

Research Paper

Perceived Social Support and Mental Health Issues among the Intensive Care Unit Staff during the Covid-19 Pandemic: A Web based Cross-Sectional Study

Fatimah Ali Wani¹, Mubasher Ahmad Bhat², Yasir Hassan Rather³, Fazle Roub Bhat^{4*}

ABSTRACT

Background and objective: The Covid-19 pandemic has put tremendous pressure on the already stretched area of anaesthesia and critical care which witnessed a surge in patients requiring invasive mechanical ventilation support. The present study aimed at analysing the adverse psychological implications of COVID-19 on the staff working in intensive care units (ICU's) and the protective role of perceived social support on their mental health. **Methods:** The cross-sectional study was carried out using an anonymized online survey comprising standardized questionnaires evaluating probable anxiety, depression, post-traumatic stress disorder, burnout and perceived social support. The data was collected in May, 2021 and included anaesthesia and critical care clinicians recruited from the tertiary care hospitals of the Union territory of Jammu & Kashmir. **Results:** Results indicated that, of the 160 responses that were obtained, over half reported probable anxiety (57.5%), 77.5% reported burnout, 41% met the threshold for post-traumatic stress disorder and 38% for depression. Multivariate regression showed that low perceived social support and anxiety predicted high probability of PTSD in the analytic sample. **Conclusion:** Our findings indicated a significant degree of adverse psychological impact among the intensive care clinicians working with patients having Covid-19 and perceived social support moderated the link between stress and mental health variables.

Keywords: Covid-19, ICU Staff, Mental health, Perceived social support, PTSD

¹Ph D Student, Department of Psychology, University of Kashmir, Srinagar, Union Territory of Jammu & Kashmir

²Associate professor department of anaesthesiology, Government Medical College, Srinagar, Union Territory of Jammu & Kashmir

³Professor, Department of Psychiatry, Institute of Mental Health and Neuroscience, Government Medical College, Srinagar, Union Territory of Jammu & Kashmir

⁴Senior Resident, Department of Psychiatry, Institute of Mental Health and Neuroscience, Government Medical College, Srinagar, Union Territory of Jammu & Kashmir

*Corresponding Author

Received: June 10, 2022; Revision Received: November 20, 2022; Accepted: November 28, 2022

Perceived Social Support and Mental Health Issues among the Intensive Care Unit Staff during the Covid-19 Pandemic: A Web based Cross-Sectional Study

The outbreak of the novel coronavirus disease COVID-19 was declared a Public Health Emergency of International Concern (PHEIC) by the World Health Organization (WHO) in January ¹. It was soon declared a global pandemic in March, 2020 ^{1,2}. According to the data released by the WHO, COVID-19 cases showed a global surge in May, 2021 with India at the centre accounting for 90% of both infections and deaths in South-East Asia, and comprising of 46% of global cases and 25% of global deaths in the first week of May 2021¹.

The magnitude of the pandemic and the high-risk exposure has put tremendous pressure on the frontline healthcare workers (HCW). The unprecedented challenges may predispose HCW's to various psychological issues ^{3,4} compromising not just their own wellbeing but the patient care as well ². Among healthcare workers, anaesthesiologists are at the frontline of the COVID-19 pandemic since many critical patients require invasive mechanical ventilation secondary to severe respiratory distress. Being experts in emergent airway management during perioperative anaesthesia, critical care management, and in the resuscitation of patients, the anaesthesiologists are playing a major role in the COVID-19 pandemic making them extremely vulnerable of contracting the Covid-19 infection and subsequently transmitting it further ^{5,6}. The high burnout rate in the clinicians of the already hard-pressed branch of anaesthesia and intensive care, can have negative psychological implications leading to suboptimal quality of patient care ⁷. The Intensive care unit staff is at a higher risk of developing psychological issues of anxiety and depression due to more workload, directly caring for Covid-19 patients, high-risk of infection and witnessing high patient mortality ^{8,9}. Some researchers have also found a high prevalence of PTSD symptoms in the critical care staff exposed to work related traumatic experiences ^{3,6,10-15}.

High social support has been proposed to act as a protective factor for mental health during a crisis and facilitates an individual's recovery from trauma ^{16,17}. Conversely, poor social support may make it more challenging to adjust to a traumatic situation as the main effect model explicates that good social support builds resilience in an individual to face stressors even in the absence of it ^{17,18}. Not many studies have investigated the impact of social support on the symptoms of PTSD, anxiety and depression in the Intensive Care Unit Staff (ICU) during the on-going pandemic. The present study aims to explore the protective effect of perceived social support on mental health and adverse psychological impact of this pandemic on the ICU clinicians.

METHODOLOGY

A web-based cross-sectional survey was done using snowball sampling among the ICU clinicians of various hospitals of Jammu and Kashmir in the month of May, 2021 which was the peak of the second wave of Covid-19 in the state as determined by a data mapping website of COVID-19 transmission (covid-19india.org). The hospital department chairs were contacted and requested to circulate the online self-administered survey questionnaire to their staff and it was forwarded via the departmental WhatsApp groups. Our study was open to the ICU doctors, medical trainees, nurses and other ICU healthcare staff actively involved with the covid-19 patients. Participants with pre-existing mental health conditions were excluded from the survey. The participants were briefed about the purpose of the study and informed consent was sought. The participation was voluntary and the participants were allowed to leave the survey at any point. The study was approved by the Government Medical College Review Board. Informed consent of the participants was obtained. This

Perceived Social Support and Mental Health Issues among the Intensive Care Unit Staff during the Covid-19 Pandemic: A Web based Cross-Sectional Study

manuscript followed the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) reporting guideline for cross-sectional studies.

The survey was built using Google forms and comprised of the following measures, the Hospital Anxiety and Depression Rating Scale (HADS) ¹⁹ to measure probable depression and anxiety with a score >11 indicating probable diagnosis; the 20-item Post Traumatic Stress Disorder-5 (PTSD-5) civilian version ^{19,20} to measure PTSD with a score of >33 indicated the presence of probable PTSD and; The Multidimensional Scale of Perceived Social Support (MPSS) ^{21,22}, a 12-item scale to measure perceived adequacy of social support from three sources: family, friends, & significant other; using a 5-point Likert scale; the Maslach Burnout Inventory (MBI) ²³, a 6-point Likert scale to explore probable risk of exhaustion/burn-out with a score of 17 or less indicating low level burnout, 18-29 moderate level and over 30 high level of burn-out. A probable diagnosis was made using the respective cut-off scores to indicate a case. We also observed participants' responses to thoughts of harming themselves since the beginning of the pandemic.

We received 169 responses out of which nine people had a diagnosed mental health condition prior to the pandemic which reduced our analytic sample to 160.

Statistical Analysis

The data collected was then analysed using the IBM SPSS Statistics for Windows [computer program], 2012. Version 21.0 Armonk, NY: SPSS Inc. All qualitative data were expressed as proportions and percentages. Chi-square test was used for descriptive statistics (n, %). To examine the association between perceived social support with PTSD, depression and anxiety multivariate regression analysis was used. A similar assessment was done for other demographic factors. The $P < 0.05$ was considered statistically significant.

RESULTS

Table 1 shows descriptive statistics for all variables in the analysis. Participants were on an average 32.57 years old ($SD = 7.021$). The majority identified as doctors (75.6%) and 53.8% were single. Based on self-report, 51.9% reported a shortage of personal protective equipment, 55.3% reported more working hours, and 97.5% feared that they might infect their families. Almost half (41.9%) reported being tested positive for COVID-19, 79.4% were vaccinated, and of the 20.6% that were not vaccinated, 6% did not get it due to the apprehension about its side effects. Based on their symptom inventory scores, 57.5%, 38.1% and 41% were classified as having probable Anxiety, Depression and PTSD respectively.

Table 2 shows Pearson's correlations, significant negative correlation was found between perceived social support and psychological outcomes of PTSD (-.268**) and anxiety (-.188**). High perceived social support was associated with lower scores on anxiety and depression. Significant positive correlation was found between depression and the other two mental health variables of anxiety (.600**) and PTSD (.443**).

Table 3: The logistic regression model explained 39.4% (Nagelkerke R²) of the variance and correctly classified 32% of the cases. In anaesthesia and intensive care clinicians working with COVID-19 patients, perceived social support and anxiety significantly predicted probable PTSD (OR=-.457- -0.50 and .978-2.5 respectively).

DISCUSSION

This cross-sectional study examined the psychological bearing and exhaustion of working in the ICU setting during the second wave of the COVID-19 pandemic, in May, 2021 and the protective effect of perceived social support on the mental health of the anaesthesia and critical care staff. Our study identified probable burnout (77.5%), PTSD (41%), anxiety (57.5%) and depression (38.1%) in the analytical sample. Consistent with other similar surveys the main findings of this study highlight that ICU clinicians are at a significantly high risk of developing post-traumatic stress symptoms^{3,11,24-26}. Our findings of increased rate of probable PTSD symptoms, and other psychological difficulties such as depression and anxiety, are greatly relevant as research suggests a link between poor mental health and functional impairment which could consequently compromise patient-care²⁷. Within the study sample, 98% had a fear of transmitting COVID-19 to their families and this fear led many healthcare workers to stay away from their families, the community also showed great reluctance to let health professionals enter public spaces which might have led to feelings of isolation and less social support²⁸.

With regard to the protective effect of perceived social support on psychological well-being, our findings are in line with previous studies and show a significant negative correlation between perceived social support and psychological variables of PTSD (-.268**) and anxiety (-.188**). Consequently, high perceived social support was associated with lower scores on anxiety and depression²⁹. The link between perceived social support and mental health was explained by Cohen and Wills using two mechanisms: the main effect model and the buffering model. The main effect model suggests that good social support equips an individual to better deal with the stressors by improving their overall mental health. The buffering model suggests that the impact of stress on mental health is attenuated by good social support¹⁷. Consistent with previous research significant positive correlation was also found between depression and the other two psychological variables of anxiety (.600**) and PTSD (.443**) ³⁰⁻³².

The survey reports that 77.5% of the analytic sample reported burn-out, some even reported having frequent thoughts of harming themselves (26.3%), they also reported having faced more work hours and long shifts, regardless of which less than half have contemplated on quitting their profession since the pandemic and also shown resilience in the face of critical decision making when intensivists were confronted with the ethical dilemma of taking the final call during the Covid-19 pandemic leading to moral injuries^{27,33}.

52% of our sample reported inadequate personal protective equipment and since many critical patients require intubation for mechanical ventilation which is an aerosol generating procedure (AGP) and requires proper personal protective equipment (PPE), it could have been a source of stress and anxiety, along with working long shifts in the uncomfortable PPE's and keeping up with changing recommendations on their usage^{7,34}.

With regard to the protective effect of perceived social support on psychological well-being, our findings are in line with previous studies and show a significant negative correlation between perceived social support and psychological variables of PTSD (-.268**) and anxiety (-.188**). Consequently, high perceived social support was associated with lower scores on anxiety and depression²⁹. The link between perceived social support and mental health was explained by Cohen and Wills using two mechanisms: the main effect model and the buffering model. The main effect model suggests that good social support equips an

Perceived Social Support and Mental Health Issues among the Intensive Care Unit Staff during the Covid-19 Pandemic: A Web based Cross-Sectional Study

individual to better deal with the stressors by improving their overall mental health. The buffering model suggests that the impact of stress on mental health is attenuated by good social support¹⁷. Consistent with previous research significant positive correlation was also found between depression and the other two psychological variables of anxiety (.600**) and PTSD (.443**).

PTSD may develop due to both direct and indirect exposure to stressful events, the indirect events in Covid times include having concerns about spreading Covid-19 to the family and shortage of PPE³⁵. During the current pandemic, it is imperative to identify individuals in general and HCWs in particular who are at risk of developing PTSD. Perceived social support has been proposed as an important risk factor for PTSD, though the relationship has not been studied in the Covid pandemic. Cool and Bickman reported that social support was significantly associated with psychological distress only six weeks after a natural disaster^{36,37,38}. Our study is in contrast to another study from Japan where poor social support was not associated with PTSD. The present study was conducted during the peak of second wave in Kashmir and it is probable that the staff had also battled the first wave. Similar to study by Chen et al (2021), in the current study, other socio demographic factors like gender and age did not predict the probable³⁹.

Limitations

A weakness of this study is that it was carried out online and exclusively in the hospitals of Jammu & Kashmir. Hence, the relative homogeneity of the participant demographics can prevent the findings from being extrapolated to less affected regions. The study was carried out during the peak of the second wave and lacks long-term follow-up. The potential confounding effects of pre-existing, undiagnosed mental health conditions were not controlled. There could also be a response bias in reporting pre-existing mental health conditions.

CONCLUSION

In sum, the present study identified that COVID-19 has significant negative psychological implications on the ICU clinicians amongst the participants; with most of them presenting a probable risk profile of burnout, anxiety, depression and PTSD. Furthermore, for the ICU staff to deliver optimal patient-care it's important to safeguard their mental health, provide adequate social support and protect them from the negative repercussions of the crisis. The current psychological burden is an unavoidable occupational hazard which needs to be dealt with by understanding the problems and needs of healthcare professionals.

Table 1: Sociodemographic, clinical, and perception data information and psychological data of the intensive care unit clinicians

Variable	n (%)
Gender	
Male	83 (51.9)
Female	77 (48.1)
Marital Status	
Single	86 (53.8)
Married	73 (45.6)
Divorced/Widowed	1 (.6)
Pre-pandemic psychiatric illness	9 (5.6)

Perceived Social Support and Mental Health Issues among the Intensive Care Unit Staff during the Covid-19 Pandemic: A Web based Cross-Sectional Study

Depression	4 (2.5)
Bi-polar	2 (1.25)
Anxiety	3 (1.87)
Profession	
Doctor	121 (75.6)
Nurse	10 (6.3)
Other healthcare Staff	29 (18.1)
PPE Shortage	83 (51.9)
Burnt-out	124 (77.5)
Low-level Burnout	17 (10.6)
Medium-level Burnout	45 (28.1)
High-level Burnout	62 (38.7)
Work hours changed	
More work hours and long shifts	89 (55.3)
Fear that you might infect your family	
Yes	156 (97.5)
No	4 (2.5)
Ever thought of harming yourself since the pandemic	42 (26.3)
Ever thought of leaving your profession since the pandemic	61 (38.1)
Tested positive for covid-19	67 (41.9)
Vaccinated against Covid-19	127 (79.4)
Reasons for not getting vaccinated	
Pregnancy	7 (4.4)
Vaccine hesitancy	6 (3.8)
Non-availability	5 (3.1)
Antibodies from previous exposure	3 (1.9)
Allergic	2 (1.3)
Lactating	2 (1.3)
Registered/ Waiting turn	3 (1.9)
Prevalence of probable mental health condition	
Anxiety	
Caseness	92 (57.5)
Borderline	34 (21.3)
None	34 (21.3)
Depression	
Caseness	61(38.1)
Borderline	68 (42.5)
None	31(19.4)
Post-Traumatic Stress Disorder	
Caseness	66 (41.6)
Sub-threshold	94 (58.4)

Perceived Social Support and Mental Health Issues among the Intensive Care Unit Staff during the Covid-19 Pandemic: A Web based Cross-Sectional Study

Table 2: Correlation matrix between perceived social support and mental health variables

	Perceived Social Support	PTSD	Anxiety	Depression
Perceived Social Support	-	-.268**	-.188**	-0.75
PTSD	-.268**	-	.551**	.443**
Anxiety	-.188**	.551**	-	.600**
Depression	-0.75	.443**	.600**	-

**Correlation is significant at the 0.05 level (two-tailed).

Table 3: Multivariate regressions predicting PCL-5 scores from sociodemographic and clinical variables in the ICU clinicians who work in COVID-19 ICU's (N = 160)

Variables	B (constant)	SE	P	Standardized co-efficient	95% CI
Age	.009	.203	.964	.004	-.392-.410
Anxiety	1.783	.407	.000	.459	.978-2.588
Depression	.665	.418	.114	.142	-.161-1.491
MPSS Total	-.253	.103	.015	-.173	-.457- -.050
Female	-2.524	2.394	.293	-.078	-7.257-2.208
Single	-6.275	14.581	.668	-.193	-35.101-22.552
Married	-5.800	14.347	.687	-.178	-34.164-22.564
Pre-existing Mental Health Condition	2.523	4.924	.609	.036	-7.211-12.258
Doctor	-3.204	3.061	.297	-.088	-9.256-2.848
Nurse	1.947	5.547	.726	.029	-9.018-12.913
More work hours	2.363	2.391	.325	.072	-2.365-7.090
PPE Shortage	-.579	2.273	.799	-.018	-5.072-3.915
Burn-out	-3.295	2.898	.257	-.085	-9.025-2.435
Fear of infecting Family	6.307	7.517	.403	.061	-8.553-6.269
Self-harm ideas	.926	2.703	.723	.025	-4.643-5.854

Abbreviations: MPSS, Multidimensional Scale of Perceived Social Support; CI, Confidence Interval; PCL-5, PTSD Checklist for DSM-5.

REFERENCES

1. WHO. COVID-19 Weekly Epidemiological Update 22. World Heal Organ. Published online 2021.
2. Blake H, Bermingham F, Johnson G, Tabner A. Mitigating the psychological impact of covid-19 on healthcare workers: A digital learning package. *Int J Environ Res Public Health*. 2020;17(9). doi:10.3390/ijerph17092997
3. Carmassi C, Foghi C, Dell'Oste V, et al. PTSD symptoms in healthcare workers facing the three coronavirus outbreaks: What can we expect after the COVID-19 pandemic. *Psychiatry Res*. 2020;292. doi:10.1016/j.psychres.2020.113312
4. Que J, Shi L, Deng J, et al. Psychological impact of the covid-19 pandemic on healthcare workers: A cross-sectional study in China. *Gen Psychiatry*. 2020;33(3). doi:10.1136/gpsych-2020-100259
5. Koppurapu VS, Puliaiev M, Doerschug KC, Schmidt GA. Ventilated Patients With COVID-19 Show Airflow Obstruction. *J Intensive Care Med*. Published online 2021.

Perceived Social Support and Mental Health Issues among the Intensive Care Unit Staff during the Covid-19 Pandemic: A Web based Cross-Sectional Study

- doi:10.1177/08850666211000601
6. Jain A, Singariya G, Kamal M, Kumar M, Jain A, Solanki RK. COVID-19 pandemic: Psychological impact on anaesthesiologists. *Indian J Anaesth.* 2020;64(9):774-783. doi:10.4103/ija.IJA_697_20
 7. Mehta S, Machado F, Kwizera A, et al. COVID-19: a heavy toll on health-care workers. *Lancet Respir Med.* 2021;9(3). doi:10.1016/S2213-2600(21)00068-0
 8. Lai J, Ma S, Wang Y, et al. Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. *JAMA Netw Open.* 2020;3(3). doi:10.1001/jamanetworkopen.2020.3976
 9. Hu Z, Wang H, Xie J, et al. Burnout in ICU doctors and nurses in mainland China—A national cross-sectional study. *J Crit Care.* 2021;62. doi:10.1016/j.jcrc.2020.12.029
 10. Demartini B, Nisticò V, D’Agostino A, Priori A, Gambini O. Early Psychiatric Impact of COVID-19 Pandemic on the General Population and Healthcare Workers in Italy: A Preliminary Study. *Front Psychiatry.* 2020;11. doi:10.3389/fpsy.2020.561345
 11. Dutheil F, Mondillon L, Navel V. PTSD as the second tsunami of the SARS-Cov2 pandemic. *Psychol Med.* Published online 2020. doi:10.1017/S0033291720001336
 12. Donnelly SC. COVID-19, healthcare workers and future mental health issues. *QJM.* 2020;113(5):307. doi:10.1093/QJMED/HCAA113
 13. Carmassi C, Foghi C, Dell’Oste V, et al. PTSD symptoms in healthcare workers facing the three coronavirus outbreaks: What can we expect after the COVID-19 pandemic. *Psychiatry Res.* 2020;292. doi:10.1016/j.psychres.2020.113312
 14. Azoulay E, De Waele J, Ferrer R, et al. Symptoms of burnout in intensive care unit specialists facing the COVID-19 outbreak. *Ann Intensive Care.* 2020;10(1). doi:10.1186/s13613-020-00722-3
 15. French-O’Carroll R, Feeley T, Tan MH, et al. Psychological impact of COVID-19 on staff working in paediatric and adult critical care. *Br J Anaesth.* 2021;126(1). doi:10.1016/j.bja.2020.09.040
 16. Pinar G, Okdem S, Buyukgonenc L, Ayhan A. The relationship between social support and the level of anxiety, depression, and quality of life of Turkish women with gynecologic cancer. *Cancer Nurs.* 2012;35(3). doi:10.1097/NCC.0b013e31822c47bd
 17. Shelton AJ, Wang CDC, Zhu W. Perceived Social Support and Mental Health: Cultural Orientations as Moderators. *J Coll Couns.* 2017;20(3). doi:10.1002/jocc.12062
 18. Liu C, Zhang Y, Jiang H, Wu H. Association between social support and posttraumatic stress disorder symptoms among Chinese patients with ovarian cancer: A multiple mediation model. *PLoS One.* 2017;12(5). doi:10.1371/journal.pone.0177055
 19. Skapinakis P. Hospital Anxiety and Depression Scale (HADS). In: *Encyclopedia of Quality of Life and Well-Being Research.* ; 2014. doi:10.1007/978-94-007-0753-5_1315
 20. U.S. Department of Veterans Affairs. PTSD Checklist for DSM-5 (PCL-5) - PTSD: National Center for PTSD. ptsd.va.gov. Published online 2020.
 21. Zimet GD, Powell SS, Farley GK, Werkman S, Berkoff KA. Psychometric Characteristics of the Multidimensional Scale of Perceived Social Support. *J Pers Assess.* 1990;55(3-4). doi:10.1080/00223891.1990.9674095
 22. Canty-Mitchell J, Zimet GD. Psychometric properties of the multidimensional scale of perceived social support in urban adolescents. *Am J Community Psychol.* 2000;28(3). doi:10.1023/A:1005109522457
 23. Gil-Monte PR. Factorial validity of the Maslach Burnout Inventory (MBI-HSS) among Spanish professionals. *Rev Saude Publica.* 2005;39(1). doi:10.1590/s0034-

Perceived Social Support and Mental Health Issues among the Intensive Care Unit Staff during the Covid-19 Pandemic: A Web based Cross-Sectional Study

- 89102005000100001
24. Raudenská J, Steinerová V, Javůrková A, et al. Occupational burnout syndrome and post-traumatic stress among healthcare professionals during the novel coronavirus disease 2019 (COVID-19) pandemic. *Best Pract Res Clin Anaesthesiol.* 2020;34(3):553-560. doi:10.1016/j.bpa.2020.07.008
 25. Carmassi C, Malacarne P, Dell'Oste V, et al. Post-traumatic stress disorder, burnout and their impact on global functioning in Italian emergency healthcare workers. *Minerva Anesthesiol.* Published online January 12, 2021. doi:10.23736/S0375-9393.20.14853-3
 26. Johnson SU, Ebrahimi O V., Hoffart A. PTSD symptoms among health workers and public service providers during the COVID-19 outbreak. *PLoS One.* 2020;15(10 October). doi:10.1371/journal.pone.0241032
 27. Greenberg N, Weston D, Hall C, Caulfield T, Williamson V, Fong K. Mental health of staff working in intensive care during Covid-19. *Occup Med (Chic Ill).* 2021;71(2). doi:10.1093/occmed/kqaa220
 28. Brooks SK, Webster RK, Smith LE, et al. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *Lancet.* 2020;395(10227). doi:10.1016/S0140-6736(20)30460-8
 29. Hou T, Zhang T, Cai W, et al. Social support and mental health among health care workers during Coronavirus Disease 2019 outbreak: A moderated mediation model. *PLoS One.* 2020;15(5). doi:10.1371/journal.pone.0233831
 30. Greene T, Harju-Seppänen J, Adeniji M, et al. Predictors and rates of PTSD, depression and anxiety in UK frontline health and social care workers during COVID-19. *Eur J Psychotraumatol.* 2021;12(1). doi:10.1080/20008198.2021.1882781
 31. Gros DF, Price M, Magruder KM, Frueh BC. Symptom overlap in posttraumatic stress disorder and major depression. *Psychiatry Res.* 2012;196(2-3). doi:10.1016/j.psychres.2011.10.022
 32. Rytwinski NK, Scur MD, Feeny NC, Youngstrom EA. The co-occurrence of major depressive disorder among individuals with posttraumatic stress disorder: A meta-analysis. *J Trauma Stress.* 2013;26(3). doi:10.1002/jts.21814
 33. Robert R, Kentish-Barnes N, Boyer A, Laurent A, Azoulay E, Reignier J. Ethical dilemmas due to the Covid-19 pandemic. *Ann Intensive Care.* 2020;10(1). doi:10.1186/s13613-020-00702-7
 34. Ansari U, Mendonca C, Danha R, Robley R, Davies T. The effects of personal protective equipment on airway management: An in-situ simulation. *Trends Anaesth Crit Care.* 2020;34. doi:10.1016/j.tacc.2020.07.003
 35. Tatsuno J, Unoki T, Sakuramoto H, Hamamoto M. Effects of social support on mental health for critical care nurses during the coronavirus disease 2019 (COVID-19) pandemic in Japan: A web-based cross-sectional study. *Acute Med Surg.* 2021;8(1). doi:10.1002/ams2.645
 36. Robinaugh DJ, Marques L, Traeger LN, et al. Understanding the relationship of perceived social support to post-trauma cognitions and posttraumatic stress disorder. *J Anxiety Disord.* 2011;25(8). doi:10.1016/j.janxdis.2011.07.004
 37. Brewin CR, Andrews B, Valentine JD. Meta-analysis of risk factors for posttraumatic stress disorder in trauma-exposed adults. *J Consult Clin Psychol.* 2000;68(5). doi:10.1037/0022-006X.68.5.748
 38. Hennein R, Mew EJ, Lowe SR. Socio-ecological predictors of mental health outcomes among healthcare workers during the COVID-19 pandemic in the United States. *PLoS One.* 2021;16(2 February). doi:10.1371/journal.pone.0246602

Perceived Social Support and Mental Health Issues among the Intensive Care Unit Staff during the Covid-19 Pandemic: A Web based Cross-Sectional Study

39. Chen Y, Huang X, Zhang C, et al. Prevalence and predictors of posttraumatic stress disorder, depression and anxiety among hospitalized patients with coronavirus disease 2019 in China. *BMC Psychiatry*. 2021;21(1). doi:10.1186/s12888-021-03076-7

Acknowledgement

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

Conflict of Interest

The author declared no conflict of interest.

How to cite this article: Fatimah, A. W., Mubasher, A. B., Yasir H. R., & Fazle, R. B. (2022). Perceived Social Support and Mental Health Issues among the Intensive Care Unit Staff during the Covid-19 Pandemic: A Web based Cross-Sectional Study. *International Journal of Indian Psychology*, 10(4), 647-656. DIP:18.01.062.20221004, DOI:10.25215/1004.062