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Effects of COVID-19 Outbreak and Lockdown - A Questionnaire Based Study

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ABSTRACT

Aim: The aim of the current study is to assess the knowledge, attitude, the anxiety experienced among the general population of Chennai during the COVID-19 pandemic outbreak and lockdown.

Materials and Methods: A Cross-sectional type of study conducted among the general population comprising 101 Subjects. A questionnaire of 15 questions was framed and responses were collected in Google forms. The data was collected, analyzed statistically using SPSS software. Chi-square test was done to check the association between gender and the impact of COVID-19 and its lockdown effects. The data was represented in a Bar Chart using SPSS software statistically.

Results: The overall scenario of the COVID-19 outbreak and lockdown leads to Pessimistic outbursts in terms of Mental and Financial aspects and an Optimistic approach in terms of the natural and family way.

Conclusion: The survey has concluded that the COVID-19 pandemic outbreak and lockdown have led to fear of death among the general population, domestic abuse, unemployment, and financial crisis as a negative impact. The increase in the flourish of the environment and natural resources, decrease in global warming, and wastage of food are the positive impact of the COVID-19 outbreak and lockdown. COVID-19 outbreak and lockdown have paved the way for the global implementation of Online Education and Work from home.

Key Words: COVID 19, Lockdown, Social distancing, Monetary effect, Quarantine, Financial crisis

INTRODUCTION

Novel Coronavirus Disease (COVID-19) originated from China and has rapidly crossed borders, infecting people all around the world. This disease has spread globally leading to a massive public reaction ¹. The media is working vigorously reporting across borders to update information about the pandemic situation. This situation keeps spreading virally among the Social Media Platform creating anxiety among people. All these tend to create a lot of concern for people leading to a sensitive environment. Anxiety is a common response to any stressful situation. COVID-19 is not common diseases like ² other viral diseases.

Previously our team had conducted many clinical studies ³⁻⁹ and awareness studies ¹⁰⁻¹⁴ and research studies ¹⁵⁻¹⁷. Now we are focusing on current topics of interest. The idea for this survey stemmed from the current interest in our community.

The aim of the present study is to assess the effect of the COVID-19 outbreak and lockdown on the mental, physical and monetary state of the general population

COVID-19 infection is a highly contagious disease and has affected a larger population. The death ratio is high when compared to other pandemic diseases like SARS, Ebola, Swine Flu, etc ¹⁸. The economic impact and the rapid spread of the infection, increasing mortality due to COVID-19 is the biggest setback. The lock-down in many parts of the world has largely affected the global economy by halting the movement of services and products. This leads to a break in the global supply chains and has affected the global economy on a large scale ¹⁹. Transport has been affected globally. Educational institutions have been shut down ²⁰. The uncertainty and postponement of examinations is also a stressor for young minds.

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Individuals are globally affected in unusual and peculiar ways due to the anxiety and concerns in society ²¹. It is observed that individuals in isolation and quarantine undergo distress in the form of anxiety, anger, confusion, and mental unstableness. The Personal Protective measures to be followed by the general public largely depend on awareness and perceptions.

Lockdown and social distancing measures to prevent the spread of COVID-19 have increased the fear of domestic violence in the form of physical, emotional, and sexual abuse. The outbreak of Lockdown has paved the way for vulnerable people to get exposed to such abuse as it is more difficult to seek help. Many individuals who are in self-isolating and remaining at home under strict governmental regulations, have become addicted to online gaming creating a remarkable record in the industry which has facilitated a boost in revenue for many companies ²².

Since the onset of the coronavirus pandemic there has been an increased use of sanitizers resulting in exhaustion of resources in the market. The Government and all the governing bodies have appealed to the public to avoid all public gatherings like Political meetings, religious ceremonies, and family functions. Similarly all the educational institutions, research laboratories are instructed to remain closed, to prevent the global spread of coronavirus infection. In Spite of these efforts, the general public is ignorant of the importance of social distancing due to attitudinal issues. The present study focuses on the effect of the COVID-19 outbreak and lockdown on the mental, physical, and monetary state of the general population.

METHODS AND MATERIALS

The present study was carried out among a group of 101 subjects from the general population of Chennai, and a questionnaire (1. Name, 2. Age, 3. Gender, 4. According to you the utmost outbreak of COVOID-19? 5. COVID -19 outbreak majorly has what impact? 6. Do you agree lockdown is the best measure to control the spread of COVID-19? 7. According to you, what are the positive impacts of Lockdown? 8. Do you think lockdown will lead to domestic abuse? 9. Do you agree Lockdown has paved the way for work from home concept? 10. How do you plan the purchase of your daily requirement during this lockdown?) was framed on the "A Survey Study on Effects of COVID-19 Outbreak and Lockdown" was distributed in Google forms as an online survey. (https://docs.google.com/forms/d/e/1FAIpQLSeI1wqxOJW6cC3nkFHiXzEQesJkFINOLbhlDLq8FGiGmuXw/ viewform?usp=sf link). A convenience sampling methodology was used in selecting the samples and data were collected over a period of two weeks. And the study was approved by the institutional review board. Questionnaire quality checking was done using peer evaluation. The Survey included questions of knowledge component, attitude component, socio- personal impact component, planning component, financial trend component.

STATISTICAL ANALYSIS

The data was collected, analyzed, and represented in a Bar Chart in SPSS software statistically. Chi-square test was done and a p-value >0.05 was said to be statistically significant.

RESULTS AND DISCUSSION

Figure 1-33% of the population responded that the outbreak of COVID-19 results in unemployment, 29% responded it is fear of death and 37% opted for both. Figure 2 - 40% agreed that COVID-19 had a negative impact, 37% opted for positive impact and 22% responded for both impact. Figure 3- 62% agreed that lockdown was the best practice to control the transmission of COVID-19 and 37% disagreed with this statement. Figure 4- 49% responded that Nature healing was the positive impact of lockdown, 31% opted for global warming and 19% opted for both. Figure 5 - 62% said lockdown led to domestic abuse and 37% disagreed with this statement. Figure 6 - 51% agreed that lockdown had paved for work from home concept, 36% disagreed and 11% were neutral. Figure 7 - 80% agreed online classes were helpful to the educational system during the lockdown and 19% disagreed. Figure 8 - 34% responded for home delivery, 28% for online purchase, 14% opted for a single person moving out for purchase and 22% opted for all the options, where they were questioned about their planning for the purchase of their daily requirement. 78% agreed and 22% disagreed with the statement that they got sufficient time to spend with their family. 68% agreed and 32% disagreed that they spent their time usefully during the lockdown. 70% agreed and 30% disagreed with the statement that there will be a downtrend in the global economy, 68% agreed and 32% disagreed with the statement that there will be a price hike in daily commodities due to this lockdown. Figure 9- Chi-square analysis of gender and the utmost outbreak of COVID-19 were done. A higher number of females reported that both fears of death and unemployment were the utmost outbreak of COVID-19 (40.43%). Figure 10-Chi square analysis of gender and whether lockdown is the best measure to control the spread of COVID-19 was done. Higher number of males reported that lockdown is the best measure to control the spread of COVID-19 (65.45%). Figure 11- Chi square analysis of gender and whether lockdown will lead to domestic abuse. A higher number of females reported that lockdown will lead to domestic abuse (65.96%). Figure 12- Chi-square analysis of gender and whether lockdown has paved the way for work from home concept was done. A higher number of females reported that lockdown has paved the way for work from home concept (59.57%). Individuals globally have faced several challenges due to such lockdown. Lack of awareness of personal protective measures has led to a detached attitude, which in turn will adversely affect the mental readiness to meet these challenges. The Impacts of such epidemics and pandemics are severe, resulting in adverse effects on mental well-being ²³. The fear and anxiety related to epidemics and pandemics also influence the behavior of people in the community. Hence, this study attempted to evaluate the awareness, attitude, anxiety, and perceived mental healthcare needs in the society.

In addition to various psychological problems like depression, anxiety, and panic disorder, the COVID-19 pandemic has caused severe threats to the lives and physical health of people around the globe. Different public health strategies such as isolation of infected or at-risk persons, reduction of social contact, and simple hygiene like frequent hand wash, have been advised to reduce the risk of infection as a response to the problem posed by COVID-19 ²⁴. Even though isolation has helped in achieving the goal of controlling the spread of infections, the less interaction with family, friends, and other social support systems causes loneliness increasing mental issues like anxiety and depression.

The agricultural sector is the worst affected due to the COVID-19 outbreak. The lockdown has decreased the operation of all hospitality sectors which in turn has the decreased prices of agricultural commodities to drop by 20%. In the Manufacturing industry over 80% of Workers predict that there would be a decline in turnover in the forthcoming quarters, with 98% accepting the fact that the COVID-19 outbreak and lockdown will have a negative impact on business operations. Movement of goods and services issues and employee resource management remain the key concerns for business due to the interruption of supply chain management and self-isolation policies. Perhaps Work from home options are not viable for Concerns operating under Factories and Establishment Act ²⁵.

The government has announced a lockdown to control the transmission of Coronavirus, which in turn has affected the economy on a large scale. All the sectors are facing a non-recoverable financial crunch as they have no men and material to proceed with their normal production. The effect of the outbreak of COVID-19 on the world economy is largely focused on the primary sectors that are involved in the extraction of raw materials, secondary sectors that are involved in the production of finished products, and tertiary sectors that are involved in all service industries ²⁶.

COVID-19 has affected the education system in a substantial way, right from pre-school to university education. Globally all countries have introduced different policies, such as the temporary shutdown of educational institutions, and have

started to educate them through online classes. COVID-19 has affected communities, businesses, and organizations globally, inadvertently affecting the financial markets and the global economy ²⁷. The COVID-19 pandemic has created a hiatus in the healthcare system, education, and training of Pharmacy Professionals and other healthcare professionals for Emergency Preparedness and Response in India ²⁸.

Unorganized strategies and lockdowns have created a disturbance in the supply chain. The decline in global stock markets has developed an environment with pre-eminent liquidity level. In order to overcome these effects, the Central banks globally have intervened to ensure that sufficient fund flow is maintained and alleviate economic shock.

The COVID-19 pandemic has caused a prodigious challenge to the healthcare systems universally. The risk involved for all healthcare workers physically and mentally is one of the greatest challenges for the healthcare systems all over the world ²⁹. Intense changes in the spirits of the healthcare sector are likely to emanate, leading to immense investment in developing the disease prevention infrastructure, and the enhanced digital transformation of healthcare delivery ³⁰.

The study is largely focusing on the educated population of the country, hence it should be generalized to the whole population. The awareness, attitude, anxiety, and mental needs may vary in an uneducated population. Hence the observations may differ from the findings of the current study. Similarly, the location can be extended globally instead of restricting to India. More criteria to be included on sectorwise impact and individual thoughts on mental stress apart from panic due to lockdown to arrive at still more precise results. The future scope of the study can be global market analysis along with an increase in sample size with different age, community, country group with more criteria included.

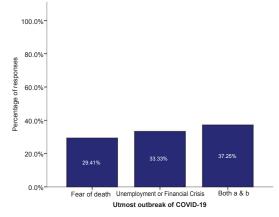


Figure 1: The bar graph represents the percentage distribution showing responses to the utmost outbreak of COVID-19. X-axis represents the responses and Y-axis represents the percentage of responses. 29.41% responded to fear of death, 33.33% responded to unemployment and 37.25% responded to both unemployment and fear of death.

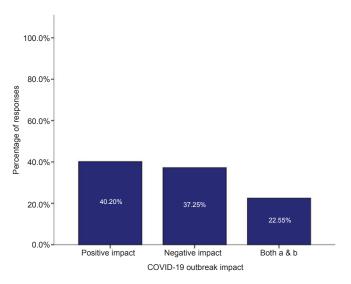


Figure 2: The bar graph represents the percentage distribution showing responses to the COVID-19 impact on people. X-axis represents the responses and Y-axis represents the percentage of responses. 40.20% responded to positive impact, 37.25% responded to the negative impact and 22.55% responded to both A & B.

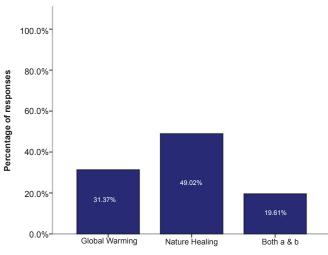


Figure 4: The bar graph represents the percentage distribution showing responses to the positive impacts of lockdown. X-axis represents the responses and Y-axis represents the percentage of responses. 31.37% responded to global warming, 49.02% responded to natural healing and 19.61% responded to both A & B.

Positive impact of lockdown

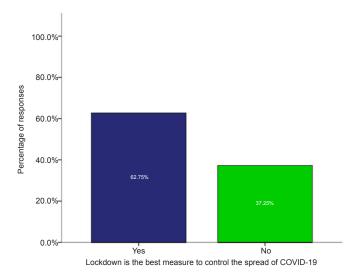


Figure 3: The bar graph represents the percentage distribution showing responses to the question of whether lockdown is the best measure to control the spread of COVID-19. X-axis represents the responses and Y-axis represents the percentage of responses. 62.75% responded yes (blue) and 37.25% responded no (green).

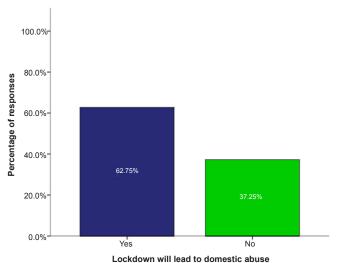


Figure 5: The bar graph represents the percentage distribution showing responses to the question of whether the COVID-19 outbreak will lead to domestic abuse. X-axis represents the responses and Y-axis represents the percentage of responses. 62.75% responded yes (blue) and 37.25% responded no (green).

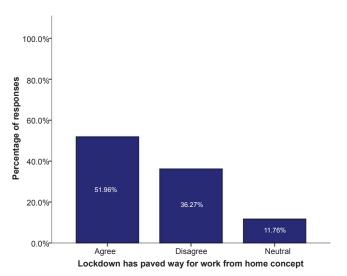


Figure 6: The bar graph represents the percentage distribution showing responses to the question of whether lockdown has paved the way for work from home concept. X-axis represents the responses and Y-axis represents the percentage of responses. 51.96% agree, 36.27% did not agree and 11.76% responded neutrally.

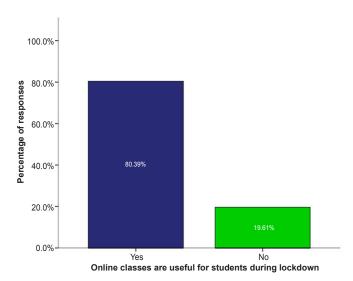


Figure 7: The bar graph represents the percentage distribution showing responses to the question of whether online classes during lockdown support the educational system for the betterment of students. X-axis represents the responses and Y axis represents the percentage of responses. 80.39% responded yes (blue) and 19.61% responded no (green).

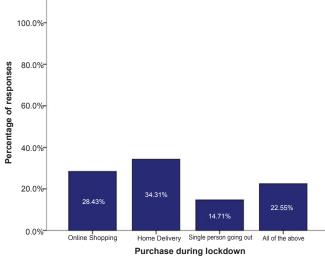


Figure 8: The bar graph represents the percentage distribution showing responses to the question of how do you plan the purchase of your daily requirements during this lockdown. X-axis represents the responses and Y-axis represents the percentage of responses. 24.43% responded to online shopping, 34.31% responded to home delivery, 14.71% responded to a single person going out, and 22.55% responded to all of the above.

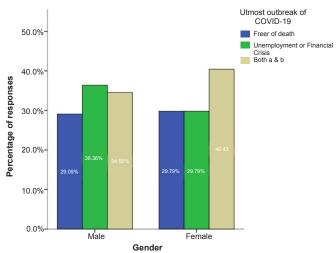


Figure 9: The bar graph represents the knowledge of the outcome of the COVID-19 outbreak. X-axis represents the gender and Y-axis represents the number of responses. The blue bar, green bar, and mustard bar represents fear of death, unemployment, and both A & B, respectively. A higher number of females reported that both fears of death and unemployment are the utmost effects of outbreak COVID-19 (40.43%). Chisquare test was done and it was not statistically significant (P =0.751, p>0.05).

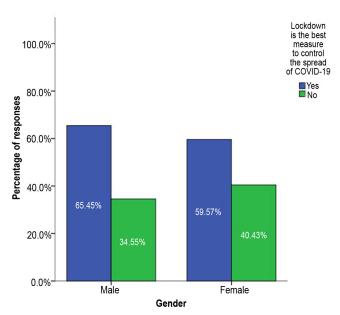


Figure 10: The bar graph represents the percentage distribution showing responses to the question of whether lockdown is the best measure to control the spread of COVID-19. X-axis represents the gender and Y-axis represents the number of responses. The blue bar represents yes and the green bar represents no. A higher number of males reported that lockdown is the best measure to control the spread of COVID-19 (65.45%). Chi-square test was done and it was not statistically significant (P = 0.545, p > 0.05).

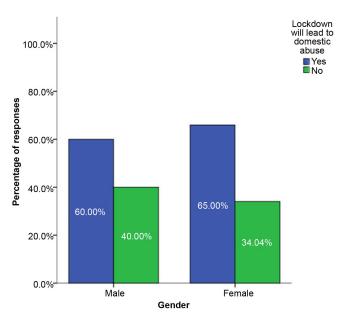


Figure 11: The bar graph represents the percentage distribution showing responses to the question of whether the COV-ID-19 outbreak will lead to domestic abuse. X-axis represents the gender and Y-axis represents the number of responses. The blue bar represents yes and the green bar represents no. A higher number of females reported that lockdown will lead to domestic abuse (65.96%). Chi-square test was done and it was not statistically significant (P = 0.540, p>0.05).

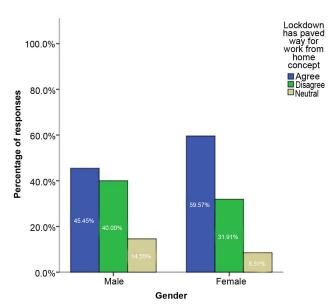


Figure 12: The bar graph represents the percentage distribution showing responses to the question of whether lockdown has paved the way for work from home concept. X-axis represents the gender and Y-axis represents the number of responses. The blue bar, green bar, and mustard bar represents agree, disagree, and neutral, respectively. A higher number of females reported that lockdown has paved the way for work from home concept (59.57%). Chi-square test was done and it was not statistically significant (P =0.144, p>0.05).

CONCLUSION

In the midst of awareness of COVID-19 infection, the methods of infection spread, and the possible preventive measures are transcendence, the worries, and apprehensions among the public regarding acquiring the COVID-19 infection keep increasing on a daily basis. The study has concluded that the COVID-19 Outbreak even though has a negative impact on the economy and mental state of individuals it has developed a new environment with global warming, natural healing.

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