

Perceived Occupational Risk among Nurses During COVID-19 Pandemic

Omprakash Swami^{1*}, Sunil Kumar Garg² and Pavan Kumar Sharma³

¹Associate Professor, Mahatma Gandhi Nursing College, Sitapura, Jaipur, India.

²Associate Professor, SINPMS, Badal, Muktsar, Punjab, India.

³Professor, Jaipur College of Nursing & Hospital, Jaipur, India.

ABSTRACT

Introduction: From the time 2019 Coronavirus complaint is a health exigency of the transnational issues and during these times not only nurses but utmost of us endured a lot of traumatic recollections. still, occupational threat frequency in nurses and the threat is unknown.¹ **Material and Methods:** Across-sectional check, descriptive exploration design was used. Total 45 subjects among registered nurses were named in a sample by convenience slice fashion. Data was collected by online Google form through a tone reported structured questionnaire and anatomized by descriptive and deducible statistics. **Result:** Data analysis revealed frequency of the perception on occupational threat among nurses. The nurses set up to be distributed into positive stations 46.7, Neutral 4.4 and negative station as 48.9. There was no significant association of occupational threat with named demographic variable at 0.05 position of significance. **Discussion:** The study revealed an critical need to modernize the knowledge and stations regarding occupational threat among nurses by incorporating the covid-19 education to nurses.

Keywords: Perceived, Occupational, Risk, COVID-19, Pandemic

Address for correspondence: Omprakash Swami, Associate Professor, Mahatma Gandhi Nursing College, Sitapura, Jaipur, India. E-mail: opswami@mgumst.org

Submitted: 15-Feb-2022

Accepted: 10-Jun-2022

Published: 29-Aug-2022

INTRODUCTION

Coronavirus complaint 2019 (COVID-19) is a public health exigency of transnational concern and has caused traumatic experience for nurses worldwide. still, the frequency of depression and anxiety symptoms in nurses, and how psychosocial factors impact nurses in this public extremity are unknown.²

In a study nurse at the frontline of minding for COVID-19 cases might witness internal health challenges and probative managing strategies are demanded to reduce their stress and collapse. The end of this study was to identify stressors and collapse among frontline nurses minding for COVID-19 cases in Wuhan and Shanghai and to explore perceived effective moral support strategies.³

During the 2019 new coronavirus complaint (COVID-19) outbreak, online consulting has been extensively used to address internal health problems, including health care professionals (HCPs) minding for COVID-19 cases who endured substantial cerebral torture.⁴

In a descriptive study, a aggregate of 262 nurses working in adult ferocious care units (ICUs) across Turkey during the COVID-19 epidemic constituted the sample. Data were collected by an online check and the Perceived Stress Scale-14. Descriptive statistics, independent t-test, one-way analysis of friction, retrogression analysis and Bonferroni test were used for data analysis. Chance of nurses with moderate position of occupational stress was 62. High working hours and nanny case rates, heavy workload and failure in patient treatment were the main factors of occupational stress. position of occupational stress was affected by gender, number of children, times of experience in ferocious care and the type of work shift. ferocious care nurses in Turkey endured moderate stress during the COVID-19 epidemic.⁵

Nurses' work-related fatigue has been honoured as a trouble to nanny health and patient safety. Multicentre, descriptive, cross-sectional design with a convenience sample was used.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Access this article online
Website: www.ijfans.org
DOI: 10.4103/ijfans_191_22

How to cite this article: Omprakash Swami, Sunil Kumar Garg and Pavan Kumar Sharma. Perceived Occupational Risk among Nurses During COVID-19 Pandemic. *Int J Food Nutr Sci* 2022; 11:133-139.

The statistical population comprised of the first-line nurses in 7 tertiary general hospitals from March 3, 2020 to March 10, 2020 in Wuhan of China. A aggregate of 2667 samples from 2768 communicated actors completed the investigation, with a response rate of 96.35. Social-demographic questionnaire, work- related questionnaire, Fatigue Scale-14, Generalized Anxiety complaint-7, Patient Health Questionnaire-9, and Chinese Perceived Stress Scale were used to conduct online check. The significant factors which redounded in nurses' fatigue were further anatomized by multiple direct retrogression analysis.⁶

During the 2019 new coronavirus complaint (COVID-19) outbreak, online consulting has been extensively used to address internal health problems, including health care professionals (HCPs) minding for COVID-19 cases who endured substantial cerebral torture.⁷

wakefulness is an important factor that can affect the health and work quality of nurses. still, there's a lack of big-sample studies exploring factors that affect the wakefulness of nurses fighting against COVID-19. This cross-sectional study using the Ascent wakefulness Scale, Fatigue Scale-14 and Perceived Stress Scale took place in March 2020. Actors were front-line nurses from four tertiary-position general hospitals. The frequency of wakefulness among actors was 52.8. The position of wakefulness among actors was advanced than the normal position. Interventions grounded on impacting factors should be enforced to ensure nurses' sleep quality.⁸

PROBLEM STATEMENT

Perceived occupational risk among nurses during COVID-19 pandemic.

OBJECTIVES

1. To assess the perceived occupational threat among nurses.
2. To find out the association of perceived occupational threat among nurses with named demographic variables.

MATERIAL AND METHODS

Research approach and design-A quantitative, Non-experimental check design was used to assess the perceived occupational risk among nurses working during COVID-19 pandemic in Rajasthan. Research variable(s). The Research variable was Perceived occupational risk among nurses working during COVID-19 pandemic. Demographic variables: The demographic variables included in the study were Age in times, gender, connubial status, number of children, place of hearthstone, professional qualification, professional experience, house in which they were living, present working hospital, present working department, exposure to COVID-19 cases, former training related to occupational threat. Sample: The sample size for the study was 45 registered nurses working in different hospitals or nursing sodalities of Rajasthan during COVID-19 epidemic. The non-probability convenience slice fashion was applicable for the study for opting subjects. Research setting: The exploration setting were

Table 1: Socio-Demographic Profile of Registered Nurses

S. No.	Variables	F	%
1	Age (in Years)		
	Less than 25	16	35.6
	25 to 35	25	55.6
	More than 35	4	8.9
2	Gender		
	Male	31	68.9
	Female	14	31.1
3	Marital Status		
	Married	22	48.9
	Unmarried	23	51.1
4	Number of Children		
	No child	27	60
	1-2 child	18	40

Table 1 (Cont.)			
5	Place of Residence		
	Hospital campus/	6	13.3
	Outside the hospital campus	39	86.7
6	Professional Qualification		
	General Nursing and Midwifery (GNM)	14	31.1
	B.Sc. (Nursing)	6	13.3
	Post basic B.Sc. (Nursing)	7	15.6
	M.Sc. (Nursing) and above	18	40
7	Professional Experience (in Years)-		
	<5	33	73.3
	10-May	8	17.8
	>10	4	8.9
8	House in Which You are Living is a		
	Own house	22	48.9
	Rented house	15	33.3
	any other	8	17.8

Table 2: Professional Profile of Registered Nurses Regarding Occupational Risk			
S. No.	Variables	F	%
1	Present working hospital		
	Government	1	2.2
	Private	38	84.4
	Charitable/Autonomous/Any other	6	13.3
2	Present working department		
	Medicine	6	13.3
	Surgery	3	6.7
	ICU	6	13.3
	Emergency	1	2.2
	Gynecology/OBG	2	4.4
	Pediatrics	3	6.7
	COVID unit/COVID Isolation ward	3	6.7
	Any other	21	46.7
3	Have you been exposed/worked with COVID-19 patients		
	Yes	14	31.1
	No	31	68.9
4	Have you received any additional training about occupational risk		
	Yes	14	31.1
	No	31	68.9

Table 3: Perception of Registered Nurses Regarding Occupational Risk

S. No.	Attitude	f	%	Mean SD	Median (IQR)
1	Positive	21	46.7	45.73±18.88	44
2	Neutral	2	4.4		-31.5
3	Negative	22	48.9		

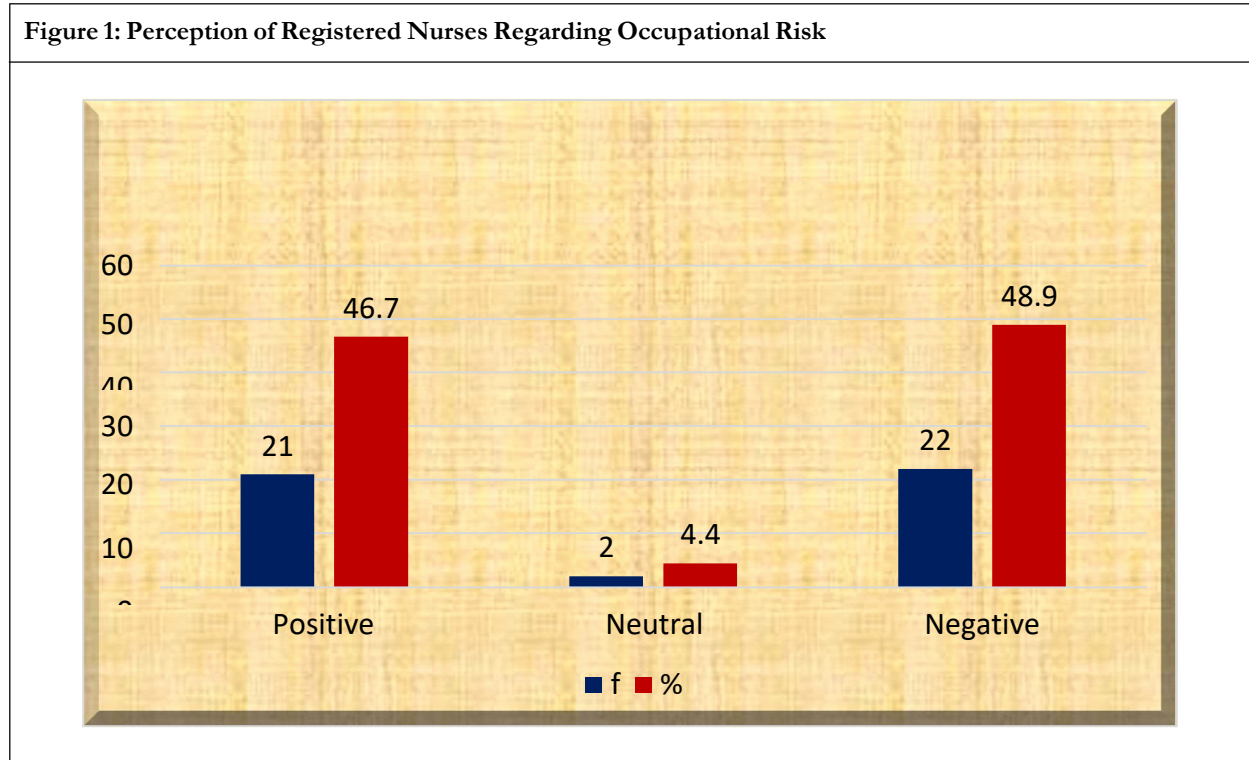


Table 4: Items Analysis of Perception about Occupational Risk among Registered Nurses During COVID-19 Pandemic

Item	Mean	SD
1	2.44	1.407
2	2.36	1.401
3	2.49	1.424
4	2.4	1.355
5	2.24	1.246
6	2.02	1.177
7	1.98	1.118
8	2.31	1.311
9	2.09	1.203
10	1.82	1.072
11	2.33	1.398

Table 4 (Cont.)

12	2.18	1.353
13	2.07	1.195
14	2.22	1.277
15	2.16	1.167
16	1.96	1.107
17	2	1.206
18	2.31	1.395
19	2.02	1.234
20	2.11	1.335
21	2.22	1.347

colourful hospitals and nursing sodalities having registered nurses working in Rajasthan and collected data through online mode. Development and description of tool(s): To achieve the exploration objects, a structured demographic

S. No.	Variables	Attitude			χ^2 Value	df	P value
		Positive	Neutral	Negative			
1	Age (in years)						
	Less than 25	8	1	7	1.405	4	.864 ^{NS}
	25 to 35	12	1	12			
	More than 35	1	0	3			
2	Gender						
	Male	16	1	14	1.139	2	.471 ^{NS}
	Female	5	1	8			
3	Marital status						
	Married	9	1	12	0.588	2	.768 ^{NS}
	Unmarried	12	1	10			
4	Number of children						
	No child	12	2	13	1.412	2	.685 ^{NS}
	1-2 child	9	0	9			
5	Place of residence						
	Hospital campus	1	1	4	4.11	2	.112 ^{NS}
	Outside the hospital campus	20	1	18			
6	Professional qualification						
	General Nursing and Midwifery (GNM)	4	2	8	10.27	6	.122 ^{NS}
	B.Sc. (Nursing)	2	0	4			
	Post basic B.Sc. (Nursing)	6	0	1			
	M.Sc. (Nursing) and above	9	0	9			
7	Professional experience (in years)						
	<5	14	2	17	2.077	4	.797 ^{NS}
	10-May	4	0	4			
	>10	3	0	1			
8	House in which you are living is a						
	Own house	12	1	9	3.999	4	0.345 ^{NS}
	Rented house	4	1	10			
	any other	5	0	3			

questionnaire was prepared in form of google form to collect online data from actors to assess the perceived occupational hazard among registered nurses working during COVID-19 epidemic. 45 registered nurses responded to the

Occupational threat assessment tool (google form). The tool included- Section A: Questions related to Socio-demographical variables. Section B particulars related to Perceived occupational threat (Occupational threat

S. No.	Variables	Attitude			χ^2 Value	df	P value
		Positive	Neutral	Negative			
Present working Hospital							
1	Government	0	0	1	1.407	4	0.843 ^{NS}
	Private	18	2	18			
	Charitable/Autonomous/Any other	3	0	3			
Present working department							
2	Medicine	2	0	4	18.314	14	0.125 ^{NS}
	Surgery	0	1	2			
	ICU	4	1	1			
	Emergency	0	0	1			
	Gynecology/OBG	1	0	1			
	Pediatrics	2	0	1			
	COVID unit/ COVID Isolation ward	0	0	3			
	Any other	12	0	9			
Have you been exposed/worked with COVID-19 patients							
3	Yes	5	1	8	1.139	2	0.471 ^{NS}
	No	16	1	14			
Have you received any additional training about occupational risk							
4	Yes	6	1	7	0.401	2	.881 ^{NS}
	No	15	1	15			

assessment tool) in form of likert scale. Occupational risk assessment tool consist of 20 items of self-structured 5-point likert scale. Each item could be given one response from five responses. The responses were: Does not possess any risk (1), Low risk (2), No idea (3), Moderate risk (4) and High risk (5). Ethical considerations: Ethical approval to conduct the study was obtained from institutional research and ethical committee of Jaipur Hospital and college of nursing, Jaipur. After successful trial of pilot study, permission to conduct the main study was obtained from concerned authority. Informed consent was taken through online mode from participants after assurance of confidentiality and anonymity. The collected data were analyzed using descriptive and inferential statistics. Different charts and diagrams were used to depict the findings.

RESULTS AND DISCUSSION

Nurses experience increased level of burnout during COVID-19. In addition to that several sociodemographic and

occupational factors prominently affect the occupational risk during COVID-19.

This study shows that a relatively highly experienced nurses experienced some degree of mental distress, including Post Traumatic Stress Disorder symptoms and perceived stress. The study findings highlight the importance of helping nurses to reduce stress. The study revealed an urgent need to update the knowledge and attitudes regarding occupational risk among nurses by incorporating the covid-19 education to nurses.

REFERENCES

- Zheng R., Zhou Y., Fu Y., Xiang Q., Cheng F., Chen H., Xu H., Fu L., Wu X., Feng M., Ye L., Tian Y., Deng R., Liu S., Jiang Y., Yu C. and Li J. (2021). Prevalence and associated factors of depression and anxiety among nurses during the outbreak of COVID-19 in China: A cross-sectional study. *Int J Nurs Stud.* Feb; 114: 103809.

2. Zheng R., Zhou Y., Fu Y., Xiang Q., Cheng F., Chen H., Xu H., Fu L., Wu X., Feng M., Ye L., Tian Y., Deng R., Liu S., Jiang Y., Yu C. and Li J. (2021). Prevalence and associated factors of depression and anxiety among nurses during the outbreak of COVID-19 in China: A cross-sectional study. *Int J Nurs Stud.* Feb; 114: 103809.
3. Zhang Y., Wang C., Pan W., Zheng J., Gao J., Huang X., Cai S., Zhai Y., Latour J. M. and Zhu C. (2020). Stress, Burnout, and Coping Strategies of Frontline Nurses During the COVID-19 Epidemic in Wuhan and Shanghai, China. *Front Psychiatry.* Oct 26; 11: 565520.
4. Ma Y., Rosenheck R. and He H. (2020). Psychological stress among health care professionals during the 2019 novel coronavirus disease Outbreak: Cases from online consulting customers. *Intensive Crit Care Nurs.* Dec; 61: 102905.
5. Sanlýturk D. (2021). Perceived and sources of occupational stress in intensive care nurses during the COVID-19 pandemic. *Intensive Crit Care Nurs.* Dec; 67: 103107.
6. Zhan Y. X., Zhao S. Y., Yuan J., Liu H., Liu Y. F., Gui L. L., Zheng H., Zhou Y. M., Qiu L. H., Chen J. H., Yu J. H. and Li S. Y. (2020). Prevalence and Influencing Factors on Fatigue of First-line Nurses Combating with COVID-19 in China: A Descriptive Cross-Sectional Study. *Curr Med Sci.* Aug; 40(4): pp. 625-635.
7. Zhan Y., Liu Y., Liu H., Li M., Shen Y., Gui L., Zhang J., Luo Z., Tao X. and Yu J. (2020). Factors associated with insomnia among Chinese front-line nurses fighting against COVID- 19 in Wuhan: A cross-sectional survey. *J Nurs Manag.* Oct; 28(7): pp. 1525-1535.
8. Ma Y., Rosenheck R. and He H. (2020). Psychological stress among health care professionals during the 2019 novel coronavirus disease Outbreak: Cases from online consulting customers. *Intensive Crit Care Nurs.* Dec; 61: 102905.