Published online 2023 March 3.

Research Article

Stress and Anxiety Among Bank Staffs Facing COVID-19 Outbreak: A Cross-sectional Study

Mitra Shabab^{1, 2} and Behzad Fouladi Dehaghi ^[], 2,]

¹Environmental Technologies Research Center, School of Health, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran ²Department of Occupational Health Engineering, School of Health, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran

Corresponding author: Department of Occupational Health, School of Health, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran. Email: bdehaghi@gmail.com

Received 2022 October 19; Revised 2022 December 17; Accepted 2023 January 18.

Abstract

Background: The prevalence of coronavirus has become one of the most important challenges and concerns, and awareness of the mental health status of people in the workplace has become an important issue. Bank staff, like other workers, maybe under severe physical and psychological stress.

Objectives: The study aimed to investigate the degree of anxiety among bank staff during the COVID-19 pandemic.

Methods: The present cross-sectional study was conducted among the bank staff by participating 199 employees. The corona disease anxiety scale (CDAS) questionnaire was used to gather data. For analyzing data, the *t*-test and chi-square test was applied.

Results: 160 males (80.4%) and 39 females (19.6%) participated in the study. 55.6% of the participants reported that when they think about COVID-19, it leads to anxiety, and 38.3% said that they feel sad when they think about the danger of corona often. The results showed that an underlying disease increases the chance of being infected with COVID-19 (OR = 3.786, 95% CI: 1.227 - 8.708 and P = 0.018). Also, the results revealed a significant relationship between increasing physical symptoms and psychological symptoms in participants and the probability of being infected with COVID-19.

Conclusions: The results showed that stress and anxiety among bank employees increased during the COVID-19 pandemic. Therefore, making the necessary arrangements to reduce stress and anxiety among employees through proper politicization and more managers' attention to this phenomenon in this period is essential.

Keywords: COVID-19, Stress, Bank, Employer

1. Background

The World Health Organization has announced the outbreak of the new coronavirus, declaring it a public health emergency and an international concern. The new coronavirus was formally named COVID-19 on February 11, 2020, by the WHO (1). The pandemic has not only been a dangerous threat to people's health but can also severely affect individuals' mental health and well-being (2). Being isolated from the community and taking the physical distance between individuals are considered two basic strategies to eliminate the transmission chain, but both strategies cause stress and severe psychological pressures on individuals (3). During the pandemic, restrictions on various areas of work and life with the closure of various educational, sports, and entertainment departments and many other cases caused fear, anxiety, depression, and stress in people (4, 5). While maintaining social distance, strict guidelines and new restrictions abruptly changed people's normal living conditions, losing personal freedoms and

resulting in uncertainty about future planning. In addition, isolation and confinement at home, as feeling worried about the health of oneself and one's family, can be psychologically challenging and exhausting for many people (6). Based on the experiences of past pandemics, the development and implementation of assessment, support, treatment, and mental health services through cooperation to control the prevalence of the COVID-19 pandemic can be very vital (7). People on the front lines of COVID-19 because of their jobs, in addition to common concerns, suffer from COVID-19 anxiety, depression, and stress disorder. Therefore, organizational and work-related interventions such as improving workplace infrastructure and taking appropriate measures such as providing personal protective equipment and implementing resilience training programs can reduce the severity of these complications (8). Fear and anxiety about COVID-19 may cause a certain state of health anxiety and irrational anxiety about having a serious medical condition (9, 10). The prevalence of coro-

Copyright © 2023, Jundishapur Journal of Health Sciences. This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/) which permits copy and redistribute the material just in noncommercial usages, provided the original work is properly cited.

navirus has become one of the most important challenges and concerns, and awareness of the mental health status of people in the workplace has become an important issue. Mental workload and job stress are among the most important factors in determining employees' job performance in the workplace. The highly stressful workload in bank offices is common, and these individuals are in close contact with clients.

2. Objectives

The study aimed to investigate the degree of anxiety among bank staff during the COVID-19 outbreak.

3. Methods

The present cross-sectional study was conducted among bank staff (June – August 2021). The sample size was calculated using G-power software based on levels of anxiety in healthcare workers (11), with a confidence level of 90% and 5% first error (α); the sample size required to achieve the study was 199. The present study sent questionnaires to bank employees through social media such as WhatsApp and Porsline.

3.1. Questionnaire

The Corona Disease Anxiety Scale (CDAS) questionnaire has been developed and validated to measure anxiety caused by the spread of coronavirus in Iran. The final version of the questionnaire has 18 items and two components (agents). Items 1 to 9 measure psychological symptoms, and items 10 to 18 measure physical symptoms. This questionnaire is scored on a 4-point Likert scale (never = 0, sometimes = 1, most times = 2, and always = 3). The reliability of the CDAS questionnaire was obtained using Cronbach's alpha method (α = 0.919). According to the range of standard T scores, the questionnaire factors and the total score of anxiety severity were divided into three ranges: non-anxiety or mild (T \leq 39), moderate (T \leq 60), and severe (T \geq 61) (12).

3.2. Statistical Analysis

The data were analyzed using SPSS version 19. Using descriptive statistics, the demographic characteristics of the participants, such as gender, history of underlying diseases, and history of COVID-19 infection, were obtained. t-test and chi-square were used for comparing quantitative and qualitative data, respectively. The level of statistical significance was considered P < 0.05.

The study was approved by the research committee of Ahvaz Jundishapur University of Medical Sciences (IR.AJUMS.REC.1400.090). All participants were fully informed about the study purpose and method and signed the consent form to participate voluntarily based on the Declaration of Helsinki.

4. Results

A total of 199 participants, 160 males (80.4%) and 39 females (19.6%) with a mean age of 40.4 ± 6.5 and 34.3 \pm 5.3 years, respectively, participated in the study. Also, from these 199 workers, 73 male staff (45.6%) and 16 female staff (41%) have been infected with COVID-19 recently. Table 1 shows the results of the psychological and physical symptoms of the CDAS screening questions; 54.7% of the participants reported that when they think about COVID-19, it leads to my anxiety, and 39.1% said that they feel sad when they think about the danger of corona for often. Also, 47.7%, 30.1%, and 22.6% said that the outbreak of COVID-19 worries them greatly, they are afraid of contracting coronavirus, and they fear that they might contract coronavirus anytime for always, respectively. The participant's response to the physical symptoms shows that 11.5%, 8.1%, and 6.5% announced: I am having trouble sleeping after thinking about COVID-19, I do not feel like eating when I think about COVID-19, and thinking about COVID-19 gives me a headache for always, respectively. The total score of CDAS male and female participants with severe anxiety was 59.3% and 66.6%, respectively (Table 2). Also, according to the Chi-square test, the results showed no difference between the intensity range of variables of psychological and physical symptoms in the two groups (Table 2). The results presented in Table 3 showed that an underlying disease increases the chance of being infected with COVID-19 (OR = 3.786, 95% CI: 1.227 - 8.708 and P = 0.018). Also, the results revealed a significant relationship between increasing psychological and physical symptoms in participants and the probability of being infected with COVID-19 (Table 3).

5. Discussion

The present study examined the negative effects of the COVID-19 pandemic among service employees, including bank employees, on perceived anxiety and stress. The results showed that bank employees' stress and anxiety about COVID-19 infection were moderate. On the other hand, the results showed that all participants had mild to severe anxiety. This finding is similar to other studies by Parajuli et al., Abolfotouh et al., Adibi et al., and Rana and

	Never	Sometimes	Often	Always
Psychological Symptoms				
When I think about COVID-19, it leads to my anxiety.	0(0)	45 (22.6)	109 (54.7)	45 (22.6)
I feel sad when I think about the danger of corona.	0(0)	82 (41.2)	78 (39.2)	39 (19.6)
The outbreak of COVID-19 worries me greatly.	0(0)	41 (20.6)	63 (31.7)	95 (47.7)
Getting infected with COVID-19 scares me.	0(0)	45 (22.6)	94 (47.2)	60 (30.2)
I have a constant fear of contracting COVID-19.	0(0)	67 (33.7)	87 (43.7)	45 (22.6)
I am obsessed with COVID-19 and check myself for the slightest symptoms.	0(0)	78 (39.2)	60 (30.2)	61 (30.7)
I am afraid to transmit the COVID-19 virus to my family and relatives.	0(0)	11 (5.5)	43 (21.6)	145 (72.9)
I am having trouble doing my daily tasks because of my anxiety about COVID-19.	0(0)	108 (54.3)	68 (34.2)	23 (11.6)
The media's attention to COVID-19 worries me.	0(0)	62 (31.2)	67 (33.7)	70 (35.1)
Physical Symptoms				
I'm having trouble sleeping after thinking about COVID19.	0(0)	143 (71.9)	33 (16.6)	23 (11.6)
I don't feel like eating when I think about COVID-19.	0(0)	157 (78.9)	26 (13.1)	16(8)
Thinking about COVID19 gives me a headache.	0(0)	165 (82.9)	21 (10.6)	13 (6.5)
The thought of COVID-19 makes my body tremble.	0(0)	162 (81.4)	27 (13.6)	10 (5)
Thinking about COVID-19 makes me sick.	0(0)	174 (87.4)	18 (9.2)	7(3.5)
Corona has become a nightmare for me.	0(0)	152 (76.4)	20 (10.2)	27 (13.5)
The fear of COVID-19 has reduced my physical activity.	0(0)	106 (53.3)	66 (33.2)	27 (13.6)
Talking to others about COVID-19 bothers me.	0(0)	143 (71.9)	41 (20.6)	15(7.5)
Thinking about COVID-19 makes my heart beat faster.	0(0)	162 (81.4)	26 (13.1)	11 (5.6)

^a Values are expressed as No. (%).

	No.	Low Anxiety	Moderate Anxiety	Severe Anxiety	P-Value
Psychological symptoms					0.571
Male	160	0(0)	95 (59.3)	65 (41.7)	
Female	39	0(0)	13 (33.3)	26 (66.6)	
hysical symptoms					0.853
Male	160	0(0)	65 (41.7)	95(59.3)	
Female	39	0(0)	17(43.5)	22(56.4)	
he total questionnaire					0.452
Male	160	0(0)	65 (41.7)	95(59.3)	
Female	39	0(0)	13(33.3)	26 (66.6)	

^a Values are expressed as No. (%).

	В	Odds Ratio	95% CI	P-Value	
Gender	0.271	1.311	0.579 - 2.969	0.516	
Age	-0.033	0.967	0.918 - 1.020	0.217	
Underlying disease	1.184	3.268	1.227 - 8.708	0.018	
Psychological symptoms	-0.569	0.566	0.333 - 0.963	0.036	
Physical symptoms	0.318	1.374	1.024 - 1.844	0.034	
The total questionnaire	-0.063	0.939	0.848 - 1.040	0.230	

Islam (13-16). Also, Aly et al. stated that the frequency of mental health problems in stress, depression, and anxiety among healthcare workers was high irrespective of demographic characteristics (17). In another study by Teshome et al., performed on 798 healthcare workers in Ethiopia, the results stated that 61.8% (95% CI: 58.4%, 65.2%) of healthcare workers experienced stress (18). The study results showed that the physical symptoms' mean value was higher than psychological symptoms in participants exposed to coronavirus. The study's results by Nagi and Kumar stated that fear of COVID-19 could cause increased physical stress in bank employees (19). A study by Alawneh et al. revealed that coronavirus anxiety was not affected by age and gender in healthcare workers (20). Similar results in the case of gender variables were gained in this study, but our results found a significant relationship concerning the age variable.

5.1. Limitations

A limitation was that social desirability bias might affect participants' responses to the anxiety and cognitive function scale. In such a way that they exaggerate in expressing their anxiety. Therefore, workers were asked to state the truth to minimize this bias.

5.2. Conclusions

This study showed that bank employees' anxiety and stress increased during the COVID-19 pandemic. Therefore, making the necessary arrangements to reduce stress and anxiety among employees through proper politicization and more managers' attention to this phenomenon in this period is essential.

Footnotes

Authors' Contribution: Concepts and design: MS and BFD; Acquisition of data: MS; Analysis and interpretation of data: MS and BFD; Drafting of the manuscript: MS; Critical revision of the manuscript for important intellectual content: MS and BFD; Statistical analysis: MS and BFD; Administrative, technical, and material support: MS.

Conflict of Interests: The authors declare no conflicts of interest

Ethical Approval: The study was approved by the research committee of Ahvaz Jundishapur University of Medical Sciences (IR.AJUMS.REC.1400.090).

Funding/Support: None.

Informed Consent: All participants were fully informed about the study purpose and method and signed the consent form to participate voluntarily based on the Declaration of Helsinki.

References

- 1. Jamshidnezhad A, Hosseini SA, Ghavamabadi LI, Marashi SMH, Mousavi H, Zilae M, et al. The role of ambient parameters on transmission rates of the COVID-19 outbreak: A machine learning model. Work. 2021;70(2):377-85. [PubMed ID: 34633338]. https://doi.org/10.3233/WOR-210463.
- 2. Cai W, Lian B, Song X, Hou T, Deng G, Li H. A cross-sectional study on mental health among health care workers during the outbreak of Corona Virus Disease 2019. Asian J Psychiatr. 2020;51:102111. [PubMed ID: 32361388]. [PubMed Central ID: PMC7194661]. https://doi.org/10.1016/j.ajp.2020.102111.
- 3. Banerjee D. How COVID-19 is overwhelming our mental health. Nature India; 2020. Available from: https://www.nature.com/articles/nindia. 2020.46.
- 4. Fofana NK, Latif F, Sarfraz S, Bashir MF, Komal B; Bilal. Fear and agony of the pandemic leading to stress and mental illness: An emerging crisis in the novel coronavirus (COVID-19) outbreak. Psychiatry Res. 2020;291:113230. [PubMed ID: 32593067]. [PubMed Central ID: PMC7833263]. https://doi.org/10.1016/j.psychres.2020.113230.
- 5. Zhou X, Snoswell CL, Harding LE, Bambling M, Edirippulige S, Bai X, et al. The Role of Telehealth in Reducing the Mental Health Burden from COVID-19. Telemed J E Health. 2020;26(4):377-9. [PubMed ID: 32202977]. https://doi.org/10.1089/tmj.2020.0068.
- 6. Savolainen I, Oksa R, Savela N, Celuch M, Oksanen A. COVID-19 Anxiety-A Longitudinal Survey Study of Psychological and Situational Risks among Finnish Workers. Int J Environ Res Public Health. 2021;18(2). [PubMed ID: 33477756]. [PubMed Central ID: PMC7832302]. https://doi.org/10.3390/ijerph18020794.
- 7. Stankovska G, Memedi I, Dimitrovski D. Coronavirus Covid-19 Disease, Mental Health and Psychosocial Support. Society Register. 2020;**4**(2):33-48. https://doi.org/10.14746/sr.2020.4.2.03.

- Giorgi G, Lecca LI, Alessio F, Finstad GL, Bondanini G, Lulli LG, et al. COVID-19-Related Mental Health Effects in the Workplace: A Narrative Review. Int J Environ Res Public Health. 2020;17(21). [PubMed ID: 33120930]. [PubMed Central ID: PMC7663773]. https://doi.org/10.3390/ijerph17217857.
- 9. Ahorsu DK, Lin CY, Imani V, Saffari M, Griffiths MD, Pakpour AH. The Fear of COVID-19 Scale: Development and Initial Validation. *Int J Ment Health Addict*. 2022;**20**(3):1–9. [PubMed ID: 32226353]. [PubMed Central ID: PMC7100496]. https://doi.org/10.1007/s11469-020-00270-8.
- Cox RC, Jessup SC, Luber MJ, Olatunji BO. Pre-pandemic disgust proneness predicts increased coronavirus anxiety and safety behaviors: Evidence for a diathesis-stress model. *J Anxiety Dis*ord. 2020;**76**:102315. [PubMed ID: 33007711]. [PubMed Central ID: PMC7507982]. https://doi.org/10.1016/j.janxdis.2020.102315.
- Sahebi A, Nejati-Zarnaqi B, Moayedi S, Yousefi K, Torres M, Golitaleb M. The prevalence of anxiety and depression among healthcare workers during the COVID-19 pandemic: An umbrella review of meta-analyses. *Prog Neuropsychopharmacol Biol Psychia try*. 2021;**107**:110247. [PubMed ID: 33476692]. [PubMed Central ID: PMC7817526]. https://doi.org/10.1016/j.pnpbp.2021.110247.
- Alipour A, Ghadami A, Farsham A, Dorri N. A New Self-Reported Assessment Measure for COVID-19 Anxiety Scale (CDAS) in Iran: A Web-Based Study. *Iran J Public Health*. 2020;**49**(7):1316– 23. [PubMed ID: 33083298]. [PubMed Central ID: PMC7548505]. https://doi.org/10.18502/ijph.v49i7.3585.
- Parajuli J, Mishra P, Sharma S, Bohora KB, Rathour PS, Joshi J, et al. Knowledge and Attitude about COVID 19 among Health Care Workers Working in Seti Provincial Hospital. J Nepal Health Res Counc. 2020;18(3):466–71. [PubMed ID: 33210642]. https://doi.org/10.33314/jinhrc.v18i3.2816.

- Abolfotouh MA, Almutairi AF, BaniMustafa AA, Hussein MA. Perception and attitude of healthcare workers in Saudi Arabia with regard to Covid-19 pandemic and potential associated predictors. *BMC Infect Dis.* 2020;20(1):719. [PubMed ID: 32993538]. [PubMed Central ID: PMC7523489]. https://doi.org/10.1186/s12879-020-05443-3.
- Adibi A, Golitaleb M, Farrahi-Ashtiani I, Pirani D, Yousefi K, Jamshidbeigi Y, et al. The Prevalence of Generalized Anxiety Disorder Among Health Care Workers During the COVID-19 Pandemic: A Systematic Review and Meta-Analysis. *Front Psychiatry*. 2021;**12**:658846.
 [PubMed ID: 34135784]. [PubMed Central ID: PMC8200464]. https://doi.org/10.3389/fpsyt.2021.658846.
- Rana RH, Islam A. Psychological impact of COVID-19 among frontline financial services workers in Bangladesh. J Workplace Behav Health. 2021;36(3):238–49. https://doi.org/10.1080/15555240.2021.1930021.
- Aly HM, Nemr NA, Kishk RM, Elsaid N. Stress, anxiety and depression among healthcare workers facing COVID-19 pandemic in Egypt: a cross-sectional online-based study. *BMJ Open.* 2021;11(4). e045281. [PubMed ID: 33931409]. [PubMed Central ID: PMC8098284]. https://doi.org/10.1136/bmjopen-2020-045281.
- Teshome A, Shegaze M, Glagn M, Getie A, Tekabe B, Getahun D, et al. Perceived stress and associated factors among health care professionals working in the context of COVID-19 pandemic in public health institutions of southern Ethiopia 2020. *PLoS One*. 2021;16(6). e0252809. [PubMed ID: 34111170]. [PubMed Central ID: PMC8191883]. https://doi.org/10.1371/journal.pone.0252809.
- 19. Nagi S. COVID-19 pandemic and stress towards bank staffs in coimbatore. *Aut Aut Res J.* 2020;**11**(6):219–30.
- 20. Alawneh T, Qasarwa M, Debas Y. Depression, anxiety, and stress levels among healthcare workers during the Covid-19 pandemic in Nablus city in the West Bank. An-Najah National University; 2021.