

Short Communication

Health concerns during lockdown: an observational study among adults of West Bengal

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ABSTRACT

The government of India enforced a strict lockdown on 24th of March 2020 to flatten the curve of COVID-19 pandemic. People feared this disease and their daily routine was greatly hampered. Social media and online activities became the life line. This is expected to bring changes in the physical and mental health of the citizens. A descriptive, observational, cross-sectional study was carried out on the last week of May 2020, after two months of lockdown. Data was collected using a predesigned, pretested google form which included personal details, symptoms experienced during lockdown and measures taken to reduce the problems. 234 participants submitted their response. Majority of the participants were living with their family during lockdown and 80% were studying or working from home. Sleep disorders, problems with appetite and eye problems were found among majority of the participants. About 65% were threatened with the thought of COVID infection and almost half of the participants were anxious about their career. There is need for monitoring and counselling of those affected with physical and psychological problems, especially the students, so that they can cope up with their regular activities, personal and professional life.

Keywords: COVID-19, Public health emergency, Lockdown, Psychological stress

INTRODUCTION

The current scenario of a nationwide lockdown is something no one had ever imagined. The population of the entire country is at home and going out only for the essentials. While the lower economic section of the country faces the already ever-increasing problems of unemployment and malnourishment, the middle-class is in a state of sudden change.¹ There was increase in food prices, decreased food diversification and availability.² Daily routines of morning walks, travelling to offices, playing in the fields all have been stopped contributing to an evident reduction in physical activity and rise in mental health issues.³⁻⁶ There has also been an attempt to have online classes for students by different schools and universities and office work is also being done from home. Electronic devices like mobile phones, laptops,

tablets, earphones are being used more than they previously were, for these activities.⁷ Being unable to physically meet friends and colleagues may give rise to feelings of loneliness and anxiety. Movie theatres, shopping malls, gyms, swimming pools, parks, restaurants, cafes and travelling to holiday destinations, all such recreational activities have come to a halt without any assurance of normalization. Such a sudden change with the combined effects of reduced physical activity and over usage of electronics is bound to have some detrimental effects on one's physical and mental health. People should understand this and make whatsoever small efforts to be healthy. Since, covid-19 is a new emerging disease and we have not faced such crisis in the past, this study was carried out to find the magnitude of physical and psychological health problems of adults during lockdown. We also assessed their living pattern during

lockdown and the measures taken to improve the mental and physical well-being.

METHODS

A descriptive, observational, cross-sectional study was carried out on the last week of May 2020 after two months of nationwide lockdown. The participants consisted of adult population of India less than 65 years of age. 234 participants had submitted their response successfully.

A pre-designed and pre-tested questionnaire was developed and validated by experts. The questionnaire included three sections. The first, personal data, where the age, sex, occupation and information about electronic device usage and daily activity was asked. The second consisted of a checklist of symptoms. The third questioned the attitude or opinions about their health during lockdown.

Google forms was used for collecting the data. It was then sent to researcher’s contact and they were in turn asked to share it with their family and friends. Descriptive statistics was expressed as proportions using MS excel.

RESULTS

Responses were obtained from 234 participants after 1 week of data collection. Majority of the participants were adults below 30 years of age and 58 % were males. College students constituted three fourth of the study subjects. During the lockdown period only about 5% were living away from their family (Table 1).

Table 1: Socio-demographic characteristics of the participants.

Variables	Number (n=234)	Percentage
Age		
18-30	186	79.5
31-65	48	20.5
Sex		
Male	136	58.1
Female	98	41.9
Occupation		
College student MBBS	141	60.2
College student others	33	14.1
Health care professional	28	12.0
Other professional/service/business	26	11.1
Homemaker	6	2.6
Living condition		
At home with family	223	95.3
Alone at home	4	1.7
Away from home	7	3.0

Almost 80% of the participants started studying or working from home. Average mobile phone usage was found to be more than 6 hours per day in almost half of the participants and around 13% used computers (PC and laptop) for more than 6 hours. However, about 50% did not have access to computers (Table 2).

Table 2: Pattern of use of electronic devices by participants during lockdown.

Variables	Number (n=234)	Percentage
Started working/studying from home		
Yes	185	79.1
No	49	20.9
Avg. mobile phone usage (hours)		
Less than 3	37	15.8
3-6	88	37.6
6-9	69	29.5
More than 9	40	17.1
Avg. laptop usage (hours)		
Not used	108	46.1
Less than 3	72	30.8
3-6	24	10.3
More than 6	30	12.8
Earphone usage		
Yes	134	57.3
Sometimes	48	20.5
No	52	22.2

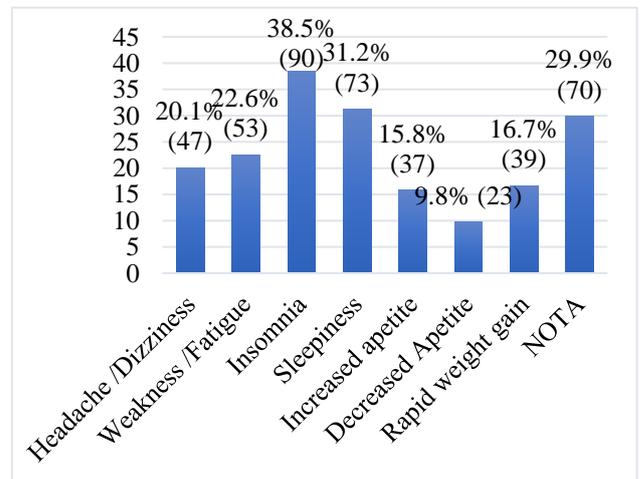


Figure 1: Bar graph showing magnitude of general symptoms amongst participants during lockdown.

Sleep and appetite were found to be affected during lockdown. Deranged sleep pattern, insomnia or sleepiness, was found to be the commonest problem. Eye problems like eye strain, irritation and itching was found among 46.6% participants. Although 36% did not complain of any Musculo skeletal symptoms, pain in different parts of the body was found to be common among others. Minimum ear problems were noticed among the participants.

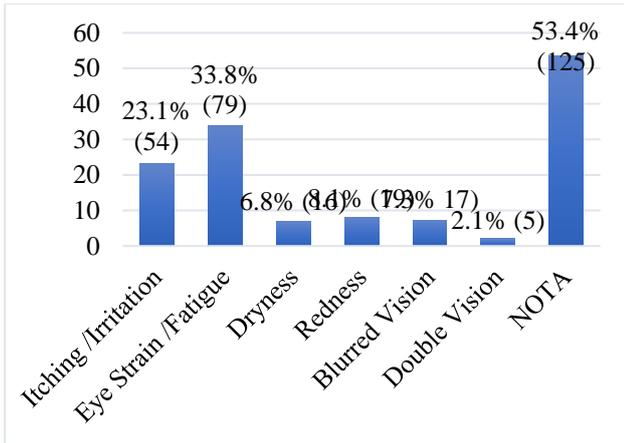


Figure 2: Bar graph showing magnitude of eye problems amongst participants during lockdown.

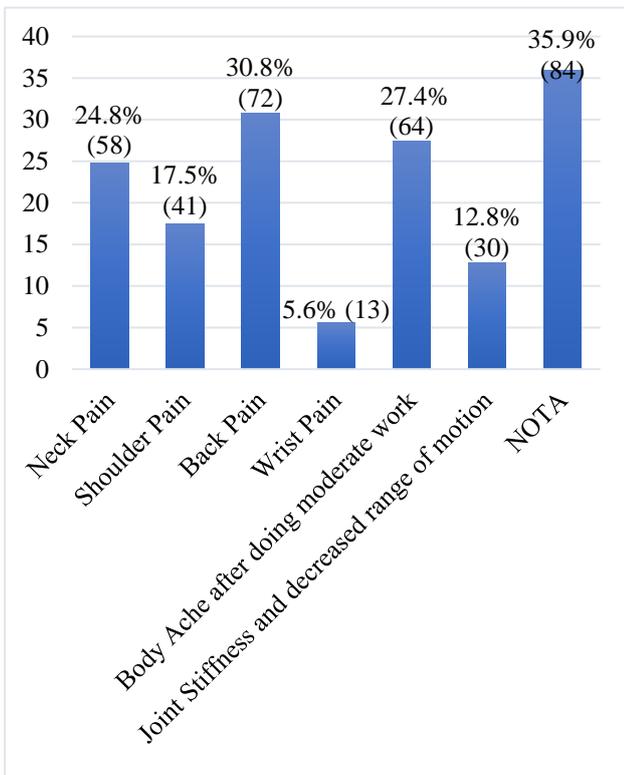


Figure 3: Bar graph showing the magnitude of musculoskeletal problems amongst participants during lockdown.

Majority (63.7%) of the participants tried to adapt to the situation however 65% were often threatened by thought of COVID-19 and similar percentage lost their interest in daily activities. Almost half of the participants were anxious about the future of their carrier and health of their family members. Participants are trying to maintain their physical health by eating healthy (45.7%) and exercising (38%). They are watching TV/movies, listening to music, pursuing their hobbies, calling their family and friends to improve their mental health.

Table 3: Perception of participants towards lockdown.

Variables	Number (n=234)	Percentage
How do you feel about staying at home for so many days?		
Great	53	22.6
Trying to adapt	149	63.7
Nothing worse could happen	32	13.7
Do you consider that staying at home could affect your health adversely?		
Yes	68	29.1
No	97	41.4
Maybe	69	29.5
How often does the thought of COVID-19 Pandemic threaten your mind?		
Always	25	10.7
Often	127	54.3
Rarely	70	29.9
Never	12	5.1
Do you feel that there is a loss of interest in your daily activities?		
Yes, all the time	32	13.7
Yes, sometimes	122	52.1
Maybe	23	9.8
Not at all	57	24.4
Do you feel very anxious about anything? (multiple response)		
Career	109	46.6
Family and own health	117	50.0
Increasing number of COVID-19 cases	109	46.6
About not doing anything useful	87	37.2
Yes, but don't know about what	33	14.1
Not anxious	23	9.8

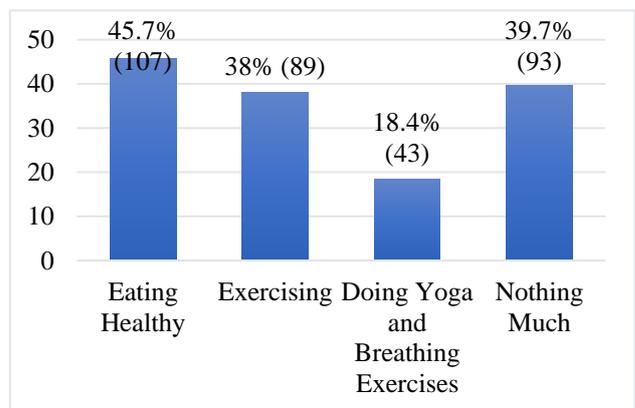


Figure 4: Bar graph showing measures taken by participants to maintain physical health during lockdown.

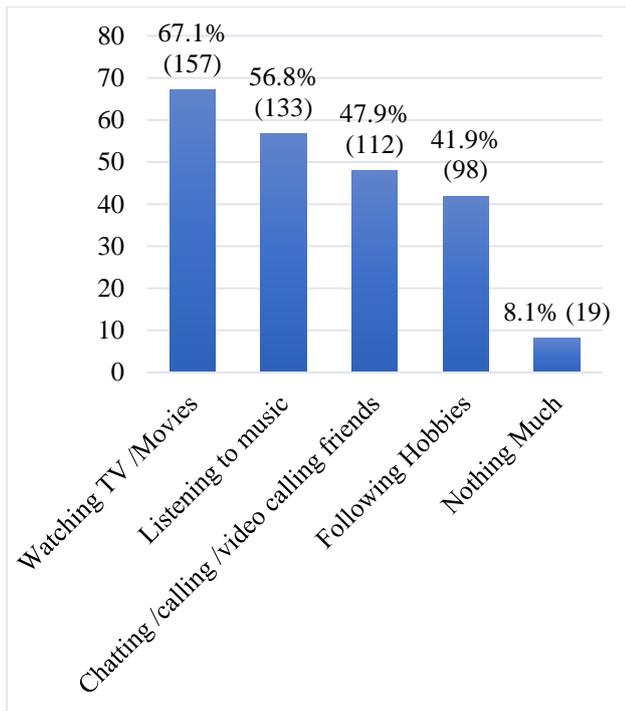


Figure 5: Bar graph showing measures taken by participants to maintain mental health during lockdown.

DISCUSSION

WHO declared the outbreak as a public health emergency of international concern on 30th January 2020.⁸ The first case in India which originated from China, was reported on 30th January 2020.⁹ High transmissibility and rapid increase in number of cases in a number of countries warned India? The pandemic was going to be a challenge to the countries health care system.¹⁰

On 24th March, the government of India declared a nation-wide lockdown for 21 days which was gradually extended. It was expected that it will reduce the exponential growth of COVID-19 cases. The growth rate of the pandemic was reduced and there was improvement in the air quality.¹¹

According to WHO, partial or complete disruption of services for hypertension, diabetes and cancer treatment as well as cardiovascular emergencies occurred in half of the surveyed countries.¹²

The role of social media was immense in staying in contact with friends and family and also for work and academics, in both private and public sector. It makes work easier, however, it does have some negative impact as well, affecting emotions and causing stress.⁷

Most of the participants of this study are students and are less than 30 years of age. Many institutions have started conducting academic activities online.

The study also revealed that there was increase in use of electronic media. About 79% of the participants had started working or studying from home. Mobile and laptop usage was found to be more than 6 hours in 46% and 12% cases respectively. As the people could not meet their family and friends, electronic media became the major means of communication. However, the study revealed that 95% of the participants lived with their family during this period, which is encouraging.

Sleep and appetite were greatly affected during the lockdown. This may be due to the fear of contamination with corona virus. A study carried out in Kashmir found that 5% of the respondents were afraid of testing for COVID-19. 5 Mental health issues, musculoskeletal and eye problems were also seen in several cases.¹³ This may be due to the overuse of electronic media for long durations.

Participants were found to be concerned about COVID-19 infections of family members and their career. Too much stress may lead to loss of interest in daily activities.¹⁴ Some of them tried to overcome stress by watching television, listening to music and following their hobbies.

There is need for monitoring and counselling of those affected with physical and psychological problems, especially the students, so that they can cope up with their regular activities, personal and professional life.

CONCLUSION

To control the exponential increase of COVID-19 cases and to prepare the health system, Indian government went into nationwide lockdown for more than two months. The Indian population have not faced such situation in the past and hence its effects were completely unknown. This study evaluated the situations and health hazards that the community faced during lockdown. Such findings can motivate the policy makers to take up monitoring and surveillance of the physical and psychological problems that are developing in different sections of the society and to take necessary actions for alleviating them. Mass media can also play an important role by dissemination of health education in respect to health problems during lockdown. Lockdown at local levels are still continuing and consideration of such studies can help in better management of the situations in future.

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