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Differences in compassion satisfaction and compassion fatigue among oncology nurses in Oman: A multi-center cross-sectional study

Devakirubai Jacob, Joshua K. Muliira, Eilean R. Lazarus, Omar Al Zaabi

Abstract:

BACKGROUND: Oncology nurses are constantly exposed to occupational exposure to the suffering of others, which can lead to vicarious traumatization, low professional quality of life (ProQOL), and inability to provide quality nursing care. The purpose of the study is to explore the ProQOL of oncology nurses working in Oman and the characteristics that lead to differences in compassion satisfaction (CS) and compassion fatigue (CF).

MATERIALS AND METHODS: A cross-sectional design was conducted between March and December 2020 using the ProQOL scale to collect data from 242 oncology nurses in Oman using a convenience sampling technique. The rates of CS and CF [(secondary traumatic stress (STS) and burnout (BO)] were summarized using descriptive statistics. The characteristics leading to differences in CS and CF were assessed using the independent-sample *t*-test.

RESULTS: Only 35% reported high levels of CS. Most nurses reported moderate STS (60%) and BO (65%). Nurses aged ≥36 years, ≥10 years of professional experience, ≥6 years of oncology experience, married, and desiring to work with cancer patients reported higher levels of CS.

CONCLUSION: Omani oncology nurses have low levels of CS. The nurses' desire to work with cancer patients, professional experience, and the age of cancer patients regularly affected the experience of CF. The identified characteristics can be exploited to mitigate deterioration in oncology nurses' ProQOL using targeted interventions for high-risk individuals. Beneficial interventions may focus on continuing education, stress management, coping, work environment, teamwork, and communication of oncology nurses and other members of the healthcare team.

Keywords:

Burnout, cancer care, cancer nursing, compassion fatigue, nurses' vulnerability, Oman, oncology nurses, secondary traumatic stress

Introduction

Cancer is a major cause of morbidity and mortality, burdening healthcare systems and societies globally.[1,2] Nurses are expected to provide quality cancer care to the increasing volume of desperately ill patients in situations of minimal staffing, task shifting, inadequate supplies, cultural stigma, and power and gender inequities that pervasively affect the profession.[3] Nurses spend the most time with cancer patients in all healthcare disciplines, providing direct care, emotional support, compassion, and comfort. Therefore, nurses working in units that specifically admit and care for cancer patients (oncology nurses) routinely witness the suffering of cancer patients and their families, and this may affect their psychological well-being and ability to ensure high-quality patient care.[4-6]

As frontline healthcare providers, oncology nurses frequently encounter emotionally

Department of Adult Health and Critical Care, College of Nursing, Sultan Qaboos University, Oman

Address for correspondence:
Dr. Eilean R. Lazarus, Department of Adult Health and Critical Care, Sultan Qaboos University, Muscat, Oman.
E-mail: eileansrmc@gmail. com

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challenging situations and witness cancer-treatment side effects, pain, end-of-life struggles, near-death situations, and death.[6-8] Sometimes, nurses care for cancer patients with severe pain and other symptoms at the end of life when they (nurses) do not have optimal knowledge, skills, or training to handle such situations.[3,7,8] Continuous exposure to the suffering of cancer patients can impair oncology nurses' well-being and ability to provide compassionate care due to vicarious traumatization.[6]

The psychological states of compassion satisfaction (CS) and compassion fatigue (CF) are crucial factors that can affect oncology nurses' well-being and professional performance.[9,10] CS is the positive emotional response nurses gain from helping others and when they make a difference in the lives of patients and their families.[11-13] High levels of CS are associated with increased job satisfaction, better retention rates, and improved mental health among healthcare professionals.[14-16] Conversely, CF is characterized by emotional exhaustion, decreased sense of personal accomplishment, and increased stress due to the cumulative impact of caring for patients with serious illnesses stress.[17,18] CF is synonymous with burnout (BO) and secondary traumatic stress (STS).[17,18] Both BO and STS impair the nurses' professional performance and are associated with an increased risk of medical errors.[17,18]

It is important to investigate the prevalence of CS and CF in oncology nurses and to identify the factors contributing to differences in the respective rates to inform interventions and practices aimed at promoting professional quality of life.[15,19,20] Identifying the factors that lead to differences in CS and CF can help us to understand the characteristics of high-risk groups or high-risk situations and needed interventions to enhance oncology nurses' resilience, coping mechanisms, and overall well-being. Ultimately, these efforts can contribute to better nursing care and patient outcomes.[19-21]

The global prevalence of CS, BO, and STS was 22.89%, 62.79%, and 66.84%, respectively.[22] Despite higher burnout and compassion fatigue concerns, cancer nurses expressed poor compassion satisfaction. Thus, oncology nurses should be treated holistically by health authorities and management. We urgently recommend staff-oriented comfort, reward, leisure, screening, consulting, and support services.[23] Nurses on cancer units struggle with CF, which impairs their ability to care for others. Integration of research shows clinical practice applicability, which improves nursing care and results. The findings illuminate compassion fatigue prevention in healthcare. Peer support groups and clinical care methods to reduce compassion fatigue and its harmful effects are discussed.[24]

In Oman, the country where the current study was conducted, no studies have addressed the mental health and professional quality of life of oncology nurses, despite the increasing incidence of cancer and cancer-related suffering.[7,8,21] We also recognize that cultural and social factors associated with cancer and the uniqueness of the Oman culture and society[25-27] may influence oncology nurses' experience of CS and CF. Therefore, there is a critical gap in the knowledge regarding the psychological well-being and professional quality of life of oncology nurses in Oman.[28] Earlier studies have called for supportive work environments to promote nurses' mental health and professional quality of life in Oman,[29,30] but these studies did not articulate the magnitude of the problem. The current study aimed to explore the professional quality of life of nurses working in oncology units in Oman and the characteristics that lead to differences in CS and CF.

Materials and Methods

Study design and setting

The study used a cross-sectional design to collect data from nurses in hospital oncology units/centers in Oman. The sample was recruited using convenience sampling. The participants were from three major public hospitals and referral centers that are responsible for providing cancer care in Oman (Sultan Qaboos University Hospital, Royal Hospital, and Sultan Qaboos Comprehensive Cancer Care and Research Centre).

Participants and sampling

The participants met the inclusion criteria of a registered nurse with a minimum of 2 years of work experience in oncology, the age of 18 years and above, and the ability to read and write in English. Participants with less than 2 years of working experience in oncology were excluded. A total of 368 nurses who work in Oncology units across the three hospitals were approached using the convenience sampling technique to participate in the study, and 242 returned the completed study questionnaires (65.8%).

Data collection tools and technique

The Professional Quality of Life Scale (ProQOL) was used to measure CS and CF.[31] The ProQOL consists of 30 items and three sub-scales of CS, BO, and STS. The BO and STS scales measure CF. ProQOL has been used widely to investigate CS and CF among oncology nurses and physicians.[16] The ProQOL is available in the public domain and has a high internal consistency level.[32] In the current study, the Cronbach's alpha values of the overall ProQol, CS sub-scale, BO sub-scale, and STS sub-scale were 0.83, 0.78, 0.70, and 0.80, respectively. The participants also completed a demographic data form eliciting data about age, gender, nationality, years of professional experience, level of education, continuing education related to grief, and other aspects [see Table 1].

Table 1: Participant characteristics (*n*=242)

Characteristic	*n*=242	
	%	M±SD
Gender		
Male	18.2	
Female	81.8	
Age in years		
20-35	66.1	34.01±7.05
≥36	33.9	
Marital Status		
Single	28.9	
Married	68.6	
Divorced/Widowed	2.5	
Nationality		
Omani	47.1	
Non-Omani	52.9	
Level of Education		
Associate/Diploma	31	
Bachelors and above	69	
Department		
Adult Oncology	78.5	
Pediatric Oncology	21.5	
Total professional experience (years)		
1–10	54.5	9.80±3.41
≥11	45.5	
Total experience in the oncology unit (years)		
1–5	75.2	3.35±1.44
≥6	24.8	
Hours worked per week		
≤40	78.5	41.29±3.21
≥41	21.5	
Hours of sleep per day		
≤7	68.2	7.32±1.11
≥8	31.8	
Desires to work with oncology patients		
No	21.9	
Yes	78.1	
Education background in oncology		
No	54.5	
Yes	45.5	
Received training in the management of personal and patient emotions		
No	80.6	
Yes	19.4	
Received training in the management of personal and patient grief		
No	82.2	
Yes	17.8	
Would enroll in an education program on compassion fatigue		
No	32.6	
Yes	67.4	

M, Mean; SD, Standard deviation

After obtaining ethical approvals to conduct the study (CON/IG/2020/04, SQU-EC/198/2020, and MREC #2312), the researchers contacted the selected hospitals to explain the study's aim and data collection procedures. The oncology nurses were approached during working hours on their respective units. The data were collected from participants between March and December 2020. Those who agreed to participate were provided with the study information form, consent form, and study questionnaire. The participant information form had details explaining the study aim, risks, and benefits and details to indicate that participation was voluntary. The questionnaires were distributed between shift changes before the nurses' patient endorsement or handover report to minimize disruption of patient care and workflow. The completed questionnaires were collected from participants at the end of the work shift.

The data were analyzed using SPSS 28 software. Participant characteristics and outcomes are presented using descriptive statistics. As frequency measures, we used prevalence with 95% confidence intervals (CIs) to summarize the prevalence of CS and CF. We assessed the factors that lead to differences in CS and CF using the independent-samples t-tests (equal variances assumed) and effect size using Cohen's d. The statistical significance level was set at 0.05 for all analyses.

Ethical consideration

The study was conducted in line with the principles of the Declaration of Helsinki. Approval to conduct the study was granted by the Ethics Committee of the College of Nursing, Sultan Qaboos University (SQU-EC/198/2020), and the Medical Ethics Committee (MREC #2312). Informed consent was obtained from all participants included in the study.

Results

Demographic characteristics, professional background, and training

Of the 368 oncology nurses approached, 242 returned completed questionnaires (65.8% response rate). The participant characteristics are summarized in Table 1. The majority were female, with a bachelor's or higher level of education, and worked on units taking care of adult patients with cancer. The participants were young, with a mean age and professional experience of 34 and 9.8 years, respectively. Most participants (78%) indicated that they had a high desire to work in oncology but had no specific educational background in oncology (56%) or training in managing personal emotions and cancer patients' emotions (81%) or personal grief and cancer patients' grief (82%). A large number of participants (67%) indicated a willingness to participate in training related to CF. On average, the participants worked full time (41 hours per week) and had been working in oncology for 3.4 years.

Prevalence of compassion satisfaction and compassion fatigue

Table 2 presents the prevalence of the professional quality of life domains. Only 35% of the participants reported high CS, with the majority reporting moderate CS (65%). Although the mean scores demonstrate low BO and low STS, two-thirds of the participants had scores consistent with moderate BO (60%) and moderate STS (65%). The mean scores show that the sample had low overall CS, BO, and STS.

Differences in compassion satisfaction

The independent-sample *t*-test was used to compare the participants' CS scores across broad personal and professional characteristics [see Table 3]. We found statistically significant differences in CS between age groups ($P \leq 0.05$), marital statuses ($P \leq 0.05$), nationality category ($P \leq 0.01$), levels of general professional experience ($P \leq 0.01$), level of experience on the oncology unit ($P \leq 0.01$), desire to work with oncology patients ($P \leq 0.01$), and willingness to enroll in educational programs on compassion fatigue ($P \leq 0.05$). There were no statistically significant differences in CS between levels of education and gender categories. The nurses who were non-Omani, were married, were ≥36 years of age, had ≥10 years of professional experience, had ≥6 years of experience in oncology, were with a desire to work with oncology patients, and were willing to enroll in education programs on CF had higher levels of CS. However, age, marital status, nationality, general professional experience, experience on the oncology unit, and willingness to enroll in education

Table 2: Prevalence and severity of professional quality of life (*n*=242)

Subscale	*n* (%)	95% CI	M±SD	SE	Min - Max	Cronbach's alpha
Compassion satisfaction (CS)						
Low (≤43)	1 (0.4)	0.0–1.2	39.73±5.76	0.37	20-68	0.78
Moderate (44-56)	156 (64.5)	58.7–70.2				
High (≥57)	85 (35.1)	29.8–40. 9				
Burnout (BO)						
Low (≤43)	96 (39.7)	33.5–45.5	23.34±4.96	0.32	11-38	0.70
Moderate (44-56)	145 (59.9)	54.5–66.5				
High (≥57)	1 (0.4)	0.0–1.2				
Secondary traumatic stress (STS)						
Low (≤43)	85 (35.1)	28.5–41.3	25.60±6.25	0.40	12-42	0.80
Moderate (44-56)	156 (64.5)	57.9–70.7				
High (≥57)	1 (0.4)	0.0–1.2				

CI, Confidence interval; M, mean; SD, Standard deviation; SE, Mean standard error; Min, minimum score; Max, maximum score

Table 3: Differences in compassion satisfaction by personal and professional factors (*n*=242)

Factor	M±SD	MD	*t*	*P*	95% CI	Effect size (Cohen's d)
Age in years						
20-35	39.22±5.70	1.50	-1.92	0.050	-3.05–0.45	0.26
≥36	40.72±5.80					
Marital Status						
Single	38.56±5.15	1.69	-2.08	0.039	-3.21 - - 0.17	0.30
Married	40.25±5.92					
Nationality						
Omani	38.36±5.05	2.59	-3.61	<0.001	-4.00 - - 1.17	0.46
Non-Omani	40.95±6.09					
Total professional experience (years)						
1–10	38.69±5.05	2.28	-3.12	0.002	-3.75 - - 0.81	0.40
≥11	40.97±6.32					
Total professional experience in the oncology unit (years)						
1–5	39.22±5.93	2.05	-2.63	0.01	-3.59 - - 0.51	0.36
≥6	41.27±4.97					
Desires to work with oncology patients						
No	36.55±5.86	4.07	-4.74	<0.001	-5.86 - -2.29	0.72
Yes	40.62±5.43					
Would enroll in an education program on compassion fatigue						
No	38.46±5.90	1.89	-2.41	0.019	-3.46 - - 0.32	0.33
Yes	40.34±5.61					

M, Mean, SD, Standard deviation, MD, Mean difference, CI confidence interval

programs about CF had a small effect on CS. The desire to work with oncology patients had a medium effect on CS.

Differences in compassion fatigue

The differences in the two domains that constitute CF (BO and STS) were also examined using the independent-sample *t*-test [see Table 4]. There were statistically significant differences in BO between age groups ($P \leq 0.05$), nationality categories ($P \leq 0.05$), levels of general professional experience ($P \leq 0.01$), desire to work with oncology patients ($P \leq 0.01$), and amount of sleep hours per day ($P \leq 0.05$). Nurses aged 20 to 35 years, Omani by nationality, sleep for less than 7 hours a day, with no desire to work with oncology patients, and ≤10 years of general professional experience reported high levels of BO. Age, general professional experience, and amount of sleep had a small effect, while nationality and desire to work with oncology patients had a medium effect on BO.

There were statistically significant differences in STS between nationality categories ($P \leq 0.01$), levels of general professional experience ($P \leq 0.01$), and cancer patient population (adult oncology vs pediatric oncology) ($P \leq 0.01$). Nurses that were Omani by nationality, working in pediatric oncology units, and with ≤10 years of general professional experience reported high levels of STS. The two factors of general professional experience and department or patient population had a small effect, while nationality had a large effect on STS.

Discussion

The Theory of Unpleasant Symptoms (TOUS) provided the framework that guided the study. The TOUS has three major concepts: the symptom(s), influencing factors, and performance outcomes.[33-35] The theory establishes that different categories of interrelated factors (physiological, psychological, and situational) influence predisposition to and the manifestation of a given symptom or multiple symptoms and the nature of the symptom experience.[33-35] Our study asserted that oncology nurses' personal, professional, and work environment factors influence their predisposition to and the manifestations of CS and CF. The factors influence one another in addition to influencing the symptoms. The symptoms also influence one another and influence some of the factors. The symptom experience (CS and CF), in turn, affects the oncology nurses' performance (incorporates cognitive, physical, social, and professional functioning).

The TOUS informs us that performance (outcome) can feed back to influence the symptom experience itself and can modify the influencing factors.[33-35] Therefore, understanding the factors that lead to differences in symptoms (CS and CF) can help us to unlock needed interventions to reduce the symptoms and disrupt the feedback loop that sustains the symptoms of low professional quality of life. The TOUS helped us identify factors associated with differences in CS and CF. The identified factors can guide interventions to enhance the professional quality of life and the nursing care received by cancer patients.

The current study aimed to explore the professional quality of life of nurses working in oncology units in Oman and the characteristics that lead to differences in CS and CF.

This is the first study to assess CS and CF in oncology nurses working in Oman. The findings show that the majority of oncology nurses were experiencing moderate levels of CS, and only 35% reported high levels of CS. A recent study conducted among Jordanian

Table 4: Differences in compassion fatigues by personal and professional factors

Scale	Factor		M±SD	MD	*t*	*P*	95% CI	Effect size (Cohen's d)
Burnout (BO)	Age in years	20-35 ≥ 36	23.79±5.10 22.46±4.66	1.32	1.98	0.05	0.0–2.64	0.27
	Nationality	Omani Non-Omani	25.21±4.38 21.67±4.87	3.54	5.91	0.04	2.36–4.72	0.76
	Total professional experience (years)	1–10 ≥11	23.94±4.98 22.62±4.88	1.32	2.08	<0.001	0.0–2.64	0.27
	Desires to work with oncology patients	No Yes	25.08±4.57 22.85±4.97	2.22	2.93	0.002	0.73–3.72	0.50
	Hours of sleep per day	≤7 ≥8	24.27±4.39 22.90±5.12	1.37	2.01	0.05	0.29–2.71	0.30
Secondary traumatic stress (STS)	Nationality	Omani Non-Omani	28.21±5.81 23.27±5.70	4.94	6.67	0.002	0.96–4.08	0.86
	Total professional experience (years)	1–10 ≥11	26.74±6.22 24.23±6.03	2.52	3.18	<0.001	3.48–6.40	0.41
	Department (patient population)	Pediatric Oncology Adult Oncology	27.83±5.23 24.99±6.38	2.84	-3.30	0.001	-4.54 - - 1.13	0.46

M, Mean, SD, Standard deviation, MD, Mean difference, CI confidence interval

oncology nurses reported similar results.[36] The average levels of CS (39.73 ± 5.76), BO (23.34 ± 4.96), and STS (25.60 ± 6.25) were much lower than those found in Jordan (CS = 71.8 ± 16, BO = 39.5 ± 11, and CF = 50.8 ± 16.9).[36] The results of our study are also consistent with those of other countries, which showed that oncology nurses have moderate CS, BO, and STS, with approximately 22% being at high risk of CF.[23,37,38] A recent systematic review of 21 studies from six countries (N = 6533 oncology nurses) reported pooled mean scores of CS, BO, and STS of 35.47, 24.94, and 24.48, respectively.[38] The means scores reported by Xie and colleagues (2021) are in tandem with those of the current study, which leads us to assert that the general ProQOL of oncology nurses in Oman is closely similar to what has been reported in other countries.[39]

The prevalences of low CS (0.4%), high BO (0.4%), and high STS (0.4%) in our study were much lower than the rates reported in other countries.[40] Xie and colleagues reported pooled prevalence of low CS, high BO, and STS of 20%, 22%, and 22%, respectively.[39] While the current study found a low prevalence of high BO and STS, a significant proportion of nurses (65%) had moderate levels of these conditions. These nurses can easily transition into higher levels of BO and STS if they are not provided interventions and support to address the causes, mediators, and moderators of CF. Thus, we recommend interventions to support oncology nurses in acquiring and developing resilience and effective coping mechanisms. Such interventions are critical because the prevalence of CF (BO and STS) in oncology nurses is increasing due to the professional and emotional demands of working with cancer patients and their families.[41,42] There is also a need for more studies to examine the factors that may be unique to the Oman health care system and the coping methods used by nurses, leading to the observed low rates of high BO and STS.

Our study shows that personal and professional characteristics have an effect on the level of CS and CF experienced by oncology nurses. For instance, nurses that were married, over 36 years of age, non-Omani by nationality, desiring to work with oncology patients, with ≥10 years of professional experience, ≥6 years of experience in the oncology unit, and willing to enroll in education programs on CF reported higher levels of CS. These findings align with previous research that identified factors such as age, marital status, nationality, experience, and motivation to work in the field as examples of aspects that impact CS in healthcare professionals.[39,41,42] The desire to work with oncology patients had a medium effect on CS, highlighting the importance of motivation and commitment to the field of oncology or cancer nursing.[42] Leaders of oncology units need to provide incentives and other forms of support to enhance the desire and motivation of nurses to work on these units.

Xie and colleagues (2021) found that CF is associated with demographic factors, work-related factors, social support, coping strategy, self-compassion, professional cognition, and psychological training.[39] The current study did not explore the social support, coping, self-compassion, and professional cognition of the participants. Nevertheless, our findings show that nurses aged 20 to 35 years, who get less than 7 hours of sleep per day, Omani by nationality, with no desire to work with oncology patients, and with ≤10 years of general professional experience had higher levels of BO. Previous studies have noted that age, nationality, sleep duration, motivation, and professional experience contribute to the experience of BO in healthcare professionals.[39,41,42] The role of nationality in how oncology nurses experience BO needs to be studied further because it points to unique domains such as culture, country of primary professional education, and others.

In our study, higher levels of STS tended to occur in nurses that were Omani, with low general professional experience, and working in pediatric oncology. This finding aligns with earlier studies and highlights the unique stressors and challenges faced by nurses working in pediatric oncology[43] and how professionals experience moderate STS.[39,42] Almost 55% of the nurses reported that they did not have specific training in oncology. A lack of professional or continuing education specific to oncology is worrying and could affect the nurse's ability to achieve CS or cope with CF. The literature shows that inadequate professional training impacts the quality of patient care and nurses' well-being.[43] Leaders of oncology units need to emphasize continuing professional education for nurses to equip them with competencies for patient care and self-care. Willingness to participate in continuing education (such as CF-related training), coupled with a strong desire to work in oncology, reflect the motivation of oncology nurses.[40] Addressing these educational and training gaps is crucial for ensuring quality cancer care and a motivated oncology nursing workforce.

Limitations

The study used a cross-sectional design, making establishing causal relationships difficult. Data were generated using nurses' self-reports, which could have introduced biases. The biases could also be compounded by the fear of being perceived as weak. The sample was generated from three hospitals in Oman using a convenience sampling strategy, and this limits the generalizability of the findings to all oncology nurses in the country. Multiple social, cultural, professional,

psychological, work environment, and biological factors were not measured, and this limits the explanation of the observed rates of CS and CF. To address these limitations, longitudinal, mixed-methods, and interventional studies are recommended to generate a comprehensive understanding of CS and CF in Oman.

Recommendation

The level of CS among oncology nurses in Oman is low, while the level of CF is moderate in most oncology nurses. Healthcare organizations can use the characteristics identified by this study to initiate processes of identifying oncology nurses at risk of low CS and high CF with the goal of providing prompt supportive interventions and programs to enhance resilience and mitigate low ProQOL and poor quality of nursing care. The oncology nurses at risk of low CS and high CF may benefit from interventions like mentorship programs, peer support groups, and tailored mental health resources to promote coping.[21] Continuing education programs focusing on stress management, sleep hygiene, coping with compassion fatigue, and updating competencies needed in cancer nursing could also benefit oncology nurses.[42,44] A positive work environment, teamwork, and open communication among oncology nurses and other members of the healthcare team staff are also important ingredients that help to sustain CS.[43-45]

Conclusion

The research underscores the notable occurrence of CS and CF among oncology nurses in Oman, underscoring the imperative necessity to tackle elements that contribute to both phenomena within the occupational setting and in personal and professional domains. In order to optimize nursing practice, it is advisable to incorporate specific interventions, such as self-care programs and team support efforts, which facilitate a candid discussion about obstacles and cultivate a nurturing professional atmosphere. The incorporation of compassion fatigue awareness and cultural competency training into nursing school curricula ensures that nurses receive comprehensive preparation for the emotional challenges associated with cancer care and are equipped to effectively traverse varied cultural contexts. Regular assessments of the work environment, together with the provision of support services and implementation of flexible work arrangements, play a significant role in mitigating burnout and promoting the overall well-being of nurses from an administrative perspective. There is a need for further investigation to examine additional cultural variables that impact CS and CF in Oman. Additionally, it is important to design and evaluate therapies that are specifically customized to address the distinct requirements of oncology nurses working in diverse healthcare environments. In general, the aforementioned suggestions are designed to maintain a standard of excellence in patient care and place a strong emphasis on the comprehensive welfare of oncology nursing practitioners.

Data availability

The data set for the current study are available upon reasonable request from the first author [Devakirubai Jacob].

Authors contribution

DJ and ERL conceptualized and designed the study. DJ, ERL, and OA collected the data. JKM analyzed and interpreted the data. ERL, DJ and OA handled the project administration. JKM and ERL drafted the manuscript. DJ and OA reviewed and edited the manuscript. DJ, ERL, and OA supervised the study and acquired the funding. All authors were involved in the study investigation and approved the final version of the manuscript.

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List of abbreviation

- ProQOL- Professional Quality of Life
- CS- Compassion Satisfaction
- CF- Compassion Fatigue
- STS- Secondary Traumatic Stress
- BO- Burnout
- TOUS- Theory of Unpleasant Symptoms
- CIs- Confidence Intervals

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Conflicts of interest

There are no conflicts of interest.

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