

Evaluation of social anxiety and health anxiety in health workers in the Covid 19 pandemic period in selected hospitals of Shahid Beheshti University in Tehran in 2021

Shahrzad Taghipour*

Department of Psychology, Christ University, Iran

ABSTRACT:

Background: Social anxiety and health anxiety are characterized by persistent and severe health concerns. People with anxiety have misconceptions and misinterpretations of health and are also hypersensitive to their physical symptoms. It is associated with disability and high costs for the medical community.

AIMS: This study aimed to investigate social anxiety and health anxiety in health workers in the Covid 19 pandemic period.

METHODS: This descriptive study was performed on 124 health workers in the Covid 19 pandemic period in selected hospitals of Shahid Beheshti University in Tehran, 2021. Sampling was done by stratified method. Data were collected using Demographic Questionnaire, Leibovitz Social Anxiety Questionnaire and Salkowski and Warwick Health Anxiety Questionnaire and analyzed in SPSS software version 22 using descriptive statistical tests.

RESULTS: The results showed that social anxiety with a mean and standard deviation of 99 ± 11.70 was at a very high level. Also, the mean and standard deviation of health anxiety is 36.06 ± 3.60 . This result indicates that the study sample is suffering from health anxiety disorder.

CONCLUSION: It seems that health workers are more prone to anxiety due to facing a stressful environment and having some personality traits. Therefore, it is necessary to provide the necessary ground for reducing nurses' anxiety by formulating, planning and presenting appropriate policies.

KEYWORDS: Health Anxiety, Social Anxiety, Health workers, Covid 19.

INTRODUCTION

Covid-19 has persisted as a serious issue posing a threat to public health since the report of the first case of the infection. The initial reports predicted the spread of the virus much larger than one (from 2.24 to 3.58). However, the number of people infected with Covid-19, and also the numbers of deaths caused by the virus have been rapidly increasing across the world such that it led to an emergency situation over a few months threatening people's health throughout the world (Abbasi Asl R, 2016). Not only this issue has raised concerns about public health, but also it has created psychological symptoms including phobia, depression, and anxiety in different social classes (Abdi H, 2018). These

types of anxiety are dangerous and damaging to health like the spread of dangerous infectious diseases is called health anxiety. Health anxiety is a disorder diagnosed by excessive anxiety and phobia about a serious disease. Therefore, this disorder may persist if it is not cured, and it can impose considerable costs on healthcare, quality of life, and work capability (Abramowitz JS, 2008). On the other hand, anxiety is also considered one of the symptoms of Covid-19. Thus, under the stressful and agitating conditions caused by the spread of Covid-19, people may accuse themselves of being infected with this virus without being really infected with the virus (Asmundson GJ, 2020). This state of mind may lead to a vicious cycle of increasing anxiety symptoms such that the beliefs held by the people with health anxiety change into a threat to their health under the influence of internal and external stimuli (Baptista CA, 2012). By focusing on pathogenesis and human physiology, more potential treatments can be identified (Bazrafshan MR, 2021). Thus, this study aimed at examining social anxiety and health anxiety in health care workers during the prevalence of the Covid-19 pandemic Tehran, Iran (Bella TT, 2009).

Received: 25-Dec-2023, Manuscript No. ijemhhr-24-122981;

Editor assigned: 28-Dec-2023, Pre QC No. ijemhhr-24-122981(PQ);

Reviewed: 11-Jan-2024, QC No. ijemhhr-24-122981;

Revised: 16-Jan-2024, Manuscript No. ijemhhr-24-122981(R);

Published: 22-Jan-2024, DOI: 10.4172/1522-4821.1000614

*Correspondence regarding this article should be directed to: shahrzadtaghipour@gmail.com

METHOD

This research was a descriptive study, and the population consisted of the workers (nurses, paramedics, and paramedic assistants) of the selected hospitals (Modaress, Taleghani, Shohada-e-Tajrish, Imam Hossein, Masih Daneshvari) of Shahid Beheshti University in Teheran, Iran, working at some wards with Covid-19 patients in 2021. The sample size was measured as 124. The inclusion criteria were: Working in Covid-19 wards and having at least one year of work experience (Eilenberg T, 2016).

The required information was collected using three questionnaires (demographic characteristics, Liebowitz Social Anxiety Scale (LSAS), and Health Anxiety Inventory (Ganji T, 2010). The demographic characteristics included age, gender, job, employment status, marital status, type of work shift, number of children, education, being infected with Covid-19, having family members with Covid-19, underlying diseases, overtime, the ward where they work, work experience, experience of working in Covid-19 wards, average working hours per week, satisfaction with personal equipment, quarantine conditions, and personal protection (Ghadimi Karahroodi S, 2020). The social anxiety scale was developed in and it includes situations where situations are related to social interactions and situations are related to performance anxiety in front of others. Individuals should determine the severity of anxiety and avoidance from a certain situation based on the four-option Likert scale graded from zero to three according to what happened to them over the last week (Ghezlbash S, 2015). The maximum performance anxiety score was and the maximum anxiety score about social situations was the maximum general score was considering the sum of these two subscales, the severity of social anxiety of individual can be measured (Hadisi N, 2022).

The scores of performance avoidance and avoidance of social situations dimensions were obtained by summing up the scores provided in the avoidance column, and the scores of performance anxiety and fear of social situations were obtained by summing up the scores in the anxiety or phobia column including Mild social anxiety (55-65); moderate social anxiety (65-80); severe social anxiety (80-95); very severe social anxiety (higher than 95) (Hosseini Ghomi, T J, 2014). In the study conducted by the validity of LSSAS-SR retest and its subscales were in the range of $r=0.76-0.84$ and their internal consistency (Cronbach's alpha) were in the range 0.73-0.93. The convergent validity of LSAS-SR was at an acceptable level in relation to other anxiety scales ($r=0.46-0.94$). In this study, the reliability of Liebowitz Social Anxiety Scale (LSAS) scale was obtained through internal consistency using Cronbach's alpha yielding 0.892 (Irani M, 2020).

The Health Anxiety Inventory was developed by to evaluate health anxiety (Karimi J, 2019). This scale includes 18 items and three components including general concerns about

one's health, illness-related concerns, and consequences of an illness. Each item consists of a group of four statements from A to D that are scored from one to four respectively (Lai J, 2020). The higher scores indicate more severe illness and symptoms. The scores range from 0 to 54. The scores above 18 indicate suffering from anxiety and the ones above 37 indicate health anxiety disorder reported that this scale has good validity and reliability for diagnosing health anxiety (Liu Q, 2020). The reliability was obtained as 0.89 using Cronbach's alpha (Lopez-Solà C, 2018). The convergent validity of this test was appropriate according to the Yale-Brown Obsessive Compulsive Scale (Y-BOCS) and Depression Anxiety Stress Scale (DASS) indicating the appropriate validity of health anxiety showed that this scale enjoyed an appropriate validity and reliability in the Iranian sample (Mattila E, 2021). In this study, the reliability of the health anxiety scale was measured through internal consistency using Cronbach's alpha yielding 0.921 (Mazhari S, 2014).

Statistical Analysis: The statistical analysis was performed using the Statistical Package for the Social Sciences software (version 22, SPSS Inc., Chicago, IL). Data were analyzed using the normality Kolmogorov-Smirnov test (Mirzabeigi AR, 2021). The obtained information was analyzed using the indices of descriptive statistics (frequency, percentage, mean, standard deviation) and inferential statistics (Cronbach's alpha test, normality, correlation coefficient).

RESULTS

The findings relate to the 124 healthcare workers. The descriptive information on healthcare workers has been presented in (Table 1.)

According to the results, 10 participants (8.1%) suffered from social anxiety, 30 participants (24.2%) suffered from severe social anxiety, and 84 participants (67.7%) suffered from very severe social anxiety (Table 2).

The lowest social anxiety score was 66, and the highest score was 126. The mean and standard deviation of the social anxiety variable were 99, and 11.70 respectively. This indicated that the sample suffered from highly severe social anxiety. Considering the coefficient of skewness, the distribution of social anxiety is left-skewed, the coefficient of kurtosis shows that the above distribution is normal because the skewness and kurtosis are in the interval (-2, 2). Furthermore, the lowest and highest scores on the performance anxiety subscale were 34 and 72 with the mean and standard deviation of 53.37 ± 8.63 . The lowest and highest fears of social situation scores were 26 and 66, with the mean and standard deviation of 45.63 ± 7.45 (Table 3).

According to the results, 81 participants (65.3%) suffered from anxiety, 43 participants (34.7%) suffered from health anxiety disorder (the lowest score was 29, and the highest was 44) (Table 4).

Table 1.
Demographic characteristics of healthcare workers.

Demographic characteristics		Frequency	Percentage
Age	Less than 30	32	25.8
	31-40	67	54
	41-50	25	20.2
Gender	Female	71	57.3
	Male	53	42.7
Job	Nurse	88	71
	Paramedic	21	16.9
	Paramedic assistant	15	12.1
Employment status	Project-based	24	19.4
	Contractual	28	22.6
	Temporary	26	21
	Permanent	22	17.7
	Corporate	24	19.4
Marital status	Single	42	33.9
	Married	78	62.9
	Widow	3	0.8
	Others	1	0.8
Type of work shift	Fixed morning shift	26	21
	Fixed evening shift	20	16.1
	Fixed night shift	44	35.5
	Rotating shifts	34	27.4
Number of children	Childless	52	41.9
	One child	27	21.8
	Two children	31	25
	Three children	14	11.3
Infected with Covid-19	Yes	38	30.6
	No	86	69.4
Having family members with Covid-19	Yes	63	50.8
	No	61	49.2
Underlying diseases	Yes	8	6.5
	No	116	93.5
Overtime	Less than 28 hours	35	28.2
	29-35 hours	40	32.3
	More than 36 hours	49	39.5
Workplace section	Severe respiratory center	23	18.5
	Emergency	31	25
	Internist center	28	22.6
	Infections	28	22.6
	ICU	14	11.3
Work experience	1-5 years	33	26.6
	6-10 years	46	37.1
	More than 10 years	45	36.3
Work experience in Covid-19 ward	Less than 15 months	22	17.7
	16-18 months	74	59.7
	More than 19 months	28	22.6
Average working hours per week	Less than 36 hours	37	29.8
	37-72 hours	47	37.9
	More than 72 hours	40	32.3
Satisfaction with personal equipment	Low	36	29
	Average	36	29
	High	42	33.9
	Very high	10	8.1
Quarantine status and personal protection	Low	36	29
	Average	28	22.6
	High	30	24.2
	Very high	30	24.2

Table 2.
Distribution social anxiety scores of healthcare workers.

Levels of social anxiety	Number	Percentage of frequency
Mild social anxiety (55-65)	0	0
Moderate social anxiety (66-80)	10	8.1
Severe social anxiety (81-95)	30	24.2
Very severe social anxiety (96 and above)	84	67.7

Table 3.
Descriptive statistics of social anxiety variable and its dimensions in healthcare workers.

Variable	Social anxiety	Performance anxiety	Fear of social situations	Anxiety	Avoidance
Number	124	124	124	124	124
Mean	99	53.37	45.63	47.68	51.32
Standard deviation	11.7	8.63	7.45	7.87	8.05
Variance	136.94	74.56	55.5	62.01	64.84
Coefficient of skewness	-0.14	-0.03	-0.2	-0.06	0.19
Coefficient of kurtosis	0.12	-0.26	-0.05	0.29	0.35
Minimum	66	34	26	26	30
Maximum	126	72	66	68	74

Table 4.
Distribution of health anxiety in healthcare workers.

Health anxiety levels	Number	Percentage of frequency
Low anxiety (less than 18)	0	0
Suffering from anxiety (18-36)	81	65.3
Health anxiety disorder (higher than 37)	43	34.7

Table 5.
Descriptive statistics of health anxiety variable and its dimensions in healthcare workers.

Variable	Health anxiety	General concerns about one's health	Illness-related concerns	Consequences of an illness
Number	124	124	124	124
Mean	36/06	13.99	12.07	9.99
Standard deviation	Mar-60	2.33	1.99	1.88
Variance	12.96	5.42	3.97	3.54
Coefficient of skewness	0.15	0.22	0.12	0.06
Coefficient of kurtosis	-0.63	-0.19	-0.67	-0.12
Minimum	29	9	7	5
Maximum	44	21	16	15

The lowest health anxiety score was 29 and the highest score was 44. The mean and standard deviation of the health anxiety variable were 36.06 and 3.60 respectively. This indicates that the sample suffers from a health anxiety disorder. Additionally, the lowest and highest scores on general concerns about one's health subscale were nine and 21 respectively with the mean and standard deviation of 13.99±2.33. The lowest and highest scores on the illness-related concerns subscale were seven and 16 respectively with the mean and standard deviation of 12.07±1.99. The lowest and highest scores on consequences of an illness subscale were five and 15 respectively with the mean and standard deviation of 9.99±1.88 (Table 5).

DISCUSSION

The findings showed that most participants in the study (67.7%) suffered from very severe social anxiety and the lowest number of participants (8.1) suffered from moderate social anxiety. Of course, no study was found that directly assessed the anxiety of healthcare workers; however, there were some studies conducted on students that are mentioned in the following lines showed that the level of social anxiety in students was 52% that is less than the anxiety level detected in the current study. One possible explanation is that the study was conducted on students while the current study was conducted on healthcare workers during the spread of Covid-19. showed the level

of social phobia in students studying at Kerman University of Medical Sciences as 40.6% . In the study by Bella et al. conducted in Nigeria, the social phobia in all students was reported as 8.5% . Showed that 11.6% of the students in Brazil suffered social anxiety . A possible explanation for the difference between social phobia in different societies is the difference in the cultures, religions, numerous diagnostic tools different methods of interviewing, and information collection. Showed that the level of social phobia in nursing and midwifery students was 28.6%. The frequency of mild, moderate, severe, and very severe social phobia was 19%, 7.3%, 0.9%, 0.9% respectively. The results of the study by with most participants being female, married, holding a bachelor's degree with a mean age of 33 years, showed that 53 participants (42.8%) suffered from mild stress, and 34 participants (27.4%) suffered from severe anxiety. The comparison between the levels of anxiety based on the demographic variables of participants showed that the level of anxiety had no significant relationship with gender, marital status, education, and major of study.

Concerning social anxiety and its dimensions in healthcare workers, the lowest social anxiety score was 66, and the highest score was 126. The mean and standard deviation of the social anxiety variable were 99 and 11.70 respectively. This result indicated that the sample suffered from very severe social anxiety. Furthermore, the lowest score was 34 and the highest score was 72 on the performance anxiety subscale with the mean and standard deviation of 53.37 ± 8.63 , and the same scores were 26 and 66 respectively on the fear of social situations subscale with the mean and standard deviation of 45.63 ± 7.45 . This is the case such that the healthcare workers obtained the highest score on the performance anxiety subscale. The level of social anxiety in workers of Bushehr University of Medical Sciences was shown as 21.11 ± 9.08 (21) which was consistent with the results of the current study.

Estimated the mean social anxiety as 0.43 in their study conducted to predict the students' social anxiety. The results of the study by. Showed that the mean scores of social anxiety in students with and without experience of work-study had a statistically significant difference. As for the social anxiety in groups of healthcare workers, the results indicated that the scores of intragroup social anxiety for the participants who were under 30 years old, bachelor and working as paramedic assistants, temporary employees, and workers in an emergency department and fixed night shifts were higher than others. In addition, the scores of intragroup social anxiety for the participants who were aged 41-50 and bachelor and working as paramedic assistants, permanent employees, and workers in Acute Respiratory Clinic (ARC) and in fixed morning shifts were lower than others. The study by on nursing students showed that there is no statistically significant difference between anxiety and the marital status of students. It appears that the level of anxiety is different

between bachelor and married students due to the positive effects of marriage on mental health; however, the study by did not confirm such an assumption.

Moreover, the distribution frequency and levels of health anxiety in healthcare workers indicated that 81 participants (65.3%) suffered from anxiety and 43 participants (34.7%) suffered from a health anxiety disorder such that the lowest health anxiety score was 29, and the highest was . evaluated the health anxiety mean score of healthcare workers as 12.67 ± 8.53 . measured the health anxiety mean score of nurses as 38.40 . Thus, Abdi et al. reported that the health anxiety mean score of nurses working at the hospital was 30.08, and it was 44.45 for the ICU workers. Therefore, to explain the results of the study we may state that the nurses as the people who are at the center of this happening experience some degrees of anxiety facing Covid-19 that may stem from being at the center of the event which imposes unavoidable anxiety on them.

Furthermore, in terms of the dimensions of health anxiety in healthcare workers, the results indicated that the lowest and highest scores were nine and 21 on general concerns about one's health subscale with the mean and standard deviation of 13.99 ± 2.33 ; the lowest and highest scores were 7 and 16 respectively on illness-related concerns subscale with the mean and standard deviation of 12.07 ± 1.99 ; the lowest and highest scores were five and 15 respectively on consequences of an illness subscale with the mean and standard deviation of 9.99 ± 1.88 . This is the case such that healthcare workers on the general concerns about one's health scale obtained the highest score and those on consequences of an illness subscale obtained the lowest score.

In the epidemic of viral diseases such as Covid-19, people with high health anxiety consider any changed physical symptom as a sign of contracting a viral disease and thus increase their level of health anxiety and worry . An excessive increase in health anxiety in these people weakens the body's immune system against the corresponding viral disease and can even affect people's rational decisions and social behaviors. Contrary to the mentioned materials and the results of some researches, the increase in the level of health anxiety in some cases cause people to be inattention to the critical situation of the society, which itself can increase the probability of infection with viral disease and transmission to others. Based on this, maintaining a moderation in the level of health anxiety can play an important role in preventing and fighting the epidemic of viral diseases such as Covid-19 in controlling the disease and fighting it by the people of the society.

Considering the results of the study Mattila et al the phobia caused by the infection is the independent factor in the prediction of anxiety. The studies by Liu showed that the phobia of being infected with Covid-19 causes anxiety. The results of the study by Ghadimi Karahroodi &

Sepehriyanazar showed the components of the disease the consequences of the disease and general health concerns are significant evaluated the dimensions of health anxiety in nurses working in healthcare centers in Tehran and showed that they experienced greater negative feelings than ordinary people. Nonetheless, no significant difference was found between them in terms of positive feelings. The results of the study by Mohammadfam et al. showed that the risk of being infected with Covid-19 in people working at a hospital was measured as 50 to 100. It is necessary to consider appropriate training programs to reduce nurses' anxiety so that nurses can provide better services to patients. It is suggested to compare the health anxiety and social anxiety of health workers with ordinary people.

CONCLUSION

This study showed that most participants suffered from severe social anxiety and the lowest number of participants suffered from moderate social anxiety. Furthermore, the samples showed some degrees of health anxiety such that the healthcare workers showed the highest score on general concerns about one's health subscale, and the lowest score on consequences of an illness scale. Therefore, concerning the fact that the nurses face stressful factors at the workplace that could impact their general health status, the nurses' managers can have an effective role in managing nurses' well-being to provide better care to the patients by training the nurses, providing periodical counseling to the nurses, and taking some measures like changing the wards where the nurses work. Therefore, in order to improve nurses, nursing managers can provide training to nurses in this field and periodic consultations for nurses and creating measures such as changing the department will be able to play an effective role in managing the well-being of nurses in providing patient care.

REFERENCES

Abbasi Asl, R., Naderi, H., Akbari, A (2016). Predicting the level of social anxiety of female students based on personality traits. *J Prin of Men Hea*.18 (6): 343-9.

Abdi, H., Eissazadegan, A., Michaeli Manee, F (2018). Comparison of health anxiety, sensory processing sensitivity and harm avoidance among nurses of critical and public care unit.7(7):189-206.

Abramowitz, JS., Braddock, A (2008). Psychological treatment of health anxiety and hypochondriasis: A biopsychosocial approach.

Asmundson, GJ., Taylor, S (2020). Coronaphobia: Fear and the 2019-nCoV outbreak. *J Anxiety Disord* .70:102196.

Baptista, CA., Loureiro, SR., de Lima Osório, F (2012). Social phobia in Brazilian university students: prevalence, under-recognition and academic impairment in women. *J Affect Disord* .136(3):857-61.

Bazrafshan, MR., Delam, H., Elahi, M., Akbarpoor, S., Faramarzian, Z (2021). Factors Influencing Anxiety of Healthcare Workers during the Outbreak of 2019 Novel Coronavirus Disease (COVID-19): A Cross-Sectional Study. *J Health Sci Surveillance Sys* .9(1):26-31.

Bella, TT., Omigbodun, OO (2009). Social phobia in Nigerian university students: prevalence, correlates and comorbidity. *Soc Psychiatry Psychiatr Epidemiol*.44 (6): 458-46.

Eilenberg, T., Fink, P., Jensen, J.S., Rief, W., Frostholm, L (2016). Acceptance and commitment group therapy (ACT-G) for health anxiety: a randomized controlled trial.

Ganji, T., Hoseyni, AF (2010). Spirituality and anxiety in nursing students of faculty of Nursing and Midwifery Iran University of Medical Science. *Iran J Nurs*.23(64):44-51.

Ghadimi Karahroodi, S., Sepehrian Azar, F (2020). Comparison of Health Anxiety, Sleep Quality and Quality of Life in People With and Without Chronic Pain. *J Anesth Pain*.10(4):63-76.

Ghezelbash, S., Peyrovi, H., Inanloo, M., Haghani, H (2015). Relationship between Social Anxiety and Some Demographic Characteristics among Nursing Students. *J Healt*. 17(1): 19-29.

Hadisi, N., Abedi, H., Shokoohi, M., Tasdemir, S., Mamikhani, S., Meshgi, S (2022). COVID-19 and Endocrine System: A Cross-Sectional Study on 60 Patients with Endocrine Abnormality. *Cell J*. 24(4):182-187.

Hosseini Ghomi, T., Salimi Bajestani, H., Zakeri, N (2014). Relationship Religious Orientation and Hope with Health Anxiety among Women Nurses in Imam Khomeini Hospital of Tehran. *Ira J Nur Res*. 9(1):17-24.

Irani, M (2020). Review on the Symptoms, Transmission, Therapeutics Options and Control the Spread of the Disease of COVID-19.2020;9(2): 171-180.

Karimi, J., Homayouni, A., Homayouni, F (2019). The Prediction of Health Anxiety based on Experiential Avoidance and Anxiety Sensitivity among non-clinical Population. *J Ment Health*.12 (4): 66-79.

Lai, J., Wang, Y., Cai, Z (2020). Factors Associated with Mental Health Outcomes Among Health Care Workers Exposed to Coronavirus Disease 2019. 3(3): e203976-e.

Liu, Q., Luo, D., Haase, JE., Guo, Q., Wang, XQ (2020). The experiences of health-care providers during the COVID-19 crisis in China: a qualitative study. *Lancet Glob Hea*.8(6):790-798.

Lopez-Solà, C., Bui, M., Hopper, JL., Fontenelle, LF (2018). Predictors and consequences of health anxiety symptoms: a novel twin modeling study. *Acta Psychiatr Scand*.137(3):241-251.

Mattila, E., Peltokoski, J (2021). COVID-19: anxiety among hospital staff and associated factors. *Ann Med*. 53(1): 237-246.

Mazhari, S., Ekhlaspour, M., Banazadeh, N (2014). Social phobia and its association with academic performance among students of Kerman University of Medical Sciences, Iran.11 (2):227-235.

Mirzabeigi, AR., Agha Mohammad Hasani, P., Sayadi, AR (2021). Assessing Health Anxiety among Healthcare Providers of COVID-19 Patients from March to May 2020, Rafsanjan County, Iran.10 (1) :24-30.