ORIGINAL ARTICLE

Assessment of Depression Disorder among Recovered Nurses from Covid-19

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ABSTRACT
Objectives: The present study aims to assess depression disorder among recovered nurses from COVID-19 in Babylon Governorate Hospitals and to find out the relationship between depression disorder and demographic characteristics, which include age, gender, marital status, type of family size, education level, and years of experience in a health setting.

Methods: A descriptive correlation design used in the present research established that for a period from October 10th, 2021 to March 20th, 2022. The study used a probability (convenient) samples of 143 nurses who recovered from COVID-19 and were drawn from wards of educational and non-educational hospitals. The instruments of the research are adopted and modified for the purpose of this research.

Results: The current study showed that less than three-quarters (102, or 71.3%) of those aged (19–29) years of age of age, and more than two-thirds (94, or 65.7%) were female. Regarding marital status, more than half of the sample of 81 (56.6%) were single, and concerning family size, less than two thirds of 89 (62.2%) were small less than six individuals. In relation to educational level, more than a fifth (58, or 40.6%) were diplomas in nursing. It also revealed that about two thirds (93, or 65%) had had (1–5) years of experience in a health setting.

Conclusions: Moderate depressive disorder was more prevalent in recovered nurses from the age group (19–29), specifically females, and they had served in health institutions for 1–5 years.

Recommendations: Researchers must invest more in studies to measure a larger population to generalize the results. The Department of Continuing Medical Education must provide psychological support for recovered nurses from COVID-19, especially female nurses. Increased efforts should be made to hold epidemiological training courses on how to deal with transmissible viruses, as well as to understand their dangers and modes of transmission.

Key word: depression disorder, recovered nurses and COVID 19.

INTRODUCTION
The behavior caused by an outbreak of COVID-19 has led to restrictions on life, social isolation, physical distance, and quarantine. This has made everyone feel isolated and increased their depression because they are not allowed to see their friends and cannot perform the daily activities that they used to do before, so COVID-19 has caused several psychological problems such as depression and sleep disturbances, similar to previous pandemics and many psychological consequences[1]

Frontline health care workers, especially nurses, were exposed to depression and suicidal ideation. It was also discovered that depression and stress about COVID-19 had at least one negative impact on their mental health and well-being, such as difficulty sleeping, digestive problems, increased alcohol or drug abuse, and exacerbation of chronic conditions, in comparison to 56.6% of all households before the pandemic. With the rise in suicidal rates, nurses are already at risk of burnout [2]

According to a cross-sectional study in the United States, there is a high psychological distress level for nurses caring for patients with COVID-19. After nursing staff struggled with sleep deprivation, tiredness, and multiple psychological disorders during the COVID-19 pandemic, they self-reported very poor overall results after working more than 40 hours per week and skipping 30-minute breaks[3]

METHODOLOGY
Study Design: A descriptive correlation design study was undertaken to assess the prevalence of depression disorders among recovered nurses from COVID-19 in teaching and non-teaching hospitals of the Babylon Governorate starting from October 28th, 2021 to May 15th, 2022 and to find out relationships between depression disorders and their demographic characteristics, which include age, gender, marital status, type of family, education level, years of experience in health settings, duration of work in isolation halls during the COVID-19 pandemic, and previous psychiatric diagnosis for studied samples.

Study Instrument: Instruments were constructed through the following: This procedure was supplied with the study instrument, which is composed of two parts: Part1: a list of common items for evaluating demographic data of participants,

Part2: a scale of the Psychological Health Questionnaire (PHQ-9) to assess depression disorder among COVID-19 recovered nurses.

Ethical Consideration: This is the valuable part of the study, and it was concerned with ethical considerations at the start of the sample collection process on December 14, 2021. The initial approval was acquired from the Ethical Committee for Study by the University of Baghdad's College of Nursing, and approval from the Iraqi Ministry of Health was also obtained to conduct research in its health institutions. Lastly, before gathering data and filling out the questionnaire, informed consent was sought from the nurses to participate in this study. The researcher explains to the subject that their information will be highly confidential and for research purposes only. The type of informed consent was written and filled out. to agree or disagree before the nurse fills out the questionnaire.

RESULTS
Table 1: Shows that less than three quarters 102 (71.3%) of age were between (19-29) year and more than two third 94 (65.7%) were female. Regarding to Marital status, more than half of sample 81 (56.6%) were single and concerning to type of family less than two third 89 (62.2%) were small (less than six individuals). In relation to educational level, more than fifth 58 (40.6%) were Diploma in nursing. less than two thirds 94 (65.7%) were did not participate in training course for isolated wards and more than half 77 (53.8%) did not work in isolated wards.

This table also revealed that about two third 93(65%) having (1-5) years of experience in health setting.

Table 1: Descriptive analysis of sample's demographic data (N =143)

Demographical data		Frequency	Percent
Age	19-29	102	71.3
	30-39	22	15.4
	40-49	11	7.7
	50-59	8	5.6
	Total	143	100.0
	Mean (SD)	28.84	8.402

Gender	Male	49	34.3
	Female	94	65.7
	Total	143	100.0
Marital status	Single	81	56.6
	Married	59	41.3
	Widow	1	.7
	Divorced	2	1.4
	Total	143	100.0
Type of family size	Small (less than six individuals)	89	62.2
	Big (Six individuals and more)	54	37.8
	Total	143	100.0
Level of Education	Bachelor in	43	30.1

	nursing		
	Diploma in nursing	58	40.6
	Bachelors nursing	41	28.7
	Postgraduate nursing	1	.7
	Total	143	100.0
Years of experience in health setting?	1-5 years	93	65.0
	6-10 years	28	19.6
	11-15 years	5	3.5
	16 years and over	17	11.9
	Total	143	100.0
	Mean (SD)	6.55	8.157

Table 2: Descriptive analysis of Depression disorder items among recovered nurses from COVID-19

Items	Responses	F	%	M	SD	Asses.
Little interest or pleasure in doing things	Not at all	53	37.1	2.59	1.35	Moderate
	Nearly every day	12	8.4			
	More than half the days	18	12.6			
	Several days	60	42.0			
	Total	143	100.0			
Feeling down, depressed, or hopeless	Not at all	42	29.4	2.67	1.26	Moderate
	Nearly every day	18	12.6			
	More than half the days	28	19.6			
	Several days	55	38.5			
	Total	143	100.0			
Trouble falling or staying a sleep, or sleeping too much	Not at all	54	37.8	2.36	1.27	Moderate
	Nearly every day	28	19.6			
	More than half the days	16	11.2			
	Several days	45	31.5			
	Total	143	100.0			
Felling tired or having little energy	Not at all	31	21.7	2.76	1.15	Moderate
	Nearly every day	23	16.1			
	More than half the days	38	26.6			
	Several days	51	35.7			
	Total	143	100.0			
Poor appetite or overeating	Not at all	47	32.9	2.52	1.26	Moderate
	Nearly every day	23	16.1			
	More than half the days	25	17.5			
	Several days	48	33.6			
	Total	143	100.0			
Feeling bad about yourself or that you are a failure or have let yourself or your family down	Not at all	110	76.9	1.55	1.06	Low
	Nearly every day	4	2.8			
	More than half the days	12	8.4			
	Several days	17	11.9			
	Total	143	100.0			
Trouble concentrating on things such as reading the newspaper or watching television	Not at all	75	52.4	2.09	1.27	Moderate
	Nearly every day	14	9.8			
	More than half the days	20	14.0			
	Several days	34	23.8			
	Total	143	100.0			
Moving or speaking so slowly that other people could have noticed ? or the opposite being so fidgety or restless that you have been moving around a lot more than usual	Not at all	81	56.6	1.98	1.23	Low
	Nearly every day	13	9.1			
	More than half the days	20	14.0			
	Several days	29	20.3			
	Total	143	100.0			
Thoughts that you would be better off dead or of hurting yourself in some way	Not at all	120	83.9	1.34	.84	Low
	Nearly every day	6	4.2			
	More than half the days	8	5.6			
	Several days	9	6.3			
	Total	143	100.0			

Cut of points value(1): low = (1-2), Moderate = (2.1 - 3), High = (3.1 - 4).; M = Mean, SD=standard deviation, F=frequency, % =percentage.

Table 2 shows that the maximum mean was 2.76 with the item (feeling tired or having little energy), while the minimum mean was 1.55 with the item (feeling bad about yourself or that you are a failure or have let yourself or your family down).

Table 3: Descriptive analysis of overall depression disorder among recovered nurses from COVID-19 (PHQ-9)

Ranking	F	%	M	SD	Overall assessment
Low	57	39.9	2.2	.633	Moderate
Moderate	76	53.1			
High	10	7.0			
Total	143	100.0			

Cut of points value(1): low = (1-2), Moderate = (2.1 - 3), High = (3.1 - 4).; M = Mean, SD=standard deviation, F=frequency, % =percentage.

Table 4: Association between depression disorder among recovered nurses from COVID-19 and demographic data

Demographic data	X^2	D.F	P value	Assessment
Age	20.748	6	.002**	H.S
Gender	7.381	2	.025*	Sig
Years of experience in health setting	23.013	6	.042*	Sig

X^2 = Chi-square ,Sig = significance, N.S = non significance, H.S= highly significance P value ≤ 0.05
** significant at the 0.01 level.
* significant at the 0.05 level.

Table 4 shows that there is a significant and highly significant relationship between depression among recovered nurses from COVID-19 and some demographical data at $p \leq 0.05$, such as (age, gender, Years of experience in health setting,).

DISCUSSION

The findings of the data analysis showed that less than three quarters 102 (71.3%) of the aged were between (19-29) years of age and more than two thirds 94 (65.7%) were female. This result agreed with a study that was carried out to assess the immediate psychological impact on healthcare professionals was connected with sociodemographic factors and hospital support measures in the COVID-19 study in Wuhan. According to the findings, the study sample's age group (19–29) years constituted 40.1% of the total target sample, and females also constituted 85% of the total number of those who participated in the study[4]

Saudi study conducted to assess Depression and Anxiety with Stigma in a Sample of Patients in Saudi Arabia Who Recovered from COVID-19. According to the Cross-sectional study age group was from (18 ≤ over) , and females constituted the largest proportion of the total number of participants .Females were more prone to depression and anxiety disorder than meals[5], according to the Multiple linear regression (β=3.071 and β=1.86), table (1)also showed that about two third 93 (65%) having (1-5) years of experience in health setting and (6-10) years represent (19.6%). This result agreed with a study that was carried out to assess anxiety among healthcare workers on the front lines of the COVID-19 outbreak. The results of the study showed that the percentage of nurses serving in health institutions is 270 (78.7%), which represents the highest percentage for the category with service and 73 (21.3%) this percentage represent over five years[6]

Iranian study conducted to assess knowledge and anxiety about COVID-19 of Iranian nurses'. The results of the study showed that the highest percentage of the service category in health institutions of five years or less out of the total number of participating nurses was 41.2% (35), which is the highest percentage of other categories. The researcher's opinion the results of this item as a rush to contribute to care for COVID-19 patients because they were enthusiastic, youthful, and had a want to assist patients for well-being[7].

The findings of the data analysis regarding to table (3) Show that more than half 76 (53.1%) of recovered nurses from COVID-19 were having moderate depression disorder. This result agreed with a study that was carried out to assess depression disorder among frontline nurses in emergency departments during the COVID-19 outbreak and its influence on quality of life. The results of the study showed that the prevalence of depression among nurses was (43.61%), as it included (27.7%) of mild depression, (8.6%) of moderate depression, (5.3%) of moderate to severe depression, and (2.1%) of severe depression out of the total number of (1103) participating nurses[8].During study to assess depression, stress, dread, and social support among Jordanian clinical staff during the COVID-19 pandemic. The results of the study showed that the majority of participants in the study were female, and that the proportion of nurses with severe depression was (40%) of the total number of (365) participants[9].

A cross-sectional study was conducted to assess psychological distress, depression symptoms, and exhaustion among Quebec nursing staff during the COVID-19 pandemic. The results of the study showed that the percentage of nurses with moderate to severe depression was (27%), of the total number (1708), and that most of the participants were female, where they constituted (87%) of the total number of participants. The researcher's opinion that the current results showed a great similarity between the findings of prior research and the current study, which indicates the existence of continuous psychological consequences for nurses recovered from COVID-19[10].

CONCLUSION

The highest age group among nurses recovered from COVID-19 is (19-29) years.

The highest category among nurses recovered from COVID-19 in terms of gender is female.

The highest percentage of nurses recovered from COVID-19 about marital status are singles.

The highest percentage of nurses recovered from COVID-19 about family type is the small family size that consists of one to six members.

The highest percentage of nurses recovered from COVID-19 about the educational level are graduates of the nursing diploma.

Most nurses who recovered from COVID-19 have service in health institutions from (1-5) years.

Moderate depressive disorder was more prevalent in recovered nurses from age group (19-29), specifically females, and they had service in health institutions from 1-5 years.

Recommendation

Must investing more studies to measure a larger population to generalize the results.

The Department of Continuing Medical Education must provide psychological support for recovered nurses from COVID-19, especially females nurses. Increased efforts should be made to hold epidemiological training courses on how to deal with transmissible viruses, as well as to understand their dangers and modes of transmission.

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