

ORIGINAL ARTICLE

COVID-19 Pandemic: Psychological Impact on Postgraduate Gynae Residents in Pakistan

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ABSTRACT

Objective: The aim of this study is to determine the psychological impact (anxiety, stress and depression) on postgraduate Gynae residents in Pakistan during COVID-19.

Study Design: Cross-sectional study

Place and Duration: The study was conducted through a questionnaire of Google Proforma which was distributed among the PGRs of Gynae and Obs department of different centres of Pakistan. The study was conducted for nine months during from April 2020 to December 2020.

Methods: Total 180 participants (PGRs) were presented in this study. Complete characteristics of the participant were obtained. Postgraduate Gynae Residents from different centers were enrolled in this study. DASS-21 scale was used to measure the severity of anxiety, depression and stress among all participants. Complete data was analyzed by SPSS 24.0 version.

Results: Mean age of the participants was 30.24±3.08 years. 109 (60.5%) participants were married and the rest 71 (39.5%) were unmarried residents. Frequency of depression was found among 130 (72.2%) participants followed by anxiety 118 (65.5%), stress found in 105 (58.3%) participants.

Conclusion: We concluded in this study that the prevalence of psychological impacts on Gynae residents were significantly higher in terms of mild, moderate and severe intensity. Early detection and prevention of factors i.e. depression, anxiety and stress are necessary in hospitals.

Keywords: Post graduate, Gynae residents, COVID-19, Psychological impacts

INTRODUCTION

COVID-19 pandemic is considered a major threat to public health, according to the World Health Organization (WHO). [1] COVID-19, like previous outbreaks like SARS-CoV and Middle East respiratory syndrome (MERS), has created a number of challenges for healthcare workers around the world, including increased workload, limited availability of personal protective equipment, scarcity of life-saving resources, frustration, isolation, and 'fear of possible infected' [2] All of these factors enhance the likelihood that HCWs may experience psychological distress." A growing body of research demonstrates that COVID-19 exposes HCWs to high levels of mental anguish. [3–5] We don't have enough data from low- and middle income (LMIC) nations on how depression rates have changed over time. One study in India indicated that 32.6 percent of health care workers had depression during the COVID-19 pandemic, which is substantially higher than the 10 percent prevalence of common mental disorders recorded among the general population of this country. [6] Even in normal circumstances, postgraduate trainees are among the most susceptible HCWs due to high burnout and psychological morbidity rates. It's been reported in previous studies that junior doctors feel under strain and resentful that primary care is often left up to them in crisis situations. After the COVID-19 pandemic, postgraduate trainees are projected to represent the majority of the personnel responsible for dealing with the impending surge of patients infected with COVID-19 [8] During the COVID-19 pandemic, junior

doctors have expressed concerns about the need to move postgraduate trainees to high-demand departments, the likelihood of coming into contact with suspected or confirmed cases of COVID-19, the need to make difficult ethical decisions, the cancellation of teaching programmes and study leaves, and the uncertainty about jobs and rotations. In Pakistan, there have been reports of similar views [9]. The risk of psychological distress among HCWs during viral outbreaks is higher when they are on the front lines, younger, and more junior. [2] Suicidal ideation and other major mental health disorders are related with the psychological discomfort, as well as medical errors and lapses in professionalism. [11,12]

Numerous studies have shown that COVID-19 outbreaks are related to a variety of psychiatric issues, which may persist even after the outbreak has ended. Because of this, it's imperative that we determine how many people are suffering from psychological issues and which populations are at danger of needing extra help.

When COVID-19 broke out in the general population of Pakistan, this study was designed to examine the psychological impact of that outbreak.

MATERIAL AND METHODS

This cross-sectional study was conducted at the Department of Gynae and Obs of different centres of Pakistan and the study was composed of 180 participants. This is the survey based study and postgraduate residents of multi centers were enrolled. It was decided to use a

structured online proforma to communicate with postgraduate gynecology residents by providing them with a brief summary of the research being done, followed by consent section in the form of "Yes" or "No" to assure their voluntary involvement in the study. In this study, only those individuals who gave agreement to participate in the study and were granted access to the Google proforma were considered for inclusion. After obtaining informed written consent, the study participants' demographic data, such as age, marital status, gender, year of training, and whether or not they had contracted COVID-19 infection herself/himself or any member of their family, were recorded.

The Depression, Anxiety, and Stress Scale (DASS-21), which consists of 21 questions and is commonly used in surveys, was utilized in this study. It is intended to assess three closely linked negative emotional states, namely depression, anxiety, and stress. It is based on a dimensional rather than a categorical view of psychiatric disease, as is the case with the Beck Depression Inventory. Complete data was analyzed by SPSS 24.0 version. Categorical variables were calculated by frequencies and percentages.

RESULTS

Mean age of the residents was 30.24 ± 3.08 years. 109 (60.5%) participants were married and the rest 71 (39.5%) were unmarried residents. 30 (16.67%) had 1st year of training, 56 (31.11%) had 2nd years, 38 (21.11%) had 3rd year and 56 (31.11%) had 4th year of training. (Table 1)

Table 1: Baseline details demographics of enrolled cases

Variables	Frequency	Percentage
Mean age	27.16 \pm 9.78	
Marital status		
Yes	109	60.5
No	71	29.5
Training Year		
4 th	30	16.67
3 rd	56	31.11
2 nd	38	21.11
1 st	56	31.11

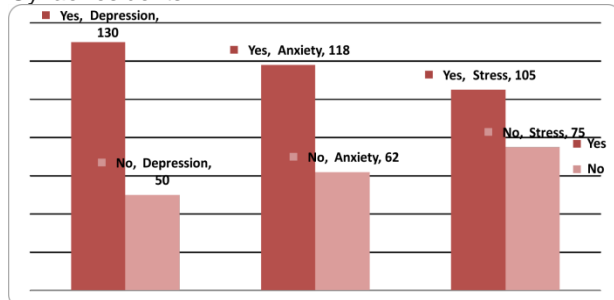
We found that 60 (33.33%) participants were infected of COVID-19 and the rest were had negative. (Table 2)

Table 2: Frequency of COVID-19 disease

Variables	Frequency (n=180)	%age
COVID-19 disease		
Yes	60	33.33
No	120	66.67

Frequency of depression was among 130 (72.2%) participants followed by anxiety 118 (65.5%), stress found in 105 (58.3%) participants.(Figure 1)

Figure No 1: Prevalence of psychological impacts on Gynae residents



Among 130 participants of depression, 50 participants had mild, 65 participants had moderate and severity was among 15 participants and in anxiety mild, moderate and severe participants were 30, 50 and 38. Frequency of mild, moderate and severe among participants of stress was 28, 42 and 35.(Table 4)

Table 4: Prevalence of psychological impacts according to DASS-21 scale

Variables	Frequency	%age
Depression		
Mild	50	38.46
Moderate	65	50
Severe	15	11.54
Anxiety		
Mild	30	25.4
Moderate	50	42.4
Severe	38	32.2
Stress		
Mild	28	26.7
Moderate	42	40
Severe	35	33.3

DISCUSSION

COVID-19, in addition to affecting the general population, the pandemic has also harmed the front line health care personnel. Their physical and emotional health has been harmed. While fighting COVID-19, a number of young doctors lost their lives, and many others became infected with the disease. Mental health of front line soldiers is negatively affected. [13]

In this cross-sectional research 180 post graduated residents were presented. Mean age of the residents was 30.24 ± 3.08 years with mean BMI 26.07 ± 6.26 kg/m². Our findings were comparable to the previous studies in which most of the residents were females with average age of 30 years.[14,15] We found that 109 (60.5%) cases were married and the rest 71 (39.5%) were unmarried residents.

As the uncertainty is high regarding the period of this pandemic, the coping strategies during these depressing times are of utmost importance.[16-17] Our population in general is utilizing this lockdown time with useful activities. However, we think that as the closure of work and other activities would continue, the vulnerable population specifically would be requiring psychological support.

In our study we found that 33.33% participants were infected of COVID-19 and the rest were not infected. A study by Sultana, R et al reported that in their survey 49.3% PGRs were got infected with covid-19. [14] Frequency of depression was among 130 (72.2%) cases followed by anxiety 118 (65.5%), stress found in 105 (58.3%) cases. As a result of this epidemic, a Malaysian online survey indicated that 72.1% of respondents had moderate to severe anxiety [18], while an Egyptian study found that 82% of respondents had mild to moderate anxiety symptoms. This could be attributed to differences in healthcare infrastructures, varying reactivity of the health system, and preventative and control measures implemented against the pandemic, among other factors.[19] Studies have shown that physician trainees exposed to COVID patients had higher rates of stress, burnout, and anxiety than those who aren't - 29.4 percent vs 18.9 percent, 46.3 percent vs 33.7 percent, and 21.6 percentage points vs 14.9%. [20] "Anesthesia and critical

care units" have a higher rate of severe burnout (36%) than "obstetrics and gynaecology departments" under normal circumstances, which makes them more vulnerable to pandemics. [21]It's been documented that the COVID-19 epidemic has a heavy psychological toll on health care personnel all throughout the world. Stressors must be treated at the source. In order to make stress coping practices and seminars easily accessible, they need to be set up. [22]

Among 130 participants of depression, 50 participants were mild, 65 participants had moderate and severity was found in 15 participants and in anxiety mild, moderate and severe participants were 30, 50 and 38. Frequency of mild, moderate and severe among participants of stress was 28, 42 and 35. A study by Imran N et al reported that the prevalence of depressive symptoms, generalised anxiety disorder and acute stress disorder were 26.4%, 22.6% and 4.4%, respectively. [17] There were 24.24 percent of resident doctors with stress, anxiety, and depression in an Indian study. [23] In addition to the long work hours and severe workload, the absence of a hobby, and a lack of control over the workplace were all factors in their study. They also found that surgical residents were more stressed than non-surgical residents. Another survey conducted in Brazil in 2017 found that 17.7 percent of residents were stressed, while 16 percent had anxiety symptoms and 19 percent had depressive symptoms. 63 percent of the study group exhibited burnout syndrome, which had a detrimental impact on their quality of life. [26]As a baseline, these studies have demonstrated a significant level of stress, anxiety and depression among the resident doctors, and our study shows comparatively very high levels of psychological effect, which can be directly linked to the ongoing pandemic.

Especially in emergency rooms, frontline healthcare personnel will be at a heightened psychological risk as a result of the COVID-19 pandemic.

CONCLUSION

We concluded in this study that prevalence psychological impacts on Gynae residents were significantly higher in terms of mild, moderate and severe. Early detection and prevention of factors i.e. depression, anxiety and stress are necessary in hospitals.

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