



Awareness about Covid 19 Pandemic and its Social Impacts on Normal Human Lifestyle Among Chennai Population

Anu Iswarya Jaisankar¹, Raghu Nandhakumar², Ezhilarasan D^{*2}

¹Saveetha Dental College and Hospitals, Saveetha Institute of Medical and Technical Sciences [SIMATS], Saveetha University, Chennai - 600077, Tamil Nadu, India

²Department of Pharmacology, Saveetha Dental College and Hospitals, Saveetha Institute of Medical and Technical Sciences [SIMATS], Saveetha University, Chennai - 600077, Tamil Nadu, India

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ABSTRACT

Covid 19 pandemic is a terrible ongoing pandemic that has spread worldwide. Covid 19 Pandemic has infected more than 188 countries and territories across the globe. The basic biological processes and functional limitations that govern the development and survival of the particular behaviors of the virus continue to be elucidated. On that note, Prevention is the only cure. The World is facing a great economic turmoil. People suffer from Psychological stress and Economic burden combined. Here assessing the Psychological, Physical, Social, Financial and Economic impacts of the Pandemic on the people becomes really very important in analysing the mindset of the people and in evaluating the significance of implemented changes and in implementing new changes. The current study aims at analysing the various impacts of Covid 19 on the people residing at the Greater Chennai corporation circle.



*Corresponding Author

Name: Ezhilarasan D

Phone: +91 99440 08201

Email: ehilarasand.sdc@saveetha.com

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spread worldwide (Ayhan and Ozturk, 2020). But this covid-19 is not a first virus of its kind. There are four non - severe corona virus and two severe coronavirus forms that already exist in nature causing human discomfort. The non severe viruses namely NL63, OC43 and HKUI are epidemic globally and account for a significant fraction of People's upper respiratory tract infections (Soy et al., 2020). The severe forms are Severe acute respiratory syndrome coronavirus (SARS - Cov) and Middle East Respiratory Syndrome Coronavirus (MERS) are more dangerous forms.

INTRODUCTION

Coronavirus Pandemic is a dreadful pandemic that has spread worldwide. The Covid 19 infection is known to be caused by a group of viruses called Severe acute respiratory syndrome coronavirus 2 (SARS - Cov 2) (Balasubramanian, 2020). They were provincially called as Covid 19 viruses (Mag-nano et al., 2020). These SARS - Cov 2 viruses are members of, positive strand RNA virus family that are responsible for the terrorsome that has

The two severe forms of Corona viruses are zoonotic in origin and cause fatal illness in affected people (Hamza et al., 2020; Gambhir, 2020). SARS Corona viruses in 2002 and 2003 triggered extreme Severe acute respiratory syndrome outbreaks in Guangdong Province, China (Modenese and Gobba, 2020). In the same way, MERS Cov viruses were responsible for Middle East Respiratory Syndrome outbreaks in 2012 which happened primarily in the Middle East Countries (Hamza et al., 2020; Gambhir, 2020). Following their origin, The SARS Cov 2

viruses have infected more than 5.1 million people residing over 188 countries and territories (Angelantonio *et al.*, 2020). As of May 2020, more than 3,30,000 deaths had been recorded (Stone, 2020). The Covid 19 pandemic has triggered significant political, financial and economic instability and is deemed the biggest global crisis since the Great Depression (Miller, 2020). Its symptoms attribute the disease fatality. WHO has stated that 4 out of 5 people infected with this fatal virus have mild to moderate symptoms and may recover without treatment (Miller, 2020). People with morbidities are most affected. More common symptoms are fever, shortness of breath, dry cough and fatigue (Zahar and Dai, 2020) and it may develop into more severe forms such as Pneumonia, Cardiac Arrhythmia, Sepsis, Shock and can even lead to Multiple organ damage and dysfunction (Zahar and Dai, 2020). The SARS Cov 2 virus enters into the human body through eyes, nose or mouth (Miller, 2020).

The virus inflames the lining of the airway epithelium, as it goes towards the respiratory organ and reduces the oxygen consumption from the respiratory system. The heart has to work harder to compensate for the deficient oxygen in the blood (Miller, 2020). However, the increased immune response to the infection causes inflammation to spread throughout the body. The sudden blood pressure drops, causing the heart function even harder (Miller, 2020). Lungs also suffer from inflammation and become edematous resulting in shortness of breath and causes pneumonia, may worsen into lung failure (Miller, 2020). Older people also suffer from a higher risk of severe complications, due to lung tissue elasticity and less robust immune function (Vizcarra, 2020). The origin of the pandemic traces to 30 December 2019, when China's Health authorities reported a cluster of Pneumonia cases of unknown origin and reasons (Zhang, 2020). As the virus is zoonotic in nature, the spread was epidemiologically related to a seafood and wet animal wholesale market in Wuhan, Hubei Province, China (Zhang, 2020). Since the outbreak was declared a Pandemic on 11th March 2020, People have endured - Psychological and mental stress because there is currently no known vaccine or antiviral treatment available for the disease (Cuschieri and Grech, 2020). It has severely affected the Global economy so People experience Psychological stress and Economic burden together. Worldwide Authorities responded by enforcing travel ban, lockdowns, Occupational danger controls and closures (Wee, 2020). Prevention is the only cure available.

The current study aims to assess the impacts of

Covid 19 on the people residing in Chennai. Impact assessment is very critical in assessing the organisational activities (Brundha and Haritha, 2019). It helps in the judgement of the significance of the changes brought about by those activities (Brundha, 2015). Impact assessment also helps us to understand the possible implications that lead to a public beneficial changes (Hannah, 2019) It identifies the tasks required to implement the change and estimates the efforts needed to complete those tasks (Shreya and Brundha, 2017). Besides these, Most importantly, they help to examine the people's mindset and to introduce a change that restores life to normal (Kumar and Brundha, 2016; Brundha *et al.*, 2019). Therefore, a Survey had been conducted among 86 people residing in the locality of Chennai. A survey is a research method that is used for collecting data from a predefined group of respondents to gain information and insights into various topics of interest (Brundha and Haritha, 2019). It is quickly becoming the number one tool that market researchers used to gather data (Brundha and Saivignesh, 2019; Brundha and Nallaswamy, 2019). It is the most convenient form of collecting data (Timothy *et al.*, 2019). It is cost effective (Brundha and Visha, 2019). It provides high representatives (Shenoy and Brundha, 2016). It has also got good statistical significance (Preethikaa and Brundha, 2018). But it has also got some disadvantages (Prashaanthi and Brundha, 2018). They may interpretation and analysis issues (Kalaiselvi and Brundha, 2016). Can be time-consuming for the respondents (Swetha and Brundha, 2017).

Therefore the purpose of the current study is to examine the various impacts of Covid 19 on the General Public and to provide a comprehensive statistical report.

MATERIALS AND METHODS

A Survey had been conducted among 86 people residing at greater chennai corporation. A Questionnaire had been prepared with the help of Google forms and had been circulated with the help of social media platforms. Spss software had been used to evaluate the statistical data. The results had been established in Pictorial charts.

RESULTS AND DISCUSSION

Psychological and social impacts

The total study population comprises 86 people residing in the locality of Chennai. Out of it, 74.4% of the survey participants are females and 25.6% of

them are males [Figure 1]. The survey was open to people of age group 7 to 70 years. Survey results show that about 58% of the people feel comfortable staying home in the lock down whereas 41.9% feel stressed. It shows that the majority of the people are relaxed during lock down period, but the difference between two alternatives has very low margin. 75.8% of the People still interact with their neighbourhood as normal, not ignoring social distances. This shows that the Social impacts of the Covid 19 pandemic on the people is pretty much low. Majority of the people i.e 50% of the study population spend their time on social media, A relatively larger percentage 45.5% spend their time on television and rest of them spend their time with their family, on computers, on games, on praying and so on. This shows that social media continues its boom in Covid 19 era. 70.9% of the respondents said they tried innovative things during this lock down period. Most of the people felt that the pandemic has reduced pollution and Road accidents in the city. Nearly 50% of the population said the Pandemic affected their routine life, and they really miss Outings, Restaurant food and struggle with their pre-fixed meetings. But still about 96.5% of the survey population communicate with their relatives and friends through audio and video calls. It depicts that 25.6% [Blue region] of the study population are men and 74.4% are women [Green region].

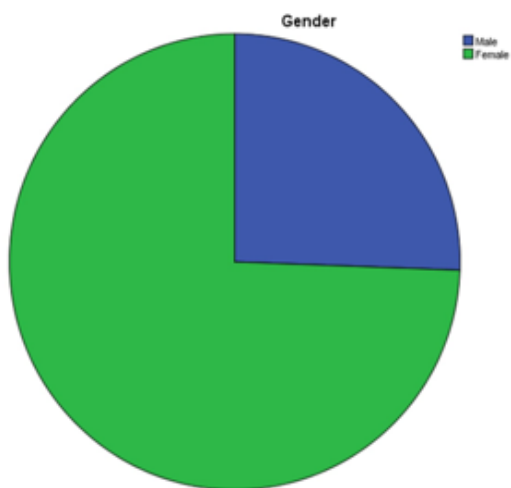


Figure 1: Pie chart represents the Gender distribution of the study population

From this we can infer that there are relatively less Psychological [Figure 3] and social impacts. Upon lockdown condition, 41.9% [Blue region] of the people underwent stress, whereas 58.1% are relaxed [Green region].

[Figure 6] on chennaites. But still people suffer

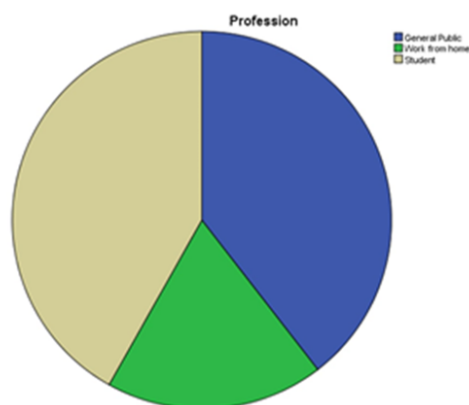


Figure 2: Pie chart represents the general distribution by randomly selecting the people's opinion based on their profession

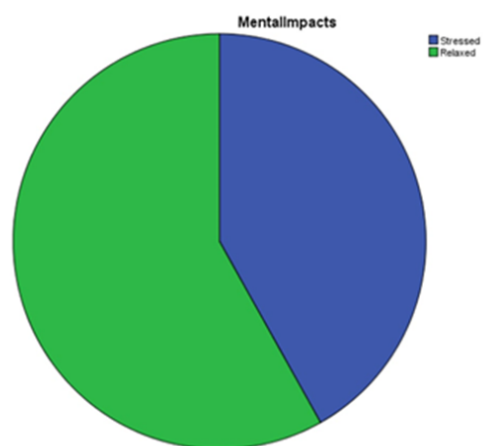


Figure 3: Pie chart depicting the common people's mental or psychological condition during covid 19 lockdown period

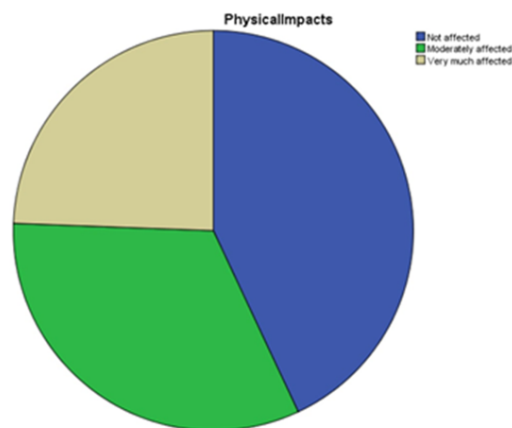


Figure 4: Pie chart represents the physical impacts of lockdown period

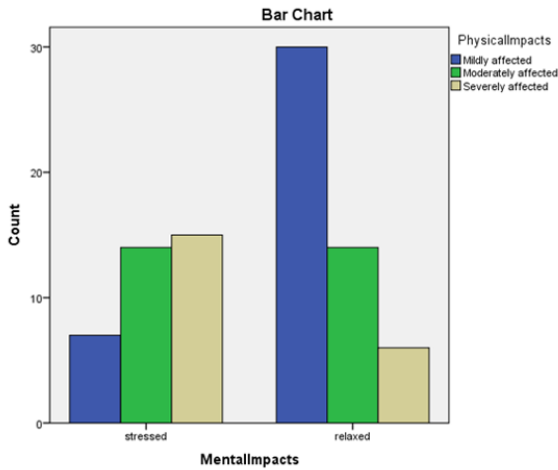


Figure 5: The bar chart representing the association between the people’s mental and physical impacts of Covid-19 lockdown period

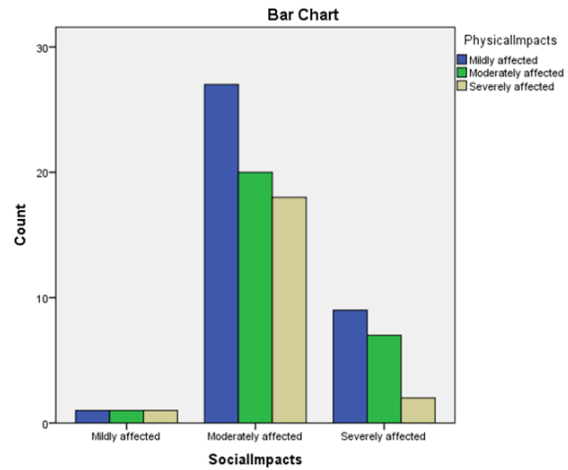


Figure 8: The Bar chart representing association between Social and Physical Impacts of Covid 19

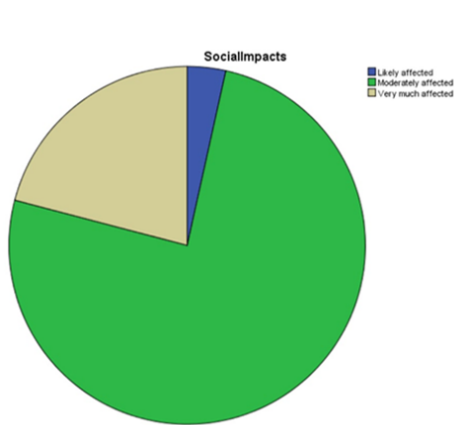


Figure 6: Pie chart representing how the covid-19 disrupted the people’s social life during the lockdown period

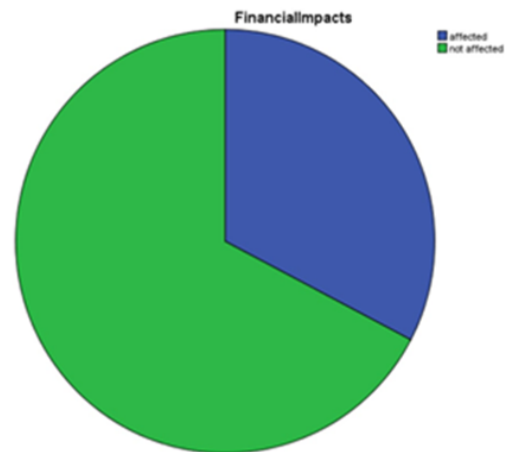


Figure 9: Pie chart depicting the Financial Impacts of Covid-19 Pandemic lockdown period

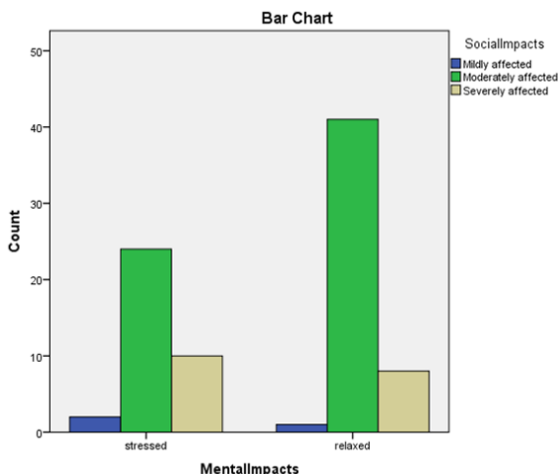


Figure 7: The Bar chart representing association between Mental and Social Impacts of Covid 19

from the change in their routine life but not much significance. A similar study by Deblina Roy et al., 2020 states that Covid 19 Pandemic has caused Great mental Stress among the People (Roy and Sinha, 2020). Over the period, 3.5% [Blue region] of people are slightly affected, 75.6% are moderately affected [Green region] and 20.9% are severely affected [Grey region]

Physical Impacts

A relatively lower number of people, i.e 24.4% of the people are very much affected and they cannot go out for their physical fitness activities, like gyms and sports clubs. 32.6% people are moderately affected and 43% of the people are not at all affected [Figure 4]. It shows that 43% are unaffected [Blue region], 32.6% are moderately affected [Green region] and 24.4% are severely affected

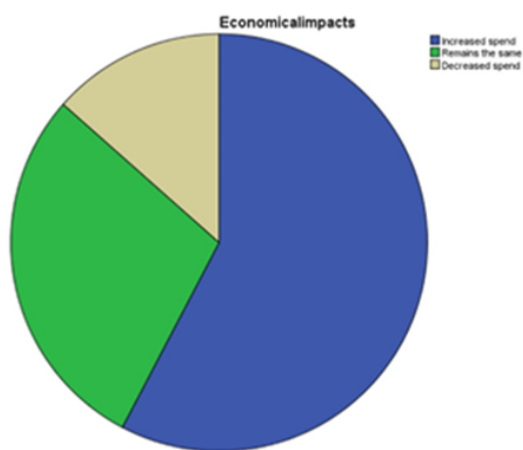


Figure 10: Pie chart representing the Economical Impacts during covid-19 lockdown period

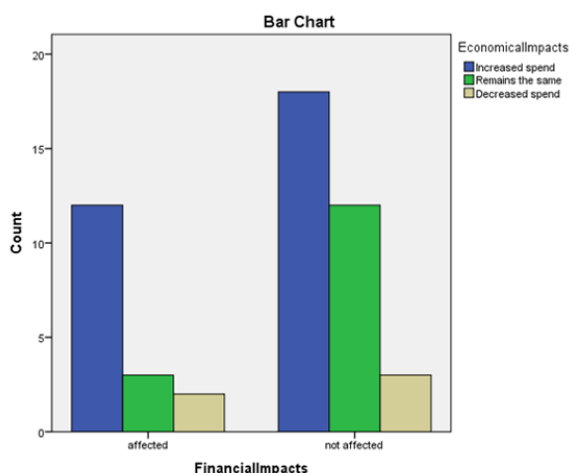


Figure 11: The bar chart representing association between Financial and Economical Impacts of Covid 19

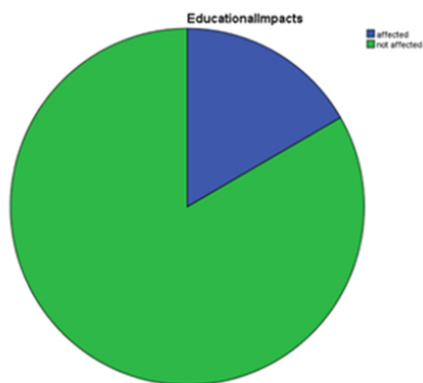


Figure 12: Pie chart depicting how the covid-19 lockdown has disrupted the normal educational systems

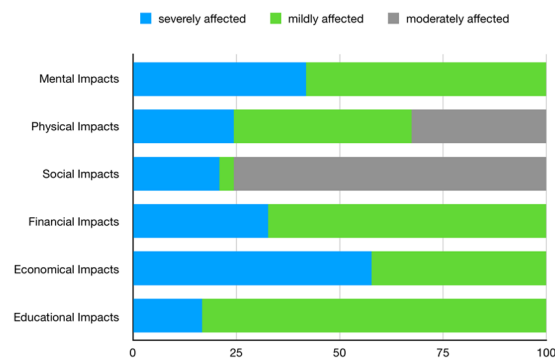


Figure 13: The cumulative graphical representation about the impacts assessment of Mental, Physical, Social, Economical, Educational and Financial condition among chennai population during the Covid19 lockdown period

[Grey region] by Covid-19 pandemic and comorbidity or lack of physical activity during the lockdown period.

[Figure 5] shows the correlation between the Physical and Mental Impacts of the Covid 19 Pandemic on the People. The P value is .000288 which is lesser than 0.05. So the correlation is statistically significant. [Figure 7] correlates the Social and Physical Impacts of the Pandemic on the People. The p value is found to be 0.685 which is not statistically significant. The correlation between the Mental and Social Impacts of the Pandemic is depicted in [Figure 8]. The p value is 0.247 which is found to be lesser than 0.05. Hence it's not statistically significant.

Educational impacts

This survey has been reported based on the people's occupation and profession. In that 41.9% respondents by students [Figure 2], concomitantly 97.2% of the students said they miss their schools and colleges. 86.1% of the people said the lockdown has initiated their minds into extra-curricular activities. 72.2% of the people have attended online classes and webinars to improve their knowledge for their curriculum and skill development. 83.3% of the students attend online classes conducted by their respective institutions. The students who attend academic online classes, 63.3% i.e. majority of the study population mentioned that they underwent stress. 66.7% have reported that their academic online learning classes are less productive than their conventional classes. 53.3% of the students said their workload was heavier than usual. But 70% said their online classes are well scheduled. A large population of students say this is the first time they take an online class. Such as 39.5% people are Gen-

eral Public [Blue region], 18.6% are people who work from home [Green region] and 41.9% are students [Grey region].

For those who did not take academic online classes, 50% claim they lag behind. 66.7% people want online classes to be conducted by their respective institutions and 66.7% of students have scheduled their spare time and time to study.

We can infer from this the majority of the people take academic online classes conducted by their respective institutions. This is the first time that they are ever taking an online class. For certain cases their schooling is not compromised but they are overwhelmed and mentally stressed with their online classes. Most people who don't take a class feel they have lagged behind in their studies, but most have a schedule. In view of all these points, the negative educational effects are lower in [Figure 12] and students are under more psychological stress. A study reports that 29.4% college students in China experience anxiety (Cao, 2020). 16.7% were affected [Blue region] by lockdown, whereas 83.3% were not affected [Green region].

Financial impacts

The lock-down has affected about 66% of people's income. 56% People still pay EMI and other monthly payments such as loans and Insurance. 58 % state they benefit from policy programs and other beneficiary events. This indicates that the pandemic has negatively impacted people's financial situation [Figure 9]. 32.7% are affected [Blue region] and 67.3% are not affected [Green region].

Economical impacts

Majority of the people have stated that the Pandemic has increased their spend on Groceries, Sanitizers, Hand washes and Mouth masks. But still near the majority of them have stated that the above items are easily available. A study by WJ McKibbin et al., 2020 has reported that the Pandemic has severely disrupted the Economy of Chinese Government (Mckibbin and Sachs, 2011). From this we can infer that the pandemic has caused a relatively high negative impacts on the Economy of the state [Figure 10] 57.7% state that the expenditure has increased, 13.5% [Grey region] state that the expenditure has decreased and 28.8% state that there were no changes in their expenditure [Green region].

[Figure 11] represents the correlation between Financial and Economical Impacts of the Pandemic on the People. The p value is 0.392 and is not statistically significant.

Impacts on office going people

Only 18.6% of the citizens work from home [Figure 2]. 75% of the people employed from home say they do not have a kind of home workplace feeling and 62.5% said they do not enjoy home job. Only 43.8% of them work in a schedule as they work in their office. But most of them, 68.3% said their efficiency has improved working from home. 43.8% do not feel any change in their workload and 37.5% felt that their workload is heavier. Only for 37.5% of people, the work from home concept is new. From this we can conclude that the Pandemic has less moderately affected the people who work from home. The Pandemic also has impacts on Dentists. Several studies state that the Pandemic has caused great hindrance to dental practice as saliva can play a crucial role in the virus transmission (Barabari and Moharamzadeh, 2020; Coulthard, 2020; Sirohi and Malhotra, 2020).

In General, the pandemic has less negatively affected the People's physical and Psychological health. Students and office staff have been mildly affected, and the cultural and financial condition of the inhabitants of Chennai has been significantly affected. 51.2% of people reported being able to tolerate the current situation if the lock is extended. [Figure 13] shows the Mental, Physical, Social, Financial, Economical and Educational Impacts of Covid 19 on the People.

Limitations of the study

The study has got some limitations. The study can not be generalised as the survey population includes only 86 people residing in the locality of chennai. Secondly: the survey is restricted to individuals with communication problems and lack of technology awarenesses like the ability to understand English with smartphones or electronic devices.

Figure 5 shows the X-axis represents the mental impacts and Y axis represents the Physical Impacts. the people who feel relaxed in the lockdown period are only mildly affected by the Physical Impacts of the Pandemic. The Graph shows that Chi-square analysis was done and association between the Mental and Physical Impacts was found to be statistically significant. Pearson's Chi Square value: 16.308, p value: 0.000288 (<0.05) hence statistically significant

Figure 7 shows the X-axis represents the Mental Impacts and Y axis represents the Social Impacts. The Graph shows that the Majority of the study population are relaxed and are moderately affected by the Social Impacts of the Pandemic. However, the Association between the Mental and Social Impacts was found to be statistically not significant. Pearson's Chi Square value: 2.797 p value: 0.247 (>0.05)

Figure 8 shows the X-axis represents the Social Impacts and Y axis represents the Physical Impacts. The Graph shows that the people who are moderately affected by the Social Impacts are mildly affected by the Physical Impacts. However, the Association between the Social and Physical Impacts that was found by Chi square test, was found to be statistically insignificant. Pearson's Chi Square value: 2.277; p Value: 0.685 (>0.05)

Figure 11 shows the X axis represents the Financial Impacts and Y axis represents the Economical Impacts. The Graph shows that People who are unaffected financially are Economically affected by the Increased spend of the commodities in the market. However, the Association between the Financial and Economical Impacts which was found by Chi square test was found to be statistically insignificant. Pearson's Chi Square value:1.872; p value: 0.392 (>0.05)

Figure 13 shows the percentage of Blue region represents the opinion of severely affected people, the Green region represents the opinion of mildly affected one and the Grey region represents the opinion of moderately affected people.

CONCLUSIONS

In spite of attempting to reduce disease transmission, we must consider and make efforts to restore the physical, psychological, educational, financial and economic status of the common citizen and their basic need to live. Our survey study will help to assess the overall statistical view of the psychological circumstances of ordinary people and their lifestyle during this lockdown period. Which will help us to take decisive steps to reverse the socio-economic recession, fight against this pandemic outbreak to recreate a stronger, wealthier and healthier human society.

Conflict of interest

The authors declare that they have no conflict of interest or this study.

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