

Attitude and Perception of Students towards Non-academic Challenges of Learning Amidst COVID Pandemic

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ABSTRACT

Introduction: The medical education sector of India, undoubtedly being a huge part of this sector, took a big hit with the advent of the pandemic. **Methodology:** Descriptive cross-sectional study was conducted during the month of October 2020 and it involved the students pursuing health courses (MBBS) from various colleges. The inclusion criteria consisted of students pursuing MBBS course and willing to participate in the survey. The survey was conducted through electronic questionnaires with the aid of Google Forms created online. **Results:** The majority (66.3%) of them expressed their disappointment over the general state of affairs during the pandemic and half of the respondents reported increased stress levels as compared to the period before the pandemic. The time spent using electronic devices by the student population increased from 1-4 hours before the pandemic (74.6%) to 5-9 hours (50.4%) during the pandemic, and they reported experiencing certain ill-effects among which eye strain, headache were the major complaints. 69% of them stated that they found some extra time during the pandemic and utilized it for non-academic activities. **Conclusion:** Our study findings show that students still prefer the traditional face-to-face lectures because of the various short comings of virtual online sessions. A big proportion of students have become the victims to the pandemic's impact on mental health.

Keywords: Attitude, Non-Academic Challenges, Perceptions, Learning, Covid Pandemic.

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INTRODUCTION

A state of Public Health Emergency of International Concern was declared on January 31, 2020 by the World Health Organisation (WHO) due to the Corona Virus-19 which then attained the status of a global pandemic on March 11, 2020.¹ With 46,591,622 confirmed cases

and 1,201,200 deaths globally, 8,267,623 confirmed cases and 123,097 deaths in India, as of November 2020, every sector has been disrupted and the chaos has ensued.² With 500 million people between the ages 5-24, being the largest in the world, and the number of colleges and universities being 39,931 and 993 respectively, this is both a boon and a bane for the education sector of India.³ The medical education sector of India, undoubtedly being a huge part of this sector, took a big hit with the advent of the pandemic. Following the guidelines for social distancing,⁴ the educational institutions were shut down paving the way to a new generation of virtual online classrooms. In today's medical education in our country, where there is an increasing focus on the early exposure to clinical skills, which form the core of this

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profession, the students have faced with the dilemma of having to deal with not just the absence of face-to-face lecture sessions, but also the absence of clinical postings which form a vital part in the proper development of a doctor's skill set. The aim of virtual classrooms being to continue the learning during the pandemic, the implementation of these new practices has led to varying results, as perceived by the student as well as the teaching fraternity. Medical students are now being forced to juggle the changes to their academic life on one hand with the untoward effects the pandemic has brought along with it on both the physiological and psychological level. This cross-sectional study aims to assess the attitude and perception of the students towards learning amidst the COVID-19 pandemic.

MATERIALS AND METHODS

This descriptive cross-sectional study was conducted during the month of October 2020 and it involved the students pursuing health courses (MBBS) from various colleges. The inclusion criteria consisted of students pursuing MBBS course and willing to participate in the survey. The survey was conducted through electronic questionnaires with the aid of Google Forms created online. The forms contained an introductory paragraph highlighting the aims of the study and general instructions to the participants. The questionnaire consisted of inquiries about the different aspects of the participant's non-academic life differences before and during the COVID pandemic. A member of the teaching faculty and 24 students were selected to pilot test the survey draft as part of the validation process of the survey and the same was modified based on

their feedback. The final questionnaire was distributed among the mentioned target audience through social media. Data was entered into MS EXCEL and analysed using SPSS software version 22.0.

RESULTS

The participant demographics are given in Table 1. Of the 264 participants, 47.3% were males and 52.7% were females. The mean age of the participants was 20.30 years, and the majority were of age 20 years. The responses of the students of various years of study were as follows, 1st year- 34 (12.9%), 2nd – 199 (75.4), 3rd- 21(8%), 4th year- 10(3.8%).

Table 1: Demographic Characteristics.

Serial Number		Frequency (n)	Percentage (%)
1	Age		
	18	5	1.9
	19	41	15.5
	20	119	45.1
	21	72	27.3
	22	23	8.7
2	Gender		
	Male	125	47.3
	Female	139	52.7
3	Year of Study		
	First year	34	12.9
	Second year	199	75.4
	Third year	21	8.0
	Fourth year	10	3.8
	Internship	-	-

Table 2: Non-Academic Challenges due to the pandemic (Mental health and Well Being) Part 1.

Serial No	Questionnaire	Modality	Frequency (n)	Percentage (%)
1	How would you describe your state of mind during this pandemic?	I'm very happy with the state of things	26	9.8
		I'm disappointed by the state of things	175	66.3
		No change	63	23.9
2	How would you describe the change in your general stress levels during the pandemic comparing it to the period before the pandemic?	Increased	132	50
		Decreased	63	23.9
		No change	69	26.1
3	How many number of hours was your screen-time (the number of hours spent using electronic devices) BEFORE the pandemic?	Less than 1 hr	51	19.3
		1-4 hr	197	74.6
		5-9 hr	6	6.1
		Greater than 9 hr	-	-
4	How many number of hours was your screen-time (the number of hours spent using electronic devices) DURING the pandemic?	Less than 1 hr	2	0.8
		1-4 hr	40	15.2
		5-9 hr	143	54.2
		Greater than 9 hr	79	29.9
5	Do you feel like you have a little extra time on your hands during the pandemic?	Yes	183	69.3
		No	81	30.7

Non-Academic Challenges due to the pandemic (Mental health and Well Being)

This section addressed the mental health and well-being of the student during the pandemic. The majority (66.3%) of them expressed their disappointment over the general state of affairs during the pandemic and half of the respondents reported increased stress levels as compared to the period before the pandemic. The time spent using electronic devices by the student population increased from 1-4 hr before the pandemic (74.6%) to 5-9 hr (50.4%) during the pandemic, and they reported experiencing certain ill-effects among which eye strain, headache were the major complaints. 69% of them stated that they found some extra time during the pandemic and utilized it for non-academic activities. The details are mentioned in Table 2 and Table 3.

Future challenges after the pandemic

As a final take on the entire situation and its impact on the future the majority of the students (63.6%) opted that they would prefer to follow the conventional face-to-face lectures in the future and nearly one third of them preferred to integrate both i.e. face-to-face lectures with virtual lectures. Also 74.6% of them opined that the pandemic would have a negative impact on their future career prospects. The detailed response can be found in Table 4.

DISCUSSION

The Indian education system was completely disrupted as a result of the pandemic and led to the birth of virtual online teaching. Although online teaching isn't entirely new to India, the rapid shift from conventional face-to-face lectures and the naivety of the population towards the same has put forth major challenges. This

study aimed to assess the attitude and perception of the students amidst this transition and its impact.

The majority of the participants ($n=204$, 77.3%) strongly agreed that their learning curve had been negatively impacted and that they felt that they had dropped in their studies. The rest of the questionnaire was focussed to assess the reason for this impact on their learning curve.

Non-Academic Challenges due to the pandemic

Mental health plays a pivotal role in a student's academic success. A study found out that "students with mental health symptoms showed four times the increased risk of low academic self-efficacy and twice the risk of delayed study progress" (Grøtan *et al.*, 2019).⁵ 66.3% of the participants were disappointed by the state of things during the pandemic and half of them experienced increased stress levels. Following the guidelines for maintaining social isolation,⁴ this has rather had a grave impact on one's mental health. As indicated by many studies, students have experienced mental health symptoms such as stress, depression, anxiousness, altered sleeping patterns, concerns about academic performance and future career prospects.⁶⁻⁸ One particular study performed by Wyatt *et al.* (2017)⁹ explored the relationship between mental health and its academic impact in students of different semesters. These studies implicate the poor academic performance because of poor mental health, which correlated with the existing trend of declining levels of study duration, concentration, confidence as observed in this study. This opens up a platform to address the implications of one's poor mental health and promote practices that help the students overcome these obstacles. As indicated by Wyatt *et al.*, first year freshmen experienced less symptoms compared to their seniors and had a lesser impact on their academic performance, and

Table 3: Non-Academic Challenges due to the pandemic (Mental health and Well Being) Part 2.

Serial No	Questionnaire	Modality	Count	Response ratio
6	Do you feel any of these symptoms during or after you use your electronic devices?	Headache	133	50.4
		Eye strain	174	65.9
		Stress	105	39.8
		Neck pain	99	37.5
		No, I don't feel any of these symptoms	53	20.1
		Others	9	3.41
7	What do you do with the extra time concerning your academics?	Sports	69	37.7
		Yoga	49	26.8
		Gym	32	17.5
		Music	119	65
		Dance	22	12
		Research	16	8.7
		PG exam preparation	37	20.2
		Others	37	14.02

Table 4: Future challenges after the pandemic.

Questionnaire	Modality	Frequency (n)	Percentage (%)
Taking into account your previous responses to the above questions, what would your preference be towards the method of teaching in the near future?	I prefer face-to-face lectures	168	63.6
	I prefer virtual online lectures	7	2.7
	I prefer both; i.e., integrate online lecture sessions into face to face lectures.	89	33.7
What effect do you think that the pandemic will have on your future career prospects?	A positive impact	37	14
	A negative impact	197	74.6
	It will not have any impact at all	30	11.4

pointed out that these problems could be addressed at the very beginning.⁹

A Wilcoxon signed rank test used to assess the screen time of the participants revealed a statistically significant difference ($z = -13.927$, $p < 0.001$). The screen time of most of the students in this study far exceeds the recommended limit, which is less than 2 hr per day, courtesy of the American Academy of Paediatrics (AAP).¹⁰ Combination of increased screen time and a sedentary lifestyle can ultimately result in altered sleeping patterns, disturbed mental health and increased risk for complications such as adiposity.¹¹⁻¹³ This calls for an increasing need to spread awareness and practices that inculcate a healthy lifestyle in the students, by targeting the audience at their own home ground, i.e., applications that can monitor screen-time duration, sleep pattern etc.^{14,15}

Impact on the future

96.2 % strongly agreed that clinical postings were necessary to learn certain key skills such as history taking etc and 84.8% stated that the absence of clinical postings would affect their future careers. The majority still preferred the traditional face-to-face lectures (63.6%) and felt that the pandemic would have a negative impact on their future careers (74.6%).

Hospital postings play a crucial role in the learning process of any medical student.¹⁶ In a study conducted by Nayak *et al.* (2020), students performed better in eliciting history from patients after they were trained in their clinical communication skills.¹⁷ Moreover, clinical postings also serve as a means where one can explore his interests in different specializations.¹⁸ Not being able to learn such key skills would definitely impact one's learning process and a possible work-around would be to conduct case scenarios simulations along with the usual lectures during video-conferencing. Dividing the students up into groups and assigning each group with a stimulated clinical case scenario and then having inter-discussions may eliminate some of these problems, if not all.

Students are increasingly anxious about the future regarding their practical classes and academic performance in their exams.¹⁹ Another observation worth noting is the number of students who felt that this would negatively impact their future careers. The same observation was noted in a study, where students across different years stated reasons such as not being able to explore speciality, not being able to obtain letters of recommendation or bolster their CV (Byrnes *et al.* 2020, p 4-5).¹⁸ Promoting participation in research, surveys not only helps reduce the existing concerns but also serves as to expand the knowledge base. Certain specialties such as preventive and social medicine, virology and many more have come into the spotlight and this too would affect one's perception of future career.

The major limitation to this study was the size and nature of the target audience. Involvement of students pursuing courses other than MBBS and students from regions across the country would have shed more light on regional disparities on the attitude of the students during the pandemic. The lack of perspective of the teaching faculty on the same should also be noted.

CONCLUSION

In times as unprecedented as this, there is no clear-cut solutions to the challenges that we face today. And this study aimed to shed some light on the existing obstacles and come up with suitable tactics to manoeuvre through the situation safely. Our study findings show that students still prefer the traditional face-to-face lectures because of the various short comings of virtual online sessions. A big proportion of students have become the victims to the pandemic's impact on mental health. Although the importance of traditional touch of a teacher is unparalleled, we also live in an era that has seen technology encompass every corner of our lives and it would be a great benefit if we could evolve the education sector paralleling it with the rise in technology. This requires skill building courses not just for teachers but for students too as well, in order to ensure equitable distribution. This could be the beginning of a new

generation of students that are physically, mentally proficient in handling not just a similar external crisis, if there were to be any, but also solve the internal crisis together as a student fraternity.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

REFERENCES

1. WHO. Rolling updates on coronavirus disease (COVID-19) [online] [cited Nov 3 2020]. Available from: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/events-as-they-happen>.
2. WHO. WHO Coronavirus Disease (COVID-19) Dashboard [online] [cited Nov 3 2020]. Available from: <https://covid19.who.int/>.
3. Indian brand equity foundation (ibef). Education and Training Industry in India [online]. Available from: <https://www.ibef.org/industry/education-sector-india.aspx#:~:text=The%20education%20sector%20in%20India,993%2C%20respectively%2C%20in%20FY%2019.&text=The%20sector%20is%20expected%20to,with%20around%209.5%20million%20users> [accessed Nov 3 2020].
4. WHO. Coronavirus disease (COVID-19) advice for the public [online] [cited Nov 3 2020]. Available from: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>.
5. Grøtan K, Sund ER, Bjerkeset O. Mental Health, Academic Self-Efficacy and Study Progress Among College Students – The SHoT Study, Norway. *Front Psychol.* 2019;10:45. doi: 10.3389/fpsyg.2019.00045, PMID 30733694.
6. Wolf MR, Rosenstock JB. Inadequate sleep and exercise associated with burnout and depression among medical students. *Acad Psychiatry.* 2017 Apr 1;41(2):174-9. doi: 10.1007/s40596-016-0526-y, PMID 26976402.
7. Elmer T, Mepham K, Stadtfeld C. Students under lockdown: Comparisons of students' social networks and mental health before and during the COVID-19 crisis in Switzerland. *PLOS ONE.* 2020;15(7):e0236337. doi: 10.1371/journal.pone.0236337, PMID 32702065.
8. Islam MA, Barna SD, Raihan H, Khan MNA, Hossain MT. Depression and anxiety among university students during the COVID-19 pandemic in Bangladesh: A web-based cross-sectional survey. *PLOS ONE.* 2020 Aug 26;15(8):e0238162. doi: 10.1371/journal.pone.0238162, PMID 32845928.
9. Wyatt TJ, Oswalt SB, Ochoa Y. Mental Health and Academic Success of First-Year College Students. *Int J Higher Educ.* 2017;6(3):178-87. doi: 10.5430/ijhe.v6n3p178.
10. EyePromise. Screen Time Guidelines by Age As recommended by the American Academy of Pediatrics (AAP) and World Health Organization (WHO) [online] [cited Nov 3 2020]. Available from: https://www.eyepromise.com/wp-content/uploads/2019/05/Screentime-Recommendation-Chart-Final_AAP-WHO.pdf.
11. Wu X, Tao S, Zhang Y, Zhang S, Tao F. Low physical activity and high screen time can increase the risks of mental health problems and poor sleep quality among Chinese college students. *PLOS ONE.* 2015;10(3):e0119607. doi: 10.1371/journal.pone.0119607, PMID 25786030.
12. Foerster M, Henneke A, Chetty-Mhlanga S, Rössli M. Impact of adolescents' screen time and nocturnal mobile phone-related awakenings on sleep and general health symptoms: A prospective cohort study. *Int J Environ Res Public Health.* 2019;16(3):518. doi: 10.3390/ijerph16030518, PMID 30759792.
13. Saunders TJ, Vallance JK. Screen time and health indicators among children and youth: Current evidence, limitations and future directions. *Appl Health Econ Health Policy.* 2017;15(3):323-31. doi: 10.1007/s40258-016-0289-3, PMID 27798796.
14. Huberty J, Green J, Glissmann C, Larkey L, Puzia M, Lee C. Efficacy of the mindfulness meditation mobile app "Calm" to reduce stress among college students: Randomized controlled trial. *JMIR mHealth uHealth.* 2019;7(6):e14273. doi: 10.2196/14273, PMID 31237569.
15. Cartreine J. Mindfulness apps: How well do they work?. *Harvard Health Blog. Weblog* [online] [cited Nov 3 2020]. Available from: <https://www.health.harvard.edu/blog/mindfulness-apps-how-well-do-they-work-2018110615306>.
16. Patil P, Chakraborty S. Where does Indian medical education stand amidst a pandemic? *J Med Educ Curric Dev.* 2020;7:2382120520951606. doi: 10.1177/2382120520951606, PMID 32923671.
17. Nayak RK, Kadeangadi DM. Effect of teaching communication skills to medical undergraduate students: An exploratory study. *Indian J Community Fam Med.* 2019;5(2):108. doi: 10.4103/IJCFM.IJCFM_66_19.
18. Byrnes YM, Civantos AM, Go BC, McWilliams TL, Rajasekaran K. Effect of the COVID-19 pandemic on medical student career perceptions: A national survey study. *Med Educ Online.* 2020;25(1):1798088. doi: 10.1080/10872981.2020.1798088, PMID 32706306.
19. Chinelatto LA, Costa TRd, Medeiros VMB, Boog GHP, Hojaj FC, Tempiski PZ, et al. What you gain and what you lose in COVID-19: Perception of medical students on their education. *Clinics.* 2020;75. doi: 10.6061/clinics/2020/e2133.

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