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Utilization of Lockdown Period by Undergraduate Students of Health Sciences

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ABSTRACT

Introduction- In the second week of March, in order of Indian Government, the state governments across the country began shutting down schools and colleges temporarily as a measure to control spread of the novel corona virus. This was the crucial time for the education sector. The structure of schooling and learning was the first to be affected by this closure. As the students were not permitted to physically attend the colleges they went to their hometown. The present study aimed at assessing the utilization of lockdown period by undergraduate students of health sciences.
Method- quantitative research approach with non- experimental descriptive survey research design was used. Total 907 respondents all over the country participated as sample. The data was collected by using Goggle form consisting of structured questionnaire.
Result- study findings revealed that though majority of health science undergraduate students attended online lectures delivered by their teachers, then also majority have not done regular studies during lockdown. Majority have not spent specific time of the day for their health care. They were not involved in direct care of COVID patients but majority voluntarily helped COVID people during lockdown.
Conclusion- study concluded that majority of undergraduate health science students have not done regular studies and also have not spend the leisure time for health care activities during lockdown. There is intense need that the students of health science should be guided about self study habits, need of recreational activities and also effective utilization of time.

Key words- COVID, lockdown, undergraduate health science students

INTRODUCTION

India witnessed an outbreak of the corona virus as a part of worldwide pandemic, known as COVID-19, or SARS-CoV-2 in late January 2020 when three Indian students travelled to the southern state of Kerala from Wuhan in China which is the epicenter of the outbreak. The first case in India was reported on 30th Jan which rose to three cases by 3 February 2020.[1] At the same time several other cases were detected in other parts of the country, most of which were linked to people with a travel history to affected countries. Apart from these, no significant rise in transmissions was observed in February. On 4 March, 22 new cases were reported, including 14 infected members of an Italian tourist group[2]. In March, the transmissions grew after several people with travel history to affected countries, and their contacts, tested positive. On 12th March, a 76-year-old man, with a travel history to Saudi Arabia, became the first COVID-19 fatality of India.[3]

The Government of India initially responded to the COVID-19 pandemic in the country with thermal screenings of passengers arriving from China, as well as other countries. As the pandemic progressed throughout the world, the Indian government began issuing recommendations regarding social distancing measures and also initiated travel and entry restrictions. Throughout March, several shutdowns and business closures were initiated, and by the

end of the month, the Indian government ordered a widespread lockdown. Over the month of March, multiple states across the country began shutting down schools, colleges, public facilities such as malls, gyms, cinema halls and other public places to contain the spread. [4]

On 16th March, the union government declared a countrywide lock-down of schools and colleges.[5] On 22 March, the Government of India announced complete lockdown in 82 districts in 22 states and Union Territories of country where confirmed cases were reported.[6] On 24 March, Hon P. M. Narendra Modi announced a complete 21-day national lockdown to contain the pandemic which later on continued phase wise and the fourth phase ended on 31st May except for the containment zones demarcated by the State and Union Territory governments in the country.[7]

Because of shutting down schools and colleges temporarily as a measure to contain the spread of the novel corona virus the structure of schooling and learning, including teaching and assessment methodologies, was the first to be affected by these closures. The pandemic significantly disrupted the higher education sector as well.[8] All the students of professional, technical education and even health science stream went back to their home town. And the colleges started with online mode of teaching learning to meet the academic requirements of their students. Though students were involved in online learning, it could not be done for hours together as it was used to take place in the classroom and because of which there was much free time available for them which they could spend for many other activities with the regular online learning. Health science students being adult learners and having enough knowledge about health and self care might have used the free time available at home for various creative and constructive academic, co curricular and health care activities. So the investigator felt the need of exploring and describing the utilization of time done by the health science students and so the study was undertaken as an online survey to assess the utilization of lockdown period by undergraduate students of health sciences.

MATERIAL AND METHODS

The quantitative research approach was used. Based on the statement and objectives of the study, non experimental descriptive survey research design was used in this study as the investigator aimed to describe and document the aspects of a selected situation as it naturally occurred and summarize the status of phenomena (time).[9]

The investigator carried out the study at national level in India. The natural setting was used to conduct the study as the investigator did not manipulate or change the environment for study. The study was conducted in June 2020. Total 907 respondents were included in the study. The sampling techniques used were cluster sampling. Inclusive criteria were all the health science students studying in any class in either medical, dental, ayurved, homeopathy, nursing or physiotherapy discipline under various Government Universities or Deemed to be University in India. The tool used was a Google form having structured questionnaire. The questionnaire consisted of total 5 sections. The first section was of personal particulars of the respondent consisting of total 12 questions. Remaining 4 sections were on Questionnaire related to academic learning during lock down period, Questionnaire related to recreational activities done during lockdown period, Questionnaire related to time spend for daily health care and health maintenance activities and Questionnaire related to participation in COVID pandemic being health science student. Total 13 questions each having various answers for it were included in these 4 sections of the tool. Self report technique was used to collect the data. The respondents were instructed to tick mark one or more than one option as applicable to them depending upon the type

of question. All the questions and fields in the form were mandatory. The respondents were sent the link of e-goggle form on their mobile phone number. In the introductory part of the form, before actual access to the questions, an introductory note was put in which the respondents were requested to give genuine responses to each question. And they were assured that their details would not be shared or misused and also the responses given by them would be kept confidential. The respondents were requested to record their responses and submit the form back immediately after completion. The respondents were not allowed to change their responses after recording once and even the submission of filled Google form was allowed only once and they were unable to reopen the e-form after submitting it once. The online survey was done for 15 days from 2nd June to 17th June 2020. The data was collected in electronic form. After the date the responses to the form were not accepted by the investigator by blocking the e- form.

Statistics- the collected electronic data was analyzed using frequency and percent.

RESULTS

As per the selected objectives of the study, the statistical analysis was done using frequency and percentage. The data is presented under various headings.

Table 1- distribution of respondents based on personal particulars-(N= 907)

sn	Particulars	Specification	Frequency	Percent
1	Age in years	17 to 18 years	180	19.8
		18 to 19 years	220	24.2
		19 to 20 years	180	19.8
		More than 21 years	327	36.0
2	Sex	Male	248	27.3
		female	659	72.7
3	Area of permanent residence	Rural	342	37.7
		Semi urban	168	18.5
		Urban	354	39
		Metropolitan	43	4.5
4	State	Maharashtra	585	64.4
		Other than Maharashtra	322	35.5
5	Type of family	Nuclear	635	70.0
		Extended	39	4.3
		joint	233	25.7
6	Program of study	MBBS	73	8.0
		BDS	51	5.6
		BHMS	79	8.71
		BAMS	93	10.25
		Nursing	501	55.23
		Physiotherapy	113	12.45
7	Year of study	First	170	18.7
		Second	228	25.1
		Third	187	20.6
		Fourth	322	35.5
8	University to which your college is affiliated	Maharashtra University of Health Sciences	509	56.1
		Deemed to be University in Maharashtra	242	26.7
		University other than Maharashtra	151	16.6

It is evident from the above table that the maximum respondents 327(36%) were above the age of 21 years. More than half that is 659(72.7%) were female. Majority of them that is 354 (39%) were from urban area. More than half 585(64.4%) were belonging to Maharashtra state. More than half 635(70%) were belonging to nuclear family. The maximum 501(55.23%) respondents were from nursing field and the least respondents 51(5.6%) were the students of BDS. The majority of respondents 322(35.5%) were studying in final year of their respective programme and more than half 509(56.1%) respondents were from colleges affiliated to MUHS and least 151(16.6%) were from the colleges affiliated to University other than Maharashtra state.

Table 2- Distribution of respondents based on academic learning done during lockdown period-(N= 907)

no	Question	Response	Frequency	Percent
1	How frequently have you done study during the lock down period	Every day	274	30.2
		Alternate day	230	25.4
		2-3 days in a week	316	34.8
		Not studied	64	7.1
2	How much time have you spend on your studies during lockdown period	More than 2 hours/day	282	31.1
		Less than 2 hours/day	131	14.4
		No specific time a day	380	41.9
		Not studied regularly	114	12.6
3	which all learning activities you were involved in during lock down period	Completion of pending assignments and college projects	383	42,2
		Reading the textbooks, reference books, notes	399	44
		Preparation of notes on various topics of various subjects	355	39.1
		Solving old question papers	187	20.6
		Preparation and revision for forthcoming examination	274	30.2
		None of the above	71	7.8
4	Which all online/ e- learning activities you were involved in during lock down period?	Attending online lectures delivered by your college teachers	534	58.9
		Attending webinars organized by other organizations	326	35.9
		Attending online recorded lectures on various topics	197	20.7
		Watching youtube videos/channels of subject matter	389	41.8
		Online group discussion and group study with colleagues	151	16.6
		Use of online study apps	218	24
		Use of free online downloaded textbooks	212	23.4
		Use of open access and free e library resources	59	6.5
		Use of Q & A blogs, virtual brainstorming sessions, problem based learning sessions	31	3.4
		Use of online & downloaded question banks	102	11.2
		Self assessment test	136	15
		Other than above mentioned activity	90	9.9
		None of the mentioned activity	43	4.7

It is evident from the table no 2 that out of total 907 respondents, only 314(34.8%) students have done studies for 2 to 3 days a week during the lockdown period and even 64(7.1%) have not at all studied during the said period. Majority of them 380 (41.9%) have not spend any specific or fixed hours for their studies daily and the least 114(12.6%) have not studied regularly. During the lockdown, reading the textbooks, reference books, and notes was done by 399(44%) students as one of the offline study activity. Majority of students 534(58.9%) attended online lectures delivered by their own college teachers as e-learning activity and least number of students 31(3.4%) did use of question and answer blogs, virtual brainstorming sessions, and problem based learning sessions during the lockdown.

Table 3- analysis of data based on recreational activities done during lockdown period,(N= 907)

no	Question	Response given	Frequency	Percent
1	How frequently were you involved in recreational activities during lockdown period?	Everyday	289	31.9
		Sometimes	568	62.2
		Never	50	5.5
2	How much time have you spent on recreational activities during lockdown?	More than 2 hours/day	191	21.1
		Less than 2 hours/day	158	17.4
		No specific time a day	558	61.5
3	Out of the following, which all recreational activities have you done daily or more frequently	Watching television programmes	463	51
		Internet surfing on mobile phone/laptop	466	51.4
		Playing games on mobile phone	286	31.5
		Listening to music	485	53.5
		Talking/chatting with friends and relatives	458	50.5
		Playing indoor games with family	363	40
		Nurturing your hobby	272	30
		Helping parents/grandparents in household work	533	58.8
		Helping in cooking and learning to cook	576	63.3
		Any other than mentioned above	141	15.5
		None of the above	16	1.8

The analysis of responses given by respondents about recreational activities done during the lock down period shows that more than half respondents that is 568 (66.2%) were involved in recreational activities sometimes during the lockdown period. Total 558 (61.5%) have spent no specific time a day on it. Out of various listed recreational activities most of them 576 (63.3%) used the time for helping in cooking and learning to cook. And the least that is 272 (30%) have nurtured their hobbies during the lockdown.

Table 4- Analysis of data based on time spend for health care and maintaince activities during lockdown period, (N= 907)

no	Question	Response given	Frequency	Percent
1	How much time have you spent on health care activities during lockdown?	More than 2 hours/day	270	29.8
		Less than 2 hours/day	165	18.2
		No specific time a day	400	44.1
		No time spend on it	72	7.9
2	How much time have you spend on rest and sleep during 24 hours	Less than 6 hours/day	108	11.9
		7 to 8 hours /day	728	80.3
		More than 10 hours/day	71	7.8
3	Which of the following physical activities you have carried out on regular basis during lockdown period?	Daily light exercises	516	56.9
		Daily moderate to high intensity physical exercises	176	19.4
		Daily brisk walking at home	313	34.5
		Daily meditation	140	15.4
		Daily yoga	146	16.1
		None of the above	120	13.2

It is evident from the data of above table that most of the respondents 400(44.1%) have not spent specific time in a day on health care activities during lockdown. Majority of them 728(80.3%) have utilized 7 to 8 hours in a day for rest and sleep and even 71(7.8%) of them have utilized more than 10 hours in a day for the same purpose. almost half that is 516(56.9%) have done daily light exercises at home and least that is 120 (13.2%) have not done any intentional physical activities as mentioned, on regular basis.

Table 5- analysis of data based on participation in COVID pandemic being health science student. (N= 907)

no	Question	Response given	Frequency	Percent
1	Were you directly involved in care of COVID positive patients in hospital, during lockdown	Yes	59	6.5
		No	848	93.5
2	Have you voluntarily helped people around you in relation to COVID awareness and its prevention?	Yes, almost everyday	174	19.2
		Yes, sometimes	519	57.2
		No	214	23.6
3	If you get an opportunity, are you willing to serve as COVID fighter?	Yes	726	80
		No	29	3.2
		Not sure	152	16.8

The data in relation to respondent's participation in COVID pandemic being health science student showed that majority that is 848(93.5%) students were not directly involved in care of COVID positive patients in hospital, during lockdown. But 519(57.2%) have voluntarily helped people around you in relation to COVID awareness and its prevention. And 726(80%) of them are willing to serve as COVID fighter if given the opportunity to them.

DISCUSSION

Oubibi Mohamed, Ram Bahadur Hamal, Krim Mohamed conducted a study to investigate the issues of time management by the international students in Northeast Normal University (NENU) Hostel in terms of what activities were done as a schedule of daily life in priority order and how much time was allocated and spend in each prioritized activities as sealed in five Likert scale basis ranging from never to more than fifteen hours. The research design implied for the study was a

phenomenological study where time was taken as a phenomenon. The data was collected via purposive participatory observation for one week. The data was analyzed qualitatively. The result revealed that study, social media, Sleeping/Rest, Eating and Drinking, Travelling, Grooming, Leisure/sports and Working for job-related activities as the top priority activities as the perception of students. The result showed that more than 80% of students have the time allocation to study in the range of 6-10 hours and 20%of students enjoy the time less than 6 hours. Maximum students have reported having the time utilization on the use of social media from 1-5 hours. 80% of students were founded to use the time to have the talk with teachers and friends in the range of 1-5 hours whereas 20% student consumed the time for communication about the range 6-10 hours. Almost all students were reported to have not regular physical exercise for their health and 20% students have used about 1-5 hours of time for physical exercise. During the campus hours and the days all students have used about 1-5 hours on campus and in the days of off-campus, more than 80% of students were allocating their time in off-campus activities in the range of more than 11 hours. [10]

Dr Ramesh Rajendran, Dr. Sangeetha Asokan Dr. Sharon Sneha did an analysis on the study habits among undergraduate medical students. The study was conducted as a cross sectional, observational study with 118 Final year MBBS students as study participants using Dennis Congos Study Skills Inventory Questionnaire consisting of 51 study habits questions classified according to domains of Text Book reading, Notes taking, Memory, Test Preparation, Concentration, Time management. The study concluded that though the students are talented and fare better in Memory and Concentration skills, there is glaring lack of attitudinal skills like Notes taking, Time management, Test preparation and Textbook reading skills. Paying attention in the class seems to be one most important distinguishing learning strategy determining the academic performance. [11]

Anju Narayanan[1], Anu P.J[1], Anusha P.N studied Study Habits among Nursing Students of a Selected Educational Institute in Mangaluru, India. A descriptive survey was conducted to determine the study habits among nursing students. The study was carried out in a parent college where the investigators have undergone their basic B.Sc. nursing course. The tool used for this study was 3 point rating scale to assess the study habits. The sampling technique adopted was probability random sampling. The sample size was 138. The findings of the study revealed that overall the subjects had moderate study habits (Mean % 67.15) with mean 34.79±5.8. There was a significant association between study habits & age and type of stay. In the area of time planning more than 1/4th proportion were with efficient time planning and more than 50% were with moderately efficient time planning and 18.84% with inefficient time planning. More or less similar findings in the area of concentration were 44.93% with moderate and around 10.14% with inefficient concentration techniques. More than 3/4th proportion of subjects scored efficient in the area of environmental planning and note taking (81.16%, 76.09%) respectively. The study revealed that the subjects need to improve their time planning and concentration techniques. The investigators have suggested that the mentors and teachers should give guidance and counseling to the students to improve their time planning and measures to concentrate while studying. This surely helps the students to improve their academic performance. Keywords: Students, study habits, educational institute. [12]

Emal Bavi1, Leila Asilzadeh, Shayeste Haghighi conducted a study to investigate students´ study habits in the nursing and midwifery faculty of Ahvaz Jundishapur University of Medical Sciences. The study was a descriptive; cross- sectional, questionnaire based

conducted on 415 nursing and midwifery university students in 2012. Data was collected through a questionnaire consisting two sections, the first of which contained demographic data and the second was on Palsane and Sharma Study Habits Inventory (PSSHI) distributed to the students by the researchers and then collected in their dorms and school s. The result showed that the mean of the study habits was 51.59 out of 90, and it was found that 21.4% of students had adverse study habits, and 60.5% had favorable study habits. There was no significant relationship between scores from different areas of study habits in nursing, midwifery and surgical technologist with Kruskal- Wallis test, however, the comparison of different study habits in academic terms we found that there was significant difference between scores in different areas of study habits among students. Conclusion: In this study, the majority of students had unfavorable study habits and only a few of them had favorable study habits. Therefore, it is recommended they be trained and educated on proper study habits through workshops or courses to improve their learning.[13]

Mausumi Basu, Sanjay Kumar Saha, Somak Majumder, Sita Chatterjee, Raghunah Misra conducted a study Sleeping Pattern among Undergraduate Medical Students. An Institution-based cross-sectional study was conducted among 293 undergraduate medical students of a teaching Hospital of Kolkata from October 2017 to December 2017 using a pre-designed, pre-tested structured questionnaire, Pittsburgh Quality of Sleep Index (PSQI) score and Epworth Daytime Sleepiness Scale (EDSS). The result showed that about 24.91% of students had daytime sleepiness as per Epworth Daytime Sleepiness Scale (EDSS) and about 63.48% had poor sleep quality as per Pittsburgh Quality of Sleep Index (PQSI) score. There was significant correlation between Poor Sleep Quality (PSQI) score and age, year of study, hostel residence, socio-economic condition, body mass index, smoking, alcohol intake, caffeine consumption, exercise, stress and excessive use of mobile/laptop. EDS score was significantly associated with age, semester of study, residence and habit of exercise. The study concluded that to improve the sleep quality of medical students, we should provide a positive environment by establishing counseling facilities and promoting good sleep hygiene.[14]

CONCLUSION

It can be concluded from the present study that during the lockdown period, majority of undergraduate health science students have done studies only for 2 to 3 days in a week and have not spend specific hours for their studies during lockdown. Those who have done studies have read textbooks, reference books and notes of the subject as offline studies and majority have attended the online lectures delivered by their college teachers. Majority of students have utilized their leisure time in the kitchen and the least were interested in nurturing their hobbies. Majority of them have done daily light exercises at home during the lockdown period. Majority of them were not directly involved in care of COVID positive patients in hospital, during lockdown but most of them have shown their willingness to serve as COVID fighter, if given the opportunity to them.

The findings of the study suggest that the present health science students can be given guidance and counseling by their teachers about developing self study habits, utilizing online resources for self learning, importance of recreational activities and also effective utilization of leisure time.

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