Journal of Pharmaceutical Research International



33(59A): 368-383, 2021; Article no.JPRI.79043 ISSN: 2456-9119 (Past name: British Journal of Pharmaceutical Research, Past ISSN: 2231-2919, NLM ID: 101631759)

A Comparative Study to Assess Compassion Fatigue, Burnout and Compassion Satisfaction among Casualty Nurses with Intensive Care Unit Nurses at Selected Hospitals in Vadodara

Sachin Sadanandan ^{a*≡}, Lakhan Kataria ^{bø}, V. Suresh ^{c#} and Sajitha Sadanandan ^{d†}

 ^a Department of Mental Health Nursing, Sumandeep Nursing College, Sumandeep Vidyapeeth Deemed to be University, Piparia, Vadodara, Gujarat State, India.
 ^b Department of Psychiatry, SBKS Medical Institute & Research Centre, Sumandeep Vidyapeeth Deemed to be University, Piparia, Vadodara, Gujarat State, India.
 ^c Mental Health Nursing, Sumandeep Nursing College, Sumandeep Vidyapeeth Deemed to be University, Piparia, Vadodara, Gujarat State, India.
 ^d Sprucedale Care Centre, Strathroy, Ontario, Canada.

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/JPRI/2021/v33i59A34281

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: https://www.sdiarticle5.com/review-history/79043

Original Research Article

Received 07 October 2021 Accepted 14 December 2021 Published 16 December 2021

ABSTRACT

Aim: This study is focussed on comparison and assessment of compassion fatigue, burnout and compassion satisfaction among casualty nurses with intensive care unit (ICU) nurses.
 Study Design: Quantitative research approach and Descriptive - Comparative research design.
 Materials and Methods: Study targeted casualty nurses and ICU nurses working at selected hospitals in Vadodara. A total of 80 casualty nurses and ICU nurses were asked to participate in this study. Convenient sampling technique was used. First tool consists of demographic variables. Second tool consists of Compassion Fatigue/Satisfaction Self-Test (CFS), assess the existing level

of compassion fatigue, burnout and compassion satisfaction.

[■]Ph.D. Scholar; [®]HOD & Professor; [#]Professor cum HOD; [†]Registered Nurse; *Corresponding author: E-mail: sachu3259@gmail.com;

Results: Assessment of compassion fatigue among casualty nurses revealed that 18 [60%] nurses exhibited extremely high-risk level, Analysis of burnout among casualty nurses showed that 15 [50%] half of the nurses presented moderate risk level and among ICU nurses showed that 45 [90%] majority of the nurses presented high risk levels of burnout. Examining the final component of the CFS tool among casualty nurses, more than half of the respondents 16 [53.3%] were characterised as high potential level of compassion satisfaction and among ICU nurses, half of the respondents 25 [50%] were characterised as having a modest potential level of compassion satisfaction. Independent t-test shows that there was no significant difference in the level of compassion fatigue and compassion satisfaction between casualty nurses and ICU nurses, since the t value [18.256] was found to be greater than the table value [1.990] at .05 significant. **Conclusion:** Study reveals an association was found to exist between the level of compassion fatigue and demographic variables. But there was no association found in the level of burnout and compassion satisfaction among subjects with their selected demographic variables.

Keywords: Compassion fatigue; burnout; compassion satisfaction; nurses; casualty and intensive care unit.

1. INTRODUCTION

Compassion fatigue and burnout are the two most frequent talks about aspects of professional quality of life [1]. Nurses know all about "guality of life." It is the main focus of our profession-we provide care to enhance the quality of our patients' lives. However, many nurses may not know that their own quality of life is at stake, depending upon how they go about their work each day. Indeed, a lot of nurses, although familiar with the terms compassion fatigue and burnout cannot identify how it manifests or whether they or their co-workers are experiencing it [2].

In the field of nursing, compassion fatigue is when a nurse has gradually become less compassionate about the medical challenges facing his or her patients. Compassion fatigue in healthcare settings is quite common with some studies showing that 7.3% to 40% of study subjects suffered from this condition. There's no doubt that healthcare professionals commit a significant amount of effort and time into giving patients the best quality of care, so trying to understand compassion fatigue in nursing needs a deep look at both sides of the fence [3].

Compassion fatigue is related to our connection to other peoples and our ability to bear witness to the suffering of others, burnout arises out of a more generalized dissatisfaction with one's own work life, and it is usually the result of a multitude of things. Of course, one's own relationship with others can be a big factor, but workload, environment, salary, benefits, organizational culture—many things can set the stage for burnout. Burnout develops gradually over time with prolonged emotional and physical exhaustion, and it finally results in widespread lethargy, a disinterest of work and relationships [4].

Some studies have developed strategies for preventing and managing compassion fatigue. For instance, the technique of "critical incident stress debriefing" has been used to prevent compassion fatigue in clinical practice settings who have experienced high levels of stress [5]. Nurses of many hospitals are frustrated with burnout by inadequate staffing, high patientnurse ratios, declining quality of care and verbal abuse directed towards them while working [6].

Most of the studies among burnouts in the nursing field have been done in the areas of oncology, casualty and mental health areas in The reason for nurses leaving the adults. professional workplace is a known and potentially preventable burnout [7]. The casualty block presents a unique set of stressors with potential for impact on nursing staff. These stressors include overcrowding, pressure to improve turnaround time, frequent delays in assignment of inpatient beds, and other factors distinctive to this environment. More importantly, casualty nurses have significant exposure to patients experiencing immediate traumatic events, which may be a contributing factor to compassion fatigue.

Compassion satisfaction is about the pleasure you derive from being able to do your work. For example, you may feel like it is a pleasure to help others through what you do at work. You may feel positively about your colleagues or your ability to contribute to the work setting or even the greater good of society through your work with people who need care. On the other side of compassion satisfaction can be Compassion Fatigue is the negative aspect of helping those who experience traumatic stress and suffering [8].

There are different factors that contribute to compassion fatigue, with emphasis on personality, education, job experience, personal quality of life, the specificity of the work and the changes of the health system [9]. Due to the considerable demand and frequent contact with traumatic situations, nursing work in casualty and urgent care makes nurses susceptible to feel the pain of their patients and leads to increasing compassion fatigue [10]. Therefore, this motivated the researcher to take up this project and aims to compare and assess compassion fatique, burnout and compassion satisfaction among casualty nurses with intensive care unit nurses at selected hospitals in Vadodara.

1.1 Significance of the Study

Compassion fatigue means the physical, mental exhaustion and emotional withdrawal experienced by those that care for sick or traumatized people over an extended period of time [11]. Burnout means the exhaustion of physical or emotional strength or motivation usually as a result of prolonged stress or frustration [12].

Consequences of Compassion fatigue included physical. social. emotional. spiritual. and intellectual effects. The nurse experiences insufficient performance, an increase in work errors, more prone to accident, Absenteeism, alcohol or substance abuse and holistic health decline Compassion [13,14]. fatique can negatively impact patient safety and quality of care, leading to patient dissatisfactions, decreased reimbursement rates, and financial loss of institution [15,16].

The cornerstone of nursing practice can be acknowledged as compassionate care for patients. Compassion fatigue could stop the continuation of empathy and result in the erosion of nurses' mind, body, and spirit. Leaving the profession may be the only way to achieve catharsis in the view of nurses who cannot overcome the situation. This will impact the global shortage of nurses. While looking at the healthcare worker population, the nursing profession is the most prevalent and contrarily has the greatest shortage (World Health Organization [WHO] [17].

As of 2013, there were 20.7 million nurses worldwide, encompassing about half of the healthcare worker population and it is expected to reduce 7.6 million nurses in the year 2030 [17].

Preventative measures for this in nursing are mostly related to the self in the forms of self-care, self-awareness, and self-reflection [18]. It was also suggested that enhancing knowledge about Compassion Fatigue could be protective [19]. So, the researcher found that this study might help the nurses to have an insight about compassion fatigue, burnout, compassion satisfaction and also help the nurses to understand the level of their compassion fatigue, burnout and compassion satisfaction.

1.2 Aim

This study is focussed on comparison and assessment of compassion fatigue, burnout and compassion satisfaction among casualty nurses with intensive care unit nurses at selected hospitals in Vadodara.

1.3 Objectives

- 1. To assess the level of compassion fatigue, burnout and compassion satisfaction among casualty nurses at selected hospitals in Vadodara.
- 2. To assess the level of compassion fatigue, burnout and compassion satisfaction among intensive care unit nurses at selected hospitals in Vadodara.
- 3. To compare the level of compassion fatigue, burnout and compassion satisfaction among nurses working in casualty and intensive care units at selected hospitals in Vadodara.
- 4. To associate the level of compassion fatigue, burnout and compassion satisfaction among nurses working in casualty and intensive care units with their selected demographic variables.

1.4 Hypotheses

 HO_1 : There will not be any significant difference in the level of compassion fatigue, burnout and compassion satisfaction among nurses working in casualty and intensive care units at 0.05 level of significance. H0₂: There will not be any significant association in the level of compassion fatigue, burnout and compassion satisfaction among nurses working in casualty and intensive care units with their selected demographic variables at 0.05 level of significance.

2. MATERIALS AND METHODS

2.1 Study Design

This present study used Quantitative research approach and Descriptive - Comparative research design.

2.2 Sample and Setting

This comparative study targeted casualty nurses and intensive care unit nurses working at selected hospitals in Vadodara based on the researchers' ability to gain access to the sample. A total of 80 casualty nurses (30) and intensive care unit nurses (50) were asked to participate in this study. Convenient sampling technique was used to select the samples.

Sample size has been calculated with the help of Raosoft sample size calculator software. It has been calculated with a 100-population size of nurses from selected hospitals in Vadodara, with a margin of error 5%, a confidence level of 95% and an ideal size of 80 samples calculated.

2.3 Inclusion Criteria

- → Nurses who were working in the casualty and intensive care unit at selected hospitals in Vadodara.
- → Nurses who can read English and Guajarati.
- → Nurses who were willing to participate in the study.

2.4 Exclusion Criteria

- → Nurses who were not willing to participate in the study
- → Nurses who were too weak to participate in the study.
- → Nurses who were already having any serious stress issues.

2.5 Instrumentation

Two kinds of tools were used for this study. First tool consists of demographic variables such as age in years, gender, professional qualification, marital status, monthly income, clinical experience in years, and job description.

Second tool consists Compassion of Fatique/Satisfaction Self-Test (CFS), is a standardized questionnaire which was given by Stamm, B. H. & Figley, C. R. (1996). In this study this questionnaire was used to assess the existing level of compassion fatigue, burnout and compassion satisfaction among casualty nurses and intensive care unit nurses at selected hospitals in Vadodara. The 66-item Compassion Satisfaction/Fatigue Self-Test for Helpers which measures compassion fatigue, Burnout and compassion satisfaction. The items of scale are six-point Likert-type rated on a scale representing 0=Never, 1=Rarely, 2=A few times, 3=Somewhat often, 4=Often, and 5=Very often. The instrument yields a 3 subscale scores including compassion fatigue, Burnout and compassion satisfaction with each score being "psychometrically unique," The instrument has been tested extensively and found to be reliable and valid as a measure of the 3 separate concepts [20]. The alpha scale reliability score of compassion fatigue is .87, burnout is .90 and of compassion satisfaction is .87 [21].

2.6 Procedure

To obtain research permission for the study settings, preliminary discussions were held with the medical superintendent of selected hospitals in Vadodara and took permission for the same. A cover letter explaining the purpose of the study, a consent form, participant information sheet and a questionnaire (Compassion Fatigue/Satisfaction Self-Test) were then administered to the nurses in the casualty and intensive care units who met inclusion criteria.

Data collection has been done individually from the nurses working in casualty and intensive care units from July 2020 to January 2021. After filling the questionnaire, completed questionnaires were collected by the researcher from the subjects.

2.7 Analysis

Responses were coded and entered into SPSS. Scale scores were summed for compassion fatigue, burnout, and compassion satisfaction for each participant. Data were analysed using descriptive statistics (frequency, percentage distribution, mean and standard deviation) and inferential statistics (Chi-square test and independent t test). Chi square test was used to find out the association between casualty nurses and intensive care unit nurses with their selected demographic variables. An independent t test was used to compare the compassion fatigue, burnout and compassion satisfaction among casualty nurses and intensive care unit nurses.

3. RESULTS AND DISCUSSION

The analysis and interpretation of data in this study were based on data collected through Compassion Fatigue/Satisfaction Self-Test (CFS), to assess the existing level of compassion fatigue, burnout and compassion satisfaction among casualty nurses and intensive care unit nurses at selected hospitals in Vadodara. The results were computed using descriptive and inferential statistics based on hypotheses and the objectives of the study.

A total of 80 nurses interviewed at selected hospitals in Vadodara. Among them 30 were employed in casualty and 50 were in intensive care units.

The results were represented in the form of tables and diagrams:

- → Assessment of compassion fatigue among casualty nurses revealed that 18 [60%] nurses exhibited extremely high risk, 6 [20%] nurses exhibited high risk, 2 [6.7%] nurses were equally exhibited moderate risk, low risk and extremely low risk. Assessment of compassion fatigue among intensive care unit nurses revealed that 5 [10%] nurses exhibited extremely high risk, 12 [24%] nurses exhibited moderate risk, 10 [20%] nurses exhibited low risk and 9 [18%] nurses exhibited extremely low risk.
- → Analysis of burnout among casualty nurses showed that 15 [50%] half of the nurses presented moderate risk and the remaining nurses were almost nearly presented with extremely low risk 8 [26.7%] and high risk 7 [23.3%]. No participants were found to have extremely high-risk levels of burnout. A further analysis among intensive care unit nurses showed that 45 [90%] majority of the nurses presented high risk and the remaining nurses presented 4 [8%] moderate risk and 1 [2%] high risk. No respondents were found to have extremely low risk levels of burnout.
- → Examining the final component of the Compassion Fatigue/Satisfaction Self-Test

(CFS) tool among casualty nurses, more than half of the respondents 16 [53.3%] were characterised as high potential level of compassion satisfaction, 11 [36.7%] were good potential and 3 [10%] were modest potential. No participants were found to have extremely high potential and low potential levels of compassion satisfaction. While analysing intensive care unit nurses, half of the respondents 25 [50%] were characterised as having a modest potential level of compassion satisfaction, 15 [30%] were low potential and 10 [20%] were of good potential. No respondents were found to have extremely high potential and high potential levels of compassion satisfaction.

- → Comparison of level of compassion fatigue among casualty nurses and intensive care unit nurses was done by computing independent t-test and found that there was no significant difference in the level of compassion fatigue between casualty nurses and intensive care unit nurses, as the results shows that t value [0.167] is less than that table value [1.990] at .05 level of significance.
- → Comparison of level of burnout discloses that there was a significant difference in the level of burnout between casualty nurses and intensive care unit nurses, since the t value [18.256] is greater than the predetermined [1.990] at .05 level of significance.
- → Comparison of level of compassion satisfaction infers that there was no significant difference in the level of compassion satisfaction between casualty nurses and intensive care unit nurses, as the results justifies that t value [0.493] is less than that table value [1.990] at .05 level of significance.
- While assessing the association between → levels of compassion fatigue among casualty nurses and intensive care unit nurses with their selected demographic X2 values variables, the calculated [57.712] was more than table value [21.03] in terms of age in years at .05 level of significance. In terms of monthly income, the calculated X2 value [60.772] was more than table value [21.03] at .05 level of significance. In terms of clinical experience in years, the calculated X2 values [39.503] was more than table value [21.03] at .05 level of significance and in terms of job description, the calculated X2 values

| Sr.no. | Demographic variables | | Cası | alty nurses [n=3 | 30] |
|--------|----------------------------|-----------|------------|------------------|--------------------|
| | U . | Frequency | Percentage | Mean | Standard Deviation |
| 1. | Age in years | <u> </u> | - | | |
| | 1) 20 to 29 | 4 | 13.3% | | |
| | 2) 30 to 39 | 15 | 50% | 2.23 | .679 |
| | 3) 40 to 49 | 11 | 36.7% | | |
| | 4) 50 or above | 0 | 0% | | |
| 2. | Gender | | | | |
| | 1) Male | 8 | 26.7% | 1.73 | .450 |
| | 2) Female | 22 | 73.3% | | |
| 3. | Professional qualification | | | | |
| | 1) ANM | 12 | 40% | | |
| | 2) GNM | 10 | 33.3% | 2 | 1.050 |
| | 3) BSC Nursing | 4 | 13.3% | | |
| | 4) PBBSC Nursing | 4 | 13.3% | | |
| 4. | Marital status | | | | |
| | 1) Single | 14 | 46.7% | | |
| | 2) Married | 14 | 46.7% | 1.63 | .718 |
| | 3) Divorce | 1 | 3.3% | | |
| | 4) Separated | 1 | 3.3% | | |
| 5. | Monthly income | | | | |
| | 1) 6000-12999 | 22 | 73.3% | | |
| | 2) 13000-19999 | 6 | 20% | 1.37 | .718 |
| | 3) 20000-26999 | 1 | 3.3% | | |
| | 4) 27000 or above | 1 | 3.3% | | |
| 6. | Clinical experience | | | | |
| | 1) 0 to 5 | 4 | 13.3% | | |
| | 2) 6 to 10 | 9 | 30% | 2.53 | .860 |
| | 3) 11 to 15 | 14 | 46.7% | | |
| | 4) 16 or above | 3 | 10% | | |
| 7. | Job description | | | | |
| | 1) Head nurse | 4 | 13.3% | 1.87 | .346 |
| | 2) Staff nurse | 26 | 86.7% | | |

Table 1. Frequency, percentage distribution, mean and standard deviation of demographic variables of casualty nurses

| Sr.no. | Demographic variables | | ICU ı | nurses [n=50] | |
|------------|----------------------------|-----------|------------|---------------|--------------------|
| | | Frequency | Percentage | Mean | Standard Deviation |
| 1. | Age in years | | | | |
| | 5) 20 to 29 | 17 | 34% | | |
| | 6) 30 to 39 | 11 | 22% | 2.12 | .918 |
| | 7) 40 to 49 | 21 | 42% | | |
| | 8) 50 or above | 1 | 2% | | |
| 2. | Gender | | | | |
| | 3) Male | 3 | 6% | 1.94 | .240 |
| | 4) Female | 47 | 94% | | |
| 3. | Professional qualification | | | | |
| | 5) ANM | 30 | 60% | | |
| | 6) GNM | 13 | 26% | 1.58 | .835 |
| | 7) BSC Nursing | 5 | 10% | | |
| | 8) PBBSC Nursing | 2 | 4% | | |
| 4. | Marital status | | | | |
| | 5) Single | 30 | 60% | | |
| | 6) Married | 20 | 40% | 1.40 | .495 |
| | 7) Divorce | 0 | 0% | | |
| | 8) Separated | 0 | 0% | | |
| 5. | Monthly income | | | | |
| | 5) 6000-12999 | 30 | 60% | | |
| | 6) 13000-19999 | 8 | 16% | 1.72 | 1.011 |
| | 7) 20000-26999 | 8 | 16% | | |
| | 8) 27000 or above | 4 | 8% | | |
| ò. | Clinical experience | | | | |
| | 5) 0 to 5 | 10 | 20% | | |
| | 6) 6 to 10 | 7 | 14% | 2.80 | 1.125 |
| | 7) 11 to 15 | 16 | 32% | | |
| | 8) 16 or above | 17 | 34% | | |
| ′ . | Job description | | | | |
| | 3) Head nurse | 11 | 22% | 1.78 | .418 |
| | 4) Staff nurse | 39 | 78% | | |

Table 2. Frequency, percentage distribution, mean and standard deviation of demographic variables of ICU nurses

- → [43.835] was more than table value [9.49] at .05 level of significance. Since association was found to exist between the level of compassion fatigue and abovementioned socio-demographic variables. But there was no association found in terms of gender, professional qualification and marital status.
- → Chi square analysis of burnout among demographic variables depicts that, no association was found to exist between the level of burnout among casualty nurses

and intensive care unit nurses with their selected demographic variables such as age in years, professional qualification, marital status, monthly income, clinical experience in years, job description except gender.

→ Results showed that only clinical experience in years among demographic variable was found to be having an association with the level of compassion satisfaction

Diagram 1: Assessment of level of compassion fatigue, burnout and compassion satisfaction among casualty nurses and ICU nurses.

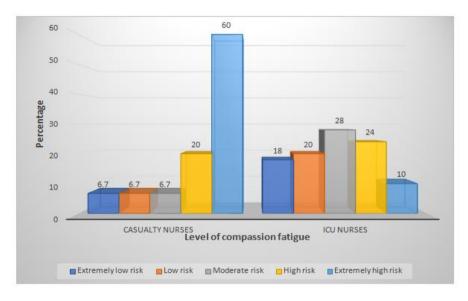
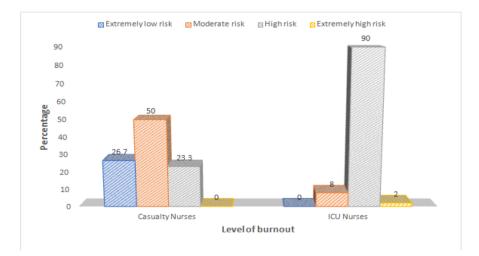
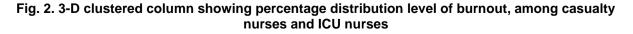
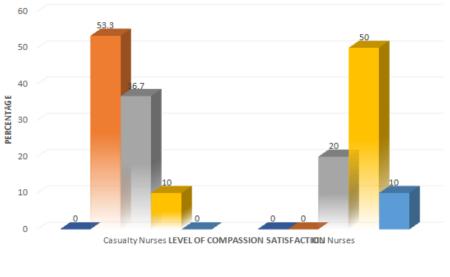


Fig. 1. 3-D clustered column showing percentage distribution level of compassion fatigue, among casualty nurses and ICU nurses







Extremely high potential High potential Good potential Modest potential Low potential

Fig. 3. 3-D clustered column showing percentage distribution level of compassion satisfaction, among casualty nurses and ICU nurses

Table 3.a. Comparison of level of compassion fatigue among casualty nurses and intensive care unit nurses

| Group | Sample | Mean | Mean difference | Standard deviation | t value | df | Table value at 0.05 level |
|----------|--------|------|--------------------|--------------------|---------|----|------------------------------|
| Casualty | 30 | 4.20 | 1.320 | 1.243 | 0.167 | 78 | 1.990 |
| ICU | 50 | 2.88 | | 2.256 | | | Not Significant |

Table 3.b. Comparison of level of burnout among casualty nurses and intensive care unit nurses

| Group | Sample | Mean | Mean difference | Standard deviation | t value | df | Table value at 0.05 level |
|----------|--------|------|--------------------|--------------------|---------|----|------------------------------|
| Casualty | 30 | 1.97 | -0.973 | 0.718 | 18.256 | 78 | 1.990 |
| ICU | 50 | 2.94 | | 0.314 | | | Significant |

Table 3.c. Comparison of level of compassion satisfaction among casualty nurses and intensive care unit nurses

| Group | Sample | Mean | Mean difference | Standard deviation | t value | df | Table value at 0.05 level |
|----------|--------|------|--------------------|--------------------|---------|----|------------------------------|
| Casualty | 30 | 2.57 | -1.533 | 0.679 | 0.493 | 78 | 1.990 |
| ICU | 50 | 4.10 | | 0.707 | | | Not Significant |

4. DISCUSSIONS

Casualty nurses and intensive care unit nurses are at risk of compassion fatigue and burnout as a result of the intensity of the work environment in such a department. Although the literature review highlights the presence of compassion fatigue and burnout in healthcare workers and their self-perceptions of compassion fatigue, burnout, and compassion satisfaction. This research was developed to measure the presence of compassion fatigue, burnout and compassion satisfaction among casualty nurses and intensive care unit nurses. This project demonstrated results consistent with the literature review in terms of validating the presence of compassion fatigue and burnout among nurses those who are working in casualty and intensive care units.

| Sr. No | Demographic | | Leve | of Compassion | Fatigue | | Total | Significance |
|--------|-----------------------|--------------------|----------|---------------|-----------|---------------------|-------|------------------------|
| | Variables | Extremely low risk | Low risk | Moderate risk | High risk | Extremely high risk | - | at .05 level |
| 1 | Age in years | | | | | | | |
| | 20-29 years | 10 | 8 | 0 | 2 | 1 | 21 | χ ² =57.712 |
| | 30-39 years | 1 | 0 | 9 | 8 | 8 | 26 | df=12 |
| | 40-49 years | 0 | 3 | 7 | 8 | 14 | 32 | Significant |
| | 50 and above | 0 | 1 | 0 | 0 | 0 | 1 | table value =21.03 |
| | Total | 11 | 12 | 16 | 18 | 23 | 80 | |
| II | Gender | | | | | | | |
| | Male | 0 | 2 | 0 | 4 | 5 | 11 | χ ² =6.718 |
| | Female | 11 | 10 | 16 | 14 | 18 | 69 | df=4 |
| | Total | 11 | 12 | 16 | 18 | 23 | 80 | Not Significant |
| | | | | | | | | table value =9.49 |
| 111 | Professional Qualific | ation | | | | | | |
| | ANM | 8 | 9 | 9 | 8 | 8 | 42 | χ ² =11.703 |
| | GNM | 2 | 2 | 5 | 5 | 9 | 23 | df=12 |
| | Basic | 1 | 1 | 2 | 2 | 3 | 9 | Not |
| | B.Sc. Nursing | | | | | | | Significant |
| | Post Basic B.Sc. | 0 | 0 | 0 | 3 | 3 | 6 | table value =21.03 |
| | Nursing | | | | | | | |
| | Total | 11 | 12 | 16 | 18 | 23 | 80 | |
| IV | Marital Status | | | | | | | |
| | Single | 3 | 6 | 8 | 13 | 14 | 44 | χ2=14.298 |
| | Married | 7 | 6 | 8 | 5 | 8 | 34 | df=12 |
| | Divorced | 0 | 0 | 0 | 0 | 1 | 1 | Not |
| | Separated/ | 1 | 0 | 0 | 0 | 0 | 1 | Significant |
| | widowed | | | | | | | table value =21.03 |
| | Total | 11 | 12 | 16 | 18 | 23 | 80 | |
| V | Monthly Income | | | | - | | | |
| | 6000-12999 | 0 | 7 | 9 | 15 | 21 | 52 | χ2=60.772 |
| | 13000-19999 | 2 | 1 | 6 | 3 | 2 | 14 | df=12 |
| | 20000-26999 | 7 | 1 | 1 | 0 | 0 | 9 | Significant |

Table 4.a. Association between levels of compassion fatigue among casualty nurses and intensive care unit nurses with their selected demographic variables

| Sr. No | Demographic | | Le | vel of Compas | sion Fatigue | | Total | Significance |
|--------|---------------------|----------|----|---------------|--------------|----|-------|--------------------|
| | 27000 and above | 2 | 3 | 0 | 0 | 0 | 5 | table value =21.03 |
| | Total | 11 | 12 | 16 | 18 | 23 | 80 | |
| VI | Clinical Experience | in Years | | | | | | |
| | 0-5 years | 6 | 7 | 0 | 0 | 1 | 14 | χ2=39.503 |
| | 6-10 years | 1 | 3 | 5 | 3 | 4 | 16 | df=12 |
| | 11-15 years | 2 | 0 | 8 | 9 | 11 | 30 | Significant |
| | 16 and above | 2 | 2 | 3 | 6 | 7 | 20 | table value =21.03 |
| | Total | 11 | 12 | 16 | 18 | 23 | 80 | |
| VII | Job Description | | | | | | | |
| | Head nurse | 9 | 5 | 0 | 0 | 1 | 15 | χ2=43.835 |
| | Staff nurse | 2 | 7 | 16 | 18 | 22 | 65 | df=4 |
| | Total | 11 | 12 | 16 | 18 | 23 | 80 | Significant |
| | | | | | | | | table value =9.49 |

Table 4.b. Association between levels of burnout among casualty nurses and intensive care unit nurses with their selected demographic variables

| Sr. No | Demographic | Level of Burnout | | | | Total | Significance | |
|--------|-----------------------|--------------------|---------------|-----------|---------------------|-------|------------------------|--|
| | Variables | Extremely low risk | Moderate risk | High risk | Extremely high risk | | At .05 level | |
| | Age in years | | | | | | | |
| | 20-29 years | 1 | 4 | 16 | 0 | 21 | χ ² =10.387 | |
| | 30-39 years | 6 | 5 | 15 | 0 | 26 | df=9 | |
| | 40-49 years | 1 | 10 | 20 | 1 | 32 | Not | |
| | 50 & above | 0 | 0 | 1 | 0 | 1 | Significant | |
| | Total | 8 | 19 | 52 | 1 | 80 | table value =16.92 | |
| I | Gender | | | | | | | |
| | Male | 0 | 7 | 4 | 0 | 11 | χ ² =11.587 | |
| | Female | 8 | 12 | 48 | 1 | 69 | df=3 | |
| | Total | 8 | 19 | 52 | 1 | 80 | Significant | |
| | | | | | | | table value =7.81 | |
| 11 | Professional Qualific | cation | | | | | | |
| | ANM | 4 | 7 | 30 | 1 | 42 | χ ² =11.483 | |
| | GNM | 1 | 6 | 16 | 0 | 23 | df=9 | |
| | Basic | 2 | 2 | 5 | 0 | 9 | Not | |

| Sr. No | Demographic | Level of Burn | out | | | Total | Significance | | | | |
|--------|------------------------------|---------------|--------|----|---|-------|--------------------|--|--|--|--|
| | B.Sc. Nursing | | | | | | Significant | | | | |
| | Post Basic | 1 | 4 | 1 | 0 | 6 | table value =16.92 | | | | |
| | B.Sc. Nursing | | | | | | | | | | |
| | Total | 8 | 19 | 52 | 1 | 80 | | | | | |
| V | Marital Status | | | | | | | | | | |
| | Single | 4 | 10 | 30 | 0 | 44 | χ2=8.123 | | | | |
| | Married | 4 | 7 | 22 | 1 | 34 | df=9 | | | | |
| | Divorced | 0 | 1 | 0 | 0 | 1 | Not | | | | |
| | Separated/ | 0 | 1 | 0 | 0 | 1 | Significant | | | | |
| | widowed | | | | | | table value =16.92 | | | | |
| | Total | 8 | 19 | 52 | 1 | 80 | | | | | |
| V | Monthly Income | | | | | | | | | | |
| | 6000-12999 | 5 | 13 | 34 | 0 | 52 | χ2=9.201 | | | | |
| | 13000-19999 | 3 | 2 | 8 | 1 | 14 | df=9 | | | | |
| | 20000-26999 | 0 | 2 3 | 6 | 0 | 9 | Not | | | | |
| | 27000 & above | 0 | 1 | 4 | 0 | 5 | Significant | | | | |
| | Total | 8 | 19 | 52 | 1 | 80 | table value =16.92 | | | | |
| VI | Clinical Experience in Years | | | | | | | | | | |
| | 0-5 years | 1 | 3 | 10 | 0 | 14 | χ2=6.337 | | | | |
| | 6-10 years | 2 | 6 | 8 | 0 | 16 | df=9 | | | | |
| | 11-15 years | 3 | 8 | 18 | 1 | 30 | Not | | | | |
| | 16 & above | 2 | 2 | 16 | 0 | 20 | Significant | | | | |
| | Total | 8 | 19 | 52 | 1 | 80 | table value =16.92 | | | | |
| VII | Job Description | | | | | | | | | | |
| | Head nurse | 1 | 2 | 12 | 0 | 15 | χ2=1.918 | | | | |
| | Staff nurse | 7 | 17 | 40 | 1 | 65 | df=3 | | | | |
| | Total | 9 | 19 | 52 | 1 | 80 | Not | | | | |
| | | | | | | | Significant | | | | |
| | | | | | | | table value =7.81 | | | | |

| Sr. No | Demographic | Level of Compassion Sati | sfaction | | | | Total | Significance |
|--------|----------------------------|--------------------------|----------|--------|----------|-------|-------|------------------------|
| | Variables | Extremely high potential | High p | Good p | Modest p | Low p | | At .05 level |
| | Age in years | · - · | | | | - | | |
| | 20-29 years | 0 | 2 | 5 | 9 | 5 | 21 | χ ² =14.553 |
| | 30-39 years | 0 | 11 | 5 | 6 | 4 | 26 | df=9 |
| | 40-49 years | 0 | 3 | 11 | 12 | 6 | 32 | Not |
| | 50 and above | 0 | 0 | 0 | 1 | 0 | 1 | Significant |
| | Total | 0 | 16 | 21 | 28 | 15 | 80 | table value =16.92 |
| | Gender | | | | | | | |
| | Male | 0 | 2 | 5 | 4 | 0 | 11 | χ ² =4.211 |
| | Female | 0 | 14 | 16 | 24 | 15 | 69 | df=3 |
| | Total | 0 | 16 | 21 | 28 | 15 | 80 | Not |
| | | | | | | | | Significant |
| | | | | | | | | table value =7.81 |
| I | Professional Qualification | | | | | | | |
| | ANM | 0 | 9 | 7 | 16 | 10 | 42 | χ ² =6.399 |
| | GNM | 0 | 5 | 8 | 7 | 3 | 23 | df=9 |
| | Basic | 0 | 2 | 3 | 3 | 1 | 9 | Not |
| | B.Sc. Nursing | | | | | | | Significant |
| | Post Basic B.Sc. | 0 | 0 | 3 | 2 | 1 | 6 | table value =16.92 |
| | Nursing | | | | | | | |
| | Total | 0 | 16 | 21 | 28 | 15 | 80 | |
| / | Marital Status | | | | | | | |
| | Single | 0 | 8 | 13 | 17 | 6 | 44 | χ2=9.414 |
| | Married | 0 | 7 | 7 | 11 | 9 | 34 | df=9 |
| | Divorced | 0 | 0 | 1 | 0 | 0 | 1 | Not |
| | Separated/ | 0 | 1 | 0 | 0 | 0 | 1 | Significant |
| | widowed | | | | | | | table value =16.92 |
| | Total | 0 | 16 | 21 | 28 | 15 | 80 | |
| / | Monthly Income | | | | | | | |
| | 6000-12999 | 0 | 11 | 17 | 17 | 7 | 52 | χ2=7.711 |
| | 13000-19999 | 0 | 3 | 2 | 4 | 5 | 14 | df=9 |

Table 4.c. Association between levels of compassion satisfaction among casualty nurses and intensive care unit nurses with their selected demographic variables

| Sr. No | Demographic | Level of Compas | sion Satisfaction | 1 | | | Total | Significance |
|--------|------------------------|-----------------|-------------------|----|----|----|-------|-----------------------------------|
| | 20000-26999 | 0 | 1 | 2 | 4 | 2 | 9 | Not |
| | 27000 and above | 0 | 1 | 0 | 3 | 1 | 5 | Significant table value =16.92 |
| | Total | 0 | 16 | 21 | 28 | 15 | 80 | |
| VI | Clinical Experience ir | n Years | | | | | | |
| | 0-5 years | 0 | 2 | 4 | 4 | 4 | 14 | χ2=17.728 |
| | 6-10 years | 0 | 7 | 3 | 4 | 2 | 16 | df=9 |
| | 11-15 years | 0 | 6 | 11 | 7 | 6 | 30 | Significant |
| | 16 and above | 0 | 1 | 3 | 13 | 3 | 20 | table value =16.92 |
| | Total | 0 | 16 | 21 | 28 | 15 | 80 | |
| VII | Job Description | | | | | | | |
| | Head nurse | 0 | 2 | 2 | 8 | 3 | 15 | χ2=3.372 |
| | Staff nurse | 0 | 14 | 19 | 20 | 12 | 65 | df=3 |
| | Total | 0 | 16 | 21 | 28 | 15 | 80 | Not |
| | | | | | | | | Significant |
| | | | | | | | | table value =7.81 |

Nurses have a great potential for influencing healthcare outcomes. If nurses working in the casualty and intensive care unit experience compassion fatigue and burnout from their work, this may affect their ability to care for patients in the casualty and intensive care unit. Nurses can develop an insight of compassion fatigue, burnout and compassion satisfaction through self-awareness such as that offered in this project.

Nurses involved in this project were also able to identify potential changes in their behaviour in order to reduce compassion fatigue, burnout and also to improve compassion satisfaction in order to improve the care they provide for patients in the casualty and intensive care units.

5. CONCLUSION

Independent t-test shows that there was no significant difference in the level of compassion fatigue and compassion satisfaction between casualty nurses and ICU nurses. But there was a significant difference in the level of burnout between casualty nurses and ICU nurses.

Study reveals an association was found to exist between the level of compassion fatigue and demographic variables. But there was no association found in the level of burnout and compassion satisfaction among subjects with their selected demographic variables.

Nurses would have an insight to take care of patients in crisis. However, nurses sometimes can't control themselves until they are in crisis. Frequently the warning signs and symptoms go unidentified by either the nurses themselves or their colleagues. This research study has the potential to raise awareness and hopes that the results in this study give support for nurses working in the hospitals.

CONSENT AND ETHICAL APPROVAL

This research involved human subjects and therefore a formal ethical approval received from the institutional ethical committee. Each participant provided written consent and filled in questionnaires anonymously. Participant data were associated with numbers rather than participant names.

ACKNOWLEDGEMENT

I would like to express my very great appreciation to Dr. Lakhan Kataria for his

valuable and constructive suggestions during the planning and development of this research work. His willingness to give his time so generously has been very much appreciated.

Finally, I wish to thank my parents, family members and all my friends for their support and encouragement throughout my study.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

- 1. Joinson C. Coping with compassion fatigue. Nursing. 1992;22:116–121. DOI:10.1097/00152193-199204000-00035
- Available:https://connect.springerpub.com/ content/book/978-0-8261-5521-4/part/part1/chapter/ch01
- 3. White W. Compassion Fatigue in Nursing: What It Is and How to Deal with It | Incredible Health [Internet]. Incredible Health. 2021 [cited 15 September 2021]. Available:https://www.incrediblehealth.com /blog/compassion-fatigue/
- 4. Maslach C. Burnout: The cost of caring. Englewood Cliffs, NJ: Prentice-Hall;1982.
- Pickett M, Brennan AM, Greenberg HS, Licht L, Worrell JD. Use of debriefing techniques to prevent compassion fatigue in research teams. Nursing Research. 1994;43:250-252.
- Aiken LH, Clarke SP, Sloane DM, Sochalski J, Silber JH. Hospital nurse staffing and patient mortality, nurse burnout, and job dissatisfaction. Journal of the American Medical Association, 2002;288:1987-1993.
- Albrecht T. Coping with occupational stress: Relational and individual strategies of nurses in acute health care settings. In M. Burgoon (Ed.), Communication yearbook 6, Newbury Park, CA: Sage. 1982;832- 849.
- 8. Available:https://proqol.org/Compassion_S atisfaction.html
- Pehlivan T. Compassion Fatigue: The Known, Unknown. J Psychiatric Nurse. 2018;9(2):129-34. DOI:10.14744/ phd.2017.25582
- 10. Van Mol MMC, Kompanje EJO, Benoit DD, Bakker J, Nijkamp MD. The prevalence of compassion fatigue and burnout among healthcare professionals in intensive care

units: A systematic review. PLoS One. 2015;10(8):1-22.

DOI: 10.1371/journal.pone.0136955.

- 11. Compassion Fatigue. In Merriam-Webster's online dictionary;2017. Available: http://www.merriamwebster.com/medical/compassion%20fatig ue. Accessed on December 12, 2017.
- 12. Burnout. In Merriam-Webster's online dictionary;2017. Available: http://www. merriamwebster.com/dictionary/burnout. Accessed on December 12, 2017.
- Coetzee S, Klopper H. Compassion fatigue within nursing practice: A concept analysis. Nurs Health Sci. 2010;12:235–243. Available: https://doi.org/ 10.1111/j.1442-2018.2010.00526.x
- Harris C, Griffin TQ. Nursing on empty: compassion fatigue signs, symptoms, and system interventions. J Christ Nurs. 2015;32:80–87. Available:https://doi.org/10.1097/CNJ.0000 00000000155
 Hunsakor S, Chin, HS, Maughan D,
- Hunsaker S, Chin HS, Maughan D, Heaston S. Factors that influence the development of compassion fatigue, burnout, and compassion satisfaction in the emergency department. J Nurs Scholarsh. 2015;47:186–194. Available:https://doi.org/10.1111/jnu.12122

- Berger J, Polivka B, Smoot EA, Owens H. Compassion fatigue in paediatric nurses. J Pediatr Nurs. 2015;30:e11-e17. Available: https://doi.org/ 10.1016/j.pedn.2015.02.005
- World Health Organization. Global Strategy on Human Resources for Health: Workforce 2030. Geneva, Switzerland: WHO; 2016. Available:http://apps.who.int/iris/bitstream/ 10665/250368/1/9789241511131 -eng.pdf. Accessed on December 10, 2017.
- Nolte AG, Downing C, Temane A, Hastings-Tolsma M. Compassion fatigue in nurses: a metasynthesis. J Clin Nurs. 2017;26:4364–4378. Available:https://doi.org/10.1111/jocn.1376 6
- Boyle DA. Compassion fatigue: the cost of caring. Nursing. 2015; 45:48–51. Available:https://doi.org/10.1097/01.NURS E.0000461857. 48809.a1
- 20. Shrinks Online [Internet]. Hcc.cfidarren.com. 2021 [cited 17 September 2021]. Available: http://hcc.cfidarren.com/satfat.htm.
- 21. Stamm BH, Figley CR. Compassion Satisfaction and Fatigue Test;1996. Available:http://www.isu.edu/~bhstamm/tes ts.htm.

© 2021 Sachin Sadanandan et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

> Peer-review history: The peer review history for this paper can be accessed here: https://www.sdiarticle5.com/review-history/79043