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THE PSYCHOLOGICAL IMPACT OF THE COVID-19 LOCKDOWN ON PHYSIOTHERAPY STUDENTS OF A COLLEGE IN NORTH INDIA

Physiotherapy

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ABSTRACT

Introduction: In response to COVID 19 spread Government of India imposed lockdown across the country to prevent the spread of virus and thus protecting the health of the community. This happened with restrictions to be at home and between the media hype of pandemic which may lead to a rise in the stress, anxiety, and depression among the community. Universities started online classes in between lockdown. Online classes would not solve the purpose of the students are not in a status to absorb the learnings and concepts. So before starting the online classes an online survey was done among the physiotherapy students to observe any distress and help them to come out of it to make online classes successful.

Methodology: An online questionnaire was made using the Impact of event scale- revised (IES-R) to assess the stress among physiotherapy students. The questionnaire was posted on the batch WhatsApp group of students across all semesters with a message showing the purpose of the study and how to approach the form. The decision of filling the form was kept completely on a volunteer basis.

Results: The response was received from a total of 307 physiotherapy students among them 140(45.6%) and 167(54.4%) were males and females respectively. The mean score was 23.21 still 42.0 % students were prone to be victims of Post-traumatic stress disorder(PTSD) and there was no significant difference between males and females. Involvement with family was found to be inversely associated with stress, possible financial instability in the future, and uncertainty about the duration of BPT and exams were positively associated with stress.

KEYWORDS

COVID-19,Lockdown, Physiotherapy Students, Stress

INTRODUCTION

WHO's announced Covid-19 as pandemic on March 11,2020[1].A decision to announce a disease as deadly and pandemic in nature has a consequence beyond the physical health domain. Every nation affected by the spread of pandemic not only faces economic and political challenges but also witnesses a severe impact on the mental health component on the general public[2]

By April 7, 2020, more than one million (1,383,436) persons have been globally infected due to the convergence of this uncontrollable infectious disease. Most of the global population has been depressed and threatened due to the exponential growth of infection and the increasing number of fatalities[3].To avoid the mass spreading of this pandemic virus, the decision regarding nationwide lockdown has been taken. No doubt, this will save the masses of life. However, this lockdown is also creating chaos and huge difficulties for the people[4]. This pandemic has also significantly affected the mental state of the students. They are also in the dilemma of being infected with this unfortunate pandemic virus. The massive transmission of the fake news over social sites (Whatsapp, Twitter, Facebook) and media has created chaos and stressful atmosphere for the students. The scary atmosphere is affecting the concentration level and the learning ability of the students. Furthermore, examinations have been postponed due to this zoonotic virus and there is complete uncertainty about the examination policies i.e. how and when it will be conducted. The postponement of the examinations is also causing frustration and stress among the students. These different kinds of tensions disrupt the sleep time of the students which eventually decreases the body's immunity and hence makes them more susceptible to infection[5]. Furthermore, due to the dilemma of lockdown and to maintain the social distancing, the authorities have instructed the teaching fraternity to take their classes online[6]. The thought behind this study was the current psychological stress students may face in the situation of lockdown. Online classes would not solve the purpose of the students are not in a status to absorb the learnings and concepts provided to them by the teachers. So before starting the online classes an online survey was done among the physiotherapy students to observe any distress and help them to come out of it to make online classes successful.

METHODOLOGY

The study was done in a Physiotherapy College of North India between 10th Apr 2020 to 16 Apr 2020. As all the classes were suspended and the lockdown was imposed so following social distancing and lockdown guidelines, an online questionnaire was made using Google forms. The form was designed in a way that maintains confidentiality yet takes general information. Impact of event scale- revised (IES-R)[7]was used in Google form to assess the stress among students. This 22-item questionnaire is composed of three subscales and aims to measure the mean avoidance, intrusion, and hyperarousal. The total IES-R score was divided into 0–23 (normal), 24–32 (mild psychological impact), 33–36 (moderate psychological impact), and >37 (severe psychological impact). The questionnaire was posted on the batch WhatsApp group of students with a message showing the purpose of the study and how to approach the form. The decision of filling the form was kept completely on a volunteer basis. A total of 410 students got the questionnaire 307 responded. Due permission was taken from the institutional ethical committee The questionnaire was sent to all students from the first year to the final year. The analysis was done using SPSS 21.

RESULTS

The response was received from a total of 307 medical students among them 140(45.6%) and 167(54.4%) were males and females respectively.Table-1 shows the scoring of participants according to the gender on the IES-R scale. There was no significant difference between the average scores of males and females. Table 2 shows the association of various factors with stress according to IES-R scoring. Figure 1 shows what students did most of the time during the lockdown period.

DISCUSSION

The Mean IES-R score of students was normal for both the genders and the difference was not statistically significant although from table 1 it appears that females have a higher prevalence of severe stress (score>37) but it was also not statistically significant. The finding of mean IES-R score in normal limits is consistent with a Chinese study[8], Where they found no significant difference between the groups of undergraduates in terms of post-traumatic stress symptoms or general mental health problems after quarantine during the 2009 H1N1 epidemic. It was predicted that the entire study population was undergraduate students who were generally young, and perhaps had fewer responsibilities than adults who are employed full-time so may not feel that much stress.

Table 1 also shows overall 129(42.01%) students have scores greater than 24 which is of concern, this percentage is higher when compared to a study done among medical students in China during COVID 19 epidemic [9] Where they found 24.9% of students suffering from stress although they used a different scale for the measurement of stress i.e 7-item Generalized Anxiety Disorder Scale (GAD7).

When the factors which may affect the stress in the students were analyzed it was found that gender and location of spending lockdown did not have any statistical association. Whether stressed or not was not associated with awareness of the fact that lockdown is necessary for the prevention of COVID 19 the finding is not consistent with many studies[10-12].

A possible reason for the discrepancy is in our study 98.5% of students were aware of the necessity of lockdown and the comparison is left only with 1.5% of students.

Those who spend their time with family and came to know the family better than earlier were lesser stressed in our study. This finding is in coherence with a study [13].

Where their social support and staying with parents were negatively correlated with stress among students.

In a few studies, the economic loss as a result of quarantine manifested as serious socioeconomic distress[14] and was proved to be a risk factor for psychological disorders[15] and both anger and anxiety even several months after quarantine[16].

In our study also the same thing was seen as the students who have seen or listened to their parents being worried about their earnings in the lockdown period were having significantly higher stress.

The apprehension that lockdown may delay the MBBS by few months and thus students may not be able to appear in a few competitive exams converted into stress as seen in table2. Uncertainties about the career brought stressful feelings among students.

Further, although there was no significant difference in stress felt by male and female students as per scores of IES-R scale still when asked as a subjective feeling of stress females felt significantly more stress than males.

Activities done during the lockdown to spend the time inside the house were considered important to understand the interest of students and thus getting an idea on feasible interventions to reduce stress which students also love to involve in. Students were asked to mention various activities they did most of the time. Maximum students spend time with parents and family which involves random talking, watching television together, assisting in the kitchen and household work, and playing indoor games with family. Many students gave time to their hobbies also. Watching Netflix, amazon prime, and Zee5, etc were also preferred by many students, students preferred mostly web series to watch in these channels. So interventions to make students in positive spirits should involve their family members to ie family-based intervention not only student-based. Hobbies of the students can be used as a tool to deviate the from negativity in atmosphere. Various online stations(Netflix, Amazon, etc) can be used by suggesting students watch inspiring stuff from there and this can be given as a task to them.

CONCLUSION

After going through the analysis it was found that almost 40% of students were prone to Post-traumatic Stress Disorder(PTSD) ranging from mild to severe symptoms. Starting the online studies straightway to students would not solve the purpose of providing the knowledge as stressed students may not accept the new method of learning. Involvement with family was found to be inversely associated with stress, possible financial instability in the future, and uncertainty about the duration of MBBS and exams were positively associated with stress.

Students were encouraged to take their hobbies to the next level and the achievements could be shared with teachers and student groups. Few very inspiring autobiographies and documentaries were selected from web channels and students were given a task to watch and review them according to their area of interest.

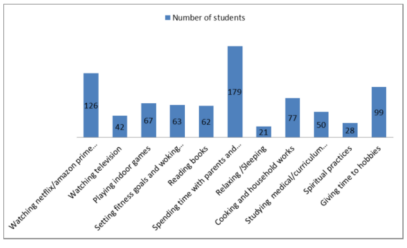
TABLE 1- : Distribution And Mean, Sd & Range Of Ies-r Score Of Participants

IES-R SCORE	GENDER		Total
	Male	Female	
<24	83	95	178
24 to 32	26	25	51
33 to 36	17	23	40
>37	14	24	38
TOTAL	**140**	**167**	**307**
MEAN	**22.74**	**23.87**	**23.21**
SD	**12.34**	**12.97**	**12.62**
RANGE	**1-56**	**1- 64**	**1- 64**

Table -2 . ASSOCIATION OF VARIOUS FACTORS WITH STRESS.

FACTORS		SCORES				Total		p-VALUE
		<24(Normal)		>24(Stress)				
		FREQ	%	FREQ	%	FREQ	%	
WHERE DID YOU SPEND LOCKDOWN PERIOD	AT HOME	171	58.8%	120	41.2	291	94.8%	0.299
	NOT AT HOME	7	43.8%	9	56.2%	16	5.2%	
LOCKDOWN IS A NECESSARY MEASURE TO PREVENT CORONA VIRUS SPREAD	YES	169	58.9%	118	41.1%	287	93.5%	0.470
	NO	9	50.0%	9	50.0%	18	6.5%	
YOU CAME TO KNOW YOUR FAMILY BETTER THAN EARLIER DURING LOCKDOWN	YES	139	64.1%	78	35.9%	217	70.7%	**0.001**
	NO	39	43.3%	51	56.7%	90	29.3%	
HOW WILL YOU RATE YOUR FAMILY LIFE DURING LOCKDOWN	HAPPY	46	63.9%	26	36.1%	72	23.5%	0.261
	MIXED	91	53.8%	78	46.2%	169	55.0%	
	NOT HAPPY	41	62.1%	25	37.9%	66	21.5%	
HAVE YOU FIND YOUR PARENTS WORRIED ABOUT THEIR EARNINGS DURING OR AFTER LOCKDOWN	YES	75	46.6%	86	53.4%	161	52.4%	**0.0001**
	NO	103	70.5%	43	29.5%	146	47.6%	
DID YOU EVER FEEL STRESSED DURING LOCK DOWN	YES	64	45.4%	77	54.6%	141	45.9%	**0.0001**
	NO	114	68.7%	52	31.3%	166	54.1%	
LOCKDOWN WILL DELAY COMPLETION OF DEGREE	YES	86	48.3%	92	51.7%	178	58.0%	**0.0001**
	NO	92	71.3%	37	28.7%	129	42.0%	

FIGURE 1- ACTIVITIES STUDENTS DID IN MOST OF THE TIME THEY SPEND THEIR LOCKDOWN PERIOD.



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