ORIGINAL ARTICLE

FREQUENCY OF THE SYMPTOMS OF VARIOUS PSYCHOLOGICAL PROBLEMS IN THE PEOPLE OF SOUTH PUNJAB, PAKISTAN IN THE TIMES OF COVID 19 PANDEMIC

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# ABSTRACT

**OBJECTIVE**

To assess the frequency of the symptoms of various psychological problems in the people of south Punjab, Pakistan.

# STUDY DESIGN

Descriptive cross sectional study

# PLACE AND DURATION OF THE STUDY

This study was conducted from 1st April 2020 to 31st May 2020 through a web based questionnaire.

# SUBJECTS AND METHODS

A total of 636 participants filled the questionnaire completely from 1st April 2020 to 31st May 2020.Then the data was analyzed.

# RESULTS

The frequency of symptoms of depression, anxiety and disturbed sleep were seen in 46.8%, 45.2% and 51.2% of the participants during the Covid-19 pandemic. The relationship of these factors with gender was statistically significant.

# CONCLUSION

Psychiatric problems along with the disease itself should be addressed to uplift the health of the community.

# KEY WORDS

Covid-19, depression, anxiety, stress, corona

# INTRODUCTION

The emergence of the COVID-19 pandemic caused by new virus SARS-CoV-2 is placing communities and the health care systems in a unprecedented stress as a whole.1,2 As the virus continues to spread across the world in the absence of a definitive treatment or a vaccine, it has forced many countries to respond with strong preventive interventions ranging from quarantines

,lockdowns and mitigation thus limiting mobility to varying degrees.1,3 Although these measures announced over the recent months to tackle this situation are an effective model in controlling transmission and rapid spread but they have drastically altered day-to-day life3,4.Although these changes are essential to beat corona virus and protect our health systems they may lead to significant financial and psychosocial negative consequences. Social distancing foster loneliness and isolation5; exposes personal and collective vulnerabilities while limiting accessible and familiar support options. Closure of educational institutes, businesses and job losses has led to immediate economic instabilities and deprives many individuals of essential sustenance and healthcare benefits.6 Psychological consequences may range from stress, anger and frustration to varying degrees' depression and anxiety leading to sleep deprivation.3

As very scarce data available on the relationship of this pandemic with the physiological issues of the general population so we aimed to assess the mental health burden of the people of South Punjab, Pakistan during COVID- 19 pandemic. We hope that the findings of our study will provide a data support for the targeted interventions related to the psychological health in our population.

The objective of my study was to assess the frequency of the symptoms of various psychological problems in the people of south Punjab, Pakistan.

# SUBJECTS AND METHODS

**Participants**

This cross sectional descriptive study was conducted from 1st April 2020 to 31st May 2020. All individuals living in South Punjab who completely filled the web based questionnaire in the study duration were included in the study. Incomplete questionnaires were excluded from the study. A total of 1000 questionnaires were sent. Out of these 935 questionnaires were received back. Out of these, 636 were completely filled questionnaires fulfilling the study criteria to be included in the study.

**Instruments**

Keeping in view the route of transmission of the prevailing pandemic disease, a web based questionnaire was formed using different questionnaire scales. We used Generalized Anxiety Disorder-7 (GAD-7) scale to assess anxiety

symptoms in our subjects. It consists of 7 items which assess the frequency of anxiety symptoms over the past 2 weeks on a 4-point Likert-scale ranging from 0 to 3, where 0 means never and 3 means nearly every day. The total score ranged from 0 to 21, with the increasing scores indicating more severe form of anxiety. For our study we defined a score of 9 or greater as the presence of anxiety. The CES-D (Center for Epidemiology Scale for Depression) was used to identify depressive symptoms. It has 20 items which assess the frequency of depressive symptoms on a 4-point Likert-scale ranging from 0 to 3. The total score range was 0-60 points, the higher the score the more sever the functional impairment as a result of depression. For the purpose of this study, a CES-D score more than 28 points would be labeled as depression. Pittsburgh Sleep Quality Index scale (PSQI) was used to assess the sleep quality of our subjects over the past 2 week. It contains 7 components with each component ranging from 0 to 3 points and a score more than 7 points indicates a poor sleep quality.

# RESULTS

A total of 1000 questionnaires were sent. Out of these 935 questionnaires were received back. From these 935 questionnaires, 636 completely filled questionnaires fulfilling the study criteria were included in the study. Out of these 284 (44.6%) were males and 352 (55.3%)were female. The ages of the participants ranged from 26-55 years with a mean age of 37 yr + 7.7 SD. Most of the participants fell in the age group of 36-45 yrs. Most of the participants, 190 (29.8%) were not doing any regular job, followed by doctors and teachers respectively, 170 (26.7%) and 128 (20. 1%) see table 1.

**Table 1 Socio demographic profile of the participants**

|  |  |  |
| --- | --- | --- |
| **Gender** | **Frequency** | **Percentage** |
| Male | 284 | 44.6% |
| Female | 352 | 55.3% |
| **Age groups(yrs)** |  |  |
| 26-35 | 157 | 24.6% |
| 36-45 | 280 | 44.0% |
| 46-55 | 199 | 31.2% |
| **Occupation** |  |  |
| doctor | 170 | 26.7% |
| teacher | 128 | 20.1% |
| shopkeepers | 88 | 13.8% |
| Banker | 60 | 9.4% |
| others | 190 | 29.8% |

According to the criteria of scoring on the generalized anxiety

**Table 4 Distribution of various psychological disorders by occupation**

disorder 45.2% of our study population showed considerable symptoms of anxiety (table 2). Out of these 45.2%, most of the participants were females (62.5%) see table 3.

Depression symptoms were observed in 46.8% of the subjects (table 2). Among these most of the subjects were males (52. 9%) see table, and predominately the male doctors were suffering from symptoms of depression the most. Followed by the shopkeeper (63.6%) see table 4.

Sleep quality was disturbed in 51.2% of the subject owning to the fear of the pandemic (table 2). Among these subjects with no regular source of income were most effected (65.2%) followed by doctors (59.4%) see table 4.

Regarding relationship of gender with anxiety in covid-19 pandemic, the observed difference between the two groups is statistically significant. As far as the relationship of depression with gender was concerned the results were significant. there was a statistical significance seen in the sleep quality and gender as well. (table 3)

**Table 2 frequency of symptoms of diﬀerent psychological disorders in the population**

|  |  |  |
| --- | --- | --- |
|  | **Total** | **%** |
| GAD |  |  |
| Yes | 288 | 45.2 |
| No | 348 | 54.7 |
| Depression |  |  |
| Yes | 298 | 46.8 |
| No | 338 | 53.1 |
| Sleep quality |  |  |
| Good | 326 | 51.2 |
| Poor | 310 | 48.7 |

**Table 3**

**Relationship of gender with the symptoms of psychological disorders**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Total | Male | Female | Chi sq. | p-valve |
| GAD |  | | | | |
| Yes | 288 | 108 | 180 | 67.8 | 0.05 |
| No | 348 | 244 | 104 |
| Depression |  | | | | |
| Yes | 298 | 153 | 145 | 12.3 | 0.05 |
| No | 338 | 76 | 137 |  |
| Sleep quality |  | | | | |
| **D**G**I**o**S**o**C**d**USSION** | 326 | 83 | 125 | 31.2 | 0.05 |
| Poor | 310 | 201 | 109 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Anxiety** | doctors | teachers | shopkeepers | Banker | others |
| yes | 90(52.9) | 65(50.7) | 10(11.3) | 48(80) | 75(39.4) |
| No | 80(47.0) | 63(49.2) | 78(88.6) | 12(20) | 115(60.5) |
| **depression** |  |  |  |  |  |
| yes | 116(68.2) | 70(54.6) | 56(63.6) | 21(35) | 35(18.4) |
| no | 54(31.7) | 58(45.3) | 32(36.3) | 39(65) | 155(81.5) |
| **Sleep quality** |  |  |  |  |  |
| good | 69(40.5) | 98(76.5) | 47(53.4) | 46(76.6) | 66(34.7) |
| poor | 101(59.4) | 30(23.4) | 41(46.5) | 14(23.3) | 124(65.2) |

The Covid-19 pandemic has changed the lives of the people around the world radically.7 The strongest measures taken to manage and contain this epidemiological emergency has undoubtedly subjected the family structures to some tensions and critical issues.8 It is also not known that how long will it last. The global prevalence of mental health issues along with the pandemic itself have become a major secondary health concern. People all over the world are experiencing confusion, anger, fear, anxiety depressive symptoms and sleep problems during the self-isolation and quarantine.6,7,8

Our study was about the psychological problems faced by people of south Punjab. A total of 636 participants filed the Performa. Out of these there were 284 males and 352 females.

Symptoms of psychological problems were seen in almost half of the study population. One of the most stressful situations is the seriousness of the risk, unpredictability and the uncertainty about ending of this pandemic situation. These, along with some predictions and misinformation by the social media can heighten concern among the populations. These challenges and stresses can trigger various mental disorders, such as anxiety and depression.6

In our study anxiety symptoms of varying degree was observed in 45.2% of the study population. Our results are similar to a study done in Bahawalpur8 in which 44.0% of the study population was suffering from anxiety. Similar results were observed in a study conducted in China 9where the anxiety level was 35.1%.

According to the previous data of pandemics and epidemics of similar intensity serious concerns about fear of death and feelings of loneliness can develop among people who are quarantined or isolated.8,9 In addition to this people lose traditional social interventions and face-to-face connections which is a stressful phenomenon as well. We can be inferred from these points that in the context of public health emergencies the psychological interventions should be a part of the health care system in the face of such crises. In the age of modern media, where people are overloaded with misinformation and rumors which are mostly not verified and usually not authenticable. These rumors and unauthenticated information create even more fear, anxiety and depression.

Depression symptoms among our study population was observed to be 46.8%. these were in contrast to a study done in China9 where only 20% of the population was suffering from depression. This difference may be because of the fact that the basic family unit of Pakistan is consanguine and extended with multiple generations living together or close by. In this culture, social distancing practices and lockdowns pose a challenge on mental health of all family members. People depend on family support and friend interactions to keep feelings of loneliness, negative emotions and psychological distresses away.10,11 People could experience depressive symptoms, anxiety, fear of getting oneself or a family member infected, fear of death, sleeplessness, anger and many other mental health problems during this period. 68.2% of the doctors were experiencing depression. The health care providers are exposed to both physical and psychological stresses, lack of personal protective measures,12 increased workload, suspected patients concealing history and a large number of their colleagues becoming covid 19 positive and dying owing of no proper treatment, no vaccination and lack of facilities in the public hospitals may be the reasons behind this alarming rise of depression in the health care workers8,13.

They are also afraid of carrying the virus to their families. Another population which had a high rate of depression were the shopkeepers (63. 6%). This may be because of the financial instability and economic loss they were facing during the complete lockdown period in the pandemic situation.6,8,14

Poor quality of sleep was observed in 48.7% of the study population. Out of which the population with no regular job were the most effected (65.2%). During this pandemic where billions of individuals have lost their jobs, people working on daily wages or in informal organizations are the worst hit. As they are now struggling for food, shelter and livelihood for themselves and their families which created extreme uncertainty leading to psychological problems the most.

# CONCLUSION

The Government of Pakistan should incorporate psychological interventional programs with the ongoing interventions in the field of treatment and prevention of this public health emergency in the healthcare system. So that the psychosocial and mental health impact of COVID-19 can be timely, effectively and efficiently mitigated.

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