***Original Research Article***

***Compassion Satisfaction, fatigue, and Burnout among registered nurses at public Hospitals in Sindh, Pakistan***

**Abstract:** A nurse is a person who is trained to give care to people who are sick or injured. Nurses work with doctors and other healthcare workers to make patients well and to keep them fit and healthy. This study aimed to investigate the occurrence of compassion satisfaction, fatigue, and Burnout among public nurses at different clinical departments of hospitals. Methodology: This was a cross-sectional study in which a convenient sampling approach was used among 94 nurses working in the cardiac ICU, neonatal ICU, pediatric ICU, and medical ICU. Approval was obtained from the medical superintendents of different hospitals. Data was collected between January and February 2025 using the Professional Quality of Life (ProQol) scale version 5. Analysis of variance (ANOVA) was used to identify the significant difference between compassion satisfaction, fatigue, and burn out among different clinical departments. Results: This study sample comprises 54.2% female and 45.7% male. The proportions of the average level of compassion satisfaction, fatigue, and burnout were 56.3%, 62.7%, and 69.1%, respectively. ANOVA confirmed that the mean compassion satisfaction and fatigue scores differed significantly among four clinical departments (*p=0.012 and 0.002*, respectively). Conclusion: Overall, study participants showed average levels of compassion, Satisfaction, fatigue, and burnout among the participants. The significant mean differences between CS and CF were seen among all the selected participants.

*Keywords: Compassion satisfaction, Compassion fatigue, and Burnout, Nurses*

**Introduction:** A nurse is a person who is trained to give care to people who are sick or injured. Nurses work with doctors and other healthcare workers to make patients well and to keep them fit and healthy [1]. Compassion satisfaction is a condition of physical, emotional, and spiritual exhaustion during caring for patients [2]. The term compassion fatigue is described as the state of physical emotional and spiritual tiredness owing to caring for patient [2]. Compassion satisfaction and compassion fatigue are tools for professional quality of life, which perform an essential role in empathic care [3]. It is that feeling of genuine accomplishment, that quiet pride in a job well done, the warm glow of knowing you have eased someone’s suffering [4]. Burnout is another notion that provide complete structure of CF is [2]. It differs from CF in that the prior is associated with generalized work-related stress, whereas the other is more particularly related to compassion practices [5]. Compassion satisfaction, another construct from the secondary traumatic stress literature, describes the positive benefits that individuals—caregivers, teachers, social workers, and clergy—derive from working with traumatized or suffering persons [5]. Compassion satisfaction (CS) is professional fulfillment experienced through helping others [7] The concept of BO, also known as "Burnout syndrome," was first described by Freuden Berger (1974) as a feeling of failure and exhaustion resulting from excessive demands [8].

Compassion fatigue (CF) is a work-related psychosocial consequence that may occur as a result of exposure to a cumulative level of trauma and is emotionally induced by dealing with those who have been traumatized [9]. Compassion fatigue affects critical nurses, including leader and administrative support within the clinical setting and the coping strategies employed by the nurses [10]. It has been detected that high levels of patient satisfaction have been associated with high levels of nurse caring with compassion satisfaction, so the high levels of patient frustration have been linked to nurses [2] A higher score in the compassion satisfaction component signifies a profound capability of the individual to be an effective care provider whereas a higher score in the Burnout component and secondary traumatic stress interlinked with a higher risk of developing Burnout and compassion fatigue, respectively [3]. That is why this study aims to identify compassion satisfaction, compassion fatigue, and burnout among registered nurses at public hospitals in Sindh.

**Material & Methods:** This cross-sectional study was conducted by using convenience sampling approach among 94 participants working at cardiac ICU (n=26), Pediatric ICU (n=40), Neonatal ICU (n=18), and in the medical ICU (n=10). Sample size calculation was performed through the Open-Epi online software, by using the 74.4% as the percentage of moderate to high levels of compassion fatigue, 95% confidence interval, 05% margin of error. Data was collected between, January to February 2025 by using the professional Quality of Life scale version 5. The 5-point Likert scale consists of 30 questions, which are divided into 03 subscale containing: compassion satisfaction, fatigue, and burn. Each subscale contains 10 questions. Subscale score less than 22 were considered as low level, between 23 and 42 as the average level, and above 42 as a high level. Data was analyzed by using SPSS V.29. For each participants of this study, scale score were summed for compassion satisfaction, fatigue and burn out. Frequency and percentage analysis performed for demographic variables. Analysis of variance (ANOVA) was used to identify the significant difference of compassion satisfaction, fatigue and burn-out among four different clinical departments, and *p≤0.05* was considered as significant.

**Table 01: Socio-demographic characteristics of participants (n=94).**

Classification based on gender.

|  |  |  |
| --- | --- | --- |
| Categories  | Frequency  | Percentage  |
| Female  | 51 | 54.2% |
| Male | 43 | 45.7% |
| Total | 100% | 100.% |

Classification based on Age.

|  |  |  |
| --- | --- | --- |
| Categories  | Frequency  | Percentage  |
| 20-29 years  | 15 | 15.6% |
| 30-39 years  | 52 | 55.3% |
| 40-49 years  | 22 | 23.4% |
| >50 | 5 | 5.3% |
| Total | 100% | 100% |

Classification based on marital status.

|  |  |  |
| --- | --- | --- |
| Categories  | Frequency  | Percentage  |
| Single | 11 | 11.7% |
| Married | 82 | 87.2% |
| Widow | 1 | 1.0% |
| Total | 100% | 100% |

Classification based on the working area

|  |  |  |
| --- | --- | --- |
| Units  | Frequency  | Percentage  |
| Adult ICU | 10 | 10.6% |
| Cardiac ICU | 26 | 27.6% |
| Pediatric ICU | 40 | 42.5% |
| Neonatal ICU  | 18 | 19.1% |
| Total | 100% | 100% |

.Classification based on professional qualification.

|  |  |  |
| --- | --- | --- |
| Educational level  | Frequency  | Percentage  |
| Diploma  | 35 | 37.2% |
| BSN | 9 | 9.5% |
| Post RN | 43 | 45.7% |
| MSN | 7 | 7.4% |
| Total | 100% | 100% |

Classification based on working experience.

|  |  |  |
| --- | --- | --- |
| Categories  | Frequency  | Percentage  |
| 6 months | 1 | 1.0% |
| 1-3years | 7 | 7.4% |
| 4-6years  | 18 | 19.1% |
| 7-10years | 28 | 29.7% |
| 11-15years | 25 | 26.5% |
| 16-20years | 8 | 8.5% |
| >20 | 7 | 7.4% |
| Total | 100% | 100% |

Classification based on working shifts.

|  |  |  |
| --- | --- | --- |
| Categories  | Frequency  | %age  |
| Working in all | 8 | 8.5% |
| Morning only | 59 | 62.7% |
| Evening only | 19 | 20.2% |
| Night only  | 8 | 8.5% |
| Total | 100% | 100% |

Table 01: illustrates that the sample is composed of 54.2%.female and 45.7% male. This remarkable variance shows the gender distribution of nurses according to the age distribution of participants. The majority, 55.3%, are between the ages of 30 and 39 years, while 23.4% are between 40.49% and 15.6% are between the ages of 20 and 29 years, and only 5.3% are between >50 years. Table 01 also shows the participants' marital status, of which the majority, 87.2%, were married. 11.7% were single, and just 1.0% were included in the widow population. More importantly, table 01 also represents the participant's working area; the majority of nurses worked in the pediatric ICU 42.5%.where in the cardiac ICU 27.6%.moreover in the neonatal ICU, there were 19.1% of the participants and just 10.6% in the adult ICU. Furthermore, table 01 also illustrates the respondent's professional qualifications. The majority of the respondents, 45.7%, had a post-RN degree, while 37.2% had a diploma in nursing. Moreover, 9.5% revealed a bachelor's degree in nursing, and only 7.4% notified in MSN. Table 01 also represents the participant's professional experience. It was observed that 29.7% had 7-10years nursing experience /professional experience, while 26.5% had 11-15years professional experience meanwhile, 19.1% had 4-6years professional experience, 8.5%had 16-20years,7.4%had 1.3years professional experience whilst >20years had 7.4%professional experience. However, only 1.0% had 6 months of professional experience. Last, this table also expressed the classification based on respondents' working shifts. The majority of the respondents (62.7%) were working in morning shifts (20.2%) were working in the evening only. While 8.5%were working night shifts and. Just 8.5%were working in all three shifts.

**Table 02: Comparison of compassion satisfaction, fatigue, and burnout scores**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Variables** | **Total n (%)** | **Cardiac ICU** | **Pediatric ICU** | **Medical ICU** | **NICU** |
| **Compassion satisfaction (CS)** |
| **Low** | 11 | 2(18.1) | 6(54.5) | 2(18.1) | 1(9.0) |
| **Average**  | 53(56.3%) | 29(54.7) | 13(24.5) | 5(9.4) | 6(11.3) |
| **High**  | 30 | 9(30) | 13(43.3) | 5(16.6) | 3(10) |
| **Compassion Fatigue(CF)** |
| **Low** | 24(25.5) | 02(8.3) | 14(58.3) | 08(33.3) | 0(0) |
| **Average** | 59(62.7) | 05(8.4) | 37(62.7) | 10(16.9) | 7(11.8) |
| **High** | 11(11.7) | 03(27.2) | 07(63.6) | 1(9.0) | 0(0) |
| **Burnout (BO)** |
| **Low** | 15(15.9) | 02(13.3) | 09(60) | 03(20) | 01(20) |
| **Average** | 65(69.1) | 15(23.0) | 43(66.1) | 03(4.6) | 04(6.1) |
| **High** | 14(14.8) | 03(21.4) | 08(57.1) | 0(0) | 03(21.4) |

**Table** **02:** compares the score of 3 subscales of the pro-Qol instrument among nurses working in four different clinical areas. The proportion of the average level of compassion satisfaction (CS) compassion fatigue and Burnout was 56.3%, 62.7%, and 69.1%, respectively. There were a few nurses (n=11) and (n=15) who had a low level of CS and Burnout, respectively, where the high level of CS (n=30) and Burnout (n=14) observed among participants with an average level of CS, CF, and Burnout was prominent in all departments, In pediatric ICU there was a high level of CS as compared to other ICUs. Moreover, the low level of CS was highest in the pediatric ICU, where there was a low level of CF, and Burnout was also prominent in the pediatric ICU.

**Table 03: Mean ± SD of subscales**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable  | Cardiac ICU (n=40)  | Pediatric ICU(n=32) | Medical ICU(n=12) | Neonatal ICU(n=10) | *p-value* |
| Compassion Satisfaction | 25.43 ± 6.25 | 27.3 ± 6.23 | 25.43 ± 5.8 | 28.06 ± 5.19 | 0.012\* |
| Compassion fatigue | 20.08 ± 4.54 | 20.2 ± 5.02 | 16.6 ± 4.1 | 20,0 ± 5.90 | 0.002\* |
| Burnout | 21.80 ± 3.89 | 20.8 ± 4.02 | 20.6 ± 2.25 | 22.96 ± 3.49 | 0.313 |

**Significant\***

Table 9 shows the mean ± SD of compassion satisfaction, compassion fatigue (CF), and Burnout of the study participants working in four selected departments. The highest mean score of (CS) found in the NICU department was 28.06 ± 5.19. Furthermore, the lowest values of CF and Burnout were observed for study participants working in medical ICU at 16.6 ± 4.1 and 20.6 ± 2.25, respectively. Moreover, ANOVA confirmed that mean scores of CS and CF were significantly different among four clinical departments *(p= 0.012 and 0.002).*

**Discussion:**In this study, most of the participants (29.7%) had working experience from 7-10 years. Similar findings were reported in a study performed in the USA7, which revealed that nurses have less than 10 years of clinical experience, but this study shows that there is an average compassion satisfaction among participants, which is in contrast to study results finding11. Moreover, in this study most of the participants, 45.7%, had Post RN degrees, in contrast to the study done in the USA who had a nursing diploma with certification courses11. Moreover, to study most of the respondents 62.7% were working in morning Shift, dissimilar to the results of this study where majority of nurses were working in night Shift12. Furthermore, According to the current study, most participants (66.1%) working in the pediatric ICU had an average level of Burnout significantly; another significant study result also showed that 92% of study participants were at moderate risk of burnout13. Moreover, the present study results show that the majority of participants had an average level of compassion satisfaction and an average level to a high level of compassion fatigue noticed among selected departments. A high level of CS is found in the pediatric ICU compared to all selected departments. The result of this study is in contrast to a study done in Karachi2, where a higher level of CS and an average to low level of CF in nurses working in critical areas. In addition, the finding of this study is similar to the study done in China14, Where (78.34%) of nurses had an average to a high level of CS; in this regard, CF had an average score among Participants. In contrast, the study findings were compared to a study accomplished in a San Antonio Military Medical Center, USA11, among emergency department nurses, which established lower levels of CS among nurses along with CF. The current study determined that the majority of participants had average BO, and this finding contrasts study findings11 where the BO was low score among the participants.

**Conclusion:**

Overall, study participants showed average levels of compassion Satisfaction, fatigue and burn out among the participants. Significant mean difference of CS and CF were seen among all the selected participants.

**Recommendations:**

To mitigate the risk of compassion fatigue and Burnout, healthcare organizations should prioritize the emotional well-being of nurses. Strategies may include:

**1. Providing emotional support**: Regular counseling sessions, peer support groups, and mental health resources can help nurses manage stress and emotional exhaustion.

**2. Promoting self-care**: Encouraging nurses to engage in self-care activities, such as mindfulness, exercise, and relaxation techniques, can help reduce stress and increase resilience.

**3. Fostering a supportive work environment**: Healthcare organizations should promote a culture of empathy, understanding, and support among nurses and other healthcare professionals.

**4. Developing effective coping strategies**: Educating nurses on effective coping strategies, such as problem-focused coping and emotional regulation, can help them manage the emotional demands of their job.

By implementing these strategies, healthcare organizations can promote the emotional well-being of nurses, reduce the risk of compassion fatigue and Burnout, and ultimately improve the quality of patient care.

**Disclaimer:** I am hereby to declare that no generative AI such as Large Language Models (ChatGPT, COPILOT), and no any text to-image generators have been used during the writing or editing if this manuscript.

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