

Research Paper

## A Study on Stress, Anxiety and Depression among Health Care Workers

Dr. Surma S.<sup>1\*</sup>, Dr. Manjunatha P.<sup>2</sup>, Seema DSouza<sup>3</sup>

### ABSTRACT

Stress, anxiety and depression are some of the most important research and practice challenges for psychologists, psychiatrists and behavioural scientists. Mental health affects physical health, job performance and healthcare utilization. Stress, depression and anxiety disorders contribute to absenteeism and lack of confidence. The present study assesses the level of anxiety, stress and depression among Health Care Workers. The study was carried out on 120 samples, among them 30 doctors, 30 nursing officers, 30 paramedical workers and 30 Asha workers selected randomly from different hospitals in Mysore. Anxiety, Depression and Stress scale (ADSS-BSPSA) developed by Pallavi Bhatnagar, Megha Singh, Manoj Pandey, Sandhya and Amitabh (2011) have been used to measure the level of anxiety, depression and stress among health care workers. One-way ANOVA and an independent sample t-test were calculated and the results were analysed. The results reveals that there is no significant difference in the level of stress, depression, and anxiety between the health care professionals, but a significant difference in gender, female healthcare workers show a greater level of anxiety, depression and stress compared to male healthcare workers.

**Keywords:** *Anxiety, Depression, Stress, Health care workers*

In the current world, pressure and rising stresses like anxiety, stress, and depression hurt many facets of life. Numerous people experience stress daily, but prolonged and excessive exposure to stress may be harmful to both mental and physical health. The nature of a job may be one of the primary causes of stress, and jobs frequently play a significant role in a person's social identity, source of income, and social ties in addition to being a major cause of stress. The job and its responsibilities may cause psychological stress, which can lead to disputes and physical, mental, and behavioural issues associated with subpar job performance. (Toosi M,2000).

Poor mental health can cause a person to experience a wide range of additional issues, making it one of the most significant markers of community health (Mohammadi & et al, 2005). Numerous studies have revealed that doctors, nurses, and other healthcare workers experience high levels of psychological stress when working in a variety of settings.

<sup>1</sup>Associate Professor, DOS&R in Psychology, Karnataka State Open University, Mysuru, Karnataka, India.

<sup>2</sup>Associate Professor, DOS&R in Psychology, Karnataka State Open University, Mysuru, Karnataka, India.

<sup>3</sup>Student, Karnataka State Open University, Mysuru, Karnataka, India.

\*Corresponding Author

Received: January 17, 2026; Revision Received: March 27, 2026; Accepted: March 31, 2026

## **A Study on Stress, Anxiety and Depression among Health Care Workers**

### **Stress**

According to Eysenck (1991), stress is defined as the strain that people experience, and different persons may or may not experience strain in the same settings. Life stress is characterised by stressful situations and a person's responses to them (Dohrenwend & Dohrenwend, 1978). According to Lazarus (1966), stress happens when a person is subjected to demands that are greater than his or her capacity for adjustment.

### **Anxiety**

Anxiety is a natural human emotion; however, it is deemed excessive or pathological when it appears in the absence of a challenge or stressful situation, when it lasts for an excessively long time or is extremely severe, when it causes great distress, and when it impairs one's ability to function in social, occupational, biological, or other ways. A psychological reaction to a real or perceived threat is anxiety. According to Marks, (1987) anxiety disorders are a category of mental disorders characterized by feelings of anxiety and fear, where anxiety is a worry about future events and fear is a reaction to current events. These feelings may cause physical symptoms, such as a racing heart and shakiness.

### **Depression**

According to Carson et al. (2000), depression is an emotional condition characterised by extreme melancholy and despair. An aversion to all activities results from depression. Individuals experience mood swings in daily life for a variety of causes. Sad emotions can be triggered by a variety of events, including the death of a loved one, failure at work, job loss, unemployment, adjustment issues in a relationship, and personal issues. Depression is a condition in which depressed feelings persist for a prolonged period and coexist with other symptoms. It's distinct from typical sadness.

## **REVIEW OF LITERATURE**

According to the study conducted by Assis and et al (2022) Nursing professionals working in hospital settings are frequently exposed to conditions that increase their risk of stress, anxiety and depression. In a quantitative, cross-sectional study involving 353 nursing workers, researchers used a sociodemographic questionnaire and the Depression, Anxiety and Stress Scale–21 (DASS-21) to identify key factors associated with these psychological outcomes. The findings showed that stress, anxiety and depression were simultaneously linked to several demographic, social and workplace characteristics. These included being female, having insufficient family or social support, limited autonomy at work and hostile or unsupportive relationships with colleagues. Additional risk factors included a lack of professional recognition, low job satisfaction, a persistent feeling of being overwhelmed and general workplace insecurity. The study concludes that demographic, physiological, social and organizational variables play significant roles in influencing emotional well-being among nursing staff. It emphasizes the importance of developing and implementing effective coping strategies, particularly those targeting modifiable occupational factors, to improve the quality of life and mental health of these professionals.

Garcia GDV et al. (2020) conducted a study titled Healthcare professionals' perception of mental health in primary care to characterize the mental health care provided in Primary Care from the perception of health professionals in the cities to the 5th Regional Health Center of the state of Paraná. An exploratory qualitative research was conducted. Participants were 121 health professionals working in primary care in the 20 cities of 5th Regional Health Center of the state of Parana. Twenty-two focus groups were recorded, transcribed and analyzed by content analysis. Five thematic categories emerged, of which

## **A Study on Stress, Anxiety and Depression among Health Care Workers**

two were analyzed in this study: actions that professionals consider to be mental health actions; mental health actions developed by Primary Care professionals. Despite of the indications of inclusion of mental health actions in Primary Care, this relationship is still occasional and unplanned. Policies that foster this interaction from a psychosocial perspective are needed.

Weinberg and colleagues (2015) conducted a study titled stress and psychiatric disorder in healthcare professionals and hospital staff. It was noted that previous studies of stress in healthcare staff have indicated a probable high prevalence of distress. Whether this distress can be attributed to the stressful nature of the work situation was not clear. No previous study had used a detailed interview method to ascertain the link between stress in and outside of work and anxiety and depressive disorders. Doctors, nurses, and administrative and ancillary staff were screened using the general health questionnaire (GHQ). High scorers (GHQ>4) and matched individuals with low GHQ scores were interviewed by means of the clinical interview schedule to ascertain definite anxiety and depressive disorders (cases). 64 cases and 64 controls were matched. The logistic-regression analyses indicated that even after the effects of personal vulnerability to psychiatric disorder and ongoing social stress outside of work had been taken into account, stressful situations at work contributed to anxiety and depressive disorders. They concluded that both stress at work and outside of work contribute to the anxiety and depressive disorders experienced by healthcare staff. The findings suggest that the best way to decrease the prevalence of these disorders is individual treatment, which may focus on personal difficulties outside of work, combined with organisational attempts to reduce work stress. The latter may involve more assistance for staff who have a conflict between their managerial role and clinical role.

Cruz, Daniela et al. (2022) conducted a research to recognize the characteristics of work within the hospital context and their potential effects on mental health of professionals who provide health care for end-of-life patients in a study titled “Health Professionals’ Mental Health: A Look at their Suffering”. The descriptive and qualitative study relied on interviews and observations. Thirty-four physicians and nurses who work in clinical medicine or emergency medical services in a teaching hospital in Rio Grande do Sul were interviewed. The results, obtained through content analysis, showed that in clinical medicine health professionals suffer more when patients die or their condition gets worse, such suffering being a threat to mental health. In emergency medical services, death causes suffering only when it is traumatic. Intercurrences which are characteristic of emergency medical services and work organization are the major source of stress for such professionals, thus affecting their mental health. Therefore, the mental health of these professionals is weakened due to the demands in health care work. It is thus necessary to rethink the institution’s organization, redefine attitudes and implement procedures that are coherent with the professionals’ needs, in search of better working conditions and improved mental health.

Lohmann, J., John, D. & Dzay (2019) conducted a systematic review titled “Prevalence and factors associated with poor mental health among healthcare professionals in low- and lower-middle-income countries: a systematic review protocol. The review aimed to synthesize the body of research, specifically to assess the prevalence of mental health issues among health workers in low- and lower-middle-income countries, to identify factors associated with good or poor mental health, and to highlight gaps in knowledge. Investigations on the nature, prevalence, and factors associated with mental health or psychological wellbeing among formally trained health professionals and health associate

## A Study on Stress, Anxiety and Depression among Health Care Workers

professionals delivering health services in formal healthcare facilities in LLMIC were studied. The primary outcomes were burnout, depression, and general psychological wellbeing. Secondary outcomes included other specific mental health diagnoses, as well as general psychological stress, distress and/or trauma if work-related and explicitly framed as a mental health issue. Findings were summarized from the extracted data in narrative form. The framework method was used to organize narrative data by subthemes and explore patterns. In assessing the prevalence of mental health issues among healthcare professionals in LLMIC and identifying factors associated with positive or poor mental health.

Khaula Atif & et al (2016) examined the incidence of anxiety and depression among medical professionals working in a tertiary care facility in Lahore and the influence of pertinent demographic factors. Results revealed that 97 volunteers, or 47.78 per cent, out of 203, responded. The maximum score for anxiety was 19, and the maximum score for depression was 15. The scores for anxiety and depression were 7.04 and 4.470, respectively. 33 (34%), 24 (24.8%), and 1 (1.0%) of the participants reported mild to moderate anxiety and depression, while 7.2% and 1.0% reported severe anxiety and depression, respectively. Depression and anxiety had a very substantial positive connection ( $p < 0.001$ ). Service years had a significant effect on depression ( $p = 0.011$ ) and gender had a significant effect on anxiety ( $p = 0.002$ ). Nine males and 24 females (or 17.31 and 53.33 per cent, respectively) reported mild to moderate anxiety, while four males and three females (or 7.69 and 6.66 per cent, respectively) reported severe anxiety. Other variables did not have a significant effect on HADS scores. Doctors demonstrated significant levels of anxiety and sadness.

In a study conducted by Tziner, Cheung et al. (2015) According to recent epidemiological statistics, 13.3% of Hong Kong people had a common mental disorder, the most common of which was combined anxiety and depressive disorder. The weighted prevalence and risk factors for depression, anxiety, and stress among Hong Kong nurses are examined in this study. This cross-sectional study enlisted the participation of 850 nurses in total. The Depression, Anxiety and Stress Scale (DAS-21) was administered to participants, and multiple logistic regression was performed to identify significant associations between factors. Past-week despair, anxiety, and stress were significantly correlated with chronic illness from the previous year and a negative perception of one's mental health. Further associations between depression and divorce, widowhood and separation, job unhappiness, workplace conflict, insufficient physical activity, and sleep issues were established. Significantly connected with anxiety are marital status, use of general medicine, sleep issues, and a lack of free time. Younger age, clinical inexperience, problems with co-workers in the previous year, low physical activity, lack of leisure time, and alcohol use were all substantially linked to stress. Compared to the local community, nurses reported higher levels of stress, anxiety, and depression, with over one-third of our respondents reporting these conditions.

As a result of the stressful environment that permeates our healthcare system, stress, anxiety, and depression are particularly widespread among healthcare personnel.

Between 22.2 per cent (95 per cent confidence interval [CI] 21.3 per cent to 23.1 per cent) and 33.0 per cent of HCWs reported having anxiety (95 per cent CI 31.9 per cent to 34.1 per cent). Between 17 and 19.8% of doctors ( $n = 5820$ ) and nurses ( $n = 14\ 938$ ) reported having anxiety, and between 22.8 and 27 per cent of both groups. All HCWs were more likely to experience depression than the general population, with rates ranging from 17.9% (95% CI: 17.1% to 18.8%) to 36%. (95 per cent CI 34.9 per cent to 37.1 per cent). There was a

## A Study on Stress, Anxiety and Depression among Health Care Workers

reported 40.4 per cent and 28 per cent depression prevalence among doctors (n=643) and nurses (n=8063), respectively. (Ritin Fernandez et al,2021)

In comparison, the prevalence rates of HCPs with depressive symptoms requiring treatment and anxiety symptoms necessitating further evaluation were 11.4 per cent (8.3, 15.2) and 17.7 per cent (13.9, 22.1), respectively. High-level stress was most common in HCPs at 3.7 per cent (2.2, 6.2), according to the 95 per cent confidence interval. (William Wilson et al,2020).

According to the findings from Kavari, H. et. al. (2007), anxiety and depression are completely common among nurses. It looks like a significant discovery for the sake of future research on this and general interest. In a tiny, perhaps related study, recent research was undertaken in Karachi's Shiraz Namazi Hospital. 81.4% of the nurses—seventy-one—were found to have depression, according to the survey. It was also revealed that 99.4% of those nurses had depression in a study with a smaller sample size that was conducted in a hospital in the Iranian city of Shiraz.

### ***Significance of the study***

The assessment of stress, anxiety and depression among health care workers is to determine the importance of psychological health and its impact upon the health care workers and their mental health. The presence of stress, anxiety and depression symptoms among health care workers affects their job performance. Hence it is of utmost importance to understand the level of stress, anxiety and depression among health care professionals.

### ***Objective of the Study***

The following objectives were formulated for present research work

- To study the influence of the type of profession on the level of Anxiety among Health Care Workers.
- To study the influence of the type of profession on the level of Depression among Health Care Workers.
- To study the influence of the type of profession on the level of Stress among Health Care Workers.
- To study the influence of gender on the level of Anxiety among Health Care workers.
- To study the influence of gender on the level of Depression among Health Care Workers.
- To study the influence of gender on the level of Stress among Health Care workers.

### ***Hypothesis of the Study***

- **H1:** There is no significant influence of the type of profession on the level of Anxiety among Health Care Workers.
- **H2:** There is no significant influence of the type of profession on the level of Depression among Health Care Workers.
- **H3:** There is no significant influence of the type of profession on the level of Stress among Health Care Workers.
- **H4:** There is a significant influence of gender on the level of Anxiety among Health Care Workers.
- **H5:** There is a significant influence of gender on the level of Depression among Health Care Workers.

## A Study on Stress, Anxiety and Depression among Health Care Workers

- **H6:** There is a significant influence of gender on the level of Stress among Health Care Workers.

### *Tool for the Study*

- **Demographic Data Collection Tool:** Demographic data consisting primary information of Health care workers (Name, age, Gender, Urban/Rural, Qualification, profession, experience and income).
- **Anxiety, Depression and Stress scale (ADSS-BSPSA)** developed by Pallavi Bhatnagar, Megha Singh, Manoj Pandey, Sandhya and Amitabh (2011), Department of Psychology Lucknow and published through National Psychological Corporation, Agra, India. It is the test that measures the anxiety, depression, and stress of an individual. A scale of 63 was developed at first and 48 items out of 63 were retained in the item selection. The test comprises a consumable book of ADSS questionnaires which has 48 items, (19 in Anxiety Subscale, 15 in Depression Subscale, and 14 in Stress Subscale).

### *Definition*

- **Anxiety:** Anxiety is a psychobiological emotional state or reaction and consists of unpleasant feelings of tension, apprehension, nervousness, worry and activation of the autonomic nervous system (Speilberger and Rickman, 1990).
- **Depression:** Depression, in psychiatry, is a symptom of mood disorder (Wolpert, 2000).
- **Stress:** Stress is a condition or feeling experienced when a person perceives that “demands exceed the personal and social resources the individual is able to mobilize” (Lazarus, 1966).

### *Research Design*

A descriptive casual comparative research design was employed to study the main and interaction effect of type of profession (Doctors, Nurses, Paramedical workers and Asha workers) and Gender (Male and Female) on the level of Anxiety, Depression and Stress among Health Care workers.

**Sample Description:** A total of 120 participants were selected from Mysuru district, Karnataka state, which includes 30 doctors, 30 nurses, 30 paramedical workers and 30 Asha workers were included in that 45 are male and 75 were female workers.

## **ANALYSIS OF RESULTS AND DISCUSSIONS**

**Hypothesis 1:** There is no significant influence of the type of profession on the level of Anxiety among Health Care Workers

*Table 1: Shows the mean score, standard deviation and one-way ANOVA statistic on Anxiety among sample groups belongs to Health care workers*

Variables	Anxiety				
	N	Mean	SD	F	P
Doctors	30	5.93	3.79	2.44	.06
Nurses	30	6.67	3.23		
Para Medical Workers	30	6.37	2.77		
Asha Workers	30	8.10	3.27		
Total	120				

\*.df=119

## A Study on Stress, Anxiety and Depression among Health Care Workers

Table 1 show the mean score and standard deviation on the level of anxiety among sample groups belonging to doctors, Nurses, paramedical workers and Asha workers. Asha workers group has obtained a greater mean score (M=8.1, SD=3.27) on the level of anxiety compared to para-medical workers (M=6.37, SD=2.77), Nurses (M=6.67, SD=3.23) and Doctors (M=5.93, SD=3.79). The doctors obtained a lesser mean score (M=5.93, SD=3.79) compared to the other three professions (Nurses, Paramedical workers and Asha workers). Referring to Figure 1 mean difference in the anxiety of four groups of respondents shows a lower mean difference among doctors, nurses, paramedical workers and Asha workers. In comparing significant mean differences between groups, one-way ANOVA is calculated and the obtained  $F(3, 116) = 2.44, p > .06$ . This indicates that there is no significant difference in the amount of anxiety across four professions. Hence hypothesis 1 “There is no significant influence of the type of profession on the level of Anxiety among Health Care workers”. A one-way ANOVA statistic showed that the anxiety among the four professions is not significantly different. The current results are contradictory to the existing research, A study conducted by Mutair (2021) indicated that age, health speciality, nationality, and sleeping disorders before COVID-19 were associated with anxiety levels.

### **Hypothesis 2: There is no significant influence of type of profession on the level of Depression among Health Care workers**

**Table 2: Shows the mean score, standard deviation and one-way ANOVA statistic on Depression among sample groups belongs to Health care workers**

Variables	Depression				
	N	Mean	SD	F	P
Doctors	30	6.17	4.21	1.82	.14
Nurses	30	7.30	4.11		
Para Medical Workers	30	7.30	3.32		
Asha Workers	30	8.47	3.50		
<b>Total</b>	120				

\*.df=119

Table 2 shows the mean score and standard deviation on the level of depression among sample groups belonging to doctors, Nurses, paramedical workers and Asha workers. Asha workers group has obtained a greater mean score (M=8.47, SD=3.50) on the level of anxiety compared to para medical workers (M=7.3, SD=3.32), Nurses (M=7.3, SD=4.11) and Doctors (M=6.17, SD=4.21). The doctors obtained a lesser mean score (M=6.17, SD=4.21) compared to the other three professions (Nurses, Paramedical workers and Asha workers). Referring to Figure 2 mean difference in the depression of four groups of respondents shows a lower mean difference among doctors, nurses, paramedical workers and Asha workers. In comparing significant mean differences between groups, one-way ANOVA is calculated and the obtained  $F(3, 116) = 1.82, p > .14$ . This indicates that there is no significant difference in the amount of depression across four professions. Hence hypothesis 2 “There is no significant influence of type of profession on the level of depression among Health Care workers”. A one-way ANOVA statistic showed that the depression among the four professions is not significantly different. The results are supported by the previous research conducted by Weibelzahl, Reiter, & Duden (2021) showed that healthcare professionals were most affected by protective measures at their workplace and changes in work procedures. Psychological symptoms, particularly anxiety and depression, were significantly more severe than in a non-clinical pre-pandemic sample and in the general population during the pandemic. At the same time, most professionals

## A Study on Stress, Anxiety and Depression among Health Care Workers

indicated that they would not seek help for psychological concerns. In a meta-analysis conducted by Pappa et., al,(2020) reviewed thirteen studies in the analysis with a combined total of 33,062 participants. Anxiety was assessed in 12 studies, with a pooled prevalence of 23.2% and depression in 10 studies, with a prevalence rate of 22.8%. A subgroup analysis revealed gender and occupational differences with female HCPs and nurses exhibiting higher rates of affective symptoms compared to male and medical staff respectively. Finally, insomnia prevalence was estimated at 38.9% across 5 studies.

**Hypothesis 3: There is no significant influence of type of profession on the level of Stress among Health Care workers**

*Table 3: Shows the mean score, standard deviation and one-way ANOVA statistic on Stress among sample groups belongs to Health care workers*

Variables	Stress				
	N	Mean	SD	F	P
Doctors	30	7.57	2.72	.96	.41
Nurses	30	8.33	2.53		
Para Medical Workers	30	7.70	2.77		
Asha Workers	30	4.52	7.35		
Total	120				

\*.df=119

Table 3 shows the mean score and standard deviation on the level of Stress among sample groups belonging to doctors, Nurses, paramedical workers and Asha workers. Asha workers group has obtained a lesser mean score (M=4.52, SD=7.35) on the level of stress compared to para-medical workers (M=7.7, SD=2.77), Nurses (M=8.3, SD=2.53) and Doctors (M=7.57, SD=2.72). The Nurses obtained a greater mean score (M=8.3, SD=2.53) compared to the other three professions (Doctors, Paramedical workers and Asha workers). Referring to Figure 3 mean difference in Stress of four groups of respondents shows a lower mean difference among doctors, nurses, paramedical workers and Asha workers. In comparing significant mean differences between groups, one-way ANOVA is calculated and the obtained  $F(3, 116) = .96, p > .41$ . This indicates that there is no significant difference in the amount of Stress across four professions. Hence, hypothesis 3 “There is no significant influence of type of profession on the level of Stress among Health Care workers”. A one-way ANOVA statistic showed that the stress among four professions is not significantly different. Contradictory to the present results a study conducted by Bidlan, & Sihag (2013) revealed statistically significant results on the dimensions of occupational stress among three occupational groups (doctors, nurses and support staff) with role overload contributing the most and 50 health professionals, including doctors, paramedical and nursing staffs from different multi-speciality hospitals in Kolkata were assessed in a study conducted by Halder & Mahato, (2013) on the General Health Questionnaire (GHQ 12) and the Professional Life Stress scale, and Medico-Psychological Questionnaire. The majority of the subjects had evidence of psychological distress. The stress level was present in varying degrees among all professionals, while nurses and technicians had stress levels at a severe level.

**Hypothesis 4: There is significant influence of gender on the level of Anxiety among Health Care Workers**

## A Study on Stress, Anxiety and Depression among Health Care Workers

**Table 4: Shows the mean, S.D. and t ratio on gender difference on the level of anxiety among health care workers**

	Group	A total Score on Anxiety				
		N	Mean	SD	T	P
A total Scores on Anxiety	Male	45	5.64	2.76	2.93	.004
	Female	75	7.44	3.50		
	Total	120				

*\*p<0.05; \*\*p<0.01*

Table 4 shows the mean score, standard deviation and t ratio on the gender difference in Anxiety. Female healthcare workers have obtained a greater mean score (M=7.44, SD=3.5) on the total score of Anxiety compared to males (M=5.64, SD=2.76). The mean difference is also shown in graph 4. In comparing significant mean differences between groups an independent t-test is calculated and the obtained t (118) = 2.93,  $p > .004$  which clearly indicates that there is a significant gender difference in anxiety among healthcare workers as the hypothesis states, “There is a significant influence of gender on the level of Anxiety among Health Care workers”. Female healthcare workers exhibited a greater level of anxiety compared to male healthcare workers. These results are supported by previous studies e. g., the results of the study conducted by Alharthy, Alrajeh, Almutairi, & Alhajri (2017) indicated that 48% of the subjects were observed without an anxiety disorder. However, moderate to mild degrees of anxiety disorder was identified among 20.7% and 23.7% of the subjects, respectively. Severe anxiety disorder was found among 7.6% of the respondents. Emergency medical services workers were reported to have the highest GAD-7 score followed by physicians and nurses  $P = 0.039$ . Gender and older age group among health professionals were statistically significantly correlated with higher GAD-7 scores  $P = 0.028$  and 0.048, respectively.

Moser et, al., (2003) reported that Women had higher anxiety levels than men ( $0.76 \pm 0.90$  vs.  $0.57 \pm 0.70$ ,  $p = .005$ ), and this pattern of higher anxiety in women was seen in each country studied. Neither socio-demographic nor clinical variables interacted with gender to influence anxiety. Across a variety of cultures, women have higher anxiety than men after acute myocardial infarction and this relationship is independent of age, education level, marital status, or presence of comorbidities or severity of acute myocardial infarction.

### **Hypothesis 5: There is a significant influence of gender on the level of Depression among Health Care Workers**

**Table 5: Shows the mean, S.D and t ratio on gender difference on the level of depression among health care workers**

	Group	A total Score on Depression				
		N	Mean	SD	T	P
A total Scores on Depression	Male	45	5.98	3.54	3.03	.003
	Female	75	8.11	3.82		
	Total	120				

*\*p<0.05; \*\*p<0.01*

Table 5 shows the mean score, standard deviation and t ratio on the gender difference in Depression. Female healthcare workers have obtained a greater mean score (M=8.11, SD=3.82) on the total score of Depression compared to males (M=5.98, SD=3.54). The mean difference is also shown in graph 5. In comparing significant mean differences

## A Study on Stress, Anxiety and Depression among Health Care Workers

between groups an independent t-test is calculated and the obtained  $t(118) = 3.03, p > .003$  which clearly indicates that there is a significant gender difference in the depression among healthcare workers hence the results are according to the hypothesis which states that “There is no significant influence of gender on the level of Depression among Health Care workers”. Female healthcare workers exhibited a greater level of depression compared to male healthcare workers. These results are supported by previous studies e. g., the results of the study conducted by Sloan & Sandt (2006) indicated that a striking feature of depressive disorder is that women are twice as likely to experience depression compared with men. Research indicates that genetic, biological and environmental factors contribute to the gender differences noted in depression. Women are more likely to suffer a greater number of and more severe stressful life events compared with men, although no gender difference has been found to explain the genetic vulnerability. As individuals with depression most frequently present to general practitioners, healthcare providers should consider screening for depression and using rigorous treatment strategies for depressed patients with comorbid medical illnesses. Bertakis et, al., (2001) reported that Women were found to have more depressive symptoms as self-reported on the Beck Depression Inventory (BDI). Women having high BDI scores (reflecting significant depression) were more likely than men with high BDI scores to be diagnosed by their primary care physician ( $p = 0.0295$ ). Female patients made significantly more visits to the clinic than men. For both sexes, patients with greater numbers of primary care clinic visits were more likely to be diagnosed as depressed. Logistic regression revealed that gender has both a direct and indirect (through increased use) effect on the likelihood of being diagnosed as depressed. Patient BDI score, clinic use, educational level, and marital status were all significantly related to the diagnosis of depression. Controlling all other independent variables, women were 72% more likely than men to be identified as depressed, but this effect did not achieve statistical significance ( $p = 0.0981$ ).

### **Hypothesis 6: There is significant influence of gender on the level of Stress among Health Care workers**

**Table 6: Shows the mean, S.D and t ratio on gender difference on the level of stress among health care workers**

	Group	A total Score on Stress				
		N	Mean	SD	T	P
A total Scores on Stress	Male	45	6.73	2.52	3.05	.003
	Female	75	8.28	2.77		
	Total	120				

*\*p<0.05; \*\*p<0.01*

Table 6 shows the mean score, standard deviation and t ratio on the gender difference in Stress. Female healthcare workers have obtained a greater mean score ( $M=8.28, SD=2.77$ ) on the total score on Stress compared to males ( $M=6.73, SD=2.52$ ). The mean difference is also shown in graph 6. In comparing significant mean differences between groups an independent t-test is calculated and the obtained  $t(118) = 3.05, p < .003$  which clearly indicates that there is a significant gender difference in the stress among healthcare workers hence the results are according to the hypothesis which states that “There is significant influence of gender on the level of Stress among Health Care workers”. Female healthcare workers exhibited a greater level of stress compared to male healthcare workers. These results are supported by previous studies e. g., the results of the study conducted by Matud (2004) found gender differences in 14 of the 31 items listed, with the women listing family

## A Study on Stress, Anxiety and Depression among Health Care Workers

and health-related events more frequently than the men, whereas the men listed relationship, finance and work-related events. The women scored significantly higher than the men on the emotional and avoidance coping styles and lower on rational and detachment coping. The men were found to have more emotional inhibition than the women. And the women scored significantly higher than the men on somatic symptoms and psychological distress. Although the effect sizes are low, the results of this study suggest that women suffer more stress than men and their coping style is more emotion-focused than that of men. Contradictory to the present results a study conducted by Bidlan, & Sihag (2013) revealed statistically significant results on the dimensions of occupational stress among three occupational groups (doctors, nurses and support staff) with role overload contributing the most, whereas, gender difference was not found statistically significant.

### *Implications of the Present Research*

1. The results of the current research project will be helpful in training and counselling healthcare workers as well as in gaining a better knowledge of them.
2. Future healthcare workers will benefit from having a thorough awareness of the demographic information gleaned from the current study.
3. The results of this study should make health professionals, counsellors, and government and non-government organisations more aware about managing mental health of healthcare personnel.
4. Prevention programmes must be implemented at all ages and in places including schools, colleges, hospitals, and primary health centres.

## **CONCLUSIONS**

The current study has revealed that there is an influence of gender on the level of Anxiety among Health Care Workers along with stress and depression. However, professionalism and anxiety, stress and depression don't have a statistically significant association in the present study which may not translate into the general population considering the cohort size. This study throws light on the importance of psychological dynamics which have a profound influence on occupation. Health care professional need to have a good mental health for themselves as well as for the effective handling of their profession. Female gender being the vulnerable strata subjected to a multitude of challenges both personal and professional has clearly been impacted more in the current study. This is a true concern for policymakers to address this with special care as this can be of tremendous difference. A systematic counselling of health care professionals along with a periodic examination of mental status would make a world of difference in ensuring the quality of health care delivery.

## **REFERENCES**

- Al Mutair A, Al Mutairi A, Schwebius D (2021) The retention effect of staff education programme: Sustaining a decrease in hospital-acquired pressure ulcers via culture of care integration. *Int Wound J.* 2021; 18: 843–849. <https://doi.org/10.1111/iwj.13586>
- Alharthy, N., Alrajeh, O. A., Almutairi, M., & Alhajri, A. (2017). Assessment of anxiety level of emergency health-care workers by generalized anxiety disorder-7 tool. *International Journal of Applied and Basic Medical Research*, 7(3), 150.
- Ashley Weinberg and Francis Creed (2015) Stress and psychiatric disorder in healthcare professionals and hospital staff, *The Lancet*, Volume 355, Issue 9203, 2000, Pages 533-537, ISSN 0140-6736, [https://doi.org/10.1016/S0140-6736\(99\)07366-3](https://doi.org/10.1016/S0140-6736(99)07366-3).
- Assis, B. B., Azevedo, C., Moura, C. C., Mendes, P. G., Rocha, L. L., Roncalli, A. A., Vieira, N. F. M., & Chianca, T. C. M. (2022). *Factors associated with stress, anxiety*

## A Study on Stress, Anxiety and Depression among Health Care Workers

- and depression in nursing professionals in the hospital context. *Revista Brasileira de Enfermagem*, 75(Suppl 3), e20210263. <https://doi.org/10.1590/0034-7167-2021-0263>
- Atif, K., Khan, H. U., Ullah, M. Z., Shah, F. S., & Latif, A. (2016). Prevalence of anxiety and depression among doctors; the unscreened and undiagnosed clientele in Lahore, Pakistan. *Pakistan journal of medical sciences*, 32(2), 294.
- Bertakis, K. D., Helms, L. J., Callahan, E. J., Azari, R., Leigh, P., & Robbins, J.A. (2001). Patient gender differences in the diagnosis of depression in primary care. *Journal of women's health & gender-based medicine*, 10(7), 689-698.
- Bidlan, J. S., & Sihag, A. (2013). Occupational stress among healthcare professionals. *Indian Journal of Health and Wellbeing*, 4(8), 1558.
- Carson A. J., MacHale S., Allen K., et al. (2000). Depression after stroke and lesion location: A systematic review. *Lancet*, 356, 122-126. doi:10.1016/S0140-6736(00)02448-X
- Cruz, Daniel & Sousa, Francisco & Silva, Keila & Nascimento, Isabel & Araújo, Beatriz & Carvalho, Sabrina & Costa, Iaciara & Bezerra, Ana. (2022). *Health Professionals' Mental Health: A Look at their Suffering*, Research, Society and Development. 11. e29811326681. 10.33448/rsd-v11i3.26681.
- Dohrenwend, B. S., & Dohrenwend, B. P. (1978). Some issues in research on stressful life events. *Journal of Nervous and Mental Disease*, 166(1), 7–15. <https://doi.org/10.1097/00005053-197801000-00003>
- Eysenck, H. J. (1991). Dimensions of personality: The biosocial approach to personality. In J. Strelau & A. Angleitner (Eds.), *Explorations in temperament: International perspectives on theory and measurement* (pp. 87–103). Plenum Press. [https://doi.org/10.1007/978-1-4899-0643-4\\_7](https://doi.org/10.1007/978-1-4899-0643-4_7)
- Fernandez, R., Sikhosana, N., Green, H., Halcomb, E. J., Middleton, R., Alananzeh, I., ... & Moxham, L. (2021). Anxiety and depression among healthcare workers during the COVID-19 pandemic: A systematic umbrella review of the global evidence. *BMJ open*, 11(9), e054528.
- Garcia GDV, Zanoti-Jeronymo DV, Zambenedetti G, Cervo MDR, Cavalcante MDMA. (2020) *Healthcare professionals' perception of mental health in primary care*. *Rev Bras Enferm*. 2020 Feb 10;73(1):e20180201. English, Portuguese. doi: 10.1590/0034-7167-2018-02011. PMID: 32049239.
- Halder, S., & Mahato, A. K. (2013). Stress and psychological well-being status among health care professionals. *International Journal of Occupational Safety and Health*, 3(1), 32-35.
- Kavari, H., Helyani, M., & Dehghani, V. (2007). A study of depression prevalence in nurses and it's effective factors in Shiraz Namazi Hospital. *Rawal Med J*, 32(2), 184-6.
- Lazarus, R.S. (1966). *Psychological stress and the coping process*. New York: McGraw-Hill.
- Lohmann J, John D, Dzay A. (2019) *Prevalence and factors associated with poor mental health among healthcare professionals in low- and lower-middle-income countries: a systematic review protocol*. *Syst Rev*. 2019 Nov 29;8(1):294. doi: 10.1186/s13643-019-1201-7. PMID: 31783918; PMCID: PMC6884904.
- Marks, I. M. (1987). *Fears, phobias, and rituals: Panic, anxiety, and their disorders*. Oxford University Press.
- Matud, M. P. (2004). Gender differences in stress and coping styles. *Personality and individual differences*, 37(7), 1401-1415.
- Mohammadi, M. R., Davidian, H., Noorbala, A. A., Malekafzali, H., Naghavi, H. R., Pouretamad, H. R., & Ghanizadeh, A. (2005). An epidemiological survey of

## A Study on Stress, Anxiety and Depression among Health Care Workers

- psychiatric disorders in Iran. *Clinical practice and epidemiology in mental health*, 1(1), 1-8.
- Pallavi Bhatnagar, Megha Singh, Manoj Pandey, Sandhya and Amitabh (2011), *Anxiety, Depression and Stress scale (ADSS-BSPSA)*, National Psychological Corporation, Agra.
- Pappa, S., Ntella, V., Giannakas, T., Giannakoulis, V. G., Papoutsis, E., & Katsaounou, P. (2020). Prevalence of depression, anxiety, and insomnia among healthcare workers during the COVID-19 pandemic: A systematic review and meta-analysis. *Brain, behavior, and immunity*, 88, 901-907.
- Sloan, D. M., & Sandt, A. R. (2006). Gender differences in depression. *Women's Health*, 2(3), 425-434.
- Spielberger, C. D. & Rickman, R. L. (1990). Assessment of State and Trait Anxiety in Cardiovascular Disorders. In D.G Byrne and R.H. Rosenman (Eds.). *Anxiety and the hearts* (pp. 73-92). New York: Hemisphere Publishing Corporation.
- Toosi, M. (2000). Human behavioral at work: organizational behavior. Tehran: The center of national education management publication, 298.
- Tziner, A., Rabenu, E., Radomski, R., & Belkin, A. (2015). Work stress and turnover intentions among hospital physicians: The mediating role of burnout and work satisfaction. *Revista de Psicología del Trabajo y de las Organizaciones*, 31(3), 207-213.
- Weibelzahl, S., Reiter, J., & Duden, G. (2021). Depression and anxiety in healthcare professionals during the COVID-19 pandemic. *Epidemiology & Infection*, 149.
- Weinberg, Ashley et al. (2015) *Stress and psychiatric disorder in healthcare professionals and hospital staff*. *The Lancet*, Volume 355, Issue 9203, 533 – 537
- Wolpert, M.M. (2000). *The Columbia Electronic Encyclopedia* Copyright © 2004. Licensed from Columbia University Press.
- Wilson, W., Raj, J. P., Rao, S., Ghiya, M., Nedungalaparambil, N. M., Mundra, H., & Mathew, R. (2020). Prevalence and predictors of stress, anxiety, and depression among healthcare workers managing COVID-19 pandemic in India: a nationwide observational study. *Indian Journal of Psychological Medicine*, 42(4), 353-358.
- Moser, D. K., Dracup, K., McKinley, S., Yamasaki, K., Kim, C. J., Riegel, B., ... & Barnett, M. (2003). An international perspective on gender differences in anxiety early after acute myocardial infarction. *Psychosomatic medicine*, 65(4), 511-516.

### **Acknowledgment**

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

### **Conflict of Interest**

The author(s) declared no conflict of interest.

**How to cite this article:** Surma, S., Manjunatha, P. & Seema D. (2026). A Study on Stress, Anxiety and Depression among Health Care Workers. *International Journal of Indian Psychology*, 14(1), 2541-2553. DIP:18.01.254.20261401, DOI:10.25215/1401.254