



# **EFFECT OF COVID-19 LOCKDOWN ON BEHAVIOURAL**

# PATTERN AMONG ADULTS IN CHENNAI CITY

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# ABSTRACT

This study employs a Cross- sectional Descriptive study to find out the positive and negative changes in the Behavioural pattern during the covid 19 - Lockdown. e.g. Anxiety/ Stress, Depression, Anger, Sadness, Defense Mechanism, Sleeping Pattern, Screen timing and Exercise Habits. The study enlisted the participation of 120 adults in Chennai. The Investigator created an online questionnaire titled "A Questionnaire on Adults' Behavioural Patterns." to study the Behavioural Pattern among the selected sample. Samples were asked to complete a Google Forms-based online questionnaire. Through this study it can be concluded that positive as well as negative behavioural changes were observed as consequences of lockdown. Positive behavioural changes as spending more family time, exercises, humanity, positive defense mechanisms to deal with stress and maintaining healthy family environment were observed. Negative behavioural changes as too much stress anxiety, more screen time, helplessness and hopelessness, disturbed sleep, economical crisis, depression and anger were noticed through this study among adults.

# INTRODUCTION

The Covid-19 is a worldwide emerging Respiratory disease. It is influenced by Severe acute Respiratory SyndromeCovid-2 (SARS CoV-2). The occurrence of massive impact in the Health of the Humans. The pandemic of the novel Coronavirus was asserted by the WHO has been impacting a large number of people worldwide. The epidemiological studies have shown that mortality is higher in the elder population and the incidence is much lower in children. Initially, medical management is primarily subsidizing with no targeted therapy attainable. Since the first case of Novel Coronavirus disease 2019 [COVID-19] was diagnosed in December 2019. It has swept across the world and galvanized global





action. This has brought unprecedented efforts to the practice of Physical distancing called "social distancing" in countries all over the world, resulting in changes in national behavioural patterns and shutdowns of usual day- to-day functioning. **P.Dashraath** et al.,(2020)

Due to long term and strict isolation policy, people used mobile phones resulting in internet addiction. It caused among young people to experience poor sleep, loneliness and depressive symptoms as well as a sense of estrangement from family, society and even psychiatric disorders.

Sleep is crucial for Adolescent health and well being. Sleep Health has numerous dimensions constituting duration, regularity, timing and quality. When encountering the covid-19 Pandemic, Sleep becomes integral because of its many benefits for mental and physical health. The sleep problems are evolving worse during and emerging. The pandemic is high. The sleep and mental disturbances are exceptionally higher in adolescents due tothe Covid- 19 outbreak that drove to stay at home, social distancing, heightened levels of stress, changes in usual daily habits, fluctuations in family financial situation, and higher screen time.

Due to these restrictions, imposed to contain the coronavirus disease [COVID-19] pandemic, different population groups have adapted to varying screen time levels, which may have profound implications on their physical and mental well being. A highernumber of people with increased screen time compared to their pre-Pandemic state and prolonged duration of total screen time substantives such assertions.

#### **RESEARCH METHODOLOGY**

### **RESEARCH DESIGN**

cross sectional descriptive study

# LOCALE OF THE STUDY

Chrompet, Chengalpattu district, Tamilnadu, India





# SAMPLE TECHNIQUE

Random Sampling technique

# SAMPLE SIZE

Total -120 Respondents (aged 20 - 40 yrs)

Male -45, Female -75

# TOOLS

Self administered online questionnaire through Google form

DATA ANALYSIS

Descriptive statistic analysis

#### **Population and Sample**

The present study was conducted in the Chrompet, Chengalpattu District of Chennai City, Tamilnadu, India. The locale was selected because it is a cosmopolitan city with people of varied background, constituents and elements with distinct Behavioural Pattern during the Covid-19 Lockdown Period. The period of shielding led to conducting the study on Virtual manner through the online questionnaire as google form. The convenience sampling technique was adopted for the study with a total number 120 Adults in Chennai city.

#### Data and Source of Data

A researcher requires many data- collecting tools or techniques. The collection of data is an





essential part of Research work. The method of data collection to be used for the study, the Researcher should keep in mind two types of data that is primary data and secondary data. The primary data collected from these selected official sources are Interview & Questionnaire. The secondary data collection are Published material, Books etc., Information from Library and Online Sources.

# Questionnaire

For the baseline study, to assess the Behavioural Pattern, Sleeping pattern, Screen Timing etc among Adults self-administered online questionnaire was used. Data was collected among 120 Adults with a well-equipped questionnaire by the Online Self-administered questionnaire through Google forms.

The **first part** of the self- administered online questionnaire was used to collect the information on the personal and family demographic characteristics of the Adults on general profile (Name, Age, gender, date of birth, type of family, educational Status). The **second part** of the questionnaire consisted of Mental status of an individual during Covid-19 Lockdown. The tools include questions about Positive Mental status, Negative mental Status and coping Strategies towards how to handle their Pandemic Life Situation.**Part three** consists of behavioural pattern questions for adults was used to assess the different behavioral changes due to the Sleeping pattern, screen Timing and exercise habits among 120 adults. The questionnaire was developed by researchers to Achieve the objectives of the study.

# **Theoretical Framework**

The methods used for the data collection was the online- based questionnaire through google Form. The Researcher answers the questionnaire through the Dorms. Due to lockdown, the questionnaire was forwarded through Mails, Whatsapp group and whatsapp individual chat to collect the data. The percentage were calculated to show the distribution of the sample across different levels about different variables. The duration of the study for the completion of the Project was September 2020- April 2021.

# **RESULTS AND DISCUSSION**

# Mental health activities during Covid-19 Lockdown

S NO.	CONTENT	<b>RESULT IN % (N=120)</b>
1	Spending time with family for relaxation	85.8

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2	gardening/planting trees	32.5	
3	exercising regularly like yoga or meditation	28.3	
4	learnt or improved cleanliness or hygiene	49.1	
5	learnt how to live ina self-sustaining pandemic.	20.8	
6	learnt improve their humanity	24.1	
7	unable to manage jobs	40.8	

### Spending time with family

Spending time with family: **85.8%** spent a lot of time with their families; the Covid -19 Lockdown positively affects spending time with family; however, **10.8%** did not have enough time to spend with their families because some of them spent their Covid-19 quarantine at work and others performed their office work at home. [doing work from home]

### Extra Activities during the Covid-19 lockdown

Many of them learned to cultivate healthy habits during the Pandemic, so **32.5 percent** began gardening/planting trees, **30.8 percent** began discovering new activities that they were unable to learn due to a lack of time, **28.3 percent** continued exercising regularly during the Covid-19 Lockdown, and some of them begin painting/drawing.

#### **Modified Behaviour**

The Covid-19 Lockdown caused **49.1%** of adults to learn or improve their cleanliness or hygiene, **24.1 percent** to learn improve their humanity, and **20.8 percent** to learn how to live in a self-sustaining pandemic.

#### Management of work

Just **33.3 percent** of the population was able to handle their working status, while **40.8%** of adults were unable to manage their jobs.

Trouble during Covid 19 lockdown	<u>Number</u>	Percentage
Depression	24	20%

#### **Challenges during the Covid-19 Lockdown**





Financial stress or pressure	41	34.1%
Anxiety, pain	35	29.1%
Loneliness	42	35%
Other	7	5.8%

### Stress during Covid-19 Lockdown

Due to the quarantine, **25%** of the 120 population was stressed for different reasons, **24.1percent** controlled their tension, **22.1 percent** were stressed, emotionally depressed, and only **10%** of the population lived stress-free.

### Afraid of covid-19

Covid-19 was not feared by **50%** of the people, who described it as merely a disease, while **30%** of the people were afraid of it.

#### **Emotions about Covid-19**

In the total 120 population, **40%** are concerned about Covid-19, **27.5 percent** have temporary feelings about Covid-19, **25 percent** are sad about Covid-19 disease, **20%** are indifferent to Covid-19, and **19.1%** are afraid of Covid-19.

<u>Communication</u>	<u>Number</u>	Percentage
Talking to friends and family	69	57.5%
Video calling	47	39.1%
Whatsapp group	45	37.5%
Whtsapp individua chat	64	53.3%

#### **Coping Strategies on Covid-19 Lockdown**





Gardening	20	16.6%
Hobbies	34	28.3%
Other	1	0.8%

Adults adopted many coping strategies to overcome from the consequences of covid 19 e.g. increased screening time in chatting with friends and others, engaging in hobbies like gardening etc.

# **BEHAVIOURAL CHANGES**

### **Sleeping Pattern**

During the Covid-19 Lockdown, **76.6 percent** of adults slept for more than nine hours, **46.6 percent** slept for 7-9 hours, and **26.6 percent** slept for more than seven hours. **51.6 percent** of adults possess good sleeping quality, **31.6 percent** have very goodsleeping quality, and **14.1 percent** of adults have poor sleeping quality, according to the 120 respondents. **25.8%** of the population has difficulty sleeping due to excessive sleepiness during the day, **25%** of adults have trouble focusing asleep, **17.5 percent** have other causes for insufficient sleep, and **15%** of them have sleeping problems due to excessive screen time. Sleeping pills are not used by **78.3%** of adults, **10.8%** of adults take them occasionally to fall asleep, and **6.6 percent** of adults need sleeping pills on a daily basis. Poor night sleep causes **37.5 percent** of the population to feel tired, **30 percent** to feel irritable due to lack of sleep, **21.6 percent** to become depressed, and **15 percent** of adults to experience anxiety as a result of poor night sleep.

#### Screen Timing on Covid-19 Lockdown

**39.1 percent** of adults spend more than 5 hours on their gadgets, **29.1 percent** spend 2- 3 hours on their gadgets, **20%** spend 3-5 hours on their gadgets, and **9.1 percent**spend 0-1 hour on their mobile phones and other electronic devices. **50.8 percent** of parents did not impose any restrictions on screen time for their children, **27.5 percent** didso sometimes, and **18.3 percent** restricted so on a daily basis. **50 percent** of them communicate with their phones within a few minutes of waking up, **24.1 percent** after





a few hours of waking up, and **21.6 percent** within seconds. From the 120 people surveyed, the majority (**88.3%**) use mobile phones, **70%** use computers/laptops, **51.6 percent** watch television, **10.8%** use tablets, **7.5 percent** use gaming consoles, and **6.6 percent** use other electronic devices. The **49%** has not been influenced by the Screen Timing, **24.1%** has been negatively influenced by the Screen Timing and **23.3%** may getaffected due to the excessive Screen Timing.

#### **Exercise Habits on covid-19 Lockdown**

35.8% said they were average in terms of fitness, 9.1% said they were poor in terms of fitness, 6.6 percent said they were perfect and maintained their fitness standard, and 5.8% said they were unfit in terms of exercise pattern. 24% of adults do notexercise, 22.5 percent exercise only occasionally, 20.8 percent exercise daily, 17.5percent exercise once a week, and 11.6 percent exercise several times a month. 52.5 percent exercise to keep fit, 25 percent to lose weight, and 8.3 percent exercise simply because they enjoy it.

According to 120 respondents, **73.3 percent** exercise alone on a daily basis, while **12.5 percent** exercise with family and friends. **76.6%** do not take any Athletic Food supplements, **15.8%** of them sometimes take Athletic Supplements and **12.5%** of them regularly take Athletic Food supplements.

#### CONCLUSION

The aim of this study is to examine the Mental Status of Adults and their Coping Strategies in order to maintain their Healthy Mental Status; the Behavioural Pattern is assessed by examining Sleeping Patterns, Screen Timing among Adults.

Through this study, changes in behavioural and mental health were observed in both ways: positive and negative. Positive changes as spending more family time, exercises, humanity, positive defense mechanisms to deal with stress and maintaining healthy family environment were observed. Negative behavioural changes as too much stress anxiety, more screen time, helplessness and hopelessness, disturbed sleep, economic crisis, depression and anger were noticed through this study among adults.

# REFERENCES

Abbas, A. M., Fathy, S. K., Fawzy, A. T., Salem, A. S., & Shawky, M. S. (2020). The mutual effects of COVID-19





and obesity. Obesity medicine, 19, 100250.

Adams, E. L., Caccavale, L. J., Smith, D., & Bean, M. K. (2020). Food insecurity, the home food environment, and parent feeding practices in the era of COVID-19. *Obesity*, *28*(11), 2056-2063.

Aman, F., & Masood, S. (2020). How Nutrition can help to fight against COVID-19 Pandemic. *Pakistan Journal of Medical Sciences*, *36*(COVID19-S4), S121.

Arora, T., & Grey, I. (2020). Health behaviour changes during COVID-19 and the potential consequences: A minireview. *Journal of Health Psychology*, 25(9), 1155-1163.

Ashrafi-Rizi, H., & Kazempour, Z. (2020). Information typology in coronavirus (COVID-19) crisis; a commentary. *Archives of academic emergency medicine*, 8(1).

Arora, T., & Grey, I. (2020). Health behaviour changes during COVID-19 and thepotential consequences: A minireview. *Journal of Health Psychology*, 25(9), 1155-1163.

Bracale, R., & Vaccaro, C. M. (2020). Changes in food choice following restrictive measures due to Covid-19. *Nutrition, Metabolism and Cardiovascular Diseases*, *30*(9), 1423-1426.

Butler, M. J., & Barrientos, R. M. (2020). The impact of nutrition on COVID-19 susceptibility and long-term consequences. *Brain, behavior, and immunity*.

Cao, X. (2020). COVID-19: immunopathology and its implications for therapy. *Nature reviews immunology*, 20(5), 269-270.

Cellini, N., Canale, N., Mioni, G., & Costa, S. (2020). Changes in sleep pattern, sense of time and digital media use during COVID-19 lockdown in Italy. *Journal of Sleep Research*, 29(4), e13074.

Chedid, Y., Ubaide, H., Sani, I., & Hamza, Y. (2020). What about BAME? A letter to the editor on 'The socioeconomic implications of the coronavirus pandemic (COVID-19): A review'. *International journal of surgery* (*London, England*), 81, 105.

Conroy, D. A., Hadler, N. L., Cho, E., Moreira, A., MacKenzie, C., Swanson, L. M., ... & Goldstein, C. A. (2020). The effects of COVID-19 stay-at-home order onsleep, health, and working patterns: a survey study of United States health care workers. *Journal of Clinical Sleep Medicine*, jcsm-8808.

Colley, R. C., Bushnik, T., & Langlois, K. (2020). Exercise and screen time during the COVID-19 pandemic. *Health Rep*, *31*(6), 3-11.

Daniel, J. (2020). Education and the COVID-19 pandemic. Prospects, 49(1), 91-96.

Dashraath, P., Wong, J. L. J., Lim, M. X. K., Lim, L. M., Li, S., Biswas, A., ... & Su, L. L. (2020). Coronavirus disease 2019 (COVID-19) pandemic and pregnancy. *American journal of obstetrics and gynecology*, 222(6), 521-531.





Di Renzo, L., Gualtieri, P., Pivari, F., Soldati, L., Attinà, A., Cinelli, G., ... & De Lorenzo, A. (2020). Eating habits and lifestyle changes during COVID-19 lockdown: an Italian survey. *Journal of translational medicine*, *18*, 1-15.

Ettman, C. K., Abdalla, S. M., Cohen, G. H., Sampson, L., Vivier, P. M., & Galea, S. (2020). Prevalence of depression symptoms in US adults before and during the COVID-19 pandemic. *JAMA network open*, *3*(9), e2019686-e2019686. Fauci, A. S., Lane, H. C., & Redfield, R. R. (2020). Covid-19—navigating the uncharted.

Grabia, M., Markiewicz-Żukowska, R., Puścion-Jakubik, A., Bielecka, J., Nowakowski, P., Gromkowska-Kępka, K., ... & Socha, K. (2020). The nutritional and health effects of the COVID-19 pandemic on patients with diabetes mellitus. *Nutrients*, *12*(10), 3013.

Guan, H., Okely, A. D., Aguilar-Farias, N., del Pozo Cruz, B., Draper, C. E., El Hamdouchi, A., ... & Veldman, S.
L. (2020). Promoting healthy movement behaviours among children during the COVID-19 pandemic. *The Lancet Child &Adolescent Health*, 4(6), 416-418

Iyimaya, A. O., & Irmak, A. Y. (2021). Relationship between parenting practices and children's screen time during the COVID-19 Pandemic in Turkey. *Journal of pediatric nursing*, *56*, 24-29.