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Assessment of Compassion Fatigue among Critical Care Nurses

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Abstract: Critical-care units is one of the most demanding and challenging clinical arenas in healthcare settings. Nurses who work in those areas need careful attention and support due to its nature of stressful and complex workload. In order to provide optimum healthcare services and achieve best quality of patients' nursing care, critical-care nurses' feelings and emotions require continuous assessment to overcome those aspects.

Compassion fatigue (CF) among critical care nurses is a secondary response that occurs as a result of repeated trauma and heightened emotional stress. Nurses who provide care may not be known of their own levels of physical and emotional stress, which has an influence on their professional and personal health well-being. In order to minimize the impact of CF on staff nurses and to maximize quality of patient care, it is vital to be aware of the risks and techniques for preventing the beginning of CF on nurses who provide nursing care for critically-ill patients.

This study aims to assess compassion fatigue among critical-care nurses and to find out the relationship between demographic variables of participants with compassion fatigue.

A descriptive design is adopted by using purposive sample of (N=60) critical-care nurses in Critical Care Units of three general hospitals in AL-Najaf AL-Ashraf City (Al-Sadr Medical city, Al-Hakeem General Hospital and Al-Furat Al-Awaste General Hospital through the period from 20th October 2021 to 23th may 2022.   The ProQOL scale (10 items) was used for data gathered.

The findings from this study indicated that most of critical-care nurses were at a moderate level of compassion fatigue. There was statistically significant relationship between compassion fatigue with nurses' demographic data (e.g., Economic status and level of education) at p-value less than 0.05. the researchers recommended that nurses who work in critical-care units need an educational intervention focuses on techniques that overcome CF at the earliest points to avoid any negative consequences.

Keywords: compassion fatigue, critical care nurses.

Introduction

Nurses who work as critical care nurses assist patients who are severely ill or injured and need immediate medical and nursing management. According to the American Association of Critical-Care Nurses (AACN, 2017), compassion fatigue has a significant impact on the emotional, psychological, and professional well-being of critical care nurses. Physical symptoms, emotional symptoms, triggering causes, and ways to avoid compassion fatigue were identified as four themes in a meta-synthesis on compassion fatigue in nursing that need to be addressed and assessed through research studies. (1).

Compassion fatigue can result from an accumulation of negative variables that induce compassion fatigue in an individual through a variety of circumstances. For example, the workplace, relationships, or caregiving responsibilities. Compassion fatigue is considered as emotional, physical, and spiritual depletion generated by caring for others (citation). CF is defined as "witnessing and absorbing the problems and suffering of others"(citation & page number) while engaging with traumatized people (2). Nurses who work by the bedside of critically sick patients have witnessed several patients with pain. Patients with acute illnesses often suffer from sudden, permanently damaging, and life-threatening health condition which required specific care by the nurses with compassion. Although, nurses who feel professionally satisfied in their work areas, their frequent exposure to the aftermath of severe illness puts them at risk for compassion fatigue. CF is a condition associated with symptoms that are comparable to posttraumatic stress disorder

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(3). Nurses usually face multiple challenging at their healthcare sittings. For example, nurses who work in critical-care areas need to provide care not only for patient with physical health problems but also provide emotional and psychological support to patients and their families. Nurses who witness devastating health condition may feel depressed or regret that repeatedly makes them in deep compassion fatigue.

Furthermore, compassion fatigue has a severe negative influence on critical-care nurses which may produce physical and emotional strains that could lead to nurses quitting their jobs and profession prematurely (4). CF affects nurses' levels of involvement and generates emotional estrangement from their work, posing a threat to ethical nursing practice, as indicated by absenteeism, tardiness, and retention of staff nurses in critical care areas. Healthcare institutions are encountering recruiting issues, which is a secondary consequence of CF (5).

Methodology:

Study Design: The research adopted a descriptive design to assess compassion fatigue among critical care nurses.

Setting of the Study: The study has been conducted in critical care units at three hospitals in Al-Najaf Al-Ashraf City which include: Al-Sadr Medical city; Al-Hakeem General Hospital and Al-Furat Al-Awaste General Hospital. The critical care units of those hospitals contain Intensive Care Units (ICUs), Critical Care Units (CCU), Respiratory Care Unit (RCU) which were chosen to be the study settings for this study.

Study Sample: A non-probability purposive sample of (60) critical care nurses that work in direct contact with patients in critical care units and who were working in the day and night shifts. Participants of 30 were selected from the morning staff and 30 from the night shift.

The Study Instrument: To determine the compassion fatigue among critical care nurses, the researchers have adopted an assessment tool from the Center for Victims of Torture, 2018. Professional Quality of Life: Compassion Satisfaction and Fatigue Version 5 (ProQOL). After surveying the relevant literature in order to achieve each of the study objectives .There are two parts to the study tool:

Part I: Socio-Demographic Data:

A socio-demographic form contains (11) items, including Age, gender, address, economic status, marital status, level of education, shift, total experience as a nurse, total experience in the current hospital, total experience in critical care unites (CCU, RCU, ICU, ER), and the last question (Have you attended any training session/education program regarding compassion fatigue)? In preparation for data analysis, these variables are coded.

Part II: Compassion Fatigue Instruments:

The ProQOL-5 (Stamm, 2010) (10 items, N.2.5.7.9.11.13.14.23.25.28) scale is the second section of the questionnaire and consists of thirty items, five of which are Likert-style questions in which the subject is asked to evaluate on positive and negative aspects of their present work environment during the last thirty days.

Instrument Description:

The scale is composed of thirty questions that allow participants to reflect on and rate the frequency and severity of compassion fatigue with other domains in their everyday job**.** The ProQOL includes the domains of compassion satisfaction, burnout, and secondary traumatic stress. A low level in each area is indicated by a score of 22 or less in that category. A moderate level is indicated by a score of 23 to 41 in that area. A score of 42 or above in that category indicates a high degree of proficiency

The ProQOL measure has been used to quantify the amount of compassion fatigue experienced by health-care workers in connection to the negative and positive aspects of their jobs (Heritage et al., 2018). Individuals are questioned on a variety of topics, including the influence of their experiences on their mental well-being and their job satisfaction (Stamm, 2016).

This instrument has been demonstrated to be valid and reliable (Cronbach's = 0. 90) across all nursing disciplines, resulting in an increase in its use in the research of compassion fatigue (6).

Data collection: After getting all required approvals, the process of data collection began on 12 November 2021 to 20 February 2022. Sixty Critical Care Nurses whose data were collected from three hospitals (Al-Sadr Teaching Hospital, Al-Hakem General Hospital, and AI-Furat Al-Awsat Hospital) from each hospital twenty samples. The participants were chosen as follow: ten from the day and ten from the

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night shifts included all Critical Care Units (C.C.U, R.C.U, and I.C.U). The purpose of the study was explained to all participants and discussed that participation in this is voluntary as well as participants were made aware that they were allowed to discontinue participation in the study at any time.

Participants were asked to read the questionnaire and ask the researcher if they had questions. The time was required for each participant to fill out the form approximately 10-15 minutes.

Results of the Study:

Table (4.1) the Socio-Demographic data related to the study

Socio-Demographic data	Rating interval	Freq.	%
Age	<= 25	26	43.3
	26 - 30	29	48.3
	31 - 35	4	6.7
	36+	1	1.7
Gender	Male	36	60.0
	Female	24	40.0
Address	Urban	58	96.7
	Rural	2	3.3
Economic status	insufficient	4	6.7
	Barely sufficient	10	16.7
	sufficient	46	76.7
Marital status	Single	29	48.3
	Married	31	51.7
Level Education	Nursing high school	8	13.3
	Diploma in Nursing	19	31.7
	BSc Nursing	31	51.7
	Master in Nursing	2	3.3
shift	Day Shift	30	50.0
	Night Shift	30	50.0

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Total Experience as a Nurse	**Less than one year**	**23**	**38.3**
	1 – 3 years	**16**	**26.7**
	4 – 6 years	**9**	**15.0**
	More than 6 years	**12**	**20.0**
Total Experience in Current hospital	**Less than one year**	**25**	**41.7**
	1 – 3 years	**17**	**28.3**
	4 – 6 years	**9**	**15.0**
	More than 6 years	**9**	**15.0**
Total Experience in critical units	**Less than one year**	**32**	**53.3**
	1 – 3 years	**15**	**25.0**
	4 – 6 years	**6**	**10.0**
	More than 6 years	**7**	**11.7**

Table (4.1) represents the socio-demographic distribution of the study. The study results indicate that the highest percentage of the age (48.3%), within (26-30) are years old, gender are meals has the majority percentage (60%), Urban residents (96.7%), Economic status (76.7%) sufficient, marital status of the study samples (51.7%) were married, followed by (48.3%) who were single. The high percentage of education level (51.7%) was those with a bachelor's degree in nursing sciences. The results in this table show (50%) of nurses working in the nightshift and (50%) in the day shift. The findings of the table one also represents (38.3%) of nurses who have Less than one year of Total Experience as a Nurse. As Total Experience in Current hospital, it was (28.3%) from 1 – 3 years. The last thing shown in the first table is the Total Experience in critical units and it was (53%) of those who worked for Less than one year.

Table (4.2) Assessment of compassion fatigue among critical care nurses.

Items	Ans.	Freq.	%	SM.	Asses.
I am preoccupied with more than one person I [help].	Never	2	3.3	35.67	Moderate
	Rarely	8	13.3		
	Sometimes	15	25.0		
	Often	24	40.0		
	Very Often	11	18.3		

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I jump or am startled by unexpected sounds	Never	8	13.3	37.67	Moderate
	Rarely	6	10.0		
	Sometimes	5	8.3		
	Often	14	23.3		
	Very Often	27	45.0		
I find it difficult to separate my personal life from my life as a [helper].	Never	13	21.7	27.83	Moderate
	Rarely	14	23.3		
	Sometimes	14	23.3		
	Often	11	18.3		
	Very Often	8	13.3		
I think that I might have been affected by the traumatic stress of those I [help].	Never	7	11.7	28.67	Moderate
	Rarely	16	26.7		
	Sometimes	22	36.7		
	Often	8	13.3		
	Very Often	7	11.7		
Because of my [helping], I have felt "on edge" about various things.	Never	7	11.7	31.67	Moderate
	Rarely	12	20.0		
	Sometimes	15	25.0		
	Often	16	26.7		
	Very Often	10	16.7		
I feel depressed because of the traumatic experiences of the people I [help].	Never	8	13.3	31.83	Moderate
	Rarely	8	13.3		
	Sometimes	19	31.7		

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	Often	15	25.0		
	Very Often	10	16.7		
I feel as though I am experiencing the trauma of someone I have [helped].	Never	13	21.7	28.17	Moderate
	Rarely	12	20.0		
	Sometimes	16	26.7		
	Often	11	18.3		
	Very Often	8	13.3		
I avoid certain activities or situations because they remind me of frightening experiences of the people I [help].	Never	15	25.0	25.17	Moderate
	Rarely	16	26.7		
	Sometimes	16	26.7		
	Often	9	15.0		
	Very Often	4	6.7		
As a result of my [helping], I have intrusive, frightening thoughts	Never	17	28.3	23.17	Moderate
	Rarely	19	31.7		
	Sometimes	14	23.3		
	Often	8	13.3		
	Very Often	2	3.3		
I can't recall important parts of my work with trauma victims.	Never	11	18.3	28.50	Moderate
	Rarely	12	20.0		
	Sometimes	19	31.7		
	Often	11	18.3		
	Very Often	7	11.7		

Freq: Frequency; SM: Sum of Scores; low: SM = <21; Moderate: SM = 22-41; high: SM = >42.

Table (4.2) displays the descriptive statistics and Assessment of compassion fatigue among critical care nurses. This table shows moderate assessment for the study subjects.

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Table (4.3) Table of the relationship between compassion fatigue and Nurses' demographic data.

Demographic Data	Rating And Intervals	Mean	SD.	F	Sig.
Age	<= 25	29.27	7.53	1.60	0.20
	26 - 30	31.17	6.59		
	31 - 35	23.25	6.99		
	36+	32.00	.		
Gender	Male	29.92	7.03	0.01	0.91
	Female	29.71	7.48		
Address	Urban	30.05	7.15	1.64	0.21
	Rural	23.50	4.95		
Economic status	insufficient	35.50	.58	3.17	0.05*
	Barely sufficient	33.10	7.74		
	sufficient	28.63	6.95		
Marital status	Single	30.41	7.46	0.37	0.55
	Married	29.29	6.93		
Level Education	Nursing high school	25.50	7.17	3.22	0.03*
	Diploma in Nursing	32.53	5.06		
	BSc Nursing	29.87	7.43		
	Master in Nursing	21.00	9.90		
shift	Day Shift	29.97	7.32	0.02	0.89
	Night Shift	29.70	7.10		
Total Experience as a Nurse	Less than one year	29.91	7.52	0.60	0.62
	1 – 3 years	29.13	8.33		

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	4 – 6 years	32.56	4.00		
	More than 6 years	28.58	6.82		
Total Experience in Current hospital	Less than one year	29.92	7.20	0.28	0.84
	1 – 3 years	29.88	8.34		
	4 – 6 years	31.22	4.66		
	More than 6 years	28.11	7.42		
Total Experience in critical units	Less than one year	29.75	7.09	0.31	0.82
	1 – 3 years	29.60	9.06		
	4 – 6 years	32.33	5.24		
	More than 6 years	28.57	4.50		

Significant P < 0.05.

Table (4.3) shows that There is a significant relationship between compassion fatigue and Nurses' demographic data (economic status and degree of education) at p-value less than 0.05, but a non-significant relationship with the other demographical data at p-value more than 0.05.

Discussion:
In this study, the demographic characteristics of study participants will be discussed here in relation to age, gender, address, economic status, marital status, level of educational or qualification, shift duty, total experience as a nurse and total experience in current hospital.

However, our study findings indicate that the highest percentage of the age were (48.3%), within the age group (26-30) years old. Same result is found in a study conducted by (7) which appeared that the greater percentage of age (61.8%)are within (21-30) years old.

Concerning the gender, the study results revealed that the majority of the participants are males (60%)and the remaining(40%) are females .This result is compatible with (8) who found that males participants (67.3%)are males and (32.7%)are females .In Al-Najaf City, there is a little difference between number of male and female who work in healthcare facilities specifically in critical-care area because the nature of this work needs more effort from nurses and longtime duty there for the numbers of males greater than females.

Regarding residency, the study results indicate that most of the study participants(96.7%) are urban residents and same this result comes with (9) that found that the most of study participants (81.6%) of them are urban resident. This result may come due to the majority of Al-Najaf population distributed in urban residential areas than rural ones and the study conduct in the center of Al-Najaf City therefore, the researcher facing more participants in urban residential area.

Concerning the socio-economic status, most of the study participants are presented with (76.7%) sufficient or intermediate socio-economic status. This result is in the sane line with (10), whose their results indicate that the majority of study participants' is sufficient to some extent and also the same of this result comes with (9) which found(72.4%) of his study participants the socio-economic status was from "enough to some extent". This could be the reason behind more nurses prefer to study nursing in order to have secure life in recent years.

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Regarding marital status, the study results shows that the majority of the study participants (51.7%) are married. These results agree with(11), whose results indicate that the majority study subjects is married The reason behind this is that most people tend to find stability after hard and tiring work.

Concerning educational level, the results show that the majority of the study subjects (51.7%) were holding bachelor's degree in nursing sciences ,This result agrees with (12) whose study results indicate that most participants are bachelor science in nursing(91.3%) and the causes behind this is the opening of many governmental and private institutions that support students to obtain certificates in broad and specialized fields, and the demand for these colleges and universities has increased in recent years.

Regarding working shift, the results showed that the equals percentage between day and night shifts (50%) of nurses working in the nightshift and (50%) in the day shift and this result come with previous arrangement of researcher plan to conduct this study.

As for the other studies, it is the percentage varies from one study to another, and also the percentages are according to the design of the study and the opportunities for providing the sample, for example the study that was conducted in Iraq in the governorate of Hilla in the year 2018 by the researcher (8) , under title of "Compassion Fatigue among Health Care Professionals Working In Intensive Care Units In Al-Hilla City" who revealed that the majority of health care professionals (46.8%) working in day shift. These results were inconsistent   with study title in "Predicting the Risk of Compassion Fatigue: An Empirical study of Hospice Nurses" which carried out by (13) who found the majority of participants were (32.2%) consist of day and night shift.

Concerning total experience as a nurse the study results shows that the majority of the study sample represents (38.3%) of nurses who have Less than one year of total experience as a nurse and most of the studies about this topic do not mention this aspect of great importance, but takes total experience of the nurse in critical units and total experience in the current hospital are extensively taken. ,therefore the highest percentage of the total experience in current hospital for this study it was 1-3 years and represents about (28.3%) from the table of findings (4.1) ,This result agrees with (14) .

Regarding total experience in critical care units, the study results reveals that the most of participants (53%) of those who worked for Less than one year. The reason behind this is that most of the study sample was from the newly appointed category and This result agreed with study carried out by (3) who found that the majority of participants had (1-3) years of experience . In addition to, study title in "The effect of education on Compassion Fatigue as Experienced by staff Nurses" conducted by (15) who reported that majority of participants (38.89%) had (1-5) years of experience. While the study that disagreed with this study was by (Gardner, 2015) found that the majority of participants (32.6%) had (31-35) years of experience.

In regard to Table (4.2): Discussion of the assessment of compassion fatigue among critical care nurses. The study results displayed the descriptive statistical analysis and assessment of compassion fatigue among critical care nurses. it showed moderate level of CF for all the study subjects. This results correspond well with (8), under title   "Compassion Fatigue among Health Care Professionals Working In Intensive Care Units In Al-Hilla City" which revealed that the majority of health care professionals and nurses had a moderate level of compassion fatigue. This could be in indication to intervene quickly for overcoming negative consequences among nurses who work in critical care units. Hence, supportive work environment must be initiative to maintain high quality nursing care and increase the level of job satisfaction among nurses.

In regard to Table (4.3): The study results of the present study revealed that there is a significant relationship between compassion fatigue and Nurses' demographic data (Economic status and level of education) at p-value less than 0.05, while there is a non-significant relationship with the other demographical at p-value more than 0.05, These results disagreed with (Al-Razaq et al., 2018) Which showed through his study some difference in the socio-demographic characteristics (gender ,age and years of experience) and he found that the female healthcare professional experience compassion fatigue more than male .

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Conclusion

The findings from this study concluded that the assessment of compassion fatigue among critical care nurses appeared to be moderate level which can be increased overtime if it is not create a specific strategy to overcome this aspect.

Most of the socio-demographic characteristics of the critical care nurses have no impact on the level of compassion fatigue except the socio-economic status and level of education, which revealed that nurses with a high level of education qualification had low level of compassion fatigue.

Recommendations

The level of compassion fatigue experienced in the workplace should be reduced, the nurses in critical care units should participate in training programs that include compassion fatigue recognition, coping mechanisms, managing stress, relaxation techniques, and self-care interventions. This is vitally important for those who are younger in age and have less years of experience. Healthcare institutions should act to implement a recreational or supportive program that could reduce CF and enhance nurses' professional quality of life.

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Conflict of Interest: None to declare.

Ethical Clearance: All experimental protocols were approved under the University Of Kufa-Faculty of Nursing and all experiments were carried out in accordance with approved guidelines.

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