Compassion fatigue among staff nurses during COVID-19

ClinicalPractice

Abstract

Introduction: Compassion Fatigue (CF) concept is a state of reduced capacity for compassion as a consequence of exhaustion caused by contact with the suffering of others. This investigation might help to identify compassion fatigue among nurses during COVID- 19 and its relationship with selected demographic variables.

Material and methods: After obtaining permission from authorities, this cross-sectional study was conducted in multispecialty hospital of Punjab during months of May -July 2021. Study population included 83 purposively selected staff nurse working in areas with COVID 19 patients and willing to participate in study. Data collection tool has two parts- socio-demographic data (age, qualification, area of work, experience, marital status and number of children) and 40 items related to Compassion fatigue at 5-point Likert scale. Tool was validated by experts in field of nursing and psychology. Reliability of tool was 0.893(Cronbach's Alpha). Compassion fatigue total score was 200. Score 41-80 indicate low level, 81-120 indicate moderate level compassion fatigue, 121-160 denotes high level of compassion fatigue and 161-200 indicates very high compassion fatigue score. Data collection permission was obtained from authorities. As per their shift duty and during their free time, participants were contacted. After taking Consent, a questionnaire was given to them and requested them to fill it. Descriptive and inferential statistics done by SPSS version 21(IBM). Findings were presented in tables and figures.

Results: Majority of the respondents had a moderate stress level (47%), followed by the respondents with high stress level (39.8%) In addition to this, about 10.8% of the respondents were dealing with very high stress level whilst 2.4% of the respondents had low stress levels. Thus, there is enough evidence that fitted regression model is non-significant and partially predicts the dependent variable: Stress score non-significantly for predictors: Age, Qualification, Area of work, Experience, Marital status and Number of children.

Conclusion: During COVID pandemic nurses have moderate and severe level of stress among younger and working in intensive care units due to their long working hours and increased job responsibilities.

Keywords: Compassion fatigue ▪ burnout syndrome ▪ occupational stress ▪ quality of life of nurses

Davinder Kaur*[1] & Preety Narula[2]

[1]Principal , Gian Sagar College of Nursing, Ramnagar, Rajpura, Patiala
[2]Vice principal, Gian Sagar College of Nursing, Ramnagar, Rajpura, Patiala.

*Author for correspondence: dav6aug@gmail.com

Introduction

COVID 19 pandemic imposed many challenges and immense stress to nursing workforce. During pandemic many nurses reported that they have poor control over their work environment, exhaustion and frustration with the workspace and work-related burnout. Work related burn out in nurses may lead to development of compassion fatigue which lead to reduces capability for empathizing with patients [1]. Compassion Fatigue (CF) concept is a state of reduced capacity for compassion as a consequence of exhaustion caused by contact with the suffering of others [2].

In pandemic days, the psychological charge of uncertainty arise as there was lack of proven therapies or vaccine, heath care equipments and personal protective devices which lead to high risk of infection among nurses. Nurses try to balance the needs of patients with their own families and put their own physical and emotional health at risk. Due to exposure of stressful events, nurses develop compassion fatigue which makes their life worse [3]. Covid care is life threatening condition as well as it increased workload and emotional distress of nurses as they have sustained exposure to pain, suffering and death of their patients [4]. These stressors lead to development of compassion fatigue and or burn out. This

is related to their perceived inability to relieve the suffering of patients in their care [5].

CF effects physical as well as psychological health of nurses which lead to decreased job satisfaction and quality of life [4]. CF leads to burn out among nurses. From the last few years academic literature reported that health care professionals are vulnerable to burn out as they have to take high risk decisions related to their work, deal with the patients and their relatives and expectations of sensitivity and compassion. They further reported that heath care professionals have compassion fatigue as they witness the patient's sufferings without being able to relieve their discomfort which cause high emotional toll to them [2,6]. This investigation might help to identify compassion fatigue among nurses during COVID- 19 and its relationship with selected demographic variables.

Methods

Study design and setting
A cross sectional study was conducted in multispecialty hospital of Punjab during months of May -July 2021.

Study participants
Study population included 83 purposively selected staff nurse working in areas with COVID 19 patients and willing to participate in study.

Study Tool
Data collection tool has two parts- socio-demographic data (age, qualification, area of work, experience, marital status and number of children) and 40 items related to Compassion fatigue at 5-point Likert scale. Tool was validated by experts in field of nursing and psychology. Reliability of tool was 0.893(Cronbach's Alpha). Compassion fatigue total score was 200. Score 41-80 indicate low level, 81-120 indicate moderate level compassion fatigue, 121-160 denotes high level of compassion fatigue and 161-200 indicates very high compassion fatigue score.

Method of Data collection
Data collection permission was obtained from authorities. As per their shift duty and during their free time, participants were contacted. After taking Consent, a questionnaire was given to them and requested them to fill it.

Ethical considerations
Ethical approval was taken institute ethical committee and written permission was taken from Medical Superintendent of hospital.

Data analysis
Master data sheet was prepared. Descriptive and inferential statistics done by SPSS version 21(IBM). Findings was presented in tables and figures.

Result

TABLE 1. Profile of the respondents			
Parameter		Frequency	Percentage
Age(years)	20-24	32	38.6
	25-29	27	32.5
	30-34	13	15.7
	35-39	4	4.8
	>=40	7	8.4
Qualification	GNM	69	83.1
	B.Sc./Post Basic, B.Sc Nursing	14	16.9
Area of work	Surgical Unit	12	14.5
	Critical Care	51	61.4
	Medical	12	14.5
	Gynae& Pediatric ward	8	9.6
Experience(years)	0-4	56	67.5
	45540	14	16.9
	41913	8	9.6
	15-19	4	4.8
	>20	1	1.2
Marital Status	Married	31	37.3
	Unmarried	52	62.7
Number of children	0	59	71.1
	1	15	18.1
	2	7	8.4
	3	2	2.4

In (TABLE 1) the profile of the respondents is discussed. There were 83 respondents in total, from which the majority of respondents fall under the age group of 20-24 years (38.6%) whereas only 4.8% of the respondents were aged between 35-39 years. As for the qualification of the respondents more than half of the population was of GNM (83.1%) and the remaining 16.9% were B.Sc/P.Basic B.Sc nursing. With regard to the area of work of the respondents 61.4% of the respondents were critical care workers while 9.6% of the respondents were in Gynae & Pediatric ward. Furthermore, 67.5% of the respondents had the job experience of 0 years -4 years and on the other hand only 1.2% of the respondents had the experience of more than 20 years. As for the personal life of the respondents the majority of respondents were unmarried (62.7%) hence the higher number of respondents had no children (71.1%).
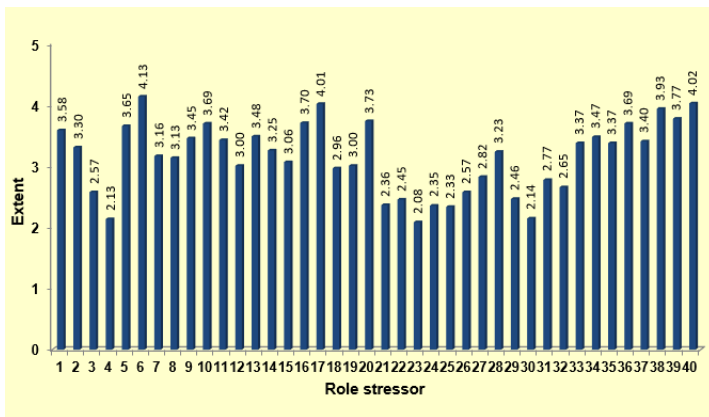
FIGURE 1: Mean extent of role stressors among respondents regarding various conditions of job

The above (**FIGURE 1**) illustrates the extent of role stressors among respondents regarding the job environmental conditions. Majority of respondents approved that they were good at their job (M-4.13), followed by 'I try to keep aware of important ways I behave and things I do (M-4.02)' and 'my job requires me to make important decisions (M-4.01)'. The least agreed role stressor among nurses was ' On my job, I am exposed to high level of dust (M-2.08)' along with ' I have to take work home with me (M-2.13)'.

One third of the staff was agreeing that most of the time (36.1%) they were expected to do too many different tasks in too little time. More than half felt increased job responsibilities during Covid-19. Only 8(9.6%) were convinced most of the time that they were expected to perform tasks on job for which they have never been trained. Majority 78.4% agreed having resources needed to get their job done. Majorly 53.0% believed that they were good at their job. Except 13.3% all the nursing staff occasionally to most of the time agreed that they have to work under tight time deadlines. Among all 95.2% wished that they had more help to deal with the demands placed upon them at work. More than one third (77.1%) respondents reported that their job required them to work in several equally important areas at once. Among respondents 95.2% (15.7%) believe that they were expected to do more work than was reasonable.

More than 85% staff worried about whether the people who work for/with them will get things done properly. Nearly three fourth respondents agreed usually (M-28.9%) and mostly (M-45.8%) that their job requires them to make important decisions. Minutely 13.3% believe mostly true that if they make a mistake, the consequences for others could be pretty bad. Inconsequential proportion (27.7%) was occasionally worried about meeting their job responsibilities. The nursing job was regarded physically non-dangerous by noticeable proportion (37.3%). The erratic work schedule bothered some of the nurses occasionally (22.9%) and often (31.3%). Maximum 30.1% nurses failed to put their job out of their mind when they go home.

An inconsequential (28.9%) number of nurses rarely feel that there are other jobs they could do besides their current one. Highly but equal proportion of nurses often and usually (25.3%) periodically re-examine or reorganize their work style and schedule. More than one third (36.1%) nurses could mostly establish priorities for the use of their time. High majority of respondents usually (33.7%) and most of the time (387.3%) used systematic approach when faced with a problem.

TABLE 2. Work related stress level of respondents			
Stress Level	Score	Frequency	Percentage
Low	41 - 80	2	2.4
Moderate	81 - 120	39	47
High	121 - 160	33	39.8
Very High	161 - 200	9	10.8
Minimum - Maximum		73 - 181	
Mean ± SD		125.64 ± 23.30	

In the above (**TABLE 2**) the stress level of the respondents is discussed. It is vivid from the table that majority of the respondents had a moderate stress level (47%), followed by the respondents with high stress level (39.8%) In addition to this,

about 10.8% of the respondents were dealing with very high stress level whilst 2.4% of the respondents had low stress levels. Therefore, the Minimum and Maximum score came out to be 73 and 181 respectively.

TABLE 3. Mean Stress score of respondents according to their demographic profile								
	Profile	N	Minimum	Maximum	Mean	SD	F/t	p-value
Age(years)	20-24	32	73	173	130.06	27.27	0.792	0.534[NS]
	25-29	27	89	181	125.63	24.35		
	30-34	13	95	153	122.85	17.29		
	35-39	4	109	121	115	5.16		
	≥ 40	7	99	134	116.71	10.4		
Qualification	GNM	69	73	181	125.26	23.13	0.326	0.745[NS]
	B.Sc./P.Basic	14	89	170	127.5	24.93		
Area of work	Surgical Unit	12	73	181	117.17	28.36	1.37	0.258[NS]
	Critical Care	51	81	173	129.63	23.12		
	Medical	12	89	172	119.92	20.78		
	Gynae&Paed.	8	99	159	121.5	16.88		
Experience (years)	0-4	56	73	181	128.7	26.42	0.825	0.513[NS]
	5-9	14	98	153	121.71	16.71		
	10-14	8	99	130	115.63	9.76		
	15-19	4	116	121	118	2.16		
	>20	1	120	120	120	-		
Marital status	Married	31	95	153	118.32	13.13	2.263	0.026[S]
	Unmarried	52	73	181	130	26.82		
Number of children	0	59	73	181	128.37	26.03	0.954	0.419[NS]
	1	15	95	153	119.8	14.52		
	2	7	98	134	117.57	10.75		
	3	2	116	118	117	1.41		
NS - Non significant (p>0.05), S - Significant (p<0.05)								

The current (**TABLE 3**) depicts the association of stress score with the demographic profile of nursing staff. It was evident that younger (M-130.06) staff had comparatively more stress than elder (M-116.71) ones but the difference was found statistically non-significant (p 0.534; p>0.05). Qualification of staff was found non-significantly (p 0.745; p>0.05) affecting their average stress score, though it showed a slight increase with higher qualification from GNM (M-125.26) to B.Sc. /P. Basic (M- 127.50). Staff deployed in Critical care (M-129.63) had maximum mean stress score and surgical unit (M-117.17) was found least stressed during the study and the difference was seen non-significantly (p 0.258; p>0.05) varying. The experience of the staff was non-significantly (p 0.513; p>0.05) associated

with their average stress score. In the study it was observed that fresher staff with 0 years -4 years (M-128.70) had maximum stress and staff having 10-14 years (M-115.63) were least stressed whereas other experience groups were having comparable similar stress. Significantly (p 0.026; p<0.05) more stress was visible among unmarried (M-130.00) staff members than married (M-118.32) as most of them were youngsters and thus having less experience in the field. Likewise, respondents having no children (M- 128.03) were non-significantly (p 0.419; p>0.05) more stressed among all as majority of them were unmarried and younger in age having lesser experience of dealing with stressful circumstances.

TABLE 4. ANOVA test for Regression					
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2698.064	6	449.677	0.817	0.560[NS]
	Residual	41829.092	76	550.383		
	Total	44527.157	82			
NS- Non significant (p >0.05)					

In (**TABLE 4**) the ANOVA test calculated non-significant p-value (0.560; p>0.05). Thus, there is enough evidence that fitted regression model is non-significant and partially predicts the dependent variable: Stress score non-significantly for predictors: Age, Qualification, Area of work, Experience, Marital status and Number of children. Combined correlation coefficient (r = 0.246) indicated weak positive relationship between stress and independent variables i.e. demographic profile. The Regression (adjusted R^2 = 0.014 advocated 0.014% variation in stress due to independent variables. None of the independent variables proved significant factor stress. All independent predictors were non-significant in the regression model.

Discussion

Compassion fatigue was a health concern for nursing profession during COVID-19. Due to excess burden of work, fear of infection to family, limited resources and unpredictable behavior of virus lead to psychological stress to nurses. This study was conducted to assess compassion fatigue among nurses during COVID-19. Majority of the respondents had a moderate stress level and high stress level. In addition to this, few respondents were dealing with very high stress level and low stress levels. Aslan, Erci and pekince reported that nurses have low levels of compassion fatigue and have moderate levels of work-related stress [7, 8]. Researchers from Turkey also reported that nurses have moderate level of compassion fatigue and work-related stress and compassion fatigue has positive correlation revealed that stress levels increase compassion fatigue [9-15]. Meadors and Lamson reprted that higher compassion fatigue in healthcare providers were associated with higher stress [16].

This study revealed that there is enough evidence that fitted regression model is non-significant (0.560; p>0.05) and partially predicts the dependent variable: Stress score non-significantly for predictors: Age, Qualification, and Area of work, Experience, Marital status and Number of children. Ruiz-Fernández et al. and Salimi found no significant relationships between BO and age, experience, gender, and education [17-19].

Beevi reported that there was no significant association between compassion fatigue and age, gender, qualification, area of work, total years of experience and experience in critical care areas[20, 21].

It was evident that younger staff had comparatively more stress than elder ones but the difference was found statistically non-significant (p 0.534; p>0.05). Qualification (p 0.745; p>0.05) and experience (p 0.513; p>0.05) of staff nurses was non-significantly associated with their average stress score. Significantly (p 0.026; p<0.05) more stress was visible among unmarried staff members than married as most of them were youngsters and thus having less experience in the field. Staff deployed in Critical care had maximum mean stress score and surgical unit was found least stressed during the study and the difference was seen non-significantly (p 0.258; p>0.05) varying. Mealer and colleagues found that Intensive Care Unit (ICU) nurses caring for highly complex critical patients had higher levels of traumatic stress than medical and surgical nurses. The literature review reports that nurses working in intensive care, emergency, oncology and surgical clinics experience greater compassion fatigue [22-26]. This can be due to more suffering of patients and frequent experience of deaths among Covid patients.

In the study it was observed that fresher staff with had maximum stress and staff having 10-14 years were least stressed whereas other experience groups were having comparable similar stress. This can be due to less competency and skill while caring the patients with life threatening disease. Nolte reported that lack of knowledge in the work area was also a cause of compassion fatigue [27]. These finding are contrary to study conducted by Aslan, Erci and pekince as they reported that compassion fatigue increases as working time in profession increases [7].

Ondrejkova and Halamova reported that nurses demanding working hours, physical difficulties, poor health care system and maintain work-life balance contribute to compassion fatigue. They further reported that prevalence of compassion fatigue is much higher in our study than other studies [28, 29].

Researchers suggested that to prevent burn out among healthcare workers, they should be monitor for fatigue level

and psychological distress in context to their personal experiences. Comprehensive approach should be used to boost their self-confidence [30].

Conclusion

During COVID pandemic nurses have moderate and severe level of stress due to their working hours During COVID pandemic nurses have moderate and severe level of stress among younger and working in intensive care units due to their long working hours and increased job responsibilities, and incapability to provide care to patients. It is suggested that mental well-being of staff nurses should be taken by providing

psychotherapy and handing their stress and providing adequate supplies and enhancing manpower.

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Conflicting Interest

Nothing to declare

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