DOI: http://dx.doi.org/10.18782/2582-2845.8690

ISSN: 2582 – 2845

Ind. J. Pure App. Biosci. (2021) 9(3), 64-72



Research Article

Peer-Reviewed, Refereed, Open Access Journal

# Impact of the Covid-19 Pandemic on Lifestyle and Well Being of Population

# Kuril Sanjeet<sup>1\*</sup>, Sunita Mishra<sup>1</sup>, Khwairakpam Sharmila<sup>2</sup> and B. B. Malik<sup>3</sup>

<sup>1</sup>Department of Food & Nutrition, Food Science & Technology,

<sup>1</sup>Dean & Head School for Home science, Department of Food and Nutrition,

<sup>2</sup>Department of Human Development and Family Studies,

<sup>3</sup>Ambedkar School of Social Sciences,

Babasaheb Bhimrao Ambedkar University, Lucknow-226025, Uttar Pradesh, India

\*Corresponding Author E-mail: sunitabbau@gmail.com Received: 2.05.2021 | Revised: 27.05.2021 | Accepted: 5.06.2021

#### **ABSTRACT**

The worldwide catastrophe that has erupted in response to the transmission of COVID-19 has sparked a number of concerns regarding the effect of the lockdown on people with mental health issues and unhealthy lifestyle. The dataset provided here is an evaluation of the mental anguish reported by persons in India after lockdown was implemented as a strategy to stop the spreading of the Coronavirus. The data was gathered by an online survey that included a 9-item sociodemographic question and perhaps even the implementation of the quick summary of the General Health Questionnaire (GHQ-12 items) created by the University of Michigan (Goldberg, 1972). The data was collected between May 6th and 15th, 2020, during India's third stage of lockdown. The Google documents comprising the study's questions were distributed to the general community via emails & social media platforms such as WhatsApp and Facebook. As a result, individuals who took the time to fill out the completed questionnaires were counted as survey respondents. The information is useful for determining the extent and severity of psychological suffering experienced by Indians throughout the COVID-19 crisis. It could also be beneficial to the country.

Keywords: COVID 19, Lockdown, Mental stress, Physical activity, Unhealthy lifestyle.

#### INTRODUCTION

The out break of Corona, which was triggered by a new Coronavirus, SARS-CoV-2, that started in China, has out breaked around the world, awarding it prevent status by the WHO on March 11, 2020. (Organization, 2021). With 256,000 cases reported of corona and 8000 deaths as of the June I<sup>st</sup> week, 2020, India has risen to fifth position (Organization, 2020).

Cite this article: Sanjeet, K., Mishra, S., Sharmila, K., & Malik, B.B. (2021). Impact of the Covid-19 Pandemic on Lifestyle and Well Being of Population, *Ind. J. Pure App. Biosci.* 9(3), 64-72. doi: http://dx.doi.org/10.18782/2582-2845.8690

This article is published under the terms of the <u>Creative Commons Attribution License 4.0</u>.

The most proposed routes of transmission are droplets, direct or indirect interaction with the immediate atmosphere surrounding infected individuals, and airborne transmission in particular circumstances (Setti et al., 2020). The incubation time was observed to be longer, ranging from 14 days (mean 6.4 days) to 14 days (mean 6.4 days) (Backer et al., 2020). Symptoms of COVID-19 infection include fatigue, sore throat, fatigue, difficulty breathing, chest discomfort, sore throat, nausea, diarrhoea, and nasal congestion (Ludvigsson, 2021).

Patients with serious cases experienced heart injury, influenza, acute respiratory distress syndrome, and eventually death, with a disease fatality rate of 2.3%. (Petrosillo et al., 2020). This infection was found to be more vulnerable in older people (average age 47 to 56 years) and people with chronic comorbidities (Mahumud et al., 2020). To address this, India's government declared a 21-day lockdown on March 24th, 2020, with a second phase from April 14 to May 3, 2020, and a third stage from May 4th to 17th, 2020.

Quarantine and lockdown epidemiological benefits such as limiting the spread of disease, which is important in the current situation, but they can also cause psychological distress in the community. Isolation, fear of catching the disease, rumors, financial pressure, work insecurity, boredom, frustrations, loss of freedom and room due to limitations, alcohol withdrawal, and worries for family members could all have an impact on the population's mental wellbeing to different degrees during the lockdown era. Anxiety and depression have been linked to suicidal behaviour in studies (Sagar et al., 2020). It was discovered that 338 people died in India between March 19 and May 2, 2020, because of the shutdown (Mishra et al., 2020). The psychological impact of India's lockdown, which has been in place for more than a month, is unavoidable. Studies performed during previous epidemics such as SARS, equine influenza, and Ebola have shown that the disease and quarantine caused increased psychological distress (Hawryluck et al., 2004).

Likewise, research performed currently in other countries such as China, Italy, and Iran found that during the COVID-19 outbreak, the incidence of mental health problems such as depression, anxiety, stress, and disturbances increased (Mazza et al., 2020). In a recent survey conducted in India in March 2020, it was discovered that more than threequarters of the respondents had a selfperceived need for mental health assistance (Roy et al., 2020). In addition to the already existing financial burden associated with mental disorders and the on-going economic crisis caused by the lockdown, resolving, mitigating psychological problems as a result of COVID-19, and delivering mental health services to the vulnerable population are critical national priorities. There have been few research on the psychological effects of the COVID-19 outbreak and lockdown in India to date, with most concentrating on particular areas such as perceived mental health care needs (Roy et al., 2020) and effect of gender and marital status (Khan et al., 2020), or conducted on specific population like healthcare workers(Chew et al., 2020) and pharmacy students (Zost et al., 2020).

At the time of Covid-19 lockdown people's unhealthy lifestyle such as Get up very late in the morning, Faulty diet, Lack of physical activity. All of these activities have affected the lifestyle and created mental illness, Insomnia, anger, a negative impact on physical as well as mental health (Lange et al., 2020; Hu et al., 2020). Nevertheless, no study has been conducted to establish the impact of the COVID-19 epidemic and lockdown on India's broad populace's psychological health, with such an emphasis on risk and preventive factors Our study will look at the prevalence of emotional mental health problems like anxiety, depression, and stress, and also the populace's high-risk demographics. In such unusual and difficult circumstances, we believe that this study will assist governments and psychological health professionals organizing and delivering mental health support to the high-risk group, as well as

protecting the psychological well-being of the Indians

# Respiratory Exercises to enhance Lungs capacity during Covid-19

The Coronavirus has very rapid threatening effects to damage human health among the body organs. Now days, the cases daily Increases speedily. The second wave of Covid-19 affects more than first wave. Death cases also increases in double rate rapidly (Mishra, 2021). Lungs were more affected, oxygen level is become much lover than normal, when virus comes contact with body. It reaches in trachea (windpipe) causes inflammatory issues. Therefore, care of Lungs is more important during Covid-19. To keep the Lungs fit; healthy diet and exercises are very essential. Respiratory Exercises is the best way to improve Lungs. Here are some Respiratory exercises for people's, you can do it anytime (Mishra, 2020).

# Deep breathing with Increasing breath counts:

Breath In & Out process, It is one of the simplest and best exercises. It improves Lungs and keeps healthy circulation of blood.

#### **Belly Breathing process**

This exercise includes lots of benefits such as depression & anxiety relaxation. This technique will help you to refresh and fulfilment of oxygen in Lungs.

#### Cardiac exercise

All cardiac exercises Increases heart rate, also improves functions and capacity of Lungs. Running, Brisk walking, water aerobics you can do in your daily routine.

# Anulom Vilom pranayama

Anulom Vilom noted for improving physiological & psychological health benefits including- Feeling refreshed, Focused, Lots of patients, enhances capacity of brain & health.

# pranayama

This pranayama help us to lower the blood pressure, also breaks the cerebral tension. The best time to perform Bhramari pranayama for more benefits seen in night for better sleep & relaxation (Mishra, 2021).

# Three types of Vaccines have arrived to fight against Coronavirus

**1. COVISHIELD-** This Vaccine made by a weak category of Common cold from Chimpanzees.

**Effectiveness-** Serum Institute of India's *Covishield* Vaccine, has success rate of over 70.4%. Its effect could reach up to 90%, If doses are taken weeks apart. Dose Interval is very long as 12 weeks or more (Pharmeasy, 2021).

**Side effects-** Moderate body pain, Redness at injection site, Fever.

**2. COVAXIN-** This vaccine promotes Immune system to make antibodies against Coronavirus. This manufactured by Bharat Bio-Tech. It is Intramuscular injection type vaccine.

**Effectiveness-** Bharat Bio-Tech's *Covaxin*, which has been found to be neutralize the virus infection. The UK variant has an success rate over the population is 78-81%. It's dose Interval is four week between two doses (Pharmeasy, 2021).

**Side effects-** Redness at injection point, Fever, Body pain, Nausea & Vomitting, Swelling at injection site.

**3. SPUTNIK-** The vaccine, also named as Gam- Covid-Vac, this vaccine is blended of two Different types of adenoviruses (responsible for common cold) are merged with the SARS-Cov-2, Strike Protein (prompts the body to generate immune response).

Efficacy rate- The Russian vaccine, *Sputnik V.* approved by DCGI (Drug controller General of India) has an success rate of 91.6%. It has high response in restrain the infection interval of 21 days. The cost of the Vaccine for every dose comes under Rs. 995.40 (Wikipedia, 2021).

**Side effects-** Fever, Headache, pain at injection point, Nausea.

### MATERIALS AND METHODS

# Study design and participants:

The research was a Cross Sectional study performed via an online survey platform. The invitees connect to join the questionnaire was circulated in social networking sites Like Facebook, Whats App, Mail and Telegram. Adult Indian citizens (over the age of 18) were requested. The study's goal was clarified, and consented respondents filled out the survey and had the option to stop at any time. The entire survey was conducted in English, and a rough estimate of how long it would take to complete it was given ahead of time (10-15 minutes). The participant's identities were kept hidden

## Survey development and Data collection:

A self-administered quiz was included in the survey, which was established after a comprehensive literature review and contained questions about sociodemographic factors as well as COVID-19 outbreak and state of emergency factors. The information for this analysis was obtained between May 5th and 14th, 2020, during the third phase of lockdown in India, using a non probability snowball sampling process. The information gathered was divided into three categories: COVID-19 sociodemographic variables, outbreak and lockout variables, and the participant's mental health status.

#### Variables of socioeconomic status:

Sex, Age, Education level, Job status, Relationship status, parental status, and household size were among the sociodemographic variables included in the first part of the data.

# Factors linked to the COVID-19 outbreak and lockdown:

The COVID-19 outbreak and lockdown factors were contained in results. Following Parameter has been included in this research survey, 1. Chronic disease status of

respondents. 2. Type of beverage importantly used during COVID-19 lockdown. 3. Details of kinds of foods those are not frequently present in lockdown. 4. Financial problem during lockdown. 5. Spending time during Covid-19 lockdown. 6. Metal stress pandemic, in our study and degree of watching motivational videos & stories. 7. Data of shopping methods employed by respondents during lockdown. 8. Frequently used food in lockdown. 9. Degree of guidelines follow, prescribed by Indian government during lockdown. 10. Status of respondents during Covid-19 lockdown. 11. Medicine or anything those were employed to boost up immunity during covid 19 lockdown. 12. Quality of food sold in area during Covid-19.

### Participant's psychological states:

The third section of the study assesses the participant's affective components of mental health, such as anxiety, depression, and pressure. Lovibond and Lovibond's short version of the Depression Anxiety Stress Scale 21 is used to assess depression, anxiety, and stress (DASS21). The DASS21 is a suitable method that can not only quantify but also distinguish between the three negative emotional states in clinical and nonclinical samples (Di Blasi et al., 2021). The sub-scores for stress, anxiety, and tension were combined classified "average," "mild," "moderate," "severe," and "highly severe," respectively. The aforementioned disorders were described as having a cut-off score of 10 for depression, 8 for anxiety, and 15 for stress (Lovibond & Lovibond, 1995).

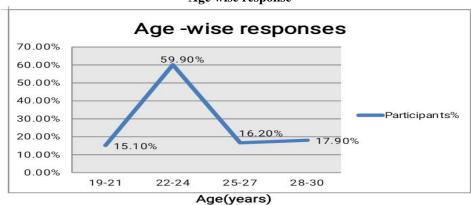
#### RESULTS AND DISCUSSIONS

Table 1: Summarization of respondent's status indulged in survey

Socio-demographic variable	Number of cases (%)
Age (years)	
19-25	78 (82.68)
26-30	26(26.56)
Gender	
Female	47(49.82)

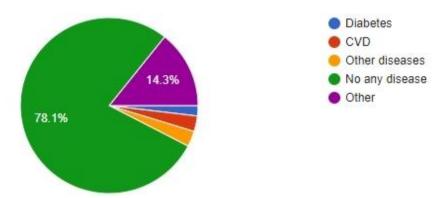
ma. 5. 1 are hpp. Biosei. (2021) 5(5), 64-72	
Male	59(62.54)
Marital status	
Married	36 (38.16)
Single	70 (74.2)
Employment	
Students	51(54.06)
Employees	55 (58.3)

### Age wise response



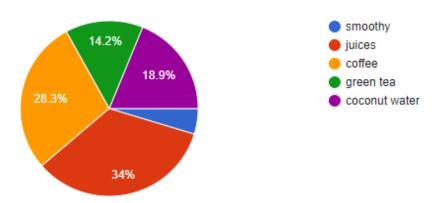
**Fig. 1:** summarization of respondent's age wise response those involved in survey. Range of age of Individual was 19-30 years old. Among the all respondents, maximum respondents (50.90%) were age of 22-24 years old.

# Do you have any Chronic disease



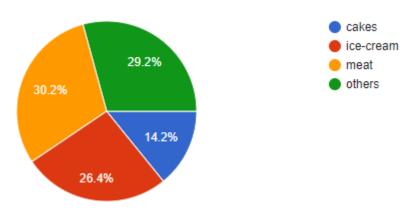
**Fig. 2:** Respondents suffered with chronic disease during COVID 19 lockdown. Survey inferred that maximum respondents (78.1%) were not suffered with any disease.

#### Kind of beverages mostly taken during Covid-19 lockdown



**Fig. 3:** Type of beverage importantly used during COVID 19 lockdown. Information provided by respondents in survey with respect to beverage elaborated that juices are beverages that were employed mostly in Covid-19 lockdown. Among the all respondents maximum individual (34%) used juices while coffee was second mostly used beverages employed by (28.3%) respondents

#### Types of foods are not easily available in lockdown



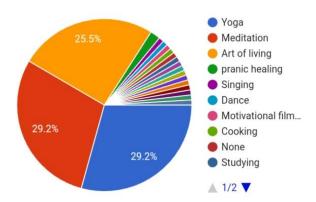
**Fig. 4:** Details of kinds of foods those are not frequently present in lockdown. Image of results inferred that meat is food, which was not easily available in lockdown. In this survey maximum respondents (30.2%) voted for meat as short food.

**Table 2: Participant's activities** 

Items	Participants (%)
Financial problems during lockdown	
Yes	64.2%
No	35.8%
Spend the most time with	
Family	78.3%
Friends	8.5%
Lonely	7.8%
Recreational	5.4%
Do you follow guidelines given by	
government of India during lockdown	
Yes	90.6%
No	9.4%

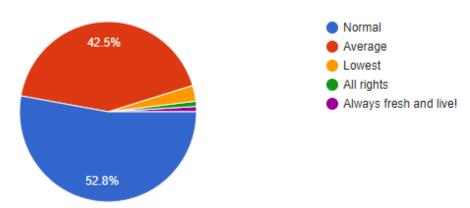
Overview of status of financial problem during lockdown. In our survey, status of financial problem was observed. Results inferred that maximum individuals (64.2%) faced the financial problems. Review of spending time during Covid-19 lockdown. In our research survey, time of spending was inferred. Data achieved from survey depicted that maximum respondents (78.3%) spent their time with family. During the Covid lockdown period, the government of India given some guidelines to the population for the stay safe from the Covid-19. 90.6% of peoples follow guidelines.

#### Mentally positive



**Fig. 5:** Summary of methods employed to maintains positivity of mental health. Data received from respondents inferred that maximum individual (29.2%) employed Yoga and meditation to maintain positivity. Few respondents (25.5%) employed art of living for mental positivity.

# Changes in quality of food sold in your area during the Covid-19



**Fig. 6:** Review of quality of food sold in area during covid 19. In our survey, quality of food was observed. Data received from respondents depicted that quality of food was normal during lockdown.

#### **DISCUSSION**

The researchers used descriptive survey design to analyses the effect of lockdown during pandemic on mental health, food quality, physiological function and other parameters of respondents. In our survey, total 106 respondents indulged to give their response. Huge percent of respondents (44.3%) employed walking for physical activity during lockdown. The result was as similar as findings of (Srivastav et al., 2021). Meditation was employed by huge respondents, similar results were achieved in survey conducted by (Islam et al., 2020).

In case of chronic disease, No any kind of disease was seen during Covid-19 lockdown (Ester et al., 2020). Internet was source which was employed to gain the information. Decoction (Kadha) was used to

boost the immunity during lockdown used by respondents, Juice was beverage that was used during lockdown by maximum respondents. Online shopping was selected by maximum respondents to purchase during lockdown. Results of survey demonstrated that there was health change in maximum individuals. In our survey, status of financial problem was observed. Results inferred that maximum individuals (64.2%) faced the financial problems. level of mental status observed. Data explained that maximum people (54. 7%) suffered with mental stress during Covid-19 lockdown. In our review degree of motivational videos and stories were seen, data elaborated that massive respondents (72.6%) watched motivational videos and stories. In our research survey, time of spending was inferred. Data achieved from survey depicted that maximum respondents (78.3%) spent their time with family. Information of medicine that was employed to boost immunity was collected. Data inferred that maximum respondents (70.8%) did not use any medicine lockdown. Data received from during respondents inferred that maximum individual (29.2%) employed Yoga and meditation to maintain positivity. Few respondents (25.5%) employed art of living for mental positivity, quality of food was observed. Data received from respondents depicted that quality of food was normal during lockdown. Data were more similar as survey of (Islam et al., 2020).

Some very important guidelines given by the ICMR(Indian council of medical research), such as-Do not travel overseas for 2 years, avoid outside food for 1 year, Avoid unnecessary functions, ceremonies trips, Don't go to crowded place at least for 1 year and follow the social distancing norms, maintain distance who has cough and regular use of face mask, eat as much vegetarian foods, Prefer immune boosting foods, Stay careful while go to the barber shop and beauty parlour, Do not wear watch, ring, belt while go to outside and take sanitizer, Shoes left outside the house, Take a bath while come from outside (ICMR, 2021).

#### REFERENCES

- Backer, J. A., Klinkenberg, D., & Wallinga, J. (2020). Incubation period of 2019 novel coronavirus (2019-nCoV) infections among travellers from Wuhan, China, 20–28 January 2020. *Eurosurveillance*, 25(5), 2000062.
- Di Blasi, M., Gullo, S., Mancinelli, E., Freda, M. F., Esposito, G., Gelo, O. C. G., Lagetto, G., Giordano, C., Mazzeschi, C., & Pazzagli, C. (2021). Psychological distress associated with the COVID-19 lockdown: A two-wave network analysis. *Journal of Affective Disorders*, 284, 18–26.
- Goldberg, D. P. (1972). The detection of psychiatric illness by questionnaire. *Maudsley Monograph*, 21.

- Hawryluck, L., Gold, W. L., Robinson, S., Pogorski, S., Galea, S., & Styra, R. (2004). SARS control and psychological effects of quarantine, Toronto, Canada. *Emerging Infectious Diseases*, 10(7), 1206.
- Hu, Z., Lin, X., Kaminga, A. C., & Xu, H. (2020). Impact of the COVID-19 epidemic on lifestyle behavdiors and their association with subjective well-being among the general population in mainland China: Cross-sectional study. *Journal of medical Internet research*, 22(8), e21176.
- Indian council of medical research, New Delhi. (2021). https://www.icmr.gov.in/
- Islam, M. A., Barna, S. D., Raihan, H., Khan, M. N. A., & Hossain, M. T. (2020). Depression and anxiety among university students during the COVID-19 pandemic in Bangladesh: A webbased cross-sectional survey. *PloS One*, *15*(8), e0238162.
- Khan, K. S., Mamun, M. A., Griffiths, M. D., & Ullah, I. (2020). The mental health impact of the COVID-19 pandemic across different cohorts. *International Journal of Mental Health and Addiction*, 1–7.
- Lange, K. W., & Nakamura, Y. (2020). Lifestyle factors in the prevention of COVID-19. Global Health Journal.
- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour Research and Therapy*, 33(3), 335–343.
- Ludvigsson, J. F. (2021). Case report and systematic review suggest that children may experience similar long-term effects to adults after clinical COVID-19. *Acta Paediatrica*, 110(3), 914–921.
- Mahumud, R. A., Kamara, J. K., & Renzaho, A. M. N. (2020). The epidemiological burden of and overall distribution of

- chronic comorbidities in coronavirus disease-2019 among 202,005 infected patients: evidence from a systematic review and meta-analysis. *Infection*, 1–21
- Mazza, C., Ricci, E., Biondi, S., Colasanti, M., Ferracuti, S., Napoli, C., & Roma, P. (2020). A nationwide survey of psychological distress among Italian people during the COVID-19 pandemic: immediate psychological responses and associated factors. International Journal Environmental Research and Public Health, 17(9), 3165.
- Mishra, S. V., Gayen, A., & Haque, S. M. (2020). COVID-19 and urban vulnerability in India. *Habitat International*, 103, 102230.
- Mishra, S. (2021). Nutrition Health Superfoods and Life Style Management, *Selective and Scientific Books*, New Delhi-110001.
- Mishra, S., & Patel, M. (2020). Role of nutrition on immune system during COVID-19 pandemic. *J Food Nutr Health* 3(2).
- N., Viceconte, G., Ergonul, O., Ippolito, G., & Petersen, E. (2020). COVID-19, SARS and MERS: are they closely related? *Clinical Microbiology and Infection*, 26(6), 729–734.
- Organization, W. H. (2020). Coronavirus disease (COVID-2019) press briefings. *Geneva: World Health Organization*.
- Organization, W. H. (2021). WHO-convened global study of origins of SARS-CoV-2: China part.
- Pharmeasy.in, (2021). (Covaxin vs Covishield-A detailed comparison-pharmEasy Blog) https://pharmeasy.in/blog/

- covaxin-vs-covishield-a-detailedcomparison/
- Roy, D., Tripathy, S., Kar, S. K., Sharma, N., Verma, S. K., & Kaushal, V. (2020). Study of knowledge, attitude, anxiety & perceived mental healthcare need in Indian population during COVID-19 pandemic. *Asian Journal of Psychiatry*, 51, 102083.
- Sagar, R., Chawla, N., & Sen, M. S. (2020). Is it correct to estimate mental disorder through online surveys during COVID-19 pandemic? *Psychiatry Research*, 291, 113251.
- Setti, L., Passarini, F., De Gennaro, G., Barbieri, P., Perrone, M. G., Borelli, M., Palmisani, J., Di Gilio, A., Piscitelli, P., & Miani, A. (2020). Airborne transmission route of COVID-19: why 2 meters/6 feet of inter-personal distance could not be enough. Multidisciplinary Digital Publishing Institute.
- Srivastav, A. K., Sharma, N., & Samuel, A. J. (2021).Impact of Coronavirus disease-19 (COVID-19) lockdown on activity physical and energy expenditure among physiotherapy professionals and students using webbased open E-survey sent through WhatsApp, Facebook and Instagram messengers. Clinical Epidemiology and Global Health, 9, 78-84.
- Wikipedia, (2021). (Sputnik), https://en.m. wikipedia.org/wiki/Sputnik\_1
- Zost, S. J., Gilchuk, P., Case, J. B., Binshtein, E., Chen, R. E., Nkolola, J. P., Schäfer, A., Reidy, J. X., Trivette, A., & Nargi, R. S. (2020). Potently neutralizing and protective human antibodies against SARS-CoV-2. *Nature*, 584(7821), 443–449.