

## Original Research Article

# COVID-19 restrictions: impact on lifestyle and social behaviour among adults of 18-40 years in Kurnool town

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## ABSTRACT

**Background:** With the unprecedented spread of COVID-19, lockdown had been implemented in the country as a preventive strategy to reduce transmission. This pandemic born lockdown has affected the lifestyle and social behaviours of individuals.

**Methods:** A web based cross-sectional study was conducted among adults of 18-40 years in Kurnool town through snow ball sampling method. Data was collected using pre-tested, pre-designed, semi-structured questionnaire through google forms and the data was analysed using SPSS version 22.

**Results:** The 53.8% of the participants were not doing any physical exercises. Only 47.8% had changed to a healthy diet during lockdown. The 38.3% perceived an increase in their weight during lockdown. The 12.6% had decreased or tried to cut-down alcohol consumption.

**Conclusions:** Overall there was a negative impact on the lifestyle behaviour in our study. There is a need for health education and lifestyle behaviour programmes.

**Keywords:** COVID-19, Lockdown, Behaviour changes

## INTRODUCTION

Corona virus disease (COVID-19), which originated in the Wuhan province of China was declared as a global pandemic by World Health Organization (WHO) on March 11, 2020.<sup>1</sup> In order to contain this pandemic disease many countries including India have adopted for a lockdown. The outbreak of COVID-19 and measures of its containment has evident impact on the lifestyle related behaviours in the population.<sup>2</sup> Quarantine and social isolation can be major stressors that can contribute to widespread change in the lifestyle of the population.<sup>3</sup> It is likely that prolonged home stay may lead to increased sedentary behaviours, such as spending excessive amounts of time sitting, reclining, or lying down for screening activities (playing games, watching television, using mobile devices); reducing regular physical activity (hence lower energy expenditure); or engaging in

avoidance activities that, consequently, lead to an increased risk for and potential worsening of chronic health conditions.<sup>4</sup> These unprecedented times are certainly tough, and it is crucial to maintain a healthy lifestyle especially, among people with predisposed health conditions and the elderly.<sup>5</sup>

### Objective

This study was conducted to assess the impact of COVID-19 restriction on lifestyle and social behaviour among 18-40-year adults in Kurnool town.

## METHOD

A web based cross-sectional study was conducted among adults of 18-40 years in Kurnool town through snow-ball sampling method. Study was conducted from 25<sup>th</sup> June to

24<sup>th</sup> August, 2021. Google forms using pre-designed, semi-structured questionnaire 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 using various social media platforms, who are in the age group between 18-40 years residing in Kurnool town. The participants were requested to participate in the study, wilfully and were required to fill. Google forms maintaining anonymity (names and email addresses were not collected) of the participants. A total of 253 responses were obtained. Data was analysed using SPSS 22 version.

**Inclusion criteria**

People who participate voluntarily and give consent, people in the age group of 18-40 years and people residing in Kurnool town were included criteria.

**Exclusion criteria**

Who are not willing to participate and who doesn’t give consent, people aged less than 18 years and aged above 40 years and who not residing in Kurnool town were excluded from the study.

**RESULTS**

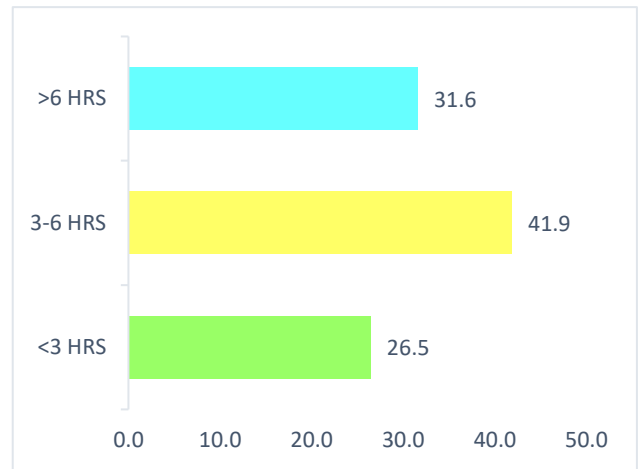
Table 1 shows that of the 253 responders, 114 (45.1%) participants belonged to the age group of 26-33 years, 101 (39.9%) in the age group of 18-25 years and 38 (15%) belong to the age group of 34-40 years. Most of the study participants are males with 176 (69.6%) and only 77 (30.4%) are females. Majority of the participants are government employees 99 (39.1%), where, 70 (27.7%) are private employees, 17 (6.7%) have their own business and the rest 67 (26.5%) are either unemployed/ student/ home-maker.

**Table 1: Socio-demographic profile of the participants, (n=253).**

| Socio-demographic variables  | N (%)      |
|------------------------------|------------|
| <b>Age in years</b>          |            |
| 18-25                        | 101 (39.9) |
| 26-33                        | 114 (45.1) |
| 34-40                        | 38 (15)    |
| <b>Gender</b>                |            |
| Female                       | 77 (30.4)  |
| Male                         | 176 (69.6) |
| <b>Employment</b>            |            |
| Government employee          | 99 (39.1)  |
| Private employee             | 70 (27.7)  |
| Business                     | 17 (6.7)   |
| Unemployed/homemaker/student | 67 (26.5)  |

Figure 1 depicts the average usage of mobile phones by the participants during the lockdown period for either their study purpose or for work or for recreation activity, which shows that majority 106 (41.9%) participants use

mobile phones for 3-6 hours daily, 80 (31.6%) use mobile phones for more than 6hours daily and 67 (26.5%) use mobile phones for less than 3 hours daily.



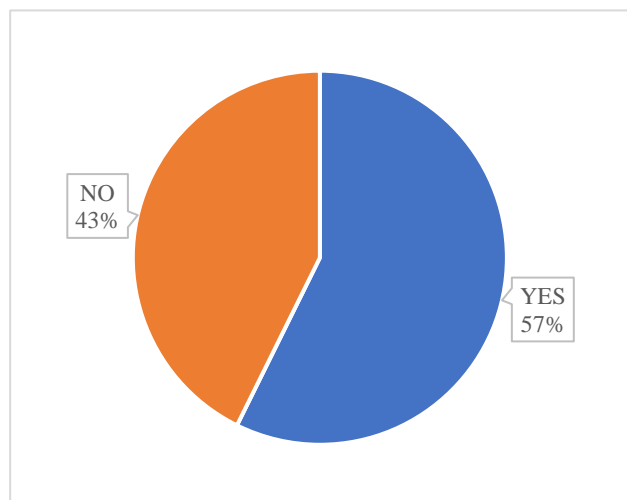
**Figure 1: Mobile usage.**

**Table 2: Lifestyle and social behaviour, (n=253).**

| Variables   | Response                      | N (%)      |
|---|-------------------------------|------------|
| <b>Exercise</b>                                     | Doesn’t exercise              | 136 (53.8) |
|   | Exercise at least once a week | 117 (46.3) |
| <b>Diet/eating habits</b>                           | Same as before                | 132 (52.2) |
|   | Changed to a healthy diet     | 121 (47.8) |
| <b>Sleep patterns</b>                               | Same as before                | 154 (60.9) |
|   | Increased sleepiness          | 75 (29.6)  |
|   | Insomnia                      | 24 (9.5)   |
| <b>Mobile usage (Hours)</b>                         | <3                            | 67 (26.5)  |
|   | 3-6                           | 106 (41.9) |
|   | >6                            | 80 (31.6)  |
| <b>Weight changes (as perceived by participant)</b> | No change                     | 106 (41.9) |
|   | Weight gain                   | 97 (38.3)  |
|   | Weight loss                   | 50 (19.8)  |
| <b>Smoking habits</b>                               | Doesn’t smoke                 | 231 (91.3) |
|   | Increased                     | 11 (4.3)   |
|   | Decreased/tried to cut off    | 11 (4.3)   |
| <b>Alcohol consumption</b>                          | Doesn’t drink                 | 210 (83.0) |
|   | Increased consumption         | 11 (4.3)   |
|   | Decreased/tried to cut off    | 32 (12.6)  |

Table 2 shows that 136 (53.8%) of the study population were not doing any kind of exercise, 117 (46.3%) were doing exercise at least once a week. Though actual reading of the weight was not taken during the study, only 97 (38.3%) felt that their weight was increased during the lockdown period. There was no changed sleep pattern in 154 (60.9%) responders. Alcohol consumption was decreased in 32 (12.6%) of respondents. Among the participants who used to smoke before the COVID-19 restrictions, there was no much difference among them who had increased their smoking consumption during

lockdown 11 (4.3%), and who tried to cut-off or decrease smoking 11 (4.3%).



**Figure 2: Felt socially isolated.**

Figure 2 depicts that 57.3% of responders felt socially isolated, while only 43% did not feel socially isolated due to COVID-19 restrictions. Though they could not be social or physically meet other persons, majority 220 (87%) tried to keep in touch with their family members and other close friends through mobile phones and through various social media platforms.

The fear of COVID-19 had led to many lifestyle changes taken by the participants, of which majority 100 (39.5%) only focussed on changing their diet to eating healthy with the available resources, 51 (%) participants have opted to exercise and only 28 (11.1%) have done yoga and breathing exercises, while 74 (29.2%) of the respondents have not taken any lifestyle changing measures during the time of lockdown.

## DISCUSSION

To address this critical situation and to reduce the spread of the infections in country, Indian prime minister Narendra Modi announced a series of decree that imposed restrictions on the movement of individuals in the entire national territory of India from March 25<sup>th</sup> 2020.<sup>6</sup> Lockdown is among options suggested to reduce the spread of COVID-19 virus so far.<sup>7-10</sup> Although these measures and efforts are necessary to curb the increasing number of new cases of COVID -19, there are reasons to be concerned because prolonged home confinement during a disease outbreak may affect people's physical and mental health.<sup>11</sup> Lockdown is having a profound impact beyond the virus as significant change in exercise habits was found in study result as 53.8% of the study participants have not done any exercise activity since lockdown. A study conducted by Peijie Chen et al suggested that prolonged home stays can change the behaviours that lead to inactivity.<sup>12</sup> There was no changed sleep pattern in 60.9% responders but a pan India survey

study revealed that 67% people have altered sleep routine.<sup>13</sup> Our study data shows that about half of the responders (57.3%) agreed to feel socially isolated due to lockdown as they are bounded to stay inside their home and not allowed to go outside or meet people. Recent studies support the impact of lockdown such condition on human behaviour and suggest that people in lockdown are experiencing negative psychosocial changes which have an impact over thinking and anxiety.<sup>14</sup> Alcohol consumption was decreased in 12.6% of respondents which are similar in a study done by Nair et al where smoking and alcohol were decreased during lockdown in their study.<sup>15</sup> This decrease could be due to their stay at home during the pandemic and not socializing with their peers.

## CONCLUSION

There is a need to monitor the usual habits and well-being of the population in parallel with the measures to contain the disease and strategies are to be made which aid in the development of physical activity and nutritional recommendations to maintain health during the COVID-19 pandemic which could decrease the risk of non-communicable diseases in the future.

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