



Prevalence of Anxiety Disorder, Post COVID-19 Infected among People in Babylon

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ABSTRACT

Background: pandemic related corona virus presented with high level of mortality rate, which produced multiple health problems related psychological aspect, as well as other aspects of health dimensions worldwide.

Objectives: The study aimed to assess the prevalence of anxiety disorder post COVID-19 Infected and to identify the correlation between anxiety disorder and sociodemographic characteristics for people after exposed to the corona virus in Babylon.

Methodology: A cross-sectional design was employed to achieve the objectives of the study for the period from 1st September 2022 to 30 June 2023. A purposive sample of (434) individuals, the sampling method using snowball technique to access the participants of the study. The data for this study was collected by using (Sherman A. Lee scale, 2020) tool,

The assessment test scale consists of two parts, Cronbach's alphas test was calculated to determine the internal consistency of the study instrument. The overall internal consistency for the questionnaire was accepted which recorded: $\alpha=0.86$.

Results: The summary statistics related sociodemographic characteristics showed that the majority of participants in the study are between age group of (20- 39) years old (56.2%). More than half of participants are female (53.5%). Regarding level of education majority of participants have college level of education, which recorded (28.1%). Related marital status more than a half of study sample are single (57.6%). lastly, (51.6%) of participants have barely sufficient level regarding with economic status.

Conclusion: The result of the study shows that anxiety disorder post COVID-19 infected presented as a low to fair level among the sample of study, in addition to that, gender recoded high negative correlation as well as the level of education showed negative correlation with anxiety disorder.

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INTRODUCTION

Covid-19 has been appeared in the end of 2019 in Wuhan city of china, which made lifestyle changes of population worldwide. It became a pandemic disease during a few period in many countries dramatically and affected many aspects of life such as social, behavioral, economic, psychological and other life features ⁽¹⁾.

Widespread outbreaks of fatal infectious diseases have a substantial negative impact on people's mental health and well-being Concerns about the mental health and psychological adjustment of the public have been arising due to the COVID-19 quick widespread and high mortality. Several studies have shown widespread and profound psychosocial impacts of the COVID-19 epidemic on mental health, such as stress-related symptoms, depression and anxiety among community residents in China as well as many countries ⁽²⁾.

The studies found that some influencing factors, including demographic information such as female gender and younger age COVID-19 epidemic related factors such as living in the crowded region near the center of the epidemic or having relatives or acquaintances infected with COVID-19 having contacted with an individual with suspected COVID-19 lead to produce of psychological disorder ⁽³⁾.

Frequent exposure to information about COVID-19 on social media were significantly associated with increased risk of COVID-19- related mental health problems. Moreover, previous studies about the psychological reactions among colleges students or population as general ⁽⁴⁾.

A significant proportion of patients self-rated in the psychopathological, depression, anxiety, symptoms, and insomnia in the pathological range in at least one clinical dimension. Females suffered more for both anxiety and depression. Patients with a positive previous psychiatric diagnosis showed increased scores on most psychopathological measures ⁽⁵⁾.

The previous evidence about SARS and MERS outbreaks, we hypothesize that COVID-19 survivors will show a high prevalence of emergent psychiatric conditions including mood disorders, anxiety disorders, and insomnia ⁽⁶⁾.

The psychological aspect impact on people after exposed to COVID- -19 that need care of those suffering from this crisis due to sometimes have been relatively neglected. These suffering documented stress and anxiety ⁽⁷⁾.

The study that conducted in Filipino teachers' practices on how they deal with anxiety due to the COVID-19 outbreak the result showed that, school closures, home quarantine, and social distancing implemented worldwide can cause a sudden anxiety even among teachers as well as among student and other employees ⁽⁸⁾.

The fear of contracting the virus, lack of treatment, higher mortality associated with the virus, and uncertainty about when the virus would be controlled these factors contributed to presented many psychological disorders such as anxiety and phobia, which led to an incredible negative effect on the daily living of people ^(9, 14).

Many researchers suggest that patients with COVID-19 might experience, depression, anxiety, and insomnia post exposed to the coronavirus. It could induce psychopathological sequelae through direct viral infection of the central nervous system (CNS) or indirectly by an immune response. Clinical, post-mortem, animal, in vitro, and cell culture studies demonstrated that coronaviruses are potentially neurotropic and can induce neuronal injuries. Although possible brain infiltration, "cytokines storm" involved in the immune response to coronaviruses may cause psychiatric symptoms by precipitating neuro inflammation ⁽¹⁰⁾.

The collection of 103 studies constituting 140732 people included in the review of psychological disorder related COVID -19. The

findings showed that anxiety prevalence was 27.3% among general population while the prevalence in COVID-19 patients was 39.6%. Anxiety was meaningfully higher among females and older adults. In addition, Europe revealed the highest prevalence of anxiety 54.6% followed by America 31.5% and Asia 28.3%. In the general population, the highest prevalence of anxiety was in Africa 61.8% followed by America 34.9%, Europe 30.7% and Asia 24.5% (11).

AIMS OF THE STUDY

The study aimed to assess the prevalence of anxiety disorder post COVID-19 Infected and to identify the correlation between anxiety disorder and sociodemographic characteristics for people after exposed to the corona virus in Babylon.

METHODOLOGY

Design of the study:

This study used a descriptive cross-sectional design to assess the prevalence of anxiety disorder post COVID-19 Infected and to identify the correlation between anxiety disorder and sociodemographic characteristics of age, gender, marital status, level of education and economic status for people after exposed to the corona virus in Babylon.

Sampling:

The target population for this study were the people who have two months recovered of the corona virus and life in Babylon. Total of (434) individuals purposively selected and participated in the study. The exclusion criteria include those individuals who did not agree to participant in the study and those who are under the care of disease.

Instrumentation and data collection:

The sampling method using snowball technique to access the participants of the study. The data for this study was collected by using (Sherman A. Lee scale, 2020) tool, to assess the prevalence of

anxiety disorder, post COVID-19 infected and to identify the correlation between sociodemographic characteristics and anxiety level, the instrument contains of two parts as the following:

Part 1: This part consists of five items related demographic data include age, gender, marital status, level of education and economic status.

Part 2: Consist of five questions to measure the prevalence of anxiety disorder post COVID – 19 infected, each question has score include (0) for Not at all, (1) for Rare less than a day or two, (2) for several days, (3) for more than 7 days and (4) for nearly every day over the last 2 weeks. After obtaining the informed consent, the data were collected from the participant by interview method. Each interview takes about 5 to 10 minutes.

Validity and reliability of instrument:

The instrument recognized a good validity and reliability in a number of studies. The validity of the questionnaire was tested by presenting it to (10) experts in the medical fields. According to the expert's recommendations, all items of instrument are valid.

The reliability of the instrument tested by using data for 10 people cured from corona virus infected who were excluded from the study sample. Cronbach's alphas were calculated to determine the internal consistency of the study instrument. The overall internal consistency for the questionnaire was acceptable $\alpha = 0.88$.

Data analysis:

Frequency and percentage was calculated to describe sociodemographic characteristics of participants of the study. Correlation coefficient was used to calculate the correlation between prevalence of anxiety disorder and participant's sociodemographic characteristics. Data was analyzed by using Statistical Package for Social Science (SPSS) for windows version 25.

RESULTS:

Table (1): sociodemographic characteristic of the study sample

Sociodemographic Characteristics	Item	Sample (n =434)	
		F	%
Age	10-19 year- old	74	17.1
	20-39 year- old	244	56.2
	40-59 year- old	84	19.4
	60-79 year- old	27	6.2
	80 and above	5	1.2
Gender	Male	202	46.5
	Female	232	53.5
Marital status	Single	250	57.6
	Married	149	34.3
	Widowed	23	5.3
	Divorced	12	2.8
Educational level	Illiterate	70	16.1
	Primary	67	15.4
	Intermediate	97	22.4
	Preparatory	40	9.2
	Institution	33	7.6
	College	122	28.1
	Master	5	1.2
Economic status	Sufficient	108	24.9
	barely sufficient	224	51.6
	Insufficient	100	23.0

This table indicates that majority of participants are between age group of (20- 39) years old (56.2%). Related gender female were recorded (53.5%) from all participants. In the other hand marital status obvious that more than a half of study sample are single (57.6%), educational level documented that (28.1%) of study sample within college level , and (51.6%) of them have barely sufficient regarding with economic status.

Table (2): Prevalence of anxiety disorder post COVID-19 infected (n=434)

Prevalence of anxiety

Very low		Low		Fair		High	
F	%	F	%	F	%	F	%
94	21.7	216	49.8	106	24.4	18	4.1

F: Frequency, %: percentage, cut of point: very low (0- 4.9), low (5-9.9), Fair (10-14.9), high (15-20).

This table related assessment of prevalence of anxiety disorder post COVID-19 infected shows, that majority of participant with in low and fair level of anxiety which recorded (49.8%), and (24.4%) respectively. Productivity score of nurses was in the range of 69 to 175 with an average of 132/60 and a standard deviation of 20.21.

Table (3): Table 3: Correlation Between Anxiety disorder post COVID-19 infected and Sociodemographic Characteristics (n=434)

Variables	Age	Gender	Level of Education	Marital status	Economic status
Anxiety disorder	-.075	-.209**	-.112*	.090	-.023

****.** Correlation is high significant at the 0.01 level (2-tailed). ***** Correlation is significant at the 0.05 level (2-tailed).

This table reveals that there is a strong negative correlation between anxiety disorder and gender as well as negative correlation between anxiety and level of education, but there is no correlation between other variables of age, marital status and economic status.

DISCUSSION

The summary statistics of the study sample related sociodemographic characteristics in the table (1) manifested that the majority of participants in the study are between age group of (20- 39) years old (56.2%). More than a half of participants are female (53.5%). Regarding level of education vast majority of participants have college level, which recorded (28.1%). related marital status more than a half of study sample are single (57.6%). finally, (51.6%) of them have barely- sufficient level concerning with economic status.

Regarding prevalence of anxiety disorder post COVID-19 infected which presented in table (2) shows, that majority of participants had low and fair level of anxiety, which verified (49.8%) and (24.4) receptivity. This result revealed that number of people infected with the disease suffer from anxiety disorder but they can have control of infection when using prevention technique. This result is agreeing with the study that measured of individual social capital include anxiety, depression and distress related with COVID-19 showed that about 34.0% suffered from anxiety disorder (12).

In the other hand, the study, which conducted after a year of the pandemic at Isfahan in Iran obvious that along with the COVID19 pandemic prolongation, the level of anxiety had decreased gradually and become moderate and low level (13).

Table (3) which reflect the correlation between anxiety and some demographic feature shows that there is a strong negative correlation between anxiety disorder and gender as well as correlation between anxiety and level of education. This outcome means that female suffering from anxiety more than male due to the increased sense, feeling and fear among female rather than male who have more stable regarding hazardous of COVID- 19 and an increase level of education contributed to decrease incidence of anxiety disorder among population. this result agrees with the study that conducted in Canada to measure the prevalence of anxiety in university students during the COVID-19 which documented A subgroup gender-based analysis reported the prevalence of anxiety in females as 43% compared to males with an anxiety prevalence of 39% (15).

Finally, according to the world health organization many studies recommended that, the anxiety disorder related COVID -19 infection reduced gradually due to presented of many types of vaccines as well as increase awareness of population contributed to minimize presented of anxiety among population worldwide.

CONCLUSION

The results of this study has benefits for all community members who have anxiety disorder related covid-19 for both mortality and morbidity rate. The result of the study shows that distribution of anxiety among population was low and fair, as well as gender and level of education had negative

correlation with the level of anxiety, which contribute to reduce condition and help them to return life normally when disease has been controlled.

RECOMMENDATIONS:

According on the study results and its interpretation regarding to anxiety disorder this study recommends the following:

1. Conducting additional studies to acquire more knowledge related anxiety or other psychological disorder regarding to COVID - 19 infection.
2. Create an educational program to increase health awareness among people, related anxiety disorder.
3. The media should play a greater role related to increase awareness to reduce anxiety level among population.

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