



HOW THE LOCKDOWN CAN AFFECT MENTAL HEALTH AMONG GENERAL POPULATION IN INDIA? A WEB-BASED SURVEY

Physiotherapy

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ABSTRACT

Due to COVID-19, many countries have implemented lockdown to reduce the transmission of the virus and its susceptibility. But this lockdown can be increases the chances of negative impact on mental health on general population. So, the study's aim is to check how many people can be affected due to lockdown. 258 participants were voluntarily involved in the study and with the use of Perceived Stress Scale (PSS), stress level was measured. Out of 258 participants, 21.3% were having mild stress level, 63.2% were considered to suffer moderate stress & 15.5% of respondents were suffering from severe stress. Among general population, mainly students and females respondents having moderate to severe stress level which directly associated with academic delay in institutions or social isolation may be the reasons for negative impact of the outbreaks.

KEYWORDS

lockdown, Mental Health, Perceived Stress Scale

INTRODUCTION

Most of the countries have started lockdown to reduce susceptibility and transmission of the virus and reduces the number of positive cases (Golechha 2020). This lockdown is leading to additional health problems in the general population, such as depression, stress, anxiety, insomnia, anger, and fear of getting infected globally (Torales, O'Higgins et al. 2020). Due to nationwide lockdown economy has started dropping down & debilitated the country's large population of daily wage earners & migrant labor (Golechha 2020). Social isolation made people more mentally disturb and chances of stigma being appeared for the vulnerable groups in the country. Social isolation and fear of the coronavirus are an important risk factor for suicidal death in India (Anil Kakunje 2020). Major risk factors like sickness, hospitalized for a prolonged period, death of beloved, loss of a job, lack of support, forced quarantine and stigmatization are likely to be a for the vulnerable group as well as those who are working and those who have their own business set up and are already being suffered from mental illness which can leads to adapt self-harm behavior in individuals (Mak, Chu et al. 2009, Brooks, Webster, et al. 2020). Due to many risk factors and self-harm behavior can be the reason by attempting suicide in India as early as 12th February 2020, when infection still not spread in different areas across India (Dsouza 2020). One case was reported in the newspaper for suicide because of an alcohol ban during the lockdown in India (Pathak, Salemi, et al. 2020, Ragini Sharma 2020). So the current study's aim is to find out the prevalence rate of stress level in the general population across India.

METHOD:

Participants: The present web-based survey study was conducted to assess the public's psychological responses to lockdown during pandemic COVID-19 by using an online questionnaire. A Snowball non-probability sampling method focused on the general public living across India during the pandemic of COVID-19 was used.

Procedure:

Due to lockdown, respondents were electronically invited and they completed the questionnaire in the English language only through an online survey platform. As lockdown was started in March that's why the study was conducted in April so it was difficult to get ethical clearance but informed consent was given before getting data. Data collection took place over 10 days.

Survey Method:

The structured questionnaire consisted of informed consent first and then it was covered in several areas: (1) Demographic data, and (2) Mental health status. (1) Demographic data were collected on Age, Gender, residential location, higher education, marital status, and employment status. (2) Mental health status was measured by using the Perceived Stress Scale and was calculated based on its interpretation.

STATISTICAL ANALYSIS:

Descriptive statistics were calculated for sociodemographic

characteristics and mental health status. The percentage of responses was calculated according to the numbers of respondents concerning the numbers of total responses to the questions. Statistical analysis was performed using SPSS version 20.0.

RESULTS:

Total survey respondents:

258 (4 respondents are being dropped out because of not completed form) participants have filled up the questionnaire and measured a mental health status using PSS. For checking the severity of stress level among respondents, 21.3% were having mild stress level, 63.2% were considered to suffer moderate stress & 15.5% of respondents were suffering from severe stress (Table 1).

Sociodemographic characteristics and stress level among the general population:

Sociodemographic characteristics are presented in Table No.3. The majority of respondents were women (62%), unmarried people (72.1%), undergraduate students (53.5%), and those who were living in the orange zone (38%) plus those who were working & housewife (57.8%) having moderate stress level among the general population. Male gender was a significantly lower score of PSS compared to women but have a more severity (PSS score 27-30). Unemployed or those who are housewives and students were having a higher rate (66.3%) in PSS among the job status of the general population.

Table 1 shows total score of PSS

PSS Score in General Population	Frequency (n)	Percentage (%)
0-13	55	21.3
14-26	163	63.2
27-40	40	15.5
Total Score	258	100

Table 2 shows descriptive statistics of different variables.

Criteria	Variables	Number of respondents	Percentage
Age	18-25	173	66.3%
	26-40	78	30.2%
	41-60	6	2.3%
	Above 60	3	1.2%
Gender	Female	162	62.8%
	Male	95	37.2%
Marital Status	Unmarried	186	72.1%
	Married	70	27.1%
	Widow/Divorcee	2	0.8%
Education status	12 th	31	12%
	Diploma	6	2.3%
	Undergraduates	138	53.5%
	Postgraduates	83	32.2%

Current job profile	Not applicable/ Housewife/Students	149	57.8%
	Self Employed	35	13.6%
	Was working (Forced to leave job)	5	1.9%
	Working with deduction in salary	69	26.7%
Containment Zone	Green Zone	68	26.4
	Orange Zone	98	38
	Red Zone	73	28.3
	Don't know	19	7.4

Table 3 shows category of stress level according to PSS in general population.

Variable	Groups/ Category	PSS category for stress level		
		Mild (0-13 score)	Moderate (14-26 score)	Sever (27-40 score)
Age Group	18-25	42	110	19
	26-40	10	48	20
	41- 60	3	2	-
	Above 60	-	3	-
Gender	Male	40	104	18
	Female	15	58	22
Marital Status	Unmarried	43	120	23
	Married	10	43	17
	Widow/ Divorcee	2	-	-
Educational status	12 th	11	19	1
	Diploma	2	3	1
	Undergraduates	33	90	15
	Postgraduates	9	51	23
Current Job Profile	Unemployed/ Housewife/ Students	19	101	29
	Self employed	10	21	4
	Was working (force to leave)	2	3	-
	Working with salary deduction	24	38	7
Containment Zone	Green	14	44	10
	Orange	25	55	18
	Red	11	52	10
	Don't know	5	12	2

DISCUSSION:

In this present study, the finding suggests that 63.2% of respondents rated the psychological impact of the outbreak as a moderate stress level, 15.5% of respondents reported as a severe stress level, and 21.3% of respondents suffered from mild stress. The prevalence of moderate psychological impact was measured by PSS. Our sociodemographic data suggest that female respondents suffered a greater psychological impact of the outbreak compared to males. Based on a previous study on Stress, they suggested that females are at higher risk of getting a negative impact on mental health as well as having a higher prevalence rate of depression than men (Basant Puri 2014, Salari, Hosseini-Far et al. 2020).

In the present study, people who are living in the orange zone have more stress levels because of susceptibility and outbreak of virus can be high because of the rapid transmission of the virus. Even in the red zone, people are also reported to have moderate stress levels compared to the green zone. As mentioned above people are afraid of this outbreak and how to cope up with the situation can be very difficult in both containment zones. Students were also the second group of the population who experienced a higher level of psychological impact among others but their stress level was moderate according to PSS. Most of the young respondents agreed that the pandemic worsened pre-existing mental health conditions, mainly due to school or college closure, loss of routine work, and restricted social connection (Jörg M. Fegert 2020). Academic delays, economic effects of the pandemic, and impact on daily life can also be the reasons for increased stress levels in a vulnerable group of people (Nicholas Grubic 2020). The potential negative impact of the outbreak on academic progression can be given an adverse effect on the mental health of the students. The fake news & social media create a stressful atmosphere. Because of stressful atmosphere, students are affecting their concentration level and learning abilities (Gautam and Sharma 2020). During this stressful situation, education institutions, organizations, and health

professionals plus each member of this county should take participate in psychological interventions and adopt necessary measures like improving physical fitness and hand hygiene (Partheeban Muruganandama 2020). The ministry of health and family welfare, Government of India, has provided health advisory, videos, and webinars to handle mental health issues of the general population as well as for the vulnerable group. <https://www.mohfw.gov.in/> Our study is having limitations like: (1) the only stress level was measured in the general population. Instead of measuring stress, depression and anxiety level can also be checked and (2) due to the limited resources available and time-sensitivity of the COVID-19 outbreak, we have used the snowball sampling strategy. Because the snowballing sampling strategy was not based on a random selection of the sample, and the study population did not reflect the actual pattern of the general population. The findings directly inform the development of psychological interventions that can minimize the effect of negative psychological impact and stress during the outbreak of COVID-19.

CONCLUSION:

The study can be concluded that more than half of the respondents rated their psychological impact as moderate, and about one-third reported to the severe stress level. Female gender and student status were associated with a greater psychological impact of the outbreak and high to moderate levels of stress.

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