



Prevalence of Psychological Problems among Healthcare Workers in a Tertiary Care Hospital, Chennai, Tamil Nadu

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ABSTRACT

Background: There is growing evidence that patient care is affected by increasing psychological problems among healthcare workers all around the world. This study was conducted to estimate the prevalence of psychological problems among health care workers in Chennai, Tamil Nadu.

Methodology: A cross-sectional study conducted over a period of 6 months. A structured questionnaire that included the Patient Health Questionnaire-9 (PHQ-9) and Cohen's Perceived stress scale were used. Analysis was done using SPSS 21.0 software. Frequency was expressed in percentage and association with factors was tested for significance using Chi square test. p Value <0.05 was considered statistically significant.

Results: Among the participants, nurses had the highest scores for psychological problems, followed by doctors and other staffs. According to PHQ-9, 32.4% of participants were found to have depression and 9% of participants had suicidal intentions, 20.3% reported high stress levels and about 70.02% reported moderate stress levels.

Conclusion: Compared to senior and experienced faculty, the junior and young faculty had higher proportions of stress, depression. It was found that lower recreational activities, experiencing abuse either verbal or physical from patients/caregivers/senior staff, lack of empathy among co-workers showed higher association with psychological problems among the health care workers.

Keywords: stress, nurses, doctors, depression

INTRODUCTION

India is second most populous country after China. Healthcare in India has many challenges and it becomes tough to deliver equitable healthcare to all of the population. There is abundant evidence that patient care is affected by increasing psychological problems among healthcare workers, but data from South India in this regard is not sufficient. Psychological problems like stress, anxiety, depression, emotional instability are quite common with every person met today in the modern world with changing lifestyle.

Stress, anxiety, and depression constitute a high

proportion of psychological morbidity among health-care professionals.^[1] A lifetime prevalence of depression among adults is 5.25% and the highest prevalence of depression of around 36% is found among Indians as per the National Mental Health Survey according to World Health Organization.^[2] Anxiety and Mental stress together may lead to the creation of a feeling which is unpleasant have been associated with worry, fear and feeling of uneasiness. It is a medical condition occurring without any stimulus or trigger. Various symptoms of depression include anxiousness, sadness, guilt, and sense of hopelessness and helplessness.^[3] Moreover, health-care workers deal with life-threatening illnesses and inju-

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ries which are complicated by overwork and having limited paramedical staff, malfunctioning equipment and tight schedules, working on demanding and dependent patients can significantly contribute to depression and stress among them. Healthcare workers are much aware of the pros of healthy lifestyle choices, yet there are practical difficulties in following them. There are challenges like compelling demands for their energy, time and attention that affects their health and makes it even more difficult for them to follow a healthy lifestyle. The family members and their social circle also play an important role in maintaining their mental well-being.

There is a general opinion that healthcare workers are more health conscious and healthy than non-healthcare professionals. The challenges they face in their day to day life in practicing healthy lifestyle are exacerbated by the fact that they have competing demands for their energy, time, and attention.

Healthcare worker's physical and mental well being can affect their productivity and efficacy and also accounts for significant morbidities. Even at sub threshold levels, depression and anxiety disorders can cause significant impairment of quality of life and psychosocial well being of the individual. The management and causes of these disorders are documented for a successful intervention. Mental health problems can be easily controlled by awareness and changing living environment.

Psychological problems in healthcare professionals can affect not only the individual but also their family members and social circle, affecting the society on the whole. Various factors which are inherent to working in a hospital like excessive work load, dealing with death and dying, inter personal conflict with co-workers, exhausting working hours, threat of malpractice litigation and patient's expectation can be the reason for depression, anxiety and stress among the healthcare professionals. The burden of psychological problems in Chennai, Tamil Nadu, South India is less researched. So this study was undertaken to estimate the psychological problems like depression, stress among healthcare workers in a tertiary care hospital in Chennai, South India.

OBJECTIVE

To determine the prevalence of Psychological problems like Stress, Depression, Emotional instability among the healthcare workers in a tertiary care hospital in Kancheepuram district, Tamil Nadu.

METHODOLOGY

This is a cross-sectional observational study conducted over a period of 6 months (January 2021-June 2021). The study population composed of Doctors, Nurses and healthcare assistants in tertiary care hospital.

Sampling method: South India constitutes major four states and Tamil Nadu is one of it. A part of Chennai that belongs to Kancheepuram district is acts as a healthcare hub. Therefore the study was done in tertiary care hospital of Kancheepuram district, the prevalence 83% of psychological morbidity was taken as reference from a study done by Wilson W et al¹ on healthcare workers, and using the formula $n = 4pq/r^2$, the sample size of 225 was calculated.

Data collection tool: A structured questionnaire that included the Patient Health Questionnaire-9 (PHQ-9) which is a diagnostic instrument for mental disorders like depression was used. It contains 9 questions scoring each of 9 DMS-IV criteria as 0 to 3 ("not at all" to "nearly every day") Total score of 27. Questions like "How they are feeling, Appetite, interests" were asked. The severity of depression is based on the score, the scoring is <9 is considered Mild, 10-14 is Moderate, 15-19 is Moderately Severe and 20-27 is Severe. The Question "9" is a single screening question on suicidal risk. Cohen's Perceived stress scale is a psychological instrument used to measure the perceived amount of stress in an individual. It scores from "0" (never) to "4" (very often).

Questions about their emotional changes, fears, working habits were asked and data was obtained. The score ranges from 0-13, is considered low stress, 14-26 is moderate stress and 27-40 is high perceived stress.

Ethical committee approval and informed consent: The study was approved by the Institutional ethical committee of Sree Balaji Medical College and Hospital and informed consent was obtained from each participant before the interview.

Data entry and analysis: Data entry was made in Microsoft Excel. Analysis was done using SPSS 21.0 software. Frequency was expressed in percentage and association with factors was tested for significance using Chi square test. p - Value <0.05 was considered statistically significant.

RESULTS

The prevalence of Psychological problem like depression, perceived stress among the Healthcare workers was, According to PHQ-9, 32.4% of participants were found to have depression and 09.00% had suicidal intentions, According to Cohen's Perceived Stress Scale 20.3% reported high stress levels and about 70.02% reported moderate stress levels.

Among Doctors, Senior stands for Assistant professors, Associate professors, professors and consultants. Junior, stands for Undergraduate doctor and Post graduate doctor. Among Nurses and other healthcare professionals, work experience more than 2 years is considered senior and less than 2 years is considered junior.

Table (1) shows the frequency of depression among

study participants. The younger age group that is from 20 to 30 years of age people was observed to have high psychological problems around 57%. The doctors and nurses were having high psychological problems equally of 49% compared to other healthcare workers, who constituted only 2%. Depression was high among those with low income, and among juniors.

Table (2) shows depression score of each variable with total score >15, that represents moderate to severe depression according to PHQ-9 scale and its association with each variable by Chi- Square test. P-value less than 0.05 are considered statistically significant.

Among all socio-demographic characteristics Age, Occupation and Work experience were found to have significant association with Depression. Age >30 years, Nurses and other healthcare workers, Juniors by work experience were found to have severe depression.

Figure 1, shows the severity of depression among healthcare workers according to PHQ-9 Scale. It was observed that Depression was severe in nurses followed by doctors and then by other healthcare

workers. Mild depression was seen among other healthcare workers, moderate and severe depression was seen among nurses followed by doctors.

Table 1: Socio-demographic distribution of study sample (n=225)

Variable	Frequency (%)
Age	
20-30	166 (57.0)
>30	59 (43.0)
Gender	
Male	140 (62.2)
Female	85 (37.8)
Occupation	
Nurse and HEALTHCARE ASSISTANT	125 (51.0)
Doctor	100 (49.0)
Monthly income	
<or= Rs. 50,000	122 (54.2)
>Rs.50,000	103 (45.8)
Number of family members	
<5	138 (61.3)
5 or >5	87 (38.6)
Work experience	
Junior	122 (54.2)
Senior	103 (45.8)

Table 2: depression score among healthcare workers and associated characteristics (n=225)

Variable	Depression Score (>15)	Depression Score (<15)	Chi-Square Test	P-Value
Age				
20-30	64 (38.5%)	102(61.5%)	5.359	0.02
>30	33(56%)	26(44%)		
Gender				
Male	57(41%)	83(59%)	0.868	0.351
Female	40(42%)	45(58%)		
Occupation				
Doctor	32(32%)	68(68%)	9.06	0.002
Nurse & Healthcare Assistant	65(52%)	60(48%)		
Monthly Income				
<Or= Rs. 50,000	59(48.4%)	63(51.6%)	2.99	0.083
>Rs.50,000	38(36.9%)	65(63.1%)		
Work Experience				
Junior	63(51.6%)	59(48.4%)	7.9	0.004
Senior	34(33%)	69(67%)		

Figure 1: Distribution of severity of depression among healthcare workers according to phq9 scale (n=225)

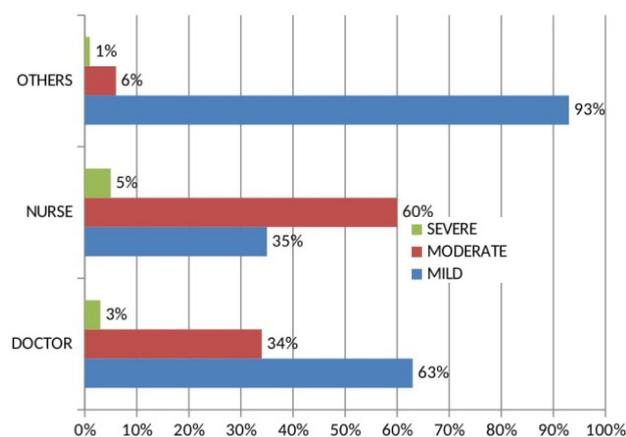


Figure 2: distribution of severity of stress among healthcare workers according to cohen's perceived stress scale: (n=225)

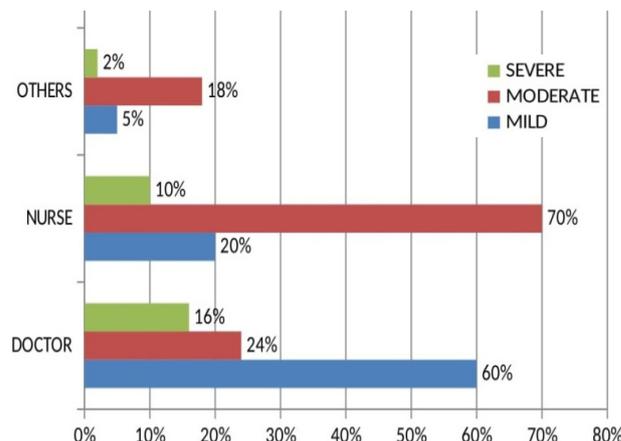


Figure 2 shows Distribution of severity of stress among healthcare workers according to Cohen's perceived stress scale. It shows that Mild stress is seen in doctors, moderate stress is seen in nurses and severe stress is seen in other healthcare workers.

DISCUSSION

A psychological problem among healthcare professionals has been associated with deterioration in health, anxiety, depression, drug and alcohol abuse, and suboptimal patient care. Work-related stress have been widely studied and researched about in developed countries, whereas its significance is undermined and studies in this aspect is scarce in developing countries like India. In this study the distribution of psychological problems among health care workers have been found as 32.4% of participants were found to have depression and 09.00% of participants had suicidal intentions, 20.3% reported high stress levels and about 70.02% reported moderate stress levels, according to PHQ-9. In a study conducted by Saini NK et al, the prevalence of stress was 32.8% among depression, 72% have some amount of stress.⁴

In a study conducted by Supe AN et al in Seth GS medical college, Mumbai among 175 medical professionals it was found that they had 35% depression among healthcare professionals, >80% had some level of stress.⁵ This study suggests that some of the highlighting reasons for stress and job dissatisfaction are frequent night shifts, managing high profile patients, low salary and long working hours. This can be related to a fact that India is a developing country with low financial power and limited resources, which leads to underpaying workers.

In a study conducted by Vikas Menon et al in Pondicherry, South India the prevalence of depression was found to be approximately >32%.⁶ Many studies from various parts of the world have reported data similar to this study in measuring prevalence of depression. Gandhi K et al has done a meta-analysis and found 35% of overall prevalence of psychological disorders among healthcare professionals from all specialties.⁷ This clearly suggests that psychological problems is an universal problem across different specialties and different sets of Healthcare workers, minimal difference is seen between the developing and developed countries.^{8,9} Multiple factors such as female gender, difficult working conditions, unmarried status, and young age were found to be associated with psychological problems. The unadjusted confounding factors could affect the result of the study leading to heterogeneity.^{10,11} Therefore, maintaining a stress free and friendly working environment is of much importance in reducing burnout among Healthcare workers. Younger healthcare professionals are given low remuneration, less respect, and increased workloads.^{12,13,14} The incidence of psychological problems and burnout might also be affected by the hospital, and its facilities.¹⁵ Females

were observed to have high psychological problems, which suggest the fact that they require family friendly work environment.¹⁶ The strengths of this study are finding the distribution of burden among the study population and stating them to the concerned institute. The limitation of this study is it cannot be generalized to general population.

CONCLUSION

The psychiatric morbidity is increasingly observed in healthcare workers in this survey. The findings observed in this study suggested that there is an important need for expanding the mental healthcare services to healthcare workers. Providing a friendly work space, not pressurizing on deadlines, avoiding over working, treating the co-workers with respect irrespective of the hierarchy can reduce majority of the disease burden. Boring work shifts can be made interactive and pleasurable with help of the seniors or management. Provision of timely leave and letting the workers have a family time is important like any other measure. Increase in pay of the healthcare workers can cause immense change in their mental health. The prevalence of depression, anxiety, stress among healthcare workers has astounding level implications on collective and subjective physical and emotional well-being. The over worked healthcare workers should be able to avail healthcare services and also get regular monitoring of psychosocial behavior and their adaptive behavior.

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