

Silent Sufferers: The Prevalence and Impact of Depression in Health Care Professionals

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ABSTRACT

Objective: Aim was to determine the prevalence and impact of depression among health care professionals.

Study Design: Observational study

Place and Duration: Pak Red Crescent Medical College & Teaching Hospital, Dina Nath, Kasur, Punjab in the duration from October, 2022 to March, 2023.

Methods: Total 213 health care professionals were presented in this study. All the presented cases were aged between 18-50 years. Included cases were both doctors and nurses. All the cases were included after taking informed written consent. In addition to a validated semi-structured questionnaire, participants completed the Pittsburgh Sleep Quality Index (PSQI). Frequency of depression and its severity among all cases were assessed. SPSS 22.0 was used to analyze all data.

Results: There were 128 (60.1%) males and 85 (39.9%) females among all cases. 77 (45.5%) cases were aged between 18-30 years, 65 (30.5%) cases had age 31-40 years and 51 (23.9%) patients had age 41-50 years. 131 (61.5%) cases had poor socio-economic status. 125 (58.7%) health care professionals were nurses and 88 (41.3%) cases were doctors. We found that 110 (51.6%) cases had depression, 56 (26.3%) cases had stress and anxiety found in 47 (22.1%) cases. In 110 cases of depression, severity found in 42 cases. Poor sleep quality was found in 134 (62.9%) cases in which 85 cases had depression, 27 cases had stress 22 cases had stress.

Conclusion: We concluded in this study that the depression rate in health care professionals was found high in which nurses were higher in numbers than doctors. To prevent and treat the frequent mental health issues that affect healthcare workers, a thorough, global approach is required.

Keywords: Depression, Health Care Professionals, Anxiety, Stress, Poor Sleep

INTRODUCTION

At the individual, communal, governmental, and worldwide levels, a wide spectrum of psychological effects have been noted during the Virus outbreak. Individually speaking, people are more prone to dread of becoming ill or dying, of feeling helpless, and of being stereotyped by others [1]. The pandemic's detrimental impact on public mental health can potentially result in psychiatric crises [2]. The effectiveness of intervention options is increased by early identification of those who are experiencing a psychological disorder in its early stages. Health emergencies like the COVID-19 pandemic cause psychological changes in both medical personnel and the general public, and these psychological changes are sparked by fear, worry, despair, or insecurity [3].

In a society, nervousness and anxiety have a significant impact on everyone. According to recent research, those who are quarantined or held in isolation have elevated levels of tension, rage, bewilderment, and anxiety [4].

With an estimated 4.7% (95% CI 4.4-5.0%) prevalence worldwide, depression is a major public health concern. Depression is linked to decreased productivity at work, dysfunctional families, substance abuse, suicide, and a shorter life span. In the first three decades following World War II, there were significant rates of depression in the general population.[5] Spending on mental health services and the treatment of MDD has dramatically grown since these concerning epidemiological findings.[6,7] These increases are particularly noticeable for antidepressant prescriptions (often referred to as "medication," including tricyclic antidepressants and SSRIs among others), which are further shortened. As a result, more persons with depression have gotten treatment, particularly in general medical settings, between 1985 and 2010. For instance, in the US, the rate of outpatient therapy for depression grew fourfold between 1987 and 2007, from 0.73/100 to 2.88/100.[8,9]

Recently, the requirement for healthcare professionals' mental health needs has come to light as a serious danger to the delivery of high-quality care and a substantial public health concern. Healthcare workers work in a stressful atmosphere that

regularly puts them under pressure, which can be bad for their emotional, mental, and physical well-being.[10,11] The World Health Organisation (WHO) estimates that there will be a shortage around 18 million healthcare professionals by 2030, especially in countries with low or middle incomes. All socioeconomic levels of nations struggle to a varying extent with job performance when it comes to of schooling, job search, deployment, or retention.[12] Due to the COVID-19 outbreak, these issues will definitely worsen for medical staff all around the world. In this paper, against the context of the ongoing COVID-19 pandemic, we discuss the consequences of stressful situations along with additional working conditions on the mental health of healthcare staff. First, we provide a broad overview of the elevated risk of burnout, stress, moral harm, and mental health issues that healthcare professionals experience. Then, we consider how public health emergencies, like pandemics, can intensify these concerns and create further challenges for contacting and aiding health personnel. Also covered is how self-care and other evidence-based treatments can be used to protect and improve the psychological well-being of healthcare professionals. Finally, we highlight the need for institutional policies, regulations, and structural modifications to solve these problems and strengthen healthcare professionals in the future.

People who work in demanding or stressful workplaces for a long amount of time with little opportunity to recover are more likely to experience burnout. Burnout is classified as an occupational phenomenon by ICD-11: Burnout is a syndrome that is thought to be caused by chronic workplace stress that is not properly managed. It has three traits: (1) feelings of fatigue or exhaustion; (2) growing mental detachment from one's job; (3) negative or cynical views about one's career; and (4) decreasing professional efficacy. Because "burnout" refers primarily to events occurring in the job setting, it shouldn't be employed to describe occurrences in other spheres of life.[13] Burnout, according to Maslach et al., happens when necessary, pertinent, and challenging work turns unpleasant, unfulfilling, and meaningless. Efficacy is replaced by

ineffectiveness as energy degenerates into fatigue, engagement (also known as involvement), and involvement.[14]

In unfavourable working environments, such as underdeveloped areas and low- or middle-income countries where availability of personal safety gear may be severely constrained, these kinds of issues and concerns could deteriorate even worse. A scoping study for COVID-19 included 51 studies on mental health problems affecting medical workers, with a focus on countries with low or middle incomes. Insomnia and poor sleep quality, stress at work and exhaustion, discomfort, and symptoms of anxiety, depression, or psychological trauma were the most prevalent detrimental consequences on mental health which were seen across these studies. Females, younger workers, those on the front lines, and non-physicians were also revealed to be more adversely affected than other groups.[13-15]

Disasters have been shown to significantly negatively impact medical responders' mental health, according to prior research. The prevalence of negative consequences, such as depression and PTSD, has been reported to be higher among nurses than among doctors. Negative psychological effects can occur in response to a variety of disasters, and key risk factors include a lack of social support and interaction, inadequate coping skills, and lack of training. Studies pertaining to emergencies and disasters have shown that long shifts over a prolonged amount of time, the risk of pollution or physical damage, and the likelihood of insomnia, dangerous alcohol use, and PTSD (post-traumatic stress disorder) among firefighters are also shown to be enhanced.[7,8]

MATERIALS AND METHODS

This observational study was conducted at Pak Red Crescent Medical College & Teaching Hospital, Dina Nath, Kasur, Punjab in the duration from October, 2022 to March, 2023 and comprised of 213 cases. After obtaining informed written consent, all cases were included. Detailed demographic information included age, sex, and socioeconomic status. Patients who were pregnant, had other illnesses, or were taking drugs for their mental health were not included.

The included cases ranged in age from 18 to 50. There were two unique sections in the questionnaire. The participants' demographic data was presented in the first segment, and a depression screening tool called the Hospital Anxiety and Depression Scale (HADS) was used in the second. The HADS is a useful screening tool since it has a sensitivity of 70% and a specificity of 90%. A score is assigned to each subscale, with a range of 0 to 21, inclusive. In addition to a validated semi-structured questionnaire, participants completed the Pittsburgh Sleep Quality Index (PSQI).

SPSS 22.0 was used to analyze all data. Frequencies and percentages were used for categorical variables.

RESULTS

There were 128 (60.1%) males and 85 (39.9%) females among all cases. 77 (45.5%) cases were aged between 18-30 years, 65 (30.5%) cases had age 31-40 years and 51 (23.9%) patients had age 41-50 years. 131 (61.5%) cases had poor socio-economic status. 125 (58.7%) health care professionals were nurses and 88 (41.3%) cases were doctors. (table 1)

Table-1: Information on the cases demographics

Variables	Frequency	Percentage
Gender		
Male	128	60.1
Female	85	39.9
Age		
18-30	77	45.5
31-40	65	30.5
41-50	51	23.9
Socio-economic status		
Poor	131	61.5
High	82	38.5

Types of Health Care Professionals		
Doctors	125	58.7
Nurses	88	41.3

We found that 110 (51.6%) cases had depression, 56 (26.3%) cases had stress and anxiety found in 47 (22.1%) cases. (table 2)

Table-2: Association of depression among all cases

Variables	Frequency	Percentage
Depression		
Yes	110	51.6
No	103	48.4
Stress		
Yes	56	26.3
No	157	63.7
Anxiety		
Yes	47	22.1
No	166	67.9

In 110 cases of depression, severity found in 42 (38.2%) cases, 35 (31.8%) cases had moderate depression and mild depression was found in 33 (30%) cases.(figure 1)

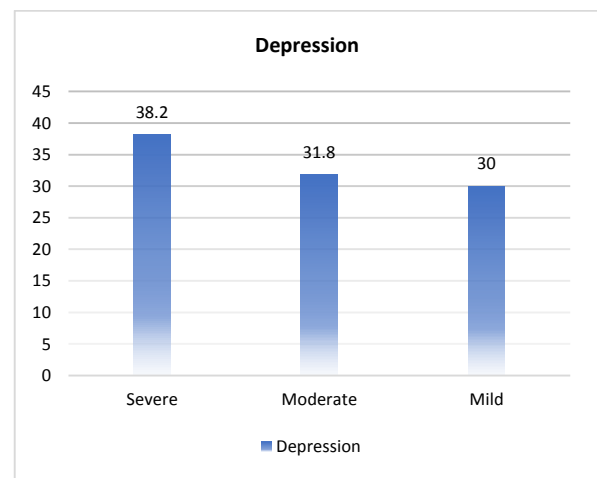


Figure-1: Severity of depression among all cases

Poor sleep quality was found in 134 (62.9%) cases in which 85 cases had depression, 27 cases had stress 22 cases had stress.(Table 3)

Table-3: Frequency of poor sleep quality among all cases

Variables	Frequency (213)	Percentage
PSQ		
Yes	134	62.9
No	79	
PSQ with Psychological disorders		
Depression	85	39.9
Stress	27	12.7
Anxiety	22	10.3

DISCUSSION

The pandemic has presented FLHCWs with a number of extra difficulties in addition to the mental stressors and cultural changes that the general population is experiencing. In addition to the demands of their jobs, they must deal with a higher danger of exposure for themselves and their loved ones. They also have to deal with increased workloads, moral conundrums, and the difficulties of working with patients who are seriously ill. Women have a higher chance of developing depression, according to the findings of epidemiological studies [15]. Stress and post-traumatic stress disorder are more likely to affect women than men [16].

Recent research has revealed that women are more likely than males to experience pandemic-related stress, anxiety, and depression [17,18].

In our study, 213 health care professionals were presented. There were 128 (60.1%) males and 85 (39.9%) females among all cases. 77 (45.5%) cases were aged between 18-30 years, 65 (30.5%) cases had age 31-40 years and 51 (23.9%) patients had age 41-50 years. 131 (61.5%) cases had poor socio-economic status. Results were comparable to the previous researches.[19,20] 125 (58.7%) health care professionals were nurses and 88 (41.3%) cases were doctors. These agreed with the previous research. [17] Previous studies had demonstrated the link between increased levels of psychological distress and medical history and chronic disorders [21]. People who are ill and have a history of medical issues may feel more at risk for developing a new illness [22].

In our study, we found that 110 (51.6%) cases had depression, 56 (26.3%) cases had stress and anxiety found in 47 (22.1%) cases. Disasters have been shown to have considerable negative consequences on the mental health of medical responders, according to prior study. Researchers have discovered that nurses are more likely than doctors to report negative effects including depression and PTSD. Important risk factors for developing bad psychological consequences during many sorts of disasters include a lack of social support and communication, maladaptive coping, and lack of training.[23] The likelihood of sleep disruptions, hazardous alcohol use, anxiety, depression, and PTSD among first responders is also shown to be enhanced by long shifts over extended periods of time and the risk of contamination or physical damage, according to studies relating to emergency situations and disasters.[24,25]

In 110 cases of depression, severity found in 42 cases. Poor sleep quality was found in 134 (62.9%) cases in which 85 cases had depression, 27 cases had stress 22 cases had stress. Our results were comparable to the previous study.[28]

Additionally, incorporating patients and healthcare professionals in the evaluation and improvement of healthcare services, a process known as co-production[26], can assist share power and offer insightful information on both an individual and organisational level. In order to prevent psychological distress and mental health issues as well as to improve their long-term health, well-being, and job satisfaction, medical professionals should be present in the making choices, creation, operation, testing, and assessment of actions and efforts. This should be done through using the co-production principles. Incorporating client and medical professional feedback regarding the perceived quality of service and working conditions may also have other substantial organisational benefits, including financial support for changes to higher-ranking entities like the hospital's doctors and board of directors. Then, using this feedback, the necessary modifications can be started and credibility established.[27] The standard of care, the working environment, and the general wellness of overworked healthcare personnel could all be improved by integrating the co-production principle into healthcare institutions.

CONCLUSION

We concluded in this study that the depression rate in health care professionals was found high in which nurses were higher in numbers than doctors. To prevent and treat the frequent mental health issues that affect healthcare workers, a thorough, global approach is required.

REFERENCES

- 1 Hall RC, Hall RC, Chapman MJ. The 1995 Kikwit Ebola outbreak: lessons hospitals and physicians can apply to future viral epidemics. *Gen Hosp Psychiatry*. 2008;30(5):446–52.
- 2 Xiang Y-T, Yang Y, Li W, Zhang Q, Cheung T, et al. Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed. *Lancet Psychiatry*. 2020;7(3):228–9.

- 3 Zhang J, Lu H, Zeng H, Zhang S, Du Q, Jiang T, et al. The differential psychological distress of populations affected by the COVID-19 pandemic. *Brian Behav Immun*. 2020;87:49–50.
- 4 Brooks SK, Webster RK, Smith LE, Woodland L, Wessely S, Greenberg N, et al. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *Lancet*. 2020. 14;395(10227):912–20.
- 5 P.W. Andrews, S.G. Kornstein, L.J. Halberstadt, C.O. Gardner, M.C. Neale Blue again: Perturbational effects of antidepressants suggest monoaminergic homeostasis in major depression. *Frontiers in Psychology*, 2 (2011), p. 159
- 6 Angst, A. Gamma, W. Roessler, V. Ajdacic, D.N. Klein. Long-term depression versus episodic major depression: Results from the prospective Zurich study of a community sample. *Journal of Affective Disorders*, 115 (1–2) (2009), pp. 112-121
- 7 K.E.M. Biesheuvel, Liefveld, G.D. Kok, C.L.H. Bockting, P. Cuijpers, S.D. Ho llon, H.V.W.J. van Marwijk, F. Smit. Effectiveness of psychological interventions in preventing recurrence of depressive disorder: Meta-analysis and meta-regression. *Journal of Affective Disorders*, 174 (2015), pp. 400-410,
- 8 A.M. Boerema, M. tenHave, A. Kleiboer, R. deGraaf, J. Nuyen, P. Cuijpers, A.T.F. Beekman. Demographic and need factors of early, delayed and no mental health care use in major depression: A prospective study. *BMC Psychiatry*, 17 (2017), p. 367
- 9 E. Castrén, T. Rantamäki. The role of BDNF and its receptors in depression and antidepressant drug action: Reactivation of developmental plasticity. *Developmental Neurobiology*, 70 (5) (2010), pp. 289-297
- 10 Ashour HM, Elkhatib WF, Rahman M, Elshabrawy HA. Insights into the recent 2019 novel coronavirus (SARS-CoV-2) in light of past human coronavirus outbreaks. *Pathogens*. 2020;9(3):186.
- 11 Holshue ML, DeBolt C, Lindquist S, Lofy KH, Wiesman J, Bruce H, et al. First case of 2019 novel coronavirus in the United States. *N Engl J Med*. 2020;382:929–36.
- 12 D. Hu, Y. Kong, W. Li et al., "Frontline nurses' burnout, anxiety, depression, and fear statuses and their associated factors during the COVID-19 outbreak in Wuhan, China: A large-scale cross-sectional study," *EClinicalMedicine*, vol. 24, p. 100424, 2020.
- 13 X. Ma and D. Vervoort, "Critical care capacity during the COVID-19 pandemic: global availability of intensive care beds," *Journal of Critical Care*, vol. 58, pp. 96-97, 2020.
- 14 A. L. McGuire, M. P. Aulisio, F. D. Davis et al., "Ethical challenges arising in the COVID-19 pandemic: an overview from the Association of Bioethics Program Directors (ABPD) task force," *The American Journal of Bioethics*, vol. 20, no. 7, pp. 15–27, 2020.
- 15 Lim GY, Tam WW, Lu Y, Ho CS, Zhang MW, Ho RC. Prevalence of depression in the community from 30 countries between 1994 and 2014. *Sci Rep*. 2018;8(1):1–10.
- 16 Sareen J, Erickson J, Medved MI, Asmundson GJ, Enns MW, Stein M, et al. Risk factors for post-injury mental health problems. *Depress Anxiety*. 2013;30(4):321–7.
- 17 Wang Y, Di Y, Ye J, Wei W. Study on the public psychological states and its related factors during the outbreak of coronavirus disease 2019 (COVID-19) in some regions of China. *Psychol Health Med*. 2020;30:1–10.
- 18 Liu D, Ren Y, Yan F, Li Y, Xu X, Yu X, et al. Psychological impact and predisposing factors of the coronavirus disease 2019 (COVID-19) pandemic on general public in China. 2020.
- 19 Alsaadi T, El Hammami K, Shahrour TM, Shakra M, Turkawi L, Almaskari B, Diab L, Raouf M. Prevalence of depression and anxiety among patients with epilepsy attending the epilepsy clinic at Sheikh Khalifa Medical City, UAE: A cross-sectional study. *Epilepsy Behav*. 2015 Nov;52(Pt A):194–9.
- 20 Luise J. Froessler, Yazan Abdeen, "The Silent Pandemic: The Psychological Burden on Frontline Healthcare Workers during COVID-19", *Psychiatry Journal*, vol. 2021, Article ID 2906785, 11 pages, 2021.
- 21 Wang C, Pan R, Wan X, Tan Y, Xu L, Ho CS, et al. Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China. *Int J Environ Res Public Health*. 2020;17(5):1729.
- 22 Hatch R, Young D, Barber V, Griffiths J, Harrison DA, Watkinson P. Anxiety, depression and post traumatic stress disorder after critical illness: a UK-wide prospective cohort study. *Crit Care*. 2018;22(1):310.
- 23 Naushad VA, Bierens JJ, Nishan KP, Firjeeth CP, Mohammad OH, Maliyakkal AM, et al. A systematic review of the impact of disaster on the mental health of medical responders. *Prehospital Disaster Med*. (2019) 34:632–43. doi: 10.1017/S1049023X19004874
- 24 Jones S, Nagel C, McSweeney J, Curran G. Prevalence and correlates of psychiatric symptoms among first responders in a Southern State. *Arch Psychiatr Nurs*. (2018) 32:828–35. doi: 10.1016/j.apnu.2018.06.007
- 25 Chatzea VE, Sifaki-Pistolla D, Vlachaki SA, Melidoniotis E, Pistolla G. PTSD, burnout and well-being among rescue workers: seeking to understand the impact of the European refugee crisis on rescuers. *Psychiatry Res*. (2018) 262:446–51. doi: 10.1016/j.psychres.2017.09.022
- 26 Farr MC. Understanding participation and power within collaborative processes: Jointly involving staff and citizens in changing public services. PhD thesis, University of Bath, United Kingdom (2012).
- 27 Vennik FD, Van De Bovenkamp HM, Putters K, Grit K.J. Co-production in healthcare: rhetoric and practice. *Int Revng Adm Sci*. (2016) 82:150–68.
- 28 Michalski D, Liebig S, Thormae E, Singer S, Hinz A, Bergh FT. Anxiety, depression and impaired health-related quality of life are therapeutic challenges in patients with multiple sclerosis. *Ment Illn*. 2010 May 14;2(1):e5.