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# Assessment of Covid-19 Lockdown on Health Status of The Population



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## ABSTRACT

During the Covid-19 lockdown in India, people have faced problems like health issues, financial burden, emotional behavior, depression & anxiety in the daily life routine. Day by day Covid-19 cases increased also death cases increased. During this period, participant's relationship also gets affected, such as the fear of losing relationships, the fear of the death of someone. The dietary pattern also get changed during the lockdown; about 72.6% people and 27.4% remained same as regular. 64.2% participants faced financial problems. Health status changed of participants 49.1% gained weight, only 13.2% peoples were lost body weight and 37.7% peoples have no change in body weight. In physical activity, 22.6% people did perform yoga, 44.3% went for walking, 13.2% went for jogging and 22.6% did other activities. For the immunity boost up 47.2% of participants taken Kadha & 9.4% had taken Chyavanprash. While going to outside 96.2% people wore mask. A cross-sectional survey was taken virtually by google form; the questionnaires were sent to participants through Whatsapp, email, Facebook via the link during a lockdown. This study focused on the Covid-19 lockdown effects on participant's health & behavior changes.



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## 1. INTRODUCTION

The World Health Organization has declared that the Covid-19 disease (Coronavirus) 2019 is a pandemic disease. A world-level harmonized effort is essential to break the spread of harmful virus. The H1N1 flu was the last pandemic of the world in 2009 (Dwivedi et al., 2020; Matsungo et al., 2020). On 31 Dec. 2019, a group of reported cases of pneumonia of unknown symptoms, in the city of Wuhan, Hubei province in China, was reported to the World Health Organization. In Jan 2020, a new unspecified new virus was recognized. Subsequently, named the 2019 Novel Coronavirus and samples obtained from cases and analysis of the virus inherited identified that this was the cause of the outbreak (Matsungo et al., 2020; Wikipedia, 2021). This Novel Coronavirus was named Coronavirus disease 2019 by World Health Organization in Feb 2020. The virus was mentioned as SARS-CoV-2 and the correlated disease is COVID -19 (Wikipedia, 2021; Gualano et al., 2020).

Total cases in India as on 7<sup>th</sup> may 2021 were 21.5 million, recovered 17.6 million, and deaths were 2.34 lakhs, as against 156 million cases all over the world with 92.3 million recovered and 3.26 million deaths (Wikipedia, 2021). Coronavirus created different types of history which changes the lifestyle of the whole world. Coronavirus changed people's behavior, thinking, relationships, education, normal lifestyle, financial burden, etc. (Matsungo et al., 2020; Sangeetha, 2020). Firstly, because of the Coronavirus there were many changes taken in the education system. The education department changed its conventional method of learning replaced by the online learning system. Because education never stops, education is the key of all development and improvement for all countries (Gualano et al., 2020; Kumar & Dwivedi, 2020).

The educational institutions, business organizations, and other working departments have taken online working and educating systems by the different online platforms such as Google meet, Zoom meeting online conferencing, etc. (Di Renzo et al., 2020). The present study is aim to assess of effects of Covid-19 lockdown on health status of the population of India, with prime focus on financial burden on peoples, changes in lifestyle, changes in food dietary pattern, social restrictions, interpersonal relationships and changes in health status (Pieh et al., 2020). The purpose of the survey research is to identify the aspects of participants during the Covid-19 lockdown impact on health status of individuals, lifestyle, food habits, social restrictions, financial burden.

## 2. MATERIAL AND METHODS

**2.1. Research method:** A Cross-sectional method, Observative test.

**2.1.1. Sampling method:** probability systematic sampling method.

**2.1.2. Criteria of the study:** peoples who have smartphones, email, WhatsApp. Age should 19-39 years.

**2.1.3. Permission:** Agreement was taken from all an individual who has participated in the survey study by sending the questionnaire virtually by WhatsApp and emails individually.

**2.1.4. Study tools:** The questionnaire was prepared by self from the Google form for taking feedback of all respondents. This has been created after looking current scenario & after the long discussion with the experts of my academic department. Then the questions were modified by the suggestions of the supervisor. The all guidelines of questions layout, design was followed in questions formulation.

**2.1.5. Data processing:** In this research, a Cross-sectional research method was used. The participants were invited *via* WhatsApp & email with following the privacy of participant's personal data. The maximum participation were taken with the approval of individuals. The questionnaire was created by Google form; easy, structured, and objective type. The collection of data started from the 7 march 2021.

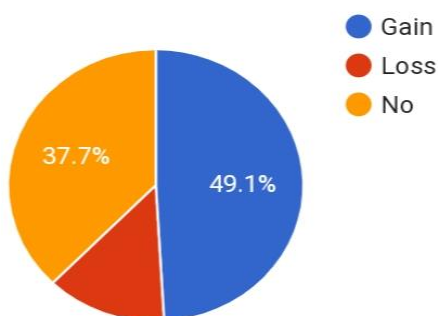
### 3. RESULTS AND DISCUSSION

**Table 1. Data of Participants**

Variables	Number of cases (%)
<b>Age in years</b>	
19-25	78(82.68)
26-30	26(26.56)
<b>Gender</b>	
Male	59(62.54)
Female	47(49.82)
<b>Marital status</b>	
Single	70(74.2)
Married	36(38.16)
<b>Employment</b>	
Employees	55(58.3)
Students	51(54.06)

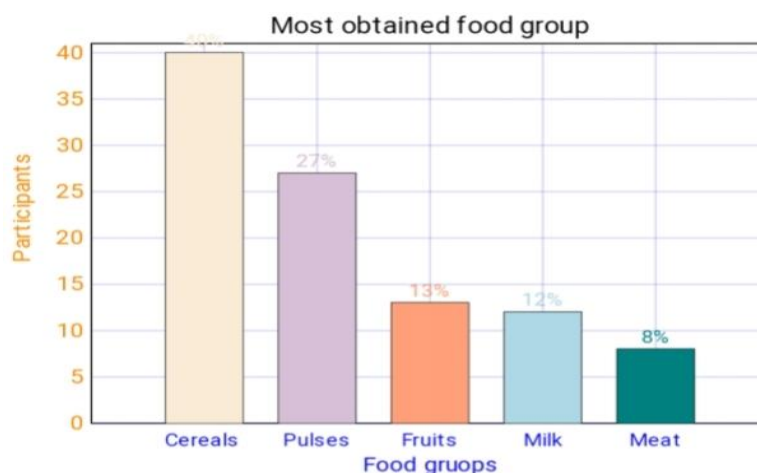
Table 1- Represents the Demographical data of participants. The age of the participants ranged between 19-30 years. The age was grouped in the table between two categories i.e. 19-25 and 26-30 years. 19-25 years ‘participant’s population is greater than 26-30 years. The male participants were greater than females. Males were 62.54% while females were 49.82% participants. The married participants are less than unmarried, about single participants were 74% and married were 38% only. Most of the participants were students or unemployed, about 54% participants was students and 58% participants were employed.

**Changes in Health status**



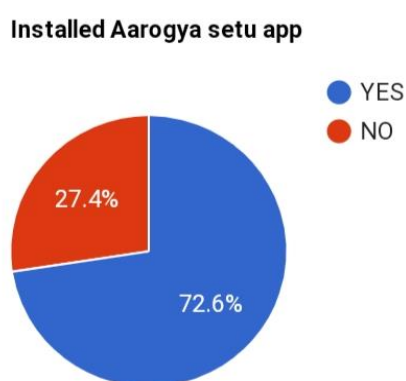
**Figure 1. Changes in health status**

Figure 1: The majority of participants has gained body weight. Figure 1, shows that the 49.1% of participants has gained weight, 13.2% of participants has lost their body weight and 37.7% of participants do not observe any changes in the body weight. Those who have changed their body weight, they have given the reason for lack of a physical activity, changes in dietary habits and the mental stress of the Covid-19 lockdown.



**Figure 2. Most obtained Food group**

Figure 2: This figure shows that 40% of participants consumed from the cereal group, 27% peoples consumed from pulses group, 13% participants were consumed fruits & vegetables, 12% from milk & milk products and meat consumption was less than other four food groups. The mostly cereals & pulses group were consumed as in the breakfast, lunch as well as dinner.



**Figure 3. Installed Aarogya Setu App**

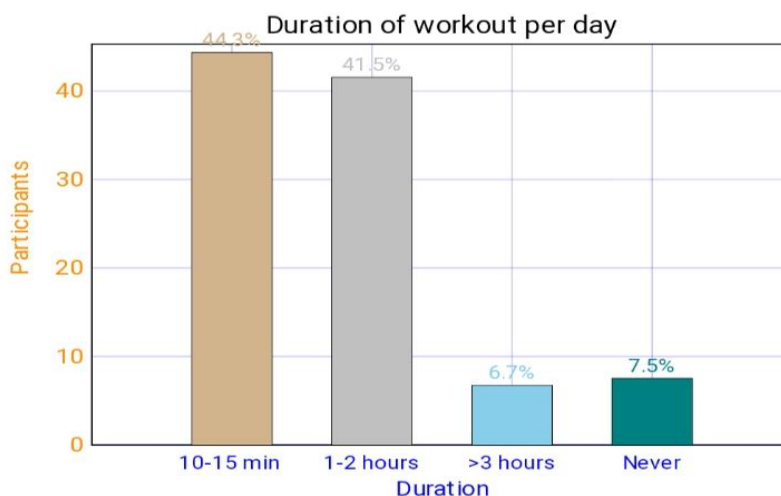
Figure 3, represents that 72.6% participants had downloaded Aarogya setu app in mobiles phones, tablets, computers and 27.4% of participants did not install this app. This app were

shown information in different three colors i.e. Red, Orange & Green. Where Red shows the dangerous zone, an Orange color shows the moderate dangerous zone while Green shows the safe zone.

**Table 2. Participants changes of activities**

Items	Number of cases (%)
<b>physical activity</b>	
Yoga	22.6%
Walking	44.3%
Jogging	13.2%
Any other activity	19.8%
<b>what kinds of immunity booster foods do you prefer in lockdown</b>	
Kadha	47.2%
Chyawanprash	9.4%
Any other booster	43.4%

Table 2- Showing the daily routine-related information of participants. The physical activity of participants was divided in yoga, walking, jogging & any other activities such as yoga performed by 22.6% peoples, walking 44.3%, jogging 13.2% & other activities has done by participants about 19.8%. The bad immunity can lead lots of symptoms therefore for improving the immune system participants were consumed kadha 47.2% which are recommended by the AYUSH Ministry, the Chyawanprash taken daily by 9.4% peoples and 43.4% of participants consumed any other Immune boosting products.



**Figure 4. Duration of workout/day**

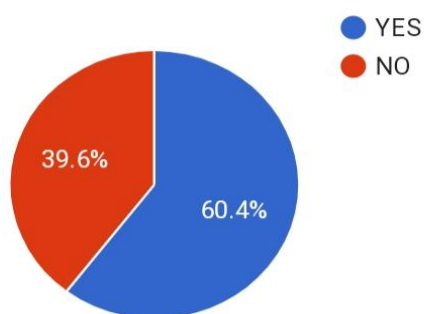
Figure 4, represents the workout habits of participants. The data in the figure shows the 44.3% participants were performed 10-15 min workout/day. 41.5% of peoples did 1-2 hours of workout daily more than 3 hours performed only 6.7% of participants and 7.5% of peoples not did any kind of the workout in the Covid-19 lockdown period.

**Table 3. Lifestyle changes during lockdown**

Items	Number of cases (%)
<b>Do you wear facemask going out</b>	
Yes	96.2%
No	4.8%
<b>Do you watch motivation videos &amp; stories during lockdown</b>	
Yes	72.6%
No	27.4%
<b>Has your dietary pattern changed during lockdown</b>	
Yes	72.6%
No	27.4%

Table 3. Presents that the majority of participants wore the facemask, when they were gone outside. About 96.2% peoples wore facemask & 4.8% do not wore facemask. . 90.6% of peoples follow guidelines. In that situation lots of peoples had experienced financial problems. The mental stress & anxiety is also affected the participants lifestyles. Dietary pattern was changed during the lockdown period, about 72.6% of participants. To stay mentally strong and stress-free, participants were watched motivational videos & stories.

**Meditation during lockdown**



**Figure 5. Meditation during lockdown**

Figure 5, depicts that 60.4% of participants were daily meditating in the lockdown period. Meditation was the way to stay refreshed, stress free, and for proper body and psychological functions.

#### 4. DISCUSSION

Coronavirus lockdown has created a different type of history in whole world. Which is changed the lifestyles of the peoples. Coronavirus changed people's behavior towards society & country, thinking, relationships, education, normal lifestyle, financial burden (Gilbert et al., 2020; Mazza et al., 2020). Firstly, because of the Coronavirus, there are many changes taken in the educational system. The educational departments changed its conventional method of learning system by virtual (e-learning) system because education never stops, education is the key of all the country's development & improvement (Ozamiz-Etxebarria et al., 2020). The business organizations, educational institutions & other working departments have taken online working & educating through various online platforms such as Google meet, Zoom online meeting, webinar, online conferences, etc. (Di-Domenico et al., 2020).

In my state and city, the students and professionals are signing up for the online classes for exams like NTA UGC NET, CSIR NET, JEE & NEET EXAMS and other competitive exam's preparation. All the schools, and colleges classes are started online mode across the country. The lots of students facing learning problems in online or virtual mode. The problems arise during the online classes like a slow Internet connection, lack knowledge of ICT, lack knowledge in application of online learning, concentration problem, problems in understanding, electricity etc. Secondly, we are become more hygiene and health-conscious (Lau et al., 2020). Most of the peoples started taking personal hygiene more seriously than before the lockdown period. Peoples started washing hands with sanitizers and soaps, before the use of things, and also before eating anything. Therefore, its become a part of life as habitual (Mishra & Patel, 2020; Hao et al., 2020; Gaidhane et al., 2020).

Thirdly, work from home was the major change that has become part of our life. But the work from home is not a new concept, many companies use these methods according to their needs. Coronavirus has taken it to another level all the companies told its employees to work from home in the pandemic situation (Aragona et al., 2020). In the lockdown days the family become together for the long time and shares the all movement together. The kitchen was a main work in the lockdown periods, women of the homes, and all the men are cooked food together. In the periods watching TV or YouTube videos for long hours become popular.



After the long time period the DD National channel was become popular in lockdowns (Niedzwiedz et al., 2021; Mishra et al., 2009; Singh & Mishra, 2014; Pooja & Mishra, 2014; Jribi et al., 2020).

A cross-sectional method of research applied with random selection with 106 sample size under this 19-25 age group participants are 82% while 26-30 years participants are 26%. The Demo graphical results show that males are more than females. Where 54.06% are unemployed and 58.3% participants are employed (Peijie et al. 2020; Avance & Brand solution, 2020; AZ Research, 2020). The Dietary pattern was changed of about 72.6% of participants, and they modified their diet to the healthy deits and peoples were skipped the junk food of outsiders (Stephen et al., 2020; Mahumud et al., 2020; WHO, 2020). There are two vaccines being used in India, *Covishield* and *Covaxin*. *Covishield* is a product of Astra Zeneca, UK, manufactured in India also. This vaccine is developed by using whole-virion inactivated vero cell-derived platform technology. Inactivated vaccines do not replicate and are, therefore, unlikely to revert and cause pathological effects. They contain a dead virus, not capable of infecting people but stull able to instruct the immune system to mount a defensive reaction against an infection (Backer et al., 2020; CDC, 2019; Wikipedia, 2021; IANS, 2020). The COVAXIN is an India's indigenous Covid-19 vaccine which is given by the Bharat Biotech developed in collaboration with the Indian council of medical research (ICMR). (Kathy et al., 2020; Hawryluck et al., 2004).

## 5. CONCLUSION

Now a day, the cases are rapidly increasing in India, the people who are infected have been more than 40,000 per day with 4000 deaths approximately a day (Wikipedia, 2021). The study revealed that COVID-19 had far-reaching impacts on health stated, attitudinal and behavioral changes in the area of study (WHO, 2019; Anderson et al., 1992). While the menace of COVID-19 affected adversely to the population in general resulting large number of infections and a great number of fatalities, simultaneously, it created awareness about immunity booster foods and supplements, hygiene practices and behavioral changes supplemented by technological innovations (Railey et al., 2003; Funk et al., 2017). The continuous infectivity of Novel Corona Virus and second wave of COVID-19 in India in large scale affected a large population. The people have been aware to keep social distancing, avoid unnecessary travels and movements, use of masks regularly and sanitize themselves (Corman et al., 2020; Wu et al., 2020). Healthy diets are being preferred, avoidance of junk

food, smoking, alcoholism have been advised. Usual habits and patterns of work have undergone subtle changes and thereby changed our lifestyle. The mode of work and the dietary patterns have changed drastically.

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