

Analyze the Association of Depression and Anxiety in Patients with and without Pandemic Disease Covid-19

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ABSTRACT

Objective: The purpose of this study is to compare the prevalence of depression and anxiety in people with and without COVID-19.

Study Design: Cross-sectional

Place and Duration: Sahara Medical College / Sughra Shafi Medical Complex Narowal. Feb-2021-Aug 2021

Methods: In this study, 178 cases of both sexes had age 15-55 years were presented. After obtaining written consent, the patient's complete demographic information—including age, sex, and BMI—was collected. Two groups of patients were split evenly. Group M contained 89 COVID-19 patients, while group N contained 89 cases but did not contain COVID-19. Both groups' rates of depression and anxiety were assessed. It was decided to use structural questionnaires. SPSS 18.0 was used to analyze all the data.

Results: Among 178 cases, 104 (58.4%) were males and 74 (41.6%) were females. Majority of the cases 80 (44.9%) had age 18-30 years, 65 (36.5%) had age 31-40 years and 33 (18.5%) had age >40 years. 120 (67.4%) had BMI <25kg/m² and 58 (33.6%) had BMI >25kg/m². We found significantly higher number of depression 48 (53.9%), anxiety 30 (33.7%) and stress 19 (21.3%) in patients of group M as compared to group N found in 24 (26.9%), 18 (16.9%) and 11 (12.4%) with p value <0.005.

Conclusion: In this study, we found that, in comparison to non-COVID 19 patients, COVID-19 patients typically experienced significant levels of anxiety and depression. Patients with medical conditions should learn methods for quick identification and treatment of depression and anxiety.

Keywords: COVID-19, anxiety, depression, illness

INTRODUCTION

The Coronavirus-2 that brought on Coronavirus Disorder 2019 (COVID-19) has been declared a pandemic by the World Health Organization as of March 11, 2020 [1]. Over six million lives have been lost, and over 500 million people have been infected with this virus [2]. Human-to-human transmission occurs through close touch with an infected individual by coughing, sneezing, or aerosols, hence several preventative public health measures were implemented to stop the spread of infection [3].

These actions have drawbacks even if they were thought to be successful in slowing the pandemic's spread. The daily schedules, modes of operation, and interpersonal relationships of people have to be dramatically altered. For instance, working parents who work from home must also take care of their children, all meetings must be conducted online instead of in person, business and social outings must be postponed, and even handshakes and embraces are not permitted. Therefore, it was reasonable to anticipate that the prevalence of those exhibiting mental health symptoms would rise [4].

There was initially less focus on the potential mental health consequences of the COVID-19 pandemic [5], but several research have subsequently appeared on the topic. A recent meta-review of meta-analyses [6] found that depression and anxiety were frequent during the COVID-19 pandemic, with rates of 26.93% and 27.77%, respectively. It was estimated that 4.4% of the population suffered from depression and 3.6% from anxiety prior to the epidemic [7]. These figures are very high. Age, gender, education, socioeconomic position, marital status, presence of children, job as a healthcare worker (HCW), and self-quarantine history are all factors that increase vulnerability [8]. Despite the growing body of academic work on the subject, there are still three major knowledge gaps concerning mental health during the COVID-19 epidemic.

Anxiety and anxiousness permeate all aspects of a society. Recent studies show that people who are quarantined or otherwise isolated have severe psychological problems, including increased tension, anger, and other unpleasant emotions [9]. Studies examining the mental health effects of the COVID-19 pandemic have consistently indicated that those who have contracted the virus have had a wide range of symptoms, including anxiety, melancholy, irritability, sleeplessness, ADD/ADHD, PTSD, and

aggression [10]. Constant contact with the media has also been linked to detrimental consequences. However, in this setting, the specific psychological and emotional effects of COVID-19 are hard to predict. Researchers in China, the first country to experience this pandemic, found that people's fears about the virus's unknown features contributed to the onset of mental health problems [11].

Due to the virus' high mortality rate, rapid spread, and pathogenicity, COVID-19 may have an impact on people's mental health at different levels of society, including those who are infected and working in the medical field as well as their families, kids, students, people who have mental illnesses, and even those who work in other industries [12].

Since doctors and other healthcare professionals are regarded as the heroes of this pandemic crisis and are the major support system for any healthcare system, it is crucial to look after their physical and mental health in order for them to carry out their duties as effectively as possible. In Pakistan, one-third of doctors were diagnosed with anxiety and/or depression prior to the epidemic, according to scant data [13]. Due to the novelty and rapid expansion of this crisis scenario, particularly in developing countries, research to determine the impact of these speculative components on the mental health of frontline physicians do not yet exist. The COVID-19 epidemic in Pakistan makes it imperative to conduct a research to determine how frontline doctors and general practitioners working in both commercial and public healthcare facilities perceive the pandemic, its frequency, and the causes of sadness and anxiety. The findings of this study will help in the creation of practises, regulations, and interventions that will improve the mental health of frontline employees at their places of employment. [14,15]

This paper examined the COVID-19 patient population's mental health status while they were hospitalised. Following a period of clinical stability, some psychological symptoms, such as depression and anxiety, were examined in these patients.

MATERIAL AND METHODS

This cross-sectional study was conducted at Sahara Medical College / Sughra Shafi Medical Complex Narowal and comprised of 178 patients. After obtaining written consent, the patient's complete demographic information, including age, sex, and BMI, was collected. Patients with serious illnesses of any kind and those

who refused to give written consent were not allowed to participate in this study.

Those with COVID-19 who had no symptoms or very moderate symptoms and were not hospitalised made up the study population. Patients who meet the following requirements will be admitted to the quarantine unit: The results of the COVID-19 reverse transcriptase-polymerase chain reaction (RT-PCR) test indicated that the patient was able to care for themselves and showed no or minimum symptoms. Prior to being placed in assisted quarantine, responders were selected to ensure they would not suffer any negative psychological effects. When those who met the research's inclusion criteria showed up at the registration counter, the registrar formally welcomed them by name and spoke to them about the study. Participating patients had to immediately sign an informed permission form and fill out a paper questionnaire.

Individuals between the ages of 18 and 55 years. Two sets of patients each received an equal number. While group N lacked COVID-19, group M contained 89 patients who did. Both groups were assessed for the prevalence of anxiety and depression. There were implemented structural questionnaires. The prevalence was calculated by means of descriptive statistical methods. Version 18.0 of SPSS was used to analyze all data.

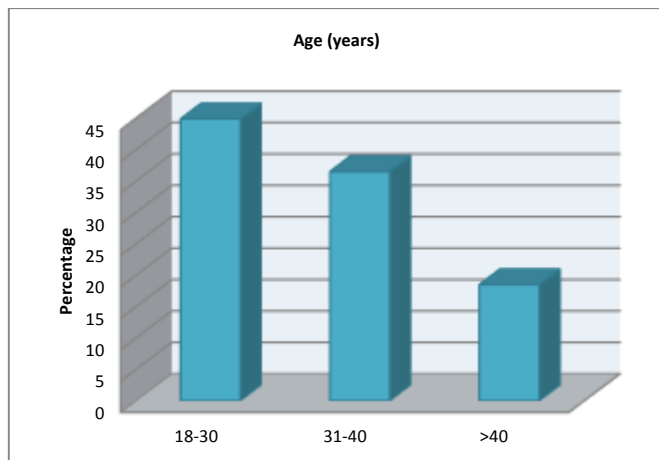
RESULTS

Among 178 cases, 104 (58.4%) were males and 74 (41.6%) were females. 120 (67.4%) had BMI <25kg/m² and 58 (33.6%) had BMI >25kg/m². Majority of the cases were married and were from urban areas. There were 112 (62.9%) patients illiterate among all cases.(table 1)

Table-1: Demographics of the enrolled cases

Variables	Frequency	Percentage
Gender		
Male	104	58.4
Female	74	41.6
BMI		
<25kg/m ²	120	67.4
>25kg/m ²	58	33.6
Marital Status		
Married	115	64.6
unmarried	63	35.4
Place of Living		
Urban	98	55.1
Rural	80	44.9
Education status		
Literate	112	62.9
illiterate	66	37.1

Majority of the cases 80 (44.9%) had age 18-30 years, 65 (36.5%) had age 31-40 years and 33 (18.5%).(figure 1)



Hypertension, diabetes mellitus and ischemic heart disease was the most common comorbidities among all cases.(figure 2)

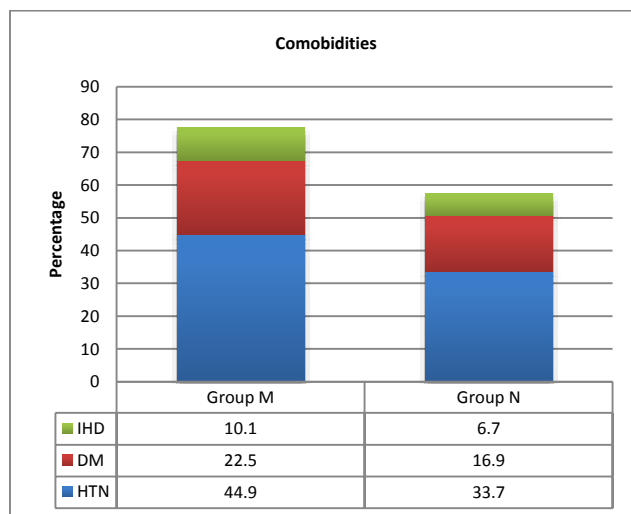


Figure-2: Comparison of comorbidities among both groups

We found significantly higher number of depression 48 (53.9%), anxiety 30 (33.7%) and stress 19 (21.3%) in patients of group M as compared to group N found in 24 (26.9%), 18 (16.9%) and 11 (12.4%) with p value <0.005.(table 2)

Table 2: Among both groups comparison of anxiety and depression

Variables	Affected Cases	Non Affected Cases
Depression		
Yes	48 (53.9%),	24 (26.9%)
No	41 (46.1%)	65 (73.1%)
Anxiety		
Yes	30 (33.7%)	18 (16.9%)
No	59 (66.3%)	71 (83.1%)
Stress		
Yes	19 (21.3%)	11 (12.4%)
No	70 (78.35)	78 (87.6%)

DISCUSSION

According to the COVID-19 Mental Disorders Collaborators, major depressive disorders cases increased by 276 percent and anxiety disorders cases increased by 256 percent globally in 2020 as a result of the pandemic. [16] On the other hand, our argument is that these prevalence figures are most likely considerably inflated. Following stressful life experiences like loss or exposure to a disaster, most people recover or are resilient (having minimal influence on their anxiety, depressive, or both symptoms) (initial short-term increase in symptoms of anxiety, or depression, or both, followed by recovery). [17] This trend fits with the outcomes of in-depth analyses and research in the framework of COVID-19. [18]

In current study 178 patients were presented. Among 178 cases, 104 (58.4%) were males and 74 (41.6%) were females. 120 (67.4%) had BMI <25kg/m² and 58 (33.6%) had BMI >25kg/m². Majority of the cases were married and were from urban areas. There were 112 (62.9%) patients illiterate among all cases. These results were comparable to the previous researches.[19,20] Majority of the cases 80 (44.9%) had age 18-30 years, 65 (36.5%) had age 31-40 years and 33 (18.5%).[16-20] Regarding the relationship between perceived stress and marital status, several research have shown that marriage has a calming effect on anxiety [21]. The COVID-19 criteria are ambiguous, thus further research is required to assess the effectiveness of common protective characteristics in this area [8]. Environmental and social factors appear to be quite important in this situation. Due to the complexity of the symptoms associated with COVID-19, a thorough examination of the relationship between marriage and anxiety and

stress among these patients requires additional investigation in other relevant research.

In our study, the group of patients who had only a diploma and were illiterate had the highest risk of depression, followed by the group of patients who had a bachelor's degree. This finding may be related to the association between socioeconomic level and psychiatric diseases. The relationship between socioeconomic status and educational attainment and depression has been the subject of debate in a number of research, although the majority of them show that there is an inverse association between the two [22].

We found significantly higher number of depression 48 (53.9%), anxiety 30 (33.7%) and stress 19 (21.3%) in patients of COVID 19 as compared to non-COVID patients found in 24 (26.9%), 18 (16.9%) and 11 (12.4%) with p value <0.005. Previously researches presented same results in which depression and anxiety was higher in numbers than non-affected patients.[20,21] Guo et al. discovered that depression and anxiety were both widespread in a 2020 examination of the mild COVID-19 patients in China, with comparable prevalences of 17.5% and 6.8%. The combined ratings for anxiety and depression in moderate COVID-19 patients were also significantly higher than those of matched normal individuals [23]. In Korea, incidences of sadness and anxiety were 10.3-24.3% and 14.9-15.9%, respectively, in individuals with moderate or asymptomatic COVID-19 [24]. In a study on Indian COVID-19 patients who were asymptomatic, researchers found that the prevalence of melancholy, worry, and stress was 49.4%, 40.9%, and 75.8%, respectively [25].

People that read the most COVID-19 information reportedly experience more anxiety [26]. Continuous exposure to COVID-19 news raises anxiety levels since the bulk of the news is distressing and occasionally connected to rumours [27]. Depressive symptoms in the general population can be made worse by false information and exaggerated stories concerning COVID-19 [28]. Anxiety levels can be reduced by knowing the most recent and reliable information, such as the number of people who have improved and the development of drugs and vaccinations [29]. Mental health practitioners advise promoting healthy habits, avoiding unpleasant news, and adopting alternative communication channels like social networks and digital communication platforms to reduce social isolation in this regard [30].

Similar high frequency and severe psychiatric disorders suggest that hospitalised COVID-19 patients require a considerable commitment to their mental health. Coherent screening and management measures appear to be needed by health policymakers. The introduction of an educational programme and patient-centered psychiatric treatments may both be successful at a community level in the continuum of this condition.

CONCLUSION

In this study, we found that, in comparison to non-COVID 19 patients, COVID-19 patients typically experienced significant levels of anxiety and depression. Patients with medical conditions should learn methods for quick identification and treatment of depression and anxiety.

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