Psychiatric Consequences of Hospitalized COVID-19 Patients in Iraq: A Preliminary Report

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ABSTRACT:

BACKGROUND:

World Health Organization (WHO) termed coronavirus disease 2019 COVID-2019, then declared it as a pandemic. It was documented that survivors of COVID-19 were at risk of developing anxiety, depression, and insomnia. This study was carried out to report on prevalence of psychiatric symptoms and identifying some determinants.

PATIENTS AND METHODS:

A total of 120 patients with COVID-19 were included in this study. Their age was 22 to 91 years giving male to female ratio of 1.6:1. They were selected conveniently (they were hospitalized in Al-Shafa center). The hospital anxiety and depression scale was used.

RESULTS:

Out of the total, 66% and 52.9% were showing anxiety and depression, respectively. Elderly COVID-19 patients were significantly prone for anxiety and depression (p = 0.0001 for both). No significant difference in anxiety and depression between males and females (p=0.8 and 0.7, respectively). Number of children was not significantly affect anxiety and depression (p=0.6 and 0.1, respectively). Marital status was without any impact on anxiety and depression (p=0.3 and 0.4, respectively). Education level had no impact on anxiety and depression (p=0.6 and 0.2, respectively). History of mental illness was not affecting anxiety (p=0.3) and significantly affect depression (p=0.0008).

CONCLUSION:

High rates of anxiety and depression were noticed. Elderly patients more significantly prone to anxiety and depression. Sex, size of family, and education level were not affecting anxiety and depression. History of mental illness significantly affects depression.

KEYWORDS: COVID-19, psychological consequences, anxiety, depression, Baghdad, Iraq

INTRODUCTION:

On December 31, 2019, China notified that some cases of pneumonia of unknown etiology in Wuhan City of Hubei province. Subsequently World Health Organization (WHO) termed coronavirus disease 2019 (COVID-19). The rapid global spread of the disease led to the declaration of COVID-19 as a pandemic on March 11, 2020.[1]

In Iraq, the health system has been badly eroded by wars, conflicts, and corruption,

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the first case reported was an international student in Najaf governorate on February 24, 2020, followed 3 days later by a second (national) case, then was followed by a series of cases in different provinces of the country. On March 17, 2020, the authorities imposed the lockdown, suspended schools, and closed mosques, malls, shops, casinos, and other crowded places.[2] There was a strict limitation of movement and communication impairment in work that appeared to be associated with serious psychological distress such as anxiety and depression.

It was indicated that survivors of COVID were at increased risk of developing new symptoms of anxiety, depression, and insomnia within 90 days of their diagnosis.[3] The COVID-19 pandemic is the first one in the era of globalization, digitalization, and commodification i.e., the features of modern society that contributed to spread of COVID-19.[4]

This study aims to establish the prevalence of psychiatric symptoms and identify some determinants of them.

MATERIALS AND METHODS:
A total of 121 patients with COVID-19 were included in this study. They were selected conveniently (they were hospitalized during collection of data) from Baghdad Teaching Hospital (Al-Shafa center for COVID-19). Their age ranged from 22 to 91 years giving male to female ratio of 1.6:1.

The Hospital Anxiety and Depression Scale (HADS) was used. It is a 14-item measure designed to assess anxiety and depression symptoms in medical patients, with emphasis on reducing the impact of physical illness on the total score. The depression items tend to focus on the anhedonic symptoms of depression. Items are rated on a 4-point severity scale.

RESULTS:
Out of the total, 80 (66.1%) and 64 (52.9%) were showing anxiety and depression, respectively.

Of those > 50 years old, there were 47 (88.7%) and 41 (77.41%) were with anxiety and depression, respectively. Among those ≤ 50 years old, 33 (48.5%) and 23 (33.8%) showed anxiety and depression, respectively. Elderly COVID-19 patients were significantly prone for anxiety and depression (χ^2 =21.4, d.f.=1, p = 0.00001 and χ^2 =22.6, d.f.=1, p = 0.00001, respectively).

Among males, anxiety and depression were noticed among 49 (65,3%) and 40 (53.3%), respectively. In females, anxiety and depression were observed in 31 (67.4%) and 24 (52.2%), respectively. There were no significant differences in anxiety and depression between males and females (χ^2 =0.05, d.f.=1, p = 0.8 and χ^2 =0.01, d.f.=1, p = 0.7, respectively).

Anxiety was detected in 19 (61.3%), 30 (62.5%) and 41 (70.7%) among those with no child, those with ≤ 3 and > 3 children, respectively. No significant variation in anxiety between those with different numbers of children (χ^2 =1.1, d.f.=2, p = 0.6). The depression was observed in 22 (71%) among those with no children and in 16 (50%) and in 26 (44.8%) among those with ≤ 3 and > 3 children. Depression was not significantly differed among those with different numbers of children (χ^2 =5.6, d.f.=2, p = 0.1).

Anxiety was detected in 19 (61.3%), 30 (62.5%) and 41 (70.7%) among those with no child, those with ≤ 3 and > 3 children, respectively. No significant variation in anxiety between those with different numbers of children (χ^2 =1.1, d.f.=2, p = 0.6). The depression was observed in 22 (71%) among those with no children and in 16 (50%) and in 26 (44.8%) among those with ≤ 3 and > 3 children. Depression was not significantly differed among those with different numbers of children (χ^2 =5.6, d.f.=2, p = 0.1).

Among married individuals, anxiety and depression were 55 (68.7%) and 48 (55.1%), respectively, and among others 25 (73.5%) and 16 (47.1%), respectively. Anxiety and depression were not significantly differed by social status (χ^2 =1.2, d.f.=1, p = 0.3 and χ^2 =0.6, d.f.=1, p = 0.4, respectively).

Those with education level (< secondary school) showed anxiety and depression among 51 (64.5%) and 39 (76.5%), respectively. With high education level (≥ secondary school) were presenting with 29 (69.04%) and 25 (59.5%) anxiety and depression, respectively. No significant variation was noticed in anxiety and depression between different educational levels (χ^2 =0.2, d.f.=1, p = 0.6 and χ^2 =1.1, d.f.=1, p = 0.2, respectively).

Anxiety among those with and without history of mental illness was 28 (30.6%) and 60 (57.55), respectively. No significant variation in anxiety between those with and without history of mental illness (χ^2 =1.2, d.f.=1, p = 0.3).

Depression among those with history of mental illness was 31 (22.2%) and among those without history of mental illness was 33 (41.8%). A significant difference in depression in those with and without history of mental illness (χ^2 =11.3, d.f.=1, p = 0.0008).

These findings are shown in Table 1.

Table 1 Determinants of anxiety &depression

Variable (total)	Anxiety		Depression	
	No.	%	No.	%
Age				
≤ 50 (68)	33	48.5	23	33.8
>50 (53)	47	88.7	41	77.4
Total (121)	80	66.1	64	52.9
	χ^2=21.4, d.f.=1, p = 0.00001		χ^2=22.6, d.f.=1, p = 0.00001	
Sex				
Male (75)	49	65.3	40	53.3
Female (46)	31	67.4	24	52.2
Total (121)	80	66.1	64	52.9
	χ^2=0.05, d.f.=1, p = 0.8		χ^2=0.01, d.f.=1, p = 0.7	
No. of children				
None (31)	19	61.3	22	71
≤ 3 (32)	20	62.5	16	50
>3 (58)	41	70.7	26	44.8
	80	66.1	64	52.9
	χ^2=1.1, d.f.=2, p = 0.6		χ^2=5.6, d.f.=2, p = 0.1	
Social status				
married	55	68.7	48	55.1
others	25	73.5	16	47.1
Total	80	66.1	64	52.9
	χ^2=1.2, d.f.=1, p = 0.3		χ^2=0.6, d.f.=1, p = 0.4	
Education level				
< secondary (79)	51	64.5	39	76.5
≥ secondary (42)	29	69.04	25	59.5
Total	80	66.1	64	52.9
	χ^2=0.2, d.f.=1, p = 0.6		χ^2=1.1, d.f.=1, p = 0.2	
History of mental illness				
Positive	28	30.6	31	22.2
Negative	60	57.5	33	41.8
Total	88	66.1	64	52.9
	χ^2=1.2, d.f.=1, p = 0.3		χ^2=11.3, d.f.=1, p = 0.0008	

DISCUSSION:

This study showed high prevalence of anxiety (66.1%) and depression (52.9%) figures. The observed figures were 5 to 7 times of that reported in Iraq before COVID-19 pandemic.[6] It is similar to that reported in Iraq recently.[7] The observed figures of anxiety (66.1%) and depression (52.9%) are much higher than that reported figures in the world in last 4 decades (6.7% and 5.4%).[8]

The observed high figures might be explained by the fact that the period COVID-19 pandemic is more than a health crisis; it is characterized by deep fears, worries, and uncertainty that influence public behaviors. The general population reported concerns ranging from the threat to personal and family safety, difficulties in receiving a prompt diagnosis of the COVID-19, to the use preventive measures that limit personal mobility.

An added explanation for the extreme high observed figures is the fact that the pandemic first noticed largely unexpected in the world, where people generally believe that modern health provide medications and healthy lifestyles allow them to cope with aggressive agents. Extreme reported figures of anxiety and depression were published in Cameron.[9] There is an evidence suggests that the high prevalence of anxiety and depression during COVID-19 pandemic might persist beyond acute phase i.e., residual anxiety and depression post-hospitalization.[10] Literature on the mental health of inpatients with COVID- 19 has been suggested that the novel Coronavirus disease can cause panic and stress in patients; especially those who are being treated in the isolation ward.

In the line of that reported in literature, anxiety and depression were significantly higher in those older patients (> 50 year) (p = 0.00001 for both).[9,11] People are concerned about their health as they notice that infection and death rates of the disease are increasing day by day, they were terrified to see this type of news through the media, so a wave of fear has been developed in the society.

This study revealed that anxiety and depression were not varied between males and females (p = 0.8 and 0.7, respectively). It is contradicting those in literature demonstrating that females were more likely to develop mood disorders.[9] Different views were reported as some studies documented those males were at high risk of developing anxiety and depression.[9] Other studies reported that females were prone to anxiety and depression.[11] It was reported that in general female is more prone to mood disorders.[12] It seems that this issue is varied with cultures.

In the line those in literature,[13] mood disorders (anxiety and depression) were not affected significantly by marital status (p=0.3 and 04, respectively) and education level background (p=0.6 and 0.2, respectively).

It was observed that history of mental illness was a significant predictor for depression among COVID-19 patients (p=0.0008). It might be explained by inability of patients with mental illness to cope with added stress of COVID-19 and lockdown. Similar finding was reported.[14]

CONCLUSION:
High rates of anxiety and depression were noticed .elderly patients were more significantly prone to anxiety &depression. Sex, size of family and education level were not affecting anxiety and depression. History of mental illness significantly affects depression.

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