Original Research Article

A study on the evaluation of Stressful Impact of the COVID-19, Depression and Anxiety among Healthcare Workers and Non-Health Care people who have recovered from COVID 19

Nimesh C Parikh[1], Dhruv H. Nakum[2], Bintal S. Patel[3], Manthan Miroliya[4], Vinodkumar M. Darji[5], Nilima D. Shah[6]

[1]Professor and Head, Department of Psychiatry, NHLMMC, SVP Hospital, Ahmedabad
[2]3rd Year Resident Doctor, Department of Psychiatry, NHLMMC, SVP Hospital, Ahmedabad
[3]3rd Year Resident Doctor, Department of Psychiatry, NHLMMC, SVP Hospital, Ahmedabad
[4]2nd Year Resident Doctor, Department of Psychiatry, NHLMMC, SVP Hospital, Ahmedabad
[5]Assistant Professor, Department of Psychiatry, NHLMMC, SVP Hospital, Ahmedabad
[6]Associate Professor, Department of Psychiatry, NHLMMC, SVP Hospital, Ahmedabad

Corresponding author: Dhruv H. Nakum
Email – dhruvhnakum@gmail.com

ABSTRACT

Background: Due to the COVID-19, there is an increase in psychological complaints. Healthcare and non-healthcare persons have had differential complaints like anxiety, depression, stress. Such complaints have also seen in the general public but more so in recovered patients from COVID-19. With this background, we conducted this study find out the stressful impact of COVID-19, prevalence of stress, anxiety and depression between healthcare workers and non-healthcare people.
Methodology: A cross-sectional study was done in the tertiary-care COVID hospital in Ahmedabad. 50 healthcare workers (HCWs) and 50 non-healthcare people (NHCPs) who had recovered from COVID-19 were included (age 18-65 years) in the study after they consented for the same. They are assessed with a clinical socio-demographic proforma, clinical variables, Impact Of Event Scale-Revised (IES-R), Patient Health Questionnaire-9 (PHQ-9) and Anxiety-Self Rating Scale (ASRS). The results were then statistically analysed.
Results: Distress by stressful life events and anxiety were not significant (14% and 32%), (14% and 30%) in HCWs and NHCPs respectively. Depression was more prevalent (44% and 38%) in HCWs and NHCPs respectively. Medical illness was more in NHCPs (50%) compared to HCWs (4%) and associated with depression (52.63%) in NHCPs as compared to HCW (4.5%). Clinical variables, O_2 requirement was also more in NHCPs (20%) as compared to HCWs (4%) and also significantly associated with anxiety (40% and 12.5%) and depression (36.84% and 4.5%) in NHCPs and HCWs respectively.
Conclusions: The prevalence of depression was much higher amongst HCWs and suggests more attention would be required for improving the mental health among HCWs and NHCPs and overall mental health needs attention in patients that are recovering from COVID-19.

Keywords: impact of stressful event, depression, anxiety, COVID-19, healthcare workers.

(Paper received –7th November 2020, Peer review completed – 18th December 2020)
(Accepted – 24th December 2020)

INTRODUCTION

The COVID-19 outbreak started in December 2019 and the first case has been reported in the Chinese seafood market, in Wuhan. Ever since then it has been a matter of concern due to its rapidly spreading nature [1]. The morbidity of COVID-19 is posited at 3.4% and it may have irreversible consequences for society, particularly for at high-risk groups as reported in some studies [2]. Increased exposure to COVID-19 in

healthcare workers leads to significant financial and psychological strain [3]. Because of the lack of disease prevention expertise, overwork, social shame, quarantine and reduced family involvement, there is an increased occurrence of psychiatric disorders, which in turn may harm the quality of work and long-term wellness. 29-35% of healthcare staff suffered from a significant level of emotional distress during the SARS outbreak. Even after some years, signs of PTSD are seen in 10% of the health care staff, found in a study [4]. Long neglected, chronic, or under-treated depression and COVID-19 can be a lethal combination. Before it is too late, health care workers must be given attention regarding this [5]. Recent evidence suggests that individuals, who are kept in isolation and quarantine experience significant distress in the form of anxiety, anger, confusion, and post-traumatic stress symptoms [6]. A study shows non-healthcare persons who have recovered from COVID often have PTSD (28%), Depression (31%), Anxiety (42%), OC symptoms (20%) and insomnia (40%). Overall, 56% scored in the pathological range at least in one clinical dimension [7]. As per our knowledge, there is has been no study conducted to assess depression, anxiety, and distress in health care workers and non-healthcare persons who are recently recovered from COVID-19 by face-to-face interview. With these backgrounds, we conducted this study to find out the prevalence of stress in health care workers and non-health care persons, to find out the prevalence of anxiety in health care workers and non-health care persons and compare the same and to find out the prevalence of depression in health care workers and non-health care persons while also finding out the relationship between socio-demographic factors in health care workers and non-health care persons and to compare the differences. The study also assessed the impact of stressful events in health care workers and non-health care persons and tries to find out the relationship between clinical variables in health care workers and non-health care persons.

METHODOLOGY

Study design and participants

The study was conducted on a cross-sectional basis in a tertiary care hospital in Ahmedabad. Approval was obtained from the institutional ethics committee. The sample size was 100, consisting of consecutive consenting 50 healthcare workers (HCWs) (who have recently recovered within 30 days from COVID-19) and consecutive consenting 50 non-healthcare persons (NHCWs) (who have recently recovered within 30 days from COVID-19). Patients between the ages 18-65 years were included and informed consent was obtained for the same.

Measurements

Both the groups, i.e. HCWs and NHCWs were assessed using the following measures –

- **Socio-demographic proforma:** The sociodemographic proforma comprised of details like age, sex, marital status, religion, education, occupation, familial income, residence, and family type.
- **Clinical Proforma:** Details about the clinical condition of the patients included the history of medical illness, psychiatric illness, details about addiction, and duration of hospital stay, date of admission & discharge, O2 requirement were noted.
- **Impact of events scale -Revised (IES-R):** This is a 22-item self-report measure that assesses subjective distress caused by traumatic events. It has subscales for intrusion, avoidance and hyperarousal subscales [8]. Items are rated on 0 (Not at all) to 4 (Extreme). In the reliability test-retest reliability were 0.93 and 0.91, respectively. Score cut-off for mild distress is ≦24, moderate distress ≦33, severe distress ≦ 37 [8].
- **Patient Health Questionnaire 9 (PHQ-9):** PHQ-9 is a 9 item self-report questionnaire used in clinical practice for screening, diagnosing, monitoring & measuring the severity of depression. Based on DSM-IV criteria as "0" (not at all) to "3" (nearly every day). The sensitivity is 88% and a specificity is 88% for major depression. Cut-off scores for mild depression 5-9, moderate depression 10-14, moderately severe depression 15-19 and severe depression 20-27 [9].
- **Anxiety Self Rating Scale (ASRS):** A self-report assessment device built to measure anxiety levels consists of 10 questions. Scoring between 0 (never) and 4 (always). The cut off scores for minimal

anxiety is 0-8, mild anxiety is 8-16, moderate anxiety is 17-24, high anxiety is 25-32 while extreme anxiety 33-40 [10].

STATISTICAL ANALYSIS

Statistical analysis is done using SPSS version-22. Descriptive statistical analysis is used for socio-demographic, clinical characteristics, IES-R, PHQ-9 and ASRS. Chi-square test / T test was used for finding significant statistical differences.

RESULTS AND DISCUSSION

Table 1: Socio-demographic parameters of HCWs and NHCWs who recovered from COVID-19

Socio-demographic Parameter		GROUP- A Healthcare workers (HCW) (n=50)	GROUP-B Non-Healthcare persons (NHCP) (n=50)
Age (years)	<30 years	48 (96%)	7 (14%)
	>30 years	2 (4%)	43 (86%)
Gender	Male	26 (52%)	27 (54%)
	Female	24 (48%)	23 (46%)
Marital status	Married	11 (22%)	36 (72%)
	Others	39 (88%)	14 (28%)
Education	Graduation done	50 (100%)	28(56%)
	Graduation not done	0 (0%)	22(44%)
Occupation	Professional, Semi- professional Skilled	50 (100%)	14 (28%)
	Semi-skilled, Unskilled Unemployed	0 (0%)	36 (72%)
Family Type	Nuclear	23 (46%)	20 (40%)
	Joint or Extended	27 (54%)	30 (60%)
Religion	Hindus	47 (94%)	48 (96%)
	Others	3 (6%)	2 (4%)
Monthly family income	< Rs. 7332	0 (0%)	1 (2%)
	>= Rs. 7332	50 (100%)	49 (98%)

In sociodemographic variables, according to Table 1, 96% of healthcare workers (HCWs) fell below < 30 years of age and 86% of non-healthcare persons (NHCPs) fell >30 years of age. More NHCPs (72%) were married compared to HCWs (22%). Only 56% of NHCPs had completed their graduation and only 28% NHCPs were professionals by occupation. There was no significant difference between gender, family income & family type in both groups.

In clinical characteristic, Table 2 shows that there was a higher prevalence of medical illness (50%) in NHCPs as compared to HCWs (4%) and the difference was statistically significant. The requirement of O2 was also more in NHCPs (20%) than HCWs (4%) which had a statistically significant difference. There were no significant differences found in clinical parameters like addiction, psychiatric illness & Duration of hospital stay between HCWs and NHCPs.

Table 2: Comparison of Clinical Parameters of HCWs and NHCPs who recovered from COVID-19

Clinical Parameter		GROUP- A Healthcare workers (HCW) (n=50)	GROUP-B Non-Healthcare persons (NHCP) (n=50)	Chi-square	p-value
Medical illness	Present	2(4%)	25(50%)	24.5561	<0.00001* significant
	Absent	48(96%)	25(50%)		
Addiction	Present	1(2%)	4(8%)	0.8421	0.358795 Not significant
	Absent	49(98%)	46(92%)		
Psychiatric illness	Present	1 (2%)	2(4%)	0.3436	0.557734 Not Significant
	Absent	49(98%)	48(96%)		
Duration of hospital stay	< 1 week	26(52%)	19(38%)	1.4545	0.2278 Not significant
	≥ 1 week	24(48%)	31(62%)		
O_2 required	Present	2 (4%)	10(20%)	4.6402	0.031232* Significant

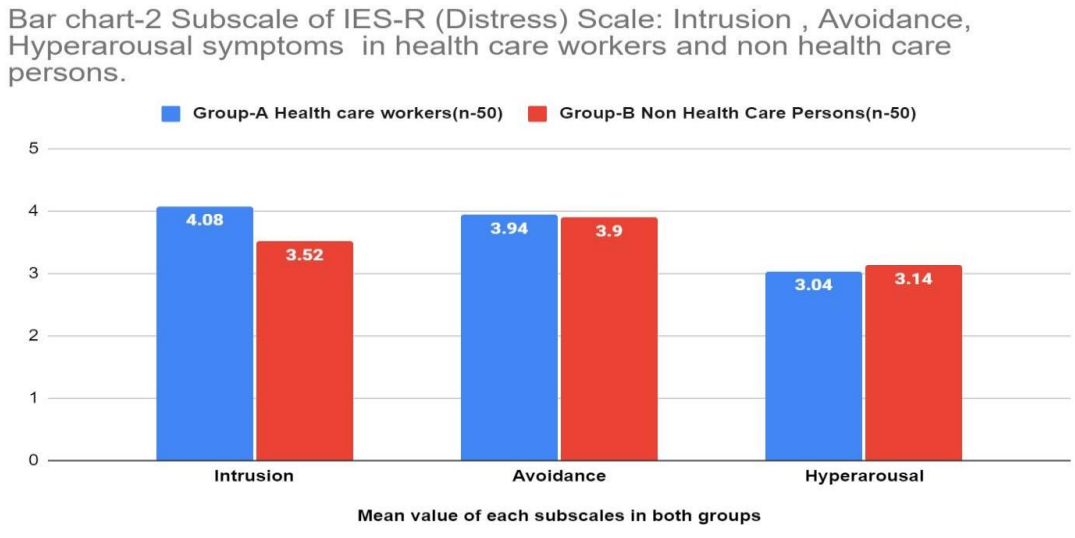
Table 3: Severity of distress in HCWs and NHCPs

IES-R scale	GROUP- A Healthcare workers (HCWs) (n=50)	GROUP-B Non-Healthcare persons (NHCWs) (n=50)
Mild Distress (≥24)	4(8%)	4(8%)
Moderate Distress (≥33)	2(4%)	1(2%)
Severe Distress (≥37)	1(2%)	2(4%)

As per the table 3, distress by stressful life events was 14% in HCWs with chi square value of 0.0831 and p value-0.773197 which was not significantly different for both groups. 8% of the HCWs and NHCPs had mild distress. 4% of HCWs and 2% of NHCPs had moderate distress. 2% of the HCWs and 4% of NHCPs had severe distress.

Subscales of the distress scale –

Bar chart 2 shows intrusion symptoms and the mean are slightly higher in the HCWs (4.08) compared to NHCWs (3.52). Avoidance symptoms have a mean in HCWs (3.94) and NHCPs (3.9). Hyperarousal



symptoms have a mean in HCWs (3.04) and NHCPs (3.14). Hyperarousal symptoms are lowest in both the groups compared to the intrusion and avoidance symptoms in both the groups. In our study the symptoms of distress that scored the most among both the groups are insomnia, anger and irritability and avoiding to think about the illness.

Table 4: Anxiety Severity in both the groups

Anxiety Self Rating Scale	GROUP- A Healthcare workers (HCWs) (n=50)	GROUP-B Non-Healthcare persons (NHCPs) (n=50)
No / Minimal Anxiety (0-8)	34(68%)	35(70%)
Mild Anxiety (8-16)	11(22%)	8(16%)
Moderate Anxiety (17-24)	5(10%)	6(12%)
High & Extreme Anxiety (25-40)	0	1(2%)

Anxiety was present in HCWs (32%) and NHCP (30%) with mean value of 6.28. There is no significant difference found between both groups. Only 2% of the NHCPs had high and extreme anxiety. 22% of the HCWs and 16% of the NHCPs had mild anxiety. 10% of HCWs and 12% NHCPs had moderate anxiety. The symptoms of anxiety that scored the most among both the groups are insomnia, worry about bad things that might happen to me or those I care about & feel tense, nervous, restless or agitated.

Table 5: Severity of Depression in both groups

Level of Depression	GROUP- A Healthcare workers (HCW) (n=50)	GROUP-B Non-Healthcare persons (NHCP) (n=50)
Mild Depression	16(32%)	16(32%)
Moderate Depression	6(12%)	3(6%)
Severe Depression	0	0

Table 6: Comparison of Clinical variables with Distress due to stressful life events in healthcare workers and non-healthcare persons.

Clinical Parameters Cut Off score <24 for IES-R Scale		Group A Healthcare workers (HCW) (n-50)		Group-B Non- Health care persons (NHCP) (n-50)		Chi-Square	P-Value
		With Distress (n-7)	Without Distress (n-43)	With Distress (n-7)	Without Distress (n-43)		
Medical illness	Present	1 (14.2%)	1(2.32%)	1(14.2%)	24(55.8%)	0.5833	0.4450 NS
	Absent	6 (85.7%)	42(97.6%)	6(85.7%)	19(44.18%)		
Addiction	Present	1 (14.2%)	1(2.3%)	1(14.2%)	4(9.3%)	0.5833	0.4450 NS
	Absent	6(85.7%)	42(97.6%)	6(85.7%)	39(90.6%)		
Psychiatric illness	Present	1(14.2%)	0(0%)	1(14.2%)	1(2.32%)	0.5833	0.445009 NS
	Absent	6(85.7%)	43(100%)	6(85.7%)	42(97.67%)		
Duration of hospital stay	< 1 week	3(42.85%)	23(53.48%)	2(28.57%)	17(39.53%)	0.3111	0.576999 NS
	≥ 1 week	4(57.14%)	20(46.51%)	5(71.42%)	26(60.47%)		
O_2 requirement	Present	1(14.2%)	1(2.32%)	3(42.85%)	7(16.27%)	0.35	0.554113 NS
	Absent	6(85.7%)	42(97.68%)	4(57.14%)	36(83.72%)		

The prevalence of depression in HCWs was 44% and NCHPs was 38% with a mean value of 3.78. Difference between both the groups is not statistically significant. But depression was found to be about 7-10 times more prevalent as compared to the general population [11]. 32% of HCWs and NHCPs had mild depression. 12% of HCWs and 6% NHCPs have moderate depression. The symptoms of depression that scored the most among both the groups are insomnia, feeling tired or having little energy & trouble concentrating things (Table 5).

According to Table 6 both the groups with medical illness and psychiatric illness were equally distressed (14.2%). Distress due to Hospital stay of more than 1 week was higher in NCHPs (71.42%) as compared to HCPs (57.14%) Almost 3 times more distress was present in NHCPs (42.85%) than HCWs (14.2%) with O_2 requirement. But neither of the results were statistically significant.

Table 7: Comparison of clinical variables with Anxiety in healthcare workers & non-healthcare persons.

Clinical Parameters Cut Off score <8 for Anxiety self-rating scale		Group A Healthcare workers (HCW) (n-50)		Group-B Non- Health care persons (NHCP) (n-50)		Chi-Square	P-Value
		With Anxiety (n-16)	Without Anxiety (n-34)	With Anxiety (n-15)	Without Anxiety (n-35)		
Medical illness	Present	2(12.5%)	0(0%)	5(33.3%)	20(57.1%)	1.9221	0.165623 NS
	Absent	14(87.5%)	34(100%)	10(66.6%)	15(42.8%)		
Addiction	Present	1(6.25%)	1(2.94%)	1(6.66%)	4(11.4%)	0.0022	0.962361 NS
	Absent	15(93.75%)	33(97.05%)	14(93.33%)	31(88.57%)		
Psychiatric illness	Present	1(6.25%)	0(0%)	1(6.6%)	1(2.8%)	0.0022	0.962361 NS
	Absent	15(93.75%)	34(100%)	14(93.3%)	34(97.14%)		
Duration of hospital stay	< 1 week	6(37.5%)	20(5.8%)	3(20%)	16(45.7%)	1.1508	0.283391 NS
	≥ 1 week	10(62.5%)	14(94.11%)	12(80%)	19(54.2%)		
O_2 requirement	Present	2(12.5%)	0(0%)	6(40%)	4(11.42%)	3.0579	0.180895 NS
	Absent	14(87.5%)	34(100%)	9(60%)	31(88.57%)		

Anxiety was more in NHCPs (40%) as compared to HCWs (12.5%) with O_2 requirement. Differences between both the groups about anxiety in correlation with medical illness, psychiatric illness, addiction and duration of hospital stay were not significant (table 7).

In table 8, Depression was significantly higher in NHCPs (52.63%) than HCWs (4.5%) having medical illness. A significant difference was also present between depression in HCWs (4.5%) and NHCPs (36.84%) with O_2 requirement. No significance statistically was found with respect to psychiatric illness, addiction and duration of hospital stay.

DISCUSSION

This study was conducted in a COVID 19 dedicated tertiary care hospital, which evaluated the impact of the stressful event, depression and anxiety among health care workers and non-healthcare persons who have recovered from COVID-19. To our knowledge, no such study has been conducted so far, in Western Region of India, assessing the levels of stress, anxiety and depression in Health care workers (HCWs) & Non-health care persons (NHCPs) by an in-person interview which gives more reliability and validity to the study. Most studies done in the past have used google forms for data collection citing the pandemic as a reason and ours is the only study where face-to-face interaction has been used.

Table 8: Comparison of clinical variables with Depression due to stressful life events in healthcare workers and non-healthcare persons

Clinical Parameters Cut Off score <4 for PHQ-9		Group A Healthcare workers (HCW) (n-50)		Group-B Non- Health care persons (NHCP) (n-50)		Chi Square	P Value
		With Depression (n-22)	Without Depression (n-28)	With Depression (n-19)	Without Depression (n-31)		
Medical illness	Present	1(4.5%)	1(3.57%)	10(52.63%)	15(48.38%)	12.0084	0.00053*
	Absent	21(95.4%)	27(96.42%)	9(47.36%)	16(51.61%)		
Addiction	Present	1(4.5%)	0(0%)	1(5.2%)	3(9.67%)	0.0113	0.915277 NS
	Absent	21(95.4%)	28(100%)	18(94.7%)	28(90.32%)		
Psychiatric illness	Present	1(4.5%)	0(0%)	2(10.52%)	0(0%)	0.5378	0.463366 NS
	Absent	21(95.4%)	28(100%)	17(89.47%)	31(100%)		
Duration of hospital stay	< 1 week	7(31.81%)	19(67.85%)	5(26.31%)	14(45.16%)	0.1491	0.699395 NS
	≥ 1 week	15(68.1%)	9(32.14%)	14(73.68%)	17(54.83%)		
O_2 requirement	Present	1(4.5%)	1(3.5%)	7(36.84%)	3(9.67%)	6.7713	0.009264*
	Absent	21(95.4%)	27(96.4%)	12(63.15%)	28(90.32%)		

In our study, among the sociodemographic parameters, 96% of healthcare workers (HCWs) fall in < 30 years of age and 86% of non-healthcare persons (NHCPs) fall in >30 years of age. In another study the mean age was 41 years which is in keeping with the current study. In the present study, males and females are almost equal in HCWs and NHCPs respectively [12]. In a previous study, male: female ratio was 1:3. In the current study, 72% in NHCPs and 22 % in HCWs were married and the education levels were higher in HCWs (100%) whereas only 56% in NHCPs were graduated. This is in keeping with all other studies [2]. Comparing the clinical parameters between HCWs and NHCPs in our study, medical illnesses were more common in the NHCPs (50%) compared to HCWs (2%) which was statistically significant. Similar findings were found in previous studies (39.3%) which reported the significant association between history of physical illness and psychological impact [2]. More O_2 requirement was present in the NCHPs group (20%) compared to the HCWs group (4%) which was also statistically significant. No other studies have collected data with respect to O_2 requirements in their clinical variables to our knowledge.

There were no statistically significant differences between addictions in HCWs (2%) and NHCPs (8%) and psychiatric illness. This is in keeping with previous studies [3]. In the present study the prevalence of distress by stressful life events was 8% in HCWs and 14% in NHCPs whereas according to the FEEL-COVID Indian online study [12], using IES-R scale ⅓ of the patients had a score >24. In another study, stress was high and assessed using the DASS scale [3]. In an Indian study, HCWs (n=350) has high levels of stress by using perceived stress scale (PSS). Such differences in results may be due to different population and sampling techniques, social acceptability of mental health problems and time of study period while in lockdown or else [3]. Both the groups with medical illness and psychiatric illness were equally distressed (14.2%). Distress due to hospital stay of ≥ 1 week was higher in NCHPs (71.42%) as compared to HCPs (57.14%) Almost 3 times more distress was present in NHCPs (42.85%) than HCWs (14.2%) with O_2 requirement. But neither of the results were significant.

In the current study, the prevalence of anxiety was 32% in HCWs and 30% in NHCPs, by using the GAD-7 scale. The Anxiety level is 17.7% in another study [3] which is comparable to our study. 68% of the HCWs and 70% NHCPs have minimal/no anxiety symptoms. Severe anxiety was seen only in 2% of the NHCPs. In our study we found anxiety was higher in NHCPs (40%) as compared to HCWs (12.5%) with O_2 requirement. Differences between both the groups about anxiety in correlation with medical illness, psychiatric illness, addiction and duration of hospital stay were not significant. No studies done previously

have compared clinical variables based on anxiety. Depression was about 7-10 times more prevalent in both COVID recovered groups compared to the general population (according to the National mental health survey 2016) [14]. Depression in HCWs was 44% and in NCHPs was 38%. Similar findings were found in a study in which depression was at 44.37% [15], and in the Indian study it was at 11.1 % [3]. Possible reasons may be that the explanation and understanding of questions are better in the in-person study compared to online study and the rapport established with patients could influence the results in contrast to studies done using google forms, social media for links or electronic version of scales. Depression was significantly higher in NHCPs (52.63%) than HCWs (4.5%) having the medical illness which was statistically significant. Significant differences were also present between depression in HCWs (4.5%) and NHCPs (36.84%) with O_2 requirement which was statistically significant. No previous studies have compared clinical variables on the basis of depression scores.

CONCLUSION

The number of healthcare workers were limited which may limit the generalizability of findings. This was a cross-sectional study it only represents a snap-shot of the mental health status of patients as follow-up assessments were not included. Nevertheless, mental health issues are prevalent in patients that have recovered from COVID-19 and needs attention.

REFERENCES

1. Velavan TP, Meyer CG. The COVID-19 epidemic. Tropical Med Int Health 2020;25(3):278-80.
2. Varshney M, Parel JT, Raizada N, Sarin SK. Initial psychological impact of COVID-19 and its correlates in Indian Community: An online (FEEL-COVID) survey. Plos One 2020;15(5):e0233874.
3. Hosseinzadeh-Shanjani Z, Hajimiri K, Rostami B, Ramazani S, Dadashi M. Stress, Anxiety, and Depression Levels Among Healthcare Staff During the COVID-19 Epidemic. Basic Clin Neurosci 2020;11(2):163-9.
4. Wilson W, Raj JP, Rao S, Ghiya M, Nedungalaparambil NM, Mundra H, Mathew R. Prevalence and Predictors of Stress, anxiety, and Depression among Healthcare Workers Managing COVID-19 Pandemic in India: a Nationwide Observational Study. Indian J Psychol Med 2020;42(4):353-8.
5. Que J, Shi L, Deng J, Liu J, Zhang L, Wu S, Gong Y, Huang W, Yuan K, Yan W, Sun Y, Ran M, Bao Y, Lu L. Psychological impact of the COVID-19 pandemic on healthcare workers: a cross-sectional study in China. Gen Psychiatry 2020;33(3):e100259.
6. Khan KS, Mamun MA, Griffiths MD, Ullah I. The mental health impact of the COVID-19 pandemic across different cohorts. Int J Ment Health Addiction 2020;:1-7.
7. Roy D, Tripathy S, Kar SK, Sharma N, Verma SK, Kaushal V. Study of knowledge, attitude, anxiety & perceived mental healthcare need in Indian population during COVID-19 pandemic. Asian J Psychiatry 2020; 8:102083.
8. Yule W, Ten Bruggencate S, Joseph S. Principal components analysis of the Impact of Events Scale in adolescents who survived a shipping disaster. Personal Individ Diff 1994;16(5):685-91.
9. Kroenke K, Spitzer RL, Williams JB. The PHQ-9: validity of a brief depression severity measure. J Gen Intern Med 2001;16(9):606-13.
10. Svanborg P, Åsberg M. A new self-rating scale for depression and anxiety states based on the Comprehensive Psychopathological Rating Scale. Acta Psychiatr Scand 1994;89(1):21-8.
11. Ohayon MM. Epidemiology of depression and its treatment in the general population. J Psychiatr Res 2007;41(3-4):207-13.
12. Türközer HB, Öngür D. A projection for psychiatry in the post-COVID-19 era: potential trends, challenges, and directions. Mol Psychiatry 2020;25(10):2214-9.
13. Mukherjee A, Bandopadhyay G, Chatterjee SS. COVID-19 pandemic: mental health and beyond–the Indian perspective. Irish J Psychol Med 2021;38(2):140-4.

****

Acknowledgements – Nil; Conflict of Interest – Nil
Funding – Nil