the routine, earlier, such as getting ready in the morning, going to college and enjoying meanwhile with their friends, in college buses or the cabs, attending classes, and interacting with teachers in the college. This was according to 86% of the participants.

They have started indoor games on an average of 1 h/day.

According to their views about the end of this pandemic, 80% think about it, in the next 2 years; 8% in 1 year; 7% in 6 months; and 5% think it would never end.

67% of participants had an opinion that study is better in college rather than at home these days. On the other hand, 44 % thought that at home, one could study better.

Table 1 shows very well the different ways in which participants and their families contributed toward society in this period.

In this lockdown period, the numbers of hours they devote to studies at home are depicted in Table 2.

Various hobbies developed by the students, while staying at home are described in Table 3.

They did follow their elders' belief in natural ways to prevent and combat coronavirus infection such as hot water, tea, coffee, healthy foods, and immunoboosters such as chyawanprash and others. The details are shown in Table 4.

DISCUSSION

There has been a great interruption in the regular lives of all of us since COVID-19 has threatened the whole world.^[13]

Educational institutions such as schools, colleges, universities, coaching centers, academic institutes, in every corner of the world are closed at present. To continue the students' studies, they have started an online teaching-learning method instead.^[13]

Lockdown is the only way to prevent transmission of this contagious coronavirus infection.^[14-16] In this lockdown period, in our country, around 15 lacks educational institutions have been shut down, and 25 crore students are not able to go and study in schools, especially, the poor students are hard hit as around 85% cannot even explore the on learning methods.^[17]

According to a survey, these are the students mainly from economically weaker sections of the society, as they cannot access to online e-learning resources, know-how, and unavailability of the utmost required infrastructure such as smartphones, tablets, internet services, laptops, or desktops.

Table 1: Different ways in which participants and their families contributed toward society during this lockdown

Different ways of contribution toward society	Percentage of participants (%)
Distribution of masks and sanitizers	79.8
Giving food to needy people	57.8
Donation to pm care funds	60
Help in spreading awareness	54.2
Helping the police personnel in various ways (water bottles, masks, sanitizers, food, etc.)	39.8

Table 2: Numbers of hours spent by students per day in their studies while staying at home

Numbers of hours/day, spent in studying, at home, during the lockdown	Percentage of participants (%)
5 h	20
4	67
<4	8
>6	5

Table 3: Various hobbies developed by students during lockdown at home

Hobbies developed and developed at home during the lockdown period	Percentage of participants (%)
Cooking	78
Dancing	57
Gyming	89
Drawing and painting	65
Sketching	38
Reading novels/books other than curriculum	27
Accepting various challenges	49

Table 4: Various methods adopted by the participants so as to enhance their immunity

Various methods adopted by participants to increase immunity	Percentage of participants (%)
Yoga	67
Hot water/fluids/tea/coffee	89
Healthy foods, fresh and seasonal fruits and vegetables	43
Immuno booster like chyawanprash	88
None	5

Rather, they need hand-holding to shift from real classes to this new virtual mode of teaching.^[17]

About 30% also require the need of supervision from some trainer so as to pursue this new mode of learning, i.e., e-learning.^[17]

To know the myriad effects of the Covid-19 pandemic, a huge number of scientists worldwide are putting themselves very hard in their research work, overtime too.^[18]

About 80% out of the ones, who are attending these online classes, feel the need of doubt clearing sessions too, either weekly or monthly, so as to become techno savvy, at least sufficient enough to proceed with the online classes during this lockdown period.^[17] It is a must to learn as nobody, as of now, knows that this mode of learning will have to be adopted further for how long period. Hence, it automatically necessitates exploring this way of teaching that is actually the need of the hour.

The strength of our study is the participant number that is sufficiently high, so as to provide us with more precise results. Another important point is that making the participants believe that all their information will be kept anonymous assures the correct data to be furnished.

This study had the weakness that the duration for which this online survey was conducted, was limited, just 25 days.

CONCLUSION

Apart from one fear that is of coronavirus infection itself, its consequences have become the major issues that have to be and also being faced by everyone across the globe.

The short term as well as long term after effects that include loneliness, relationship strains, unemployment, financial problems, and new erupting necessities of the children who stay at home.^[19]

Is this outbreak can affect prejudices, values, and policy preferences – each of which has broad economic and social impacts – we expect this work will be of interest not only to scientists but also to governments, institutions, corporations, and ordinary people as they seek to respond and adapt to this and other crisis. Emotional well-being is at par significant with the physical health so as to cope up in this stressful situation.^[19]

These types of surveys are quite helpful in assessing the impacts of this pandemic on diverse aspects of one's life. This study concludes that both the personal and academic lives of students have been greatly affected. However, many other ways have come up as new activities in our routine life as well.

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How to cite this article: Roy VK, Arora J, Kaur N, Gandhi A. Effect of the present situation of coronavirus disease-2019 pandemic on the academic and personal life of undergraduate medical and paramedical students. *Natl J Physiol Pharm Pharmacol* 2020;10(09):795-798.

Source of Support: Nil, **Conflicts of Interest:** None declared.