Psychological Distress of Home Quarantine during COVID-19
Outbreak in Baghdad City, Iraq

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ABSTRACT

Background: Between December 2019 and the beginning of 2020, the corona virus epidemic first appeared in Wuhan, China, before its spreading to the rest of the country and subsequently to many other nations. Many people experience severe psychological anguish, manifested as physical symptoms, anxiety disorders, sadness, and a sense of helplessness.
Objective: This study aimed to identify the levels of psychological distress among Iraqi peoples and to find-out the association between levels of psychological distress and some socio-demographic characteristics.
Patients and methods: A cross-sectional design was conducted on 291 persons of both sexes from the City of Baghdad. Data were collected from the first to the 15th of April 2020 through online interview. The Kessler Psychological Distress Scale was employed to measure the respondents' psychological distress.
Results: Almost 16.8% of the respondents experienced psychological distress. There was a significant association between psychological distress and respondents' gender, occupation, monthly income and level of education. Females significantly demonstrated higher psychological distress than males. **Conclusion:** COVID-19 epidemic has an impact on people's health, both psychological and physical health, which requires follow-up and treatment by specialists. New studies are needed to determine the predicative factors for the level of psychological distress.
Keywords: Coronavirus disease, Quarantine, Psychological distress.

INTRODUCTION

Coronavirus disease 2019 (COVID-19) is a global infectious disease, which appeared in Wuhan, China, and then spread into many countries between December 2019 and the end of 2020 [1]. The COVID-19 pandemic causes a real risk to people's mental and physical health. It also causes a range of mental problems including anxiety disorder and major depression. This study seeked to measure the widespread presence and intensity of these psychological effects, and to determine the present psychological health burden on the general public. Thus, providing a tangible basis for designing and implementing pertinent mental health interventions and/or policies to efficiently and effectively address this defy [1]. Killing people everywhere is not limited to the pandemic, but it is also stressing out healthy people and those with COVID-19 [2]. In response to any form of anomalous circumstance, high degrees of stress and anxiety are common reactions [3].

In order to restrict infectious disease outbreaks, quarantine has been employed as a preventive measure for millennia. In the past, it has been successful to stop the spread of infectious diseases like cholera and plague [4]. According to studies, those in quarantine may feel psychological distress in the form of anxiety, rage, hesitancy, and signs of severe stress [4]. There are currently no well-recognized research on the psychological consequences and general state of the people during the peak of the COVID-19 outbreak. The majority of studies that shed the light on this disease have been on identifying the epidemiological and clinical traits of affected people [5, 6], the genetic makeup of the virus [7], and issues related to managing universal health care [8]. The general population of Iraq was never the subject of research materials examining the psychological and physical impacts of COVID-19.

Therefore, this study illustrated the first psychological impact survey and emotional health survey on residents of Baghdad city during the first two weeks of the COVID-19 outbreak. This study also aimed to assess the psychological symptoms and to determine the factors that contribute to psychological distress. This perhaps could help governmental agencies and healthcare workers to protect the psychological well-being of society in the face of the expanding COVID-19 outbreak in Iraq and all over the world.

PATIENTS AND METHODS

A cross-sectional study was conducted to investigate the psychological effects of the quarantine period on COVID-19 asymptomatic patients. This study was conducted in Baghdad city. A total of 291 respondents were obtained via an online survey. Data were collected for the period from April 1st, 2020, to April 15th 2020. The Kessler Psychological Discomfort Scale (K10) was employed to measure the psychological distress [9].

It includes 10 questions with 5-point Likert ratings. The total score ranges from 0 (None at any time) to 5 (All times). Higher scores on each scale indicate greater psychological distress. The K10 internal consistency ranged from 0.80 to 0.86. Participants' approval to participate in this study was confirmed through informed consent.

Ethical considerations: An approval of the study was obtained from University of Baghdad Academic and Ethical Committee. The study's participants were informed that their involvement in this study was voluntary. The researcher gave an explanation of the study's goals and advantages. An anonymous questionnaire was made available to the participants

once they consented to take part. This work has been carried out in accordance with The Code of Ethics of the World Medical Association (Declaration of Helsinki) for studies involving humans.

Statistical analysis:

Data were analyzed using the Statistical Package for Social Sciences (SPSS) version 26. Qualitative variables were presented in the form of frequencies and percentages. Quantitative variables were presented in the form of means and standard deviations. Student's t-

test was used to determine whether psychological discomfort differed by gender. To determine whether there was a statistically significant association between respondents' sociodemographic traits and psychological distress, Pearson correlation was assessed. Statistical significance was considered at p-value ≤ 0.05.

RESULTS

Table (1) summarized the sociodemographic characteristics of the participants.

Table (1): Participants' sociodemographic characteristics (N = 291)

List	Variable		Frequency	Percent
1	**Sex**	Male	138	47.4
		Female	153	52.6
2	**Age (years):** **Mean (SD)= 34.16 (11.713)**	<19	26	8.9
		20-29	89	30.6
		30-39	107	36.8
		40-49	47	16.2
		50- 59	16	5.5
		60 ≤	6	2.1
3	**Marital Status**	Not married	90	30.9
		Married	175	60.1
		Divorced	11	3.8
		Widow	15	5.2
4	**Level of Education**	Unable to read and write	11	3.8
		Reads and Write	31	10.7
		Primary School	18	6.2
		Intermediate School	37	12.7
		Preparatory School	126	43.3
		Bachelor's Degree	68	23.4
5	**Employment Status**	Work	184	63.2
		Doesn't Work	107	36.8
6	**Monthly Income**	Insufficient	103	35.4
		Somewhat Sufficient	108	37.1
		Sufficient	80	27.5
7	**Residency**	Urban	243	83.5
		Rural	11	3.8
		Suburban	37	12.7

Table (2) showed that most of participants had well mental health (n= 242; 83.2%), while 49 (16.8%) experienced psychological distress from mild to severe.

Table (2): Participants' mental health status (n=291)

List	Mental Wellbeing Status	Frequency	Percent
1	Well	242	83.2
2	Have a mild psychological distress	14	4.8
3	Have moderate psychological distress	16	5.5
4	Have a severe psychological distress	19	6.5
	Total	291	100.0

According table (3), there was a substantial difference between psychological distresses according to participants' gender. Female respondents displayed psychological distress that was noticeably higher than that of their male counterparts (P=0.001).

Table (3): Differences in psychological distress between gender groups (N = 291)

Variable	Test	No.	Mean	SD	Independent Test		
					t-value	Sig.	P ≤ 0.05
Psychological Distress	**Male**	138	9.93	7.348	-3.433	**0.001**	HS
	Female	153	13.44	9.772			

No: Number, M: Mean, SD: Standard deviation,   t: t-test, Sig: Significance, p: Probability value, N.S: Not significant.

Table (4) showed that there was a significant correlation between psychological distress and gender, education, occupation and monthly income among the sample.

Table (4): Pearson correlation between psychological distress and sociodemographic characteristics of participant (n=291).

Psychological distress \ Characteristics	Pearson correlation	P-value	Significance
Age	-0.068	0.247	N.S
Gender	0.198**	0.001	S
Marital Status	-0.097	0.097	N.S
Educational level	-0.152**	0.009	S
Occupation level	0.211**	0.000	S
Monthly income	-0.224**	0.000	S
Residency	0.150	0.803	N.S

Sig: Significance,   p: Probability value, N.S: Not significant.

DISCUSSION

The current study adds to the body of knowledge about how quarantine affects mental health. The study's findings revealed that almost 16.8% of respondents experienced psychological anguish. These findings are consistent with earlier research, which found that stress, anxiety, and mild to very severe depression was present in 28.5%, 33.3%, and 46.92% of respondents successively [10]. The results of this study also demonstrated a statistically significant difference in psychological discomfort according to participant gender, with females displaying significantly more psychological anguish than males. These findings are in line with earlier research, which revealed that women are more susceptible to stress and have higher rates of acute stress disorder and post-traumatic stress disorder [1]. The outcome also demonstrated that there was a significant association between psychological distress and gender, education, occupation and monthly income among the sample. A study presented supportive evidence that one's Peritraumatic Distress Index score was related to their gender, education and occupation [1].

Regarding monthly income, a significant relationship with psychological distress has been reported. The impact on family income that has been psychologically impacted by financial difficulties as a result of being under quarantine or aversion, and the inability to resolve financial issues by taking on a part-time job or learning new job skills, or applying for a loan, is also found in these results, which are consistent with earlier studies [11].

CONCLUSION

Persons who were isolated from COVID-19 during the pandemic had sadness and anxiety symptoms, probably as a result of COVID-19's effects as well as those of the economic downturn, poor health conditions, and lack of medical resources. With the help of this research, psychological therapies can be established to improve mental health and psychological adaptability during the COVID-19 pandemic, hence reducing psychological distress and averting the development of new mental health issues.

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