

Impact of COVID-19 on Lifestyle Factors among Residents of Twin cities, Pakistan-A Cross-sectional Study

Farah Rashid¹, Nadia Tariq², Sadia Zafar³, Usman Zafar⁴, Shehla Farhin⁵, Syed Shoaib Hussain Shah⁶

Abstract

Objective: COVID-19 pandemic has played havoc with millions of lives worldwide, affecting not only physical health but also mental and social wellbeing. The objective of this study was to assess effect of Covid-19 on factors related to mental health and life style.

Method: It was a cross sectional study conducted among residents of Islamabad and Rawalpindi above 18 years of age, from July-August, 2020. The sample size was 886. Data was collected through a self-designed pre -tested structured questionnaire with cronbach's alpha value 0.89. It was posted on various social media platforms. Data was entered and analyzed through SPSS version 26.

Results: The mean age of the sample was 29.63±9.361. 26.6% (236) reported to have fear of death from covid-19 while 33.9% (300) felt hopeless. Increase in domestic disputes was reported to be 31.7% (281). 68.1% (603) participants performed physical activities during the lockdown. Eating habits were altered as well with 30.8% (273) participants reporting less appetite and 34.3% (304) increased appetite. 38.1% (338) had trouble falling asleep while 31% (275) said that they tended to stay asleep longer. During the lockdown, majority of the social media users (45.5%) reduced their social media usage, 21.7% (192) stopped using it completely, and 32.8% (291) continued using social media without any change.

Conclusion: Covid-19 pandemic impacted noticeably mental health and life style factors including eating habits, sleep patterns, physical activity and social media usage

Keywords: Impact, COVID-19, mental, lifestyle, factors, Pakistan, sleep, eating habits, physical activity, social media

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Introduction

The Covid-19 first began in the city of Wuhan, China. It is now established that it is a public health emergency at the global level. The disease has been found to be associated with a variety of psychological illnesses

such as anxiety, depression, loneliness, domestic, child and substance abuse.^{1,2} The pandemic has been a challenge for psychiatrists and other health professionals. The pandemic has impacted and raised number of people worldwide who need psychiatric help. In comparison to natural disasters, such as earthquakes or tsunamis, cases are distributed everywhere and not localized to a given area.^{3,4} Main factors responsible for affecting psychosocial functioning are un certainty and un predictability of this disease, impaired social functioning due to isolation and quarantine and interpersonal issues. Situation in Pakistan is even worse due to existing poor health infrastructure. Therefore, holistic and comprehensive approach is required to tackle this problem.⁵ Since Pakistan is a low middle-income and 5th most populous country, economic instability and financial

1. Department of Community Medicine, Federal Medical and Dental College, Islamabad

2-6. Department of Community Medicine, Islamabad Medical and Dental College, Islamabad

Correspondence:

Dr. Sadia Zafar, Assistant Professor, Department of Community Medicine, Islamabad Medical and Dental College, Islamabad, Pakistan
E-mail: sadia.11@imdcollge.edu.pk

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challenges have badly affected the mental health of people, along with the direct effects of the pandemic. As this pandemic has played havoc in Pakistan as in the rest of the world, its mental health effects need to be researched along with its physical and financial consequences. This study was conducted to assess the effect of Covid-19 on factors related to mental health, physical lifestyle factors on financial hardships.

Materials and Methods

It was a cross-sectional study conducted among residents of Islamabad and Rawalpindi above 18 years of age. The study duration was 2 months. The sample size was calculated by using the formula $n = \frac{[DEFF * Np(1-p)]}{[(d2/Z21-\alpha/2*(N-1)+p*(1-p)]}$ (95% confidence level, 5% precision, 50% assumed prevalence to get maximum sample size and design effect 2). Sample size was inflated by 15% for data errors to get an overall sample size of 886. Sampling technique was non-probability consecutive. As per the guidelines given by the World Health Organization and the Government of Pakistan to minimize physical social interaction, respondents were electronically invited by sharing google forms link on various social media platforms (Facebook, WhatsApp groups). They were requested to further share the link in their friends and family circles. The first 886 completed forms were included in the study. A self-developed pre-tested structured questionnaire was used for data collection. Cronbach's alpha for the tool was calculated to be 0.89. It comprised of socio-demographic profile, items related to mental health, various life style factors and financial situation. Data was analyzed using SPSS v 26. Percentages were calculated for categorical variables. Continuous variables were analyzed using mean, median and standard deviation. Inferential statistics were performed using Chi-square test and logistic regression (taking p-value less than 0.05 as significant).

Study was undertaken after approval from the Institutional review board of Islamabad Medical and Dental College. The study was self-financed. Informed consent was taken from the participants, explaining the objectives of the research in the form of a disclaimer statement. Confidentiality and anonymity was ensured. Automatically generated random IDs were given to each form filled by the participants. For data security, Google Forms ensured password protected access to the database.

Results

The data was collected from 886 participants, out of which 65.7% (582) were males and 34.3% (304) were

females. The mean age of the sample was 29.63 ± 9.361 . Regarding marital status, 52.6% (466) were unmarried, while 47.4% (420) were married. Majority of the respondents (77.7%) belonged to urban areas while 22.3% (198) were from rural areas. During the Covid-19 lockdown, 68.1% (603) reported working from home. Covid-19 pandemic adversely affected the mental well-being of people all over the world. In our study, 26.6% (236) reported to have fear of death from covid-19. 63.1% participants had little interest in daily life activities while 33.9% (300) felt hopeless. 28.2% (250) agreed that they developed feelings of being a failure during lockdown. Anxiety about future uncertainty developed in 55.3% (490), 48.9% (433) reported feelings of restlessness while 39.8% (353) felt angrier than before. On cross-tabulation, all the variables related to mental well-being, that is, fear of dying from covid infection, little interest and pleasure in daily activities, feelings of hopelessness and failure, tendency to be angrier and restless and future anxiety were more in females (p -value < 0.05). Financial insecurity was more in males (65.1%) as compared to females (37.2%) with a significant p -value of 0.000. All these variables were reported to be more among the unmarried participants with significant p -values except financial insecurity which was found to be more (64%) among married respondents. (p -value 0.000). The results of cross-tabulation are shown in table 1. Covid-19 also had drastic effects on lifestyle factors. Our study reported that 68.1% (603) participants performed physical activities during the lockdown. Eating habits were altered as well with 30.8% (273) participants reporting less appetite and 34.3% (304) feeling hungrier. Regarding sleeping habits, 38.1% (338) had trouble falling asleep while 31% (275) said that they tended to stay asleep longer. Role of social media has been debatable during the Covid-19 pandemic. Our results portrayed that majority of the respondents (31.8%) found social media depressing during this period, 16.8% found it panicky and fearful, 17% reported it to have a negative impact, while 34.3% felt that it had a positive impact. During the lockdown, majority of the social media users (45.5%) reduced their social media usage, 21.7% (192) stopped using it completely, and 32.8% (291) continued using social media without any change. On cross-tabulation, table 2 depicts that staying asleep for longer hours was reported more among females and unmarried (p -value 0.000). Less appetite was more among unmarried (p -value 0.033) and greater appetite was more among females and unmarried (p -value 0.000). Majority of the males (74.9%) and married

participants (80%) agreed that social media caused stress during Covid-19 infection. When asked about reducing social media usage, decreased usage during pandemic was reported more among males (46.9%) and married (48.6%) with significant p-value ($p=0.00$).

Discussion

Covid 19 pandemic is not just a medical phenomenon but has devastating impact on the life style and its quality affecting individuals as well as communities leading to social dysfunction.⁶ In order to determine the impact of COVID-19 on psychological wellbeing and quality of life, a Chinese study revealed 52.1% of participants were terrified and apprehensive due to the pandemic and 46.7% of the participants felt helpless.⁷ There was no significant difference between males and females in their fear of the disease while the age group 18-30 years feared more as compared to older age groups. Our study results show that 26.6% of participants have fear of dying from Covid 19 with no significant difference between males and females as well as participants having different marital status. 33.9% of the participants feel hopeless with females and unmarried people feeling hopeless more. This difference in fear of death and hopelessness with the Chinese study may be due to the fact that people of this area are more resilient or may have strong religious beliefs.

Feeling of being a failure is present among 28.2% with 33.9% having little interest or pleasure in doing things. Females and unmarried people reported little interest more. There was a high (17.9%) prevalence of psychological symptoms such as depression and anxiety among people who experienced lockdown during the COVID-19 pandemic as shown by a nationwide survey conducted in Japan.⁸ The prevalence rates of depressive symptoms and anxiety symptoms were 10.5% and 38.2%, respectively during lockdown according to an online survey conducted in India.⁹ This shows that lockdown period has led to increase in depression and anxiety. It is more in Pakistan and India. This may be due to the reason that people of these countries faced more financial constraints during lock down period. The COVID-19 crisis has hit developing countries like Pakistan which may lead to extreme economic and social turmoil in future. Any destructions in economic cycle leads to lower gross domestic product and higher unemployment rates in a country.¹⁰ Our study shows 55.5% respondents have financial insecurity during lock down which was more in males. It is justified as mostly male members of the family have financial responsibilities in this

region of the world. According to a study done in UK, working people were found to have more financial insecurity as compared to non-working which is consistent with our study due to the same reason.¹¹

Social media along with playing a positive role, has also lead to a surge of various rumors and misinformation regarding the etiology, outcomes, prevention, and cure of the disease. Such spread of misinformation is promoting wrong practices leading to poor physical and mental health outcomes. Misinformation regarding remedies and cure led to panic buying also. Our study shows the same with 72.2% of respondents agreeing that social media played a negative role and contributed to increase in stress and anxiety.¹²

Sleep plays a pivotal role in the onset and exacerbation of chronic illnesses. A recent survey, conducted by King's College London (KCL) with 2250 UK respondents revealed that 38% reported sleeping less or less well than normal before the country was placed on lockdown. This is consistent with our study that shows 38.1% of participants have trouble falling asleep and 31% sleep for longer hours. The results are also comparable with another study conducted in Karachi, Pakistan in which one third of the participants reported trouble falling asleep.¹³ Females and un married people tend to sleep longer during lock down as per our study. Energy intake is one of the most fundamental behaviors pertaining to health. Since the outbreak of COVID-19, there have been several media reports of stockpiling of household items. If the population is buying more food items, then they may be preparing more home-cooked meals. Indeed, Kantar World panel estimated a 38% increase in the number of meals consumed at home during the lockdown period.¹⁴ In our study 30.8% reported to have less appetite in this period with 34.3% reporting increased appetite.

Increase in domestic disputes was reported by 31.7% of the participants with maximum reporting increase in verbal abuse (85.5%) followed by physical (11%). It has been shown internationally that family violence can escalate during and after large scale disasters. A rise of 40% or 50% increase in family violence was reported in Brazil. In one region of Spain, the government claimed that calls to its helpline had risen by 20% in the first few days of the confinement period and in Cyprus, calls to a similar hotline rose 30% in the week after the country confirmed its first case of coronavirus. Calls to the UK Domestic Violence Helpline increased by 25% in the seven days following the announcement of tighter social distancing and lockdown measures by

the government as reported by Refuge, one of the leading domestic abuse organizations in UK.¹⁵⁻¹⁷

The results of our study relate to the studies done in the other parts of the world. There is a change in life style factors since Covid-19 strengthened its roots.

Conclusion

There was rise in depression, anxiety, financial insecurity during lock down period. Social media played a negative role by exacerbating stress and anxiety. Dietary habits, sleep pattern were disturbed and there was a rise in domestic disputes.

Conflict of Interest

None

Funding Source

None

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