

Compulsion Symptoms among Health Care Providers during the Pandemic of Corona at Baghdad Teaching Hospital

اعراض الإكراه بين مقدمي الرعاية الصحية أثناء جائحة كورونا في مستشفى بغداد التعليمي

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المستخلص

الهدف: تهدف الدراسة الحالية إلى تقييم اعراض الإكراه بين مقدمي الرعاية الصحية أثناء جائحة كورونا. **منهجية البحث:** تم وضع التصميم الوصفي المستخدم في الدراسة الحالية في الفترة من 10 تشرين الأول (أكتوبر) 2020 إلى 20 أيار (مايو) 2021. وقد أجريت الدراسة على عينة احتمالية (ملائمة) مؤلفة من 248 طبيباً وممرضاً يعملون في مستشفى بغداد التعليمي. تم اعتماد ادوات الدراسة على مقياس ضغوط جائحة كورونا المستجد كوفيد-19 (الفحص القهري بسبب كوفيد-19) النسخة العربية. **النتائج:** أظهرت نتيجة الدراسة المقدمة أن 42% من مقدمي الرعاية الصحية يعانون من اعراض اكراه معتدل و 36% منهم يعانون من اعراض اكراه خفيف ، و 13% فقط مصابين بأعراض إكراه شديد وفقاً لدرجة مقياس إجهاد كورونا. **الاستنتاجات:** كان لدى 78.6% من المشاركين أعراض إكراه خفيفة إلى متوسطة و 13.7% لديهم إكراه شديد. **التوصيات:** يجب على جميع مقدمي الرعاية الصحية الحصول على تدريب منظم وشامل حول كيفية التعامل مع الوبئة. هناك حاجة لاجراء المزيد من البحوث حول كيفية تأثير أوبئة الأمراض المعدية على الحالة النفسية لمقدمي الرعاية الصحية. **الكلمات المفتاحية:** علامات الإكراه ، مقدمي الرعاية الصحية ، كوفيد-19

Abstract

Objectives: The present study aimed to assess the compulsion among health care providers during the pandemic of COVID-19.

Methodology: a descriptive design was used in the present study. This study was conducted from October 10th, 2020 through May 20th, 2021. The study was conducted on a probability (convenient) sample of 248 physicians and nurses who work at Baghdad Teaching hospital in Baghdad city. The instrument was used in this study is the COVID Stress Scale-Arabic version (CSS).

Results: The result of this study showed that 42 % of HCPs had moderate symptoms and 36% of them had mild compulsive symptoms, and only 13% have severe compulsive symptoms according to the score of COVID stress scale.

Conclusions: 78.6 % of the participants had mild to moderate compulsive and 13.7% had sever compulsion.

Recommendations: All HCPs must get regular and thorough training on how to deal with the pandemic, and there is a need for more researches on how infectious disease epidemics affect the mental health of HCPs.

Keywords: compulsion symptoms, health care providers, COVID-19

Introduction

The global community concerns about Coronavirus disease (COVID-19), and found out its effect on different circles of life, for example, the economy, human wellbeing and medical services. World Health Organization (WHO) is on controlling and alleviating the effect of this pandemic by recognizing, testing, treating tainted individuals, creating medications, antibodies and treatment conventions (Kumar & Nayyar, 2020).

Shaukat, Ali and Razzak in 2020 reviewed Ten full-text articles were investigated and remembered. Working in a high-risk department, having a diagnosed family member, insufficient hand hygiene, suboptimal hand hygiene before and after contact with patients, improper PPE use, close contact with patients, long daily contact hours, and unprotected exposure were all identified as risk factors for COVID-19-related health impact. Fever (85 percent), cough (70 percent), and weakness were the most frequent symptoms reported by HCPs (70 percent). Long-term PPE use resulted in cutaneous symptoms and skin damage in 97% of cases, with the nasal bridge (83%) being the most often afflicted areas. High levels of sadness, anxiety, sleeplessness, and discomfort were reported by HCPs. HCPs who were female disproportionately affected⁽¹⁾.

The purposes of this study are to assess the compulsion symptoms among HCPs during the pandemic of COVID-19 and investigate the association between the HCPs age, gender, marital status, educational qualifications, and years of experience with the level of compulsion.

Methodology

A quantitative descriptive research design was used in this research to accomplish objectives of the study. The ethical consideration of research was accomplished by obtaining the agreement

from the Ethical Committee for Research at the College of Nursing, University of Baghdad. Finally; the informed content was obtained from the physicians and nurses to participate in this study before collecting the data and filling the questionnaire. The purpose of administrative and arrangements, issues for conducting the research, permission was asked from the Council of the Nursing College/ University of Baghdad for this study, then obtained approval from the Ministry of Planning/ Central statistical organization, and also permission was obtained from the Ministry of Health including Baghdad teaching hospitals.

The sample of this study includes physicians (81) and nurses (167) who work at the Baghdad teaching hospital. The data for this study were collected using a questionnaire which consisted of two parts: (a) socio-demographic characteristics included age, gender, marital status, educational level, years of experience, type of job, and providing care for patient with COVID-19, injury with COVID-19 (b) The Arabic version of COVID Stress Scale (CSS). The CSS total score for the 6 items of COVID compulsive checking domain ranges from 0 to 24. 0–5: absent compulsive, 6–11: mild compulsive, 12–17: moderate compulsive, 18–24: severe compulsive (4). The most recent edition of the CSS which is the Arabic version of CSS in 2021 which comprises of 36 items⁽²⁾. The Content validity index CVI are adequate for significance and consistency in the current analysis, varying from 0.8 to 1.0 for item level CVI (I-CVI), expert level CVI (E-CVI), and scale level CVI (S-CVI). The Cronbach alphas of the various domains were found to be satisfactory in the current analysis, ranging from 0.86 to 0.91. The Arabic CSS had a multidimensional structure, strong internal continuity, and construct validity. COVID compulsive checking Cronbach alpha result 0.86.

COVID compulsive checking and reassurance seeking, which consists of six items, was used in this study on a 5-point Likert scale, 0 (not at all) to 4 (very) (extremely). A questionnaire was used for data collection. Data collection was performed through the use of the study instrument. Each participant needs approximately 15 minutes to answer the study questioner. During and after their participation in the study, the researcher assured participants that their data would be kept confidential and safe. However, because of their duties and responsibility

each questionnaire was restored about 60 minutes approximately. Data were collected from the period 12 April 2021 to 1 May 2021 and about 20 samples were collected in one day.

Data were analyzed through the use of statistical package of social sciences (SPSS) version 23. The statistical procedures, which were applied for the data analysis and assessment of the results, included the following: Descriptive statistics Frequency (F), Percentage (%), Mean Score and Standard deviation according to the mean scores ⁽³⁾.

Results

Table (1): Assessment of COVID Compulsive symptoms among health care providers

Absent compulsive symptoms	14	7.7%
Mild compulsive symptoms	90	36.3%
Moderate compulsive symptoms	105	42.3%
Sever compulsive symptoms	34	13.7%
Mean= 12.33		
Std. Deviation= 4.77		
0–5: absent compulsive, 6–11: mild compulsive, 12–17: moderate compulsive, 18–24: severe compulsive ⁽⁴⁾.		
Total	248	100%

F: Frequency, %: Percentage, M: Mean total score, SD: Standard Deviation for total score.

Presented table showed that 42 % of HCPs had moderate compulsive and 36% of them have mild compulsive, and only 13% have severe compulsive according to the score of COVID stress scale.

Table (2): The Relationships between Participants' Demographics and Compulsive symptoms

COVID compulsive checking symptoms		
	CC	P. V
Age	0.15	0.89
Gender	0.06	0.80

Marital status	0.20	0.57
Level of education	0.26	0.02
Years of experience in the hospital	0.23	0.31
Type of job	0.19	0.02
Providing care for patient with COVID-19	0.21	0.007
Injury with COVID-19	0.09	0.49

The results of the table 2 indicated that there were three significant correlations were reported between psychological status and COVID-19 Compulsion checking among HCPs, including psychological status and level of education; psychological status and type of job; and psychological status and providing care for patients with COVID-19.

Discussion

The goal of this study was to emphasize the pandemic's psychological effects (compulsive) on front-line HCPs and assess the symptoms of compulsive among HCPs.

The finding of data analysis that were shown in Table 1 that 42 % of HCPs had moderate compulsive and only 13% have severe compulsive, according to the score of COVID stress scale similar to the results of study conducted by Taylor et al. Stated that 16% of American and Canadian have sever compulsive. According to the researcher's view, two years since the outbreak of the epidemic, the HCW or HCPs have coexisted by using defense and sterilization procedures. Conducted study in Egypt about attitudes, socioeconomic burden, and mental health issues related to the COVID-19 pandemic among the general public and health care worker (HCP) were

compared. There were 402 non-HCPs and 122 HCPs. The majority of participants, notably HCPs, had a strong understanding of the condition and a positive attitude toward preventative measures. COVID-19 had a detrimental effect on several parts of the participants' lives. HCPs showed a greater prevalence of anxiety (32%) and OCD (29%) than non-HCPs (30% and 28%), respectively, whereas non-HCPs had a greater prevalence of depression than HCPs⁽⁵⁾. The frequency of OCD in Wuhan was 17.93 percent three months after the quarantine was lifted. Approximately 89 percent of OCD patients had both obsessions and compulsions, whereas 8% exclusively had obsessions and 3% exclusively had compulsions. Miscellaneous (84.0%), aggressive (76.6%), and contamination (48.9%) were the top three common characteristics of obsessions, whereas miscellaneous (64%) and checking (48.9%)

were the top three frequent characteristics of compulsions, respectively (51.7 percent), as well as cleaning, washing, and repeated (31.5 percent). Unmarried people were more likely to develop OCD than married people. Students were 2.103 times more likely than health care employees to acquire OCD ⁽⁶⁾.

The Table 2 showed that there is no significant relationship ($p = 0.91$ and $p = 0.89$) between age and COVID compulsive checking. This result differs from the results of a study about obsessive-compulsive disorder (OCD) with early and late onset showed significant differences between patients with early and late onset of the disorder. Patients with early OCD (beginning at age 19) had higher levels of OCD severity and more symptoms across the board. There is no significant difference ($p = 0.80$) between gender and COVID compulsive checking ⁽⁷⁾. There is no significant difference between gender, age and obsession compulsion. There is no significant difference ($p = 0.80$ and $p = 0.57$) between marital status and COVID compulsive checking, respectively ⁽⁸⁾. There is a significant incidence of OCD in unmarried individuals, which is in line with previous research that suggests single people are more likely to be affected than married people ⁽⁹⁾. The Obsessive-compulsive symptoms were seen in 18.5 percent of the participants ($n = 37/200$). Contamination was the most prevalent fixation, while cleaning/washing was the most frequent compulsion, with 51.35 percent and 63.33 percent frequency, respectively. There were no significant variations in age, gender, marital status, or income between the two groups. There is a significant relationship ($p=0.02$) between level of education and COVID compulsive checking. The researcher didn't find any study to support this idea. There is no significant relationship ($p = 0.31$) between years of

experience in the hospital and COVID compulsive checking. The researcher didn't find any study to support this idea ⁽¹⁰⁾.

There is a significant difference ($p = 0.02$) between type of job and COVID compulsive checking ⁽¹¹⁾. The nurses, on the other hand, are required to work at all hours of the day to satisfy the demands of their patients. Shift work can cause a variety of physical and psychological issues, which can have an impact on other elements of nurses' life. In other words, improper emotional reactions like stress, anxiety, and sadness are common in modern nursing care and generate a slew of issues for both nurses and patients and found a link between shift work and the prevalence of serious depressive disorders and OCD during and after employment in this study ⁽¹¹⁾. The other employees had statistically significantly greater self-reported symptoms of moderate or high stress, anxiety, and depression than health care employees. After the pandemic began, some workers reported more obsessive-compulsive symptoms (concern about contamination and repetitive hand washing). Symptoms among HCPs were statistically considerably greater both before and after the COVID-19 pandemic ⁽¹²⁾.

There is a significant difference ($p = 0.04$ and $p = 0.007$) between providing care for patients with COVID-19 and COVID compulsive checking. The researcher didn't find any study to support this idea.

There is no significant difference ($p=0.49$) between injury with COVID-19 and COVID compulsive checking. French and Lyne discussed the case of a woman in her 30s a history of well-controlled contamination OCD who came with an abrupt aggravation of OCD symptoms triggered by a COVID-19 injury ⁽¹³⁾.

Conclusions

HCPs have more interaction with patients and are more likely to suspect COVID-19 infection. This research concluded that the HCPs had mild to moderate compulsive as they work with patient with COVID_19.

Recommendations

1. This research suggests protect the well-being of healthcare personnel, comprehensive assistance should be offered. It recommends that all HCPs receive regular and comprehensive training (how to deal with the pandemic).
2. More research is needed on how epidemics of infectious diseases affect the mental health of HCPs.

References

1. Shaukat, N., Ali, D. M., & Razzak, J. (2020). Physical and mental health impacts of COVID-19 on healthcare workers: A scoping review. *International Journal of Emergency Medicine*, 13(1), 1-8.
2. Abbady, A. S., El-Gilany, A. H., El-Dabee, F. A., Elsadek, A. M., ElWasify, M., & Elwasify, M. (2021). Psychometric characteristics of the of COVID Stress Scales-Arabic version (CSS-Arabic) in Egyptian and Saudi university students. *Middle East Current Psychiatry*, 28(1), 1-9.
3. Polite, D.F., & Hungler, B.P. (1999). *Textbook of nursing Research: Principles and Methods*. Philadelphia, Lippincott Williams and Wilkins. Pp.345-398.
4. Taylor, S., Landry, C. A., Paluszek, M. M., Fergus, T. A., McKay, D., & Asmundson, G. J. (2020). COVID stress syndrome: Concept, structure, and correlates. *Depression and anxiety*, 37(8), 706-714.
5. Ahmed, G. K., Ramadan, H. K. A., Refay, S. M., & Khashbah, M. A. (2021). Comparison of knowledge, attitude, socioeconomic burden, and mental health disorders of COVID-19 pandemic between general population and HCPs in Egypt. *The Egyptian journal of neurology, psychiatry and neurosurgery*, 57(1), 1-11.
6. Zheng, Y., Xiao, L., Xie, Y., Wang, H., & Wang, G. (2020). Prevalence and Characteristics of Obsessive-Compulsive Disorder among Urban Residents in Wuhan during the Stage of Regular Control of Coronavirus Disease-19 Epidemic. *Frontiers in psychiatry*, 11, 1435.
7. Anholt, G. E., Aderka, I. M., Van Balkom, A. J. L. M., Smit, J. H., Schruers, K., Van Der Wee, N. J. A., ... & Van Oppen, P. (2014). Age of onset in obsessive-compulsive disorder: admixture analysis with a large sample. *Psychological Medicine*, 44(1), 185.
8. Boedhoe, P. S., Schmaal, L., Abe, Y., Ameis, S. H., Arnold, P. D., Batistuzzo, M. C., ... & members of the ENIGMA OCD Working Group. (2017). distinct subcortical volume alterations in pediatric and adult OCD: A worldwide Meta-and mega-analysis. *American Journal of Psychiatry*, 174(1), 60-69.
9. Ashraf, F., Malik, S., & Arif, A. (2017). An epidemiological study of prevalence and comorbidity of obsessive compulsive disorder symptoms (SOCD) and stress in Pakistani Adults. *Pakistan journal of medical sciences*, 33(4), 835.
10. Singh, A., Beniwal, R. P., Bhatia, T., & Deshpande, S. N. (2019). Prevalence and clinical correlations of obsessive-compulsive symptoms in schizophrenia. *Asian journal of psychiatry*, 39, 48-52.
11. Rajabi, G., & Naderi Nobandegani, Z. (2017). Death obsession, death anxiety, and depression as predictors of death depression in nurses. *Jentashapir Journal of Health Research*, 8(6).

12. Mrklas, K., Shalaby, R., Hrabok, M., Gusnowski, A., Vuong, W., Surood, S., ... & Agyapong, V. I. O. (2020). Prevalence of Perceived Stress, Anxiety, Depression, and Obsessive-Compulsive Symptoms in Health Care Workers and Other Workers in Alberta During the COVID-19 Pandemic: Cross-Sectional Survey. *JMIR Mental Health*, 7(9), e22408.
13. French, I., & Lyne, J. (2020). Acute exacerbation of OCD symptoms precipitated by media reports of COVID-19. *Irish journal of psychological medicine*, 37(4), 291-294.
14. Kumar, A., & Nayar, K. R. (2020). COVID-19 and its mental health consequences. *Journal of Mental Health*, 1-2.