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Research Paper / Article / Review

The Effect of Covid-19 Induced Lockdown on Mental Health of Sikkimese Students - An Investigation

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Abstract: COVID-19 was first reported in China, however within a couple of months many countries were affected by it. In India, the first state to contract the virus was Kerala. As an emergency measure, countries throughout the globe, including India initiated the lockdown strategy. However, due to lockdown and immediate closure of educational institutions students' population was badly affected. In the backdrop of this vital understanding, the authors in the present paper were keen to understand the extent of lockdown effect on the mental health of 100 students studying in colleges of Sikkim. The study was essentially quantitative and a standardized tool was used for collection of data through google forms. The study entailed some significant findings which have positive implications for educational institutions.

Key Words: COVID-19, pneumonia, mental health, lockdown.

1. INTRODUCTION :

On December 2019, what began like pneumonia was reported from Wuhan China and on January 2020 WHO termed it a new coronavirus and subsequently declared it a public health emergency and within a span of two months i.e., by the beginning of February 2020 at least 24 countries were afflicted by the virus (Drissi et al., 2020a). As an effective strategy of containment, the governments across the globe resorted to lockdown measures, social distancing, and travel restrictions as a standard operating protocol. While the statistics suggest that with this tactic, the fatality rates declined and so did the spread, yet there are equally compelling evidences that prove the hike in mental health-related issues especially among the young population. COVID-19 induced lockdown affected the physical and mental health and also the world economies, while the younger population may have shown milder symptoms but on the other hand it led to heightened levels of stress, anxiety, depression culminating into suicidal intentions among them (Shukla et al., 2021).

Students pursuing higher studies particularly graduation and post-graduation have a distinctive lifestyle characterized by active social contact, peer relationship, get-togethers, travel etc. the sudden enforcement of lockdown and social distancing severely changed their life(Villani et al., 2021). Additionally, there are empirical evidences suggesting that the closure of schools and colleges further affected the well-being of students and disturbed the academic and social life of students. For instance, studies have indicated a close association between lockdown and students' worries regarding their academics, social life including recreation and physical health.(Shukla et al., 2021).

In India, strict lockdown measures were put in place right away because of which the first wave was manageable. However, the second wave proved extremely disastrous with positivity rate and death rates escalating every day. Even the smaller states like Sikkim had to bear the brunt of the second wave with unexpected positivity and death rates. Therefore, the present paper attempts to understand the extent to which the mental well-being of college students were affected, the details are presented in the following paragraphs.

2. Review of Related Literature :

Impact on General Population

Recent studies conducted on the impact of pandemic induced lockdown on the psychological well-being of students



have firmly maintained that the lockdown has adversely affected the students. Most of the reviewed studies have reported increased anxiety, depression, stress, sleep disorder, fear of contagion, fear of isolation, academic difficulties etc. as possible fallout of quarantine. Relevant to the present study, the extant literature suggests the onset of anxiety among 50% of the respondents during the pandemic and worsening the pre-existing trait anxiety by 60% during the pandemic(Busetta et al., 2021). Likewise, some others maintained that social isolation intensifies fear, depressed mood and loneliness since human beings are essentially social in nature (Carvalho Aguiar Melo & de Sousa Soares, 2020). The most potent stressors were identified as indefinite period of quarantine, fear of infection, frustration coupled with boredom, insufficient and unreliable information, inadequate provisions etc. (Brooks et al. 2020). In similar vein some studies reported the most common psychological distress in the form of anxiety, depression, post-traumatic stress associated with disturbed sleeping and eating pattern as a fair share of quarantine experienced in higher magnitude by females, individuals having low income and unemployed (Bonati et al., 2022). Similarly psychological distress along with emotional problems like anger, frustration, loneliness, and psycho-somatic issues have been found to be experienced by quarantined individuals (Sharan et al., 2020).

Impact on Student Population

Studies focusing on the impact of lockdown on students' mental health have also agreed on unhealthy mental status among the students during the period of isolation and social distancing, lockdown, and quarantine. In this regard, some studies conducted on university students reported psychological distress among them culminating into long-term mental ill-health and the need to identify vulnerable sub-groups for planning effective and dedicated interventions to counter the mental ill-health (Villani et al., 2021). In consonance with this study some other studies also reported university students to be psychologically affected by the lockdown (Drissi et al., 2020b). Similarly some studies reported the adverse effect of the pandemic on the mental health of school students experienced in the form of stress, anxiety and depression which underscored that individuals with higher resilience and the ability to cope would have better psychological and mental health in contrast to the ones with negative coping behaviour(Zhang et al., 2020).

The Himalayan state Sikkim too deemed it necessary to impose lockdown as a measure of containment. Closure of educational institutions, travel restrains, social distancing became the instant mantras for minimizing the spread. The forceful beginning of the trend of online education with untrained teachers and unprepared students coupled with issues of poor network connectivity and poor power supply especially in rural Sikkim(Chettri et al., 2020) might have led to unprecedented rise in the number of students with poor mental health status. Approximately 69% of Sikkimese population resides in rural parts of the state (Census, 2021) and in such a set-up majority of students up to class XII pursue their education in village schools. Beginning of college life marks a transition in their lifestyles and they look up to college life as a way of socializing with their peers from many other parts of the state. But, the sudden closure of educational institutions could have possibly affected their social life and consequently their psychological health. However, till date there is insufficient data on the impact of pandemic induced lockdown on college students' mental health. Therefore, considering the lack of such studies this study attempts to investigate how the lockdown affected the college student's confidence, heightened anxiety levels and depression and social dysfunction.

3. Objectives :

- To study the level of lockdown impact on the mental health of college students.
- To explore the differences in the impact of the lockdown on the mental health of students based on gender and locale.

3.1 Null Hypothesis

 H_{01} There is no significant difference in the mean scores of college students in mental health regarding gender and locale.

3.2 Rationale of the Study

Since the onset of the pandemic, countries throughout the globe started conducting studies in order to measure the impact of the pandemic in various areas of an individual's life and all the studies indicated a negative impact of the pandemic in mental and physical health as well as social life. Students' population is one of the most vulnerable groups affected by the pandemic in many forms like- learning loss, psychological distraught and crucial social development particularly among school-going children. However, the studies focusing on measuring the impact of the pandemic induced lockdown on the mental health of the college students particularly in the Sikkimese setting is far from satisfactory. Hence, the authors have attempted to understand the predicament of Sikkimese students during the lockdown.



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4. Methodology :

The study is essentially quantitative in nature and falls under the purview of Descriptive Research Method. Within Descriptive Research, survey method was used for data generation that was carried out through google forms. A standardized tool consisting of twelve questions i.e., General Health Questionnaire developed by Baksheev, et al. (2011) was used for data collection. Sample was selected through convenience sampling technique and comprised of the undergraduate students pursuing varied courses in Nar Bahadur Bhandari Government College Tadong, Sikkim India. Analysis and Results

Data analysis was carried out in SPSS by performing both descriptive and inferential statistics in accordance with the objectives stated for the study. Details are presented in the ensuing sections.

Objective 1: To study the level of lockdown impact on the mental health of college students based on locale and gender.

For realizing the above objective, percentage analysis was done for both the categorical variables as presented in the following tables and figures:

Gender		Female						
		Social	Loss of		Anxiety	Social	Loss of	
Dimensio	Anxiety &	Dysfunctio	Confidenc	Overal	&	Dysfunctio	Confidenc	Overa
ns	Depression	n	е	1	Depression	n	e	1
Low	42.50	40	72.5	52.5	57	42	87	62
Moderate	47.50	30	27.5	35	38	38	13	30
High	10.00	30	0	12.5	5	20	0	8
High	10.00	30	0	12.5	5	20	0	
Total	100	100	100	100	100	100	100	100

Table 1Level of Mental Health among Sample Based on Gender

Note. Higher score indicates higher level of mental health

The level of mental health of male and female students in percentage is figuratively represented in figure 1 below.

Graphical Representation of the Level of Mental Health among Sample Based on Gender

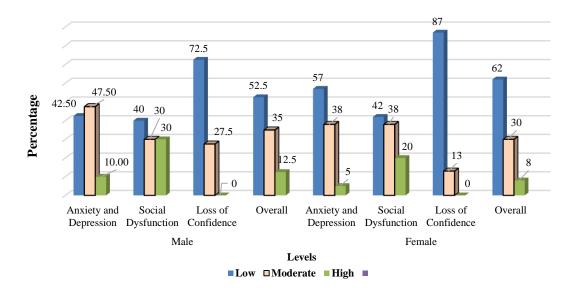


Figure 1



Table 1 and Figure 1above compares the mental health of male and female students during the lockdown across three dimensions and in overall status. As evident above, if we compare the overall level of mental health between the gender, female students had low level of overall mental health. Similarly, in terms of moderate level of mental health male students with higher percentage maintained a moderate level of mental health as compared to female counterparts. Correspondingly, male students with higher percentage of high level of mental health were ahead of female students. Thus, in terms of overall level of mental health the study found that majority of female students showed lower levels of mental health as compared to male counterparts during the lockdown.

Table 2

Locale	Rural				Urban				
	Anxiety &	Social	Loss of		Anxiety &	Social	Loss of		
Dimension	Depressio	Dysfunctio	Confidenc	Overal	Depressio	Dysfunctio	Confidenc	Overal	
S	n	n	e	1	n	n	e	1	
Low	51.47	45.59	82.35	58.82	50	31.25	78.13	53.13	
Moderate	44.12	33.82	17.65	32.35	37.5	37.5	21.86	31.25	
High	4.41	20.59	0	8.82	12.5	31.25	0	15.62	

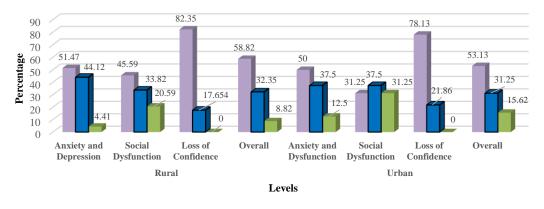
Level of Mental Health among Sample Based on Locale

Note. Higher score indicates higher level of mental health

The level of mental health of students based on their locale in percentage is figuratively represented in figure 2 below.

Figure 2

Graphical Representation of the Level of Mental Health among Sample Based on Locale



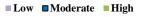


Table 2 and Figure 2 above shows the mental health of students during the lockdown across three dimensions and in overall status based on locale. As shown above, in terms of overall level of mental health of rural and urban area students, rural area students had low level of overall mental health. However, there was not much variance regarding the moderate level of mental health maintained by students from rural and urban background. On the contrary, in terms of high level of mental health, students with urban background surpassed their rural counterparts, suggesting that the percentage of urban area students having high level of mental health was high in comparison to students from rural area. Overall, we can conclude that students from urban area comparatively maintained higher level of mental health than students from rural area.

Objective 2: To explore the differences in the impact of the lockdown on the mental health of students based on certain demographic variables.

In order to fulfil the above objective, a null hypothesis was formulated, which reads as follows:



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 H_{01} There is no significant difference in the mean scores of college students in mental health regarding gender and locale.

For testing the above null hypothesis an inferential statistic i.e., t test was computed and was tested at 0.05 level of significance. The results are shown below in table 3:

Table 3

Study Variable	Categorical Variables	n	М	SD	Calculated t (98)	Table t	Result
	Male	40	12.13	7.32	1.99	1.98	Significant
Mental Health	Female	60	10.18	6.70	1.77		
	Rural	68	10.34	6.38	2.01	1.98	Significant
	Urban	32	12.28	8.07	2.01		

Descriptive and Inferential Statistics of Sample Based on Gender and Locale

Table 3 above displays the results of *t* test that was computed to test the null hypothesis. The table reveals that regarding gender a significant difference was found since t (98) = 1.99, p<0.05. Likewise, the table also indicates a significant difference in the mental health of students in accordance with their locale since t (98) = 2.01, p<0.05. Therefore, based on the above analysis, there existed a significant difference in the mental health of college students regarding their gender and locale. Further, it is also clear that there were significant mean differences in study variables regarding both gender and locale with mean scores of (M=12.13, *SD*=7.32) for male and (M=10.18, *SD*=6.70) for female. Likewise, in terms of locale a significant difference was found between students belonging to rural and urban areas with (M=10.34, *SD*=6.38) for rural and (M=12.28, *SD*=8.07) for urban area students. Based on the preceding analysis, the authors rejected the null hypothesis and it was concluded that a significant difference in mental health of college students during the lockdown existed in terms of gender and locale.

5. Findings and Discussion :

The study found a significant gender and locale difference in the mental health of students during the lockdown. Regarding gender, female students were found to be more affected than male, likewise students from rural background were found to have suffered more than their urban counterparts. People socialise a lot and de-stress themselves through travels and associations, but, lockdown measures such as social distancing, travel restrictions, fear and worry and most importantly stress experienced on account of contracting the virus could possibly explain the above findings. The study also found a great deal of loss of confidence among the sample which was the highest as compared to other dimensions i.e., anxiety and depression and social dysfunction. The authors attribute this finding to the understanding that students were uncertain about the future since the period of lockdown was unspecified moreover, due to sudden closure of educational institutions and onset of online classes students probably found it difficult to cope up with abrupt changes. Likewise in terms of anxiety and depression, the study found that female students and students from rural background were worst affected, the finding corroborates to the earlier studies of (Bonati et al., 2022; Zhang et al., 2020)). This finding could be possibly linked to the understanding that there was a lack of steady information since newer variants of were rapidly developing and virus and vaccination drive started much later intensifying the fear of contagion among the people. The understanding aligns with previous authors who maintained that due to lack of dependable information students suffered frustration and boredom and feared about infection (Brooks et al. 2020).

6. Conclusion :

To conclude, the study showed that the mental health of more than 50% of the sample was poor whereas a very less percentage reported a high level of mental health during the lockdown. The era of pandemic led to a drastic change in teaching-learning since it gave rise to the phenomena of online teaching, a previously unknown approach. Transitioning from offline to online mode of teaching-learning was stressful for both teachers and students as it required a lot of adjustments and adaptations. It is estimated that approximately 10 million people were lost to COVID-19 although WHO has recently announced that COVID-19 is no more a pandemic yet the period of lockdown and pandemic was



stressful and lowered the mental health of both the general population and the students' population. It is evident from this study that the lockdown affected the students' psychological health as well as their academics. As a prudent measure, the authors recommend that the students right from school level must be acquainted with online teaching / hybrid teaching in the real sense, teachers must also gear up with new era of digital pedagogies to overcome all such future emergencies. Upgrading the status of ICT devices in educational institutions demand urgent attention so that both teachers and students get sensitized regarding exploring the alternative methods of lesson delivery. Appropriate counselling facilities should become an integral part of all educational institutions for proper rehabilitation of mentally weak students.

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