

## ORIGINAL ARTICLE

# MENTAL HEALTH AND PSYCHOSOCIAL CONSIDERATIONS POST COVID-19 OUTBREAK

DOI: 10.36740/WLek202112106

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## ABSTRACT

**The aim:** To determine the pandemic's impact on worldwide psychological suffering and its consequences for vulnerable groups.

**Materials and methods:** 200 participants (mean 66.5% males) from 6 provinces of central and southern Iraq responded to the survey for 6 months. Mental signs and symptoms were assessed using the Patient Health Questionnaire and State Trait Anxiety Inventory, respectively. Over 55% of the post-Covid respondents had depression; the male gender was higher than female gender (56% vs. 44%). About 44% of the post-Covid respondents had Nervousness, 59% of them was male. Participates had moderate level of confusion & memory loss about 73%, however, the male gender was greater suffering from it than female (72% vs. 28%).

**Results:** Results show that Post Covid-19 patients have high depression, Nervousness, and memory loss, and also Male gender with Covid-19 have a severe level of depression, Nervousness, memory loss as compare with the female gender.

**Conclusions:** Post Covid-19 patients have high depression, Nervousness, and memory loss as compared with those without covid-19 one. Patients who have a history of psychological problems inpatient with Covid-19 must be taken and treated in combination with a protocol of covid-19 management. The male gender with Covid-19 has a severe level of depression, Nervousness, memory loss as compared with the female gender.

**KEY WORDS:** post-covid-19, depression, Nervousness, memory loss, mental changes

Wiad Lek. 2021;74(12):3156-3159

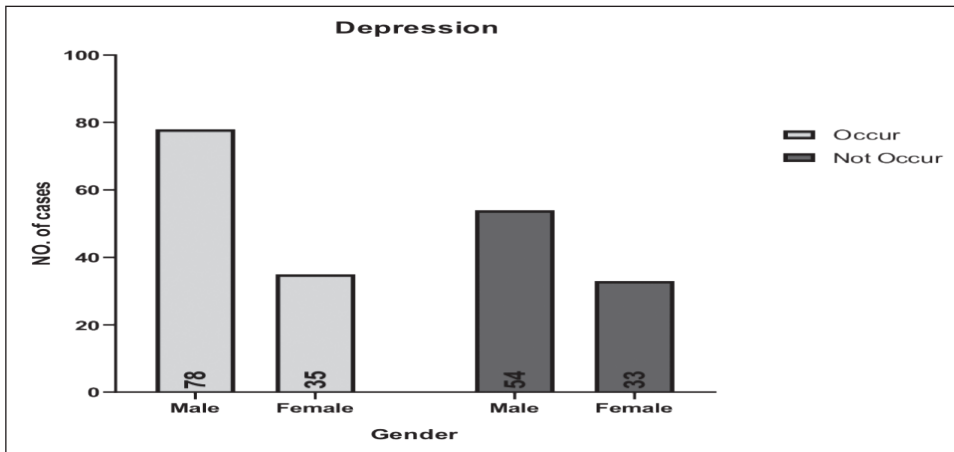
## INTRODUCTION

The COVID-19 is pandemic disease that began in December 2019 has impacted negatively on our lives, with serious ramifications for our emotional and mental health. Apart from the disease's cognitive consequences, individuals everywhere around the world are suffering elevated anxiety and stress as a result of financial suffering, social exclusion, quarantining, and stay-at-home orders [1-2]. COVID-19 is a novel viral infection that can affect the lungs and airways, causing people to die. The ACE2 receptors were shown that the disrupted in various cells and tissues, such as the lung, kidney, small intestine, heart, and others, and were thought to be a target for the nCOVID-19 virus [3]. Isolation and phobias of infection may also output/input persons at risk of negative mental health outcomes, particularly those with concomitant health complications or cognitive impairment [4]. There are many studies from various regions have reported the psychological implications of the COVID-19 pandemic in the general population in a similar fashion, correlating with its occupational hazards [5-7]. This pandemic is a severe stressor for everyone since it is outside of the normal spectrum of human experience, poses a significant threat to life, and evokes profound anxiety and powerlessness. It is well acknowledged that in such condi-

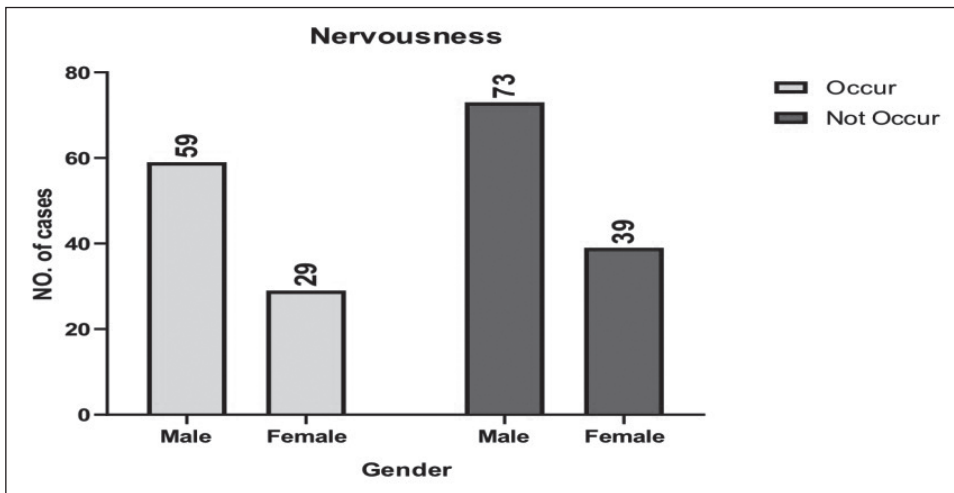
tions, an adaptive response is triggered to aid coping and activate resilience systems [8]. Growth and development, school, childhood illnesses that persist into adolescence, mental health disorders, and the consequences of risky or illegal behaviors, such as injury, legal consequences, pregnancy, infectious diseases, and substance use disorders, are the most common issues among adolescents. The primary causes of death and disability among adolescents are unintentional injuries caused by motor vehicle crashes and injuries caused by interpersonal violence [9]. The majority of COVID-19 cases in this area were urban males. Fever, sore throat, and dyspnea or cough was the most prevalent onset symptoms. The vast majority of cases were isolated and treated in the comfort of one's own home. The case fatality rate was assessed to be within the global range (2.4 percent) [10].

## THE AIM

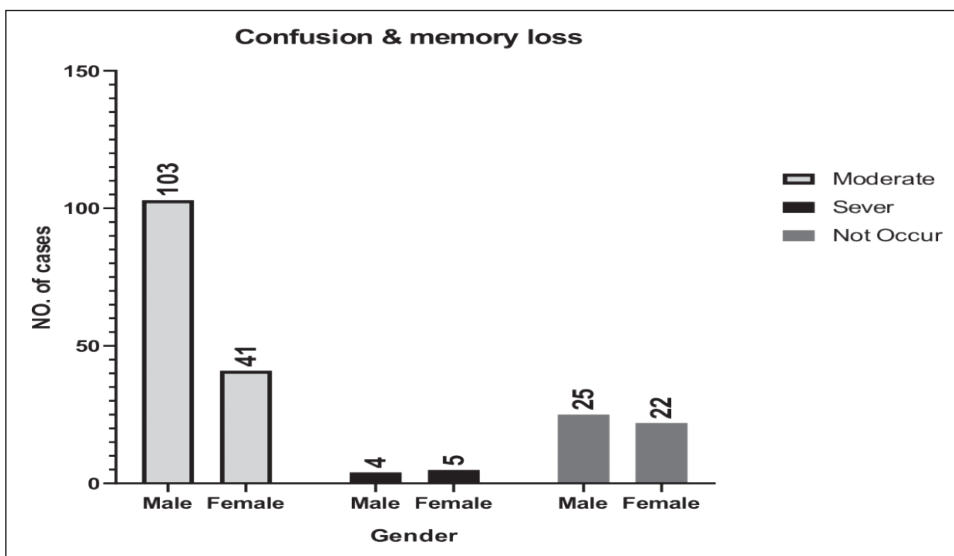
To determine the pandemic's impact on worldwide psychological suffering and its consequences for vulnerable groups.



**Fig 1.** The number of depression cases between the genders. The male gender showed high number of cases.



**Fig 2.** The number of Nervousness cases between the genders. The male gender showed high number of cases.



**Fig 3.** The number of Confusion & Memory loss cases between the genders. The male gender showed high number of cases.

**MATERIALS AND METHODS**

Online survey was disseminated 1/12/2020-30/4/2021 including patients with Covid-19 through social media channels. All patients were diagnosis via RT-PCR technique according to WHO. A sample of 200 patients infected with COVID-19 from different provinces of central and southern Iraq (waist, Babylon, Diwaniya, Basra, etc.). The study was approved by the Al-Zahrawi University College Human Research Ethics

Committee. The survey was conducted demographic items (age, sex, education, and employment/student status), questions on health behaviors, and questions regarding risk of COVID-19, or pandemic related changes in personal, social or occupational functioning. The Depression and Nervousness Scale is made up of 21 statements, each of which represents a different symptom of depression (sadness, pessimism, sense of failure, loss of pleasure, guilt feelings, punishment feelings,

self-dislike, self-criticalness, suicidal thoughts or wishes, crying, agitation, social withdrawal, indecisiveness, change body image and shape, tiredness or fatigue, changes in sleeping pattern, loss of energy, changes in appetite, decreased weight, loss of interest in sex and preoccupation with health) (not at all = 0, a little = 1, some = 2, a lot = 3) were the responses to each item. The degrees of the scale ranged from 0 to 63, and they were used to categorize depression levels [11].

### STATISTICAL ANALYSIS

The descriptive statistics of categorical variables were presented by counts and percentages. The association between age groups, place of isolation, underlying co-morbidity, clinical symptoms, and severity of disease was analyzed by application of a One-way ANOVA test was used as appropriate at the level of significance  $\alpha = 0.05$ . All statistical analyses were applied using SPSS 26.0 for Windows and graphs were drawn by using Graph Pad prism v 8.02.

## RESULTS

### GENDER

In our study, the participants that included were 200 patients, the total number of male genders were 133 (66.5%) while the female gender was 67 (33.5%), table (I)

**Table I.** The total and percentage of genders that participate in the study

Gender	Frequency	Percent
male	133	66.5
female	67	33.5
Total	200	100.0

**Table II.** The occurrence of depression between the genders

Occurrence	Male	Female	Frequency	Percent
Occur	78 (69%)	35 (31%)	113	56.0
Not Occur	54 (62%)	33 (38%)	87	44.0
Total	132	68	200	100.0

**Table III.** The occurrence of Nervousness between the different genders

	Male	Female	Frequency	Percent
Occur	59 (67%)	29 (33%)	87	43.5
Not Occur	73 (65%)	39 (27%)	113	56.5
Total	132	68	200	100.0

**Table IV.** The occurrence of Confusion & Memory loss between the different genders

Occurrence	Male	Female	Frequency	Percent
Not occur	25 (52%)	23 (48%)	48	24.0
Moderate	103 (72%)	41 (28%)	144	73.0
Sever	5 (63%)	3 (38%)	8	3.0
Total	133	67	200	100.0

## MENTAL CHANGES

### DEPRESSION

The vast majority of respondents were currently in lockdown (56%). In this sample, 18% of individuals were diagnosed with a mental health condition post to the COVID-19 infection. The occurrence of depression post Covid disease differs between males and females. However, in our study, we noticed that the occurrence of depression in the male gender was higher than female gender (56% vs. 44%). Also, we showed that the occurrence in the male gender was higher than female gender (69% vs. 31%), table (II) and figure (1)

### NERVOUSNESS

The occurrence of Nervousness differs between males and females. However, in our study, we noticed that the Nervousness occurrence about 43%. Also, we showed that the occurrence in the male gender was higher than the female gender (59% vs. 29%), table (III) and figure (2)

### CONFUSION & MEMORY LOSS

In our study, we noticed that patients who suffered from confusion & memory loss about 76% while those not suffer from that about 24%. Also, we showed that the moderate cases were more than severe cases (144 vs. 8). However, the male gender was higher percent than the female gender (72% vs. 28%) for moderate cases, table (IV) and figure (3)

## DISCUSSION

Depression is a psychological condition characterized by a loss of interest, energy, and mood. It might be thought

of as the polar opposite of mania. The term “depressive disorders” refers to a group of mental illnesses. Excessive or long-term depression is a symptom of a variety of disorders 112. Our result about depression compatible with Terry, Peter C et al, 2020 study (55.3% vs. 59.74) and less in Nervousness (43.7% vs. 57.08) and more in confusion (73.6 vs. 58.88) the difference in results perhaps because of the cultural difference. There are several plausible explanations for the observed increase in negative feeling states. The pandemic has undoubtedly caused fear and loss for many individuals; health fears for self and loved ones, fear of isolation, loss of income, social support, and a sense of normality, the list is extensive. During the pandemic and lockdown, many individuals have lost livelihoods, relationships, and opportunities, or been denied access to simple things that give them pleasure, such as physical contact with friends and family, a trip to the local café, or interacting with work colleagues. A mood disturbance may also be explained by reduced physical activity and increased sedentary behaviors during COVID-19 restrictions (13).

In our study, we noticed that depression and Nervousness occurrence in the male gender was more than in the female gender. However, the occurrence of depression in males was more than that not occurrence but there is an insignificant difference between them.

Fengsu Hou et al 2020 findings that the increased of depression among Covid-19 patients. However, the female gender was more severe depression symptoms than males in the Chinese population during the COVID-19 epidemic (14), therefore this result disagreed with our results.

## CONCLUSIONS

Post Covid-19 patients have high depression, Nervousness, and memory loss as compared with those without covid-19 one. Patients who have a history of psychological problems inpatient with Covid-19 must be taken and treated in combination with a protocol of covid-19 management. The male gender with Covid-19 has a severe level of depression, Nervousness, memory loss as compared with the female gender.

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## Conflict of interest:

*The Authors declare no conflict of interest*

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**Received:** 10.06.2021

**Accepted:** 26.11.2021

A - Work concept and design, B - Data collection and analysis, C - Responsibility for statistical analysis, D - Writing the article, E - Critical review, F - Final approval of the article