

Determinants Of Compassion Fatigue, Compassion Satisfaction And Coping Strategies Among Nurses Caring For Cancer Patients

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Abstract:

Cancer is the 3rd leading cause of death after infectious and cardiovascular diseases locally, with an annual incidence of about 28,000 new cases and mortality of 22 000 annually (National Cancer Control Strategy, 2017-2022). The high number of cancer cases may negatively impact nurses caring for cancer patient's leading to compassion fatigue (CF). Oncology nurses work in an emotionally charged environment and may assimilate the suffering of their patients (Ko & Kiser-larson, 2016) however, some may experience compassion satisfaction (CS) due to prolonged therapeutic relationship with their clients.. This study aimed at assessing the level and determinants of compassion satisfaction and compassion fatigue, among cancer care nurses.

A descriptive correlation was conducted among 90 cancer care nurses using the structured tool based on researchers objectives and Brief COPE inventory self-administered questionnaires. Stratified sampling was used to select the study participants from different units. The results shows there was a high score for compassion satisfaction 42 ± 4.76 and average compassion fatigue 27 ± 8.7 scores. There was a statistically significant difference in the levels based on some demographic factors and coping strategies. A negative relationship between compassion satisfaction with exposure to chemotherapeutic agents, workload, and insufficient preparation or training in cancer care. The Staff patient ratio was noted to be the major predicting factors for occurrence of compassion fatigue.

In conclusion, both the organizational and personal intervention measures such as self-care, a mentorship program for upcoming new oncology staff, and training cancer caregivers. A study with a large sample is highly recommended.

Keywords: Oncology nursing, compassion fatigue, compassion satisfaction, coping strategies

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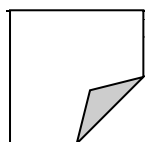
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I. Introduction

This chronic exposure to stressful situations at the workplace has been associated with health care workers' low quality of life, particularly if they have no organizational and personal coping strategies in place. However, studies show that oncology nurses experience compassion satisfaction, a positive feeling due to their prolonged therapeutic relationship with their patients (Yu et al., 2016; Sacco & Copel, 2018). Tuna and Baykal (2017) found that empathizing with cancer patients leads to the formation of a special bond that can be emotionally satisfying on the part of the nurse. The consequences of compassion fatigue (secondary traumatic stress) could lead to far-reaching effects on the clinical practice, compromised quality of care, and increased rates of medication errors (Kelly & Tyson, 2015; Lagerlund et al., 2015; Wells-English et al., 2019). On the other hand, compassion satisfaction includes a sense of wellbeing, accomplishment, and enthusiasm to help more (Bardeh, Sayedali & Kourosh, 2016).

In a study conducted by Ortega-Campos et al., (2020), the findings revealed that 19% of oncology nurses had low compassion satisfaction, 56% had medium and high burnout, while 60% had medium and high compassion fatigue. Similarly, in another study conducted in South Africa among nurses working in three oncology departments, 55% of participants had compassion satisfaction, 61% had burnout experiences, while 75% had average compassion fatigue (Wentzel & Brysiewicz, 2018).

Coping strategies such as mentorship, debriefing, and self-care strategies such as exercises, reflections, talking with others, work-life balance, and spirituality helps to mitigate the occurrences of compassion fatigue. The job tension associated with patients, relatives, colleagues, and physicians can be a source of stress for the nurses though tension relieving measures such as self-regulation, social support at the workplace, and a positive attitude can manage negative experiences (Bardeh et al., 2016). This agrees with a study conducted in Canada



established that learning to pause and recognize stressors, self-care, building self-compassion, having emotional insight, spirituality, and practicing reflection can also be personal strategies for dealing with job demands and enhancing compassion satisfaction (Wahlberg et al., 2016; Davis et al., 2015). Verbalization, exercise, ability to relax, caring for self, and emotional insight can enable one to experience less stress and burnout (Bahad, 2017). Having personal resources such as family cohesion and social support leads to less experience of stressful situations. (Kutlurkan, Elif, Uysal & Figen, 2016).

The lack of teamwork and cohesiveness among the multidisciplinary team in cancer care can be a real threat to the quality of care being given. Lack of support from supervisors, disrespect from patients and their relatives, poor relationships with colleagues at the workplace, and lack of a supportive work environment were excellent sources of stress among oncology care nurses (Bardeh et al., 2016; Ko & Kiser-larson, 2016 & Wu et al., 2016). In a systematic review of articles (n=13) personal intervention strategies such as having professional efficacy, exercising socialization, and having access to educational articles could prevent compassion fatigue. Mentorship, debriefing, and self-care strategies such as exercises, reflections, talking out with others, work-life balance and spirituality (Cocker & Joss, 2016; Nolte et al., 2017).

A Cancer care nurse can unconsciously assimilate the emotions, fear & grief experienced by their patients and death and dying and reflection of own death which are sources of stress (Ko & Kiser-larson, 2016) and (Intan et al., 2016). Therefore, it is essential for oncology health professions to have emotional maturity, keep some emotional distance, and develop communication skills to handle patients and their grieving relatives. Lack of skills for empathy and discussing death, dying, and end-of-life care posed communication challenges among cancer care nurses. (Banerjee et al., 2016). In Sweden, participants reported higher burnout scores and showed intentions to leave the workplace due to a Lack of adequate cancer care education (Lagerlund et al., 2015).

II. Research Methodology

Study design: The study adopted a correlation study design to examine the work-related, personal factors and demographic characteristics that determine oncology nurses' professional quality of life status.

Study Location- A national referral hospital

Study Duration: February 2020.

Sample size calculation: The targeted population was 124 cancer care nurses. Fisher et al. (1998) formula was used to calculate sample size (N=94) of nurses caring for cancer patients for more than six months.

Subjects & selection method: The study population was drawn from both outpatient and in patient's oncology units at the National referral health care facility. A Stratified sampling technique was applied in recruiting proportions of individual nurses in each unit then a simple random was undertaken to give each participant an equal chance of participating in the study. We assumed that the confidence interval of 10% and confidence level of 95%.

Procedure methodology: After written informed consent was obtained, a semi-structured self-administered questionnaire based on the objectives of the study was utilized to collect data and Coping strategies were assessed using Brief COPE inventory (Carver, 1997, 2007).

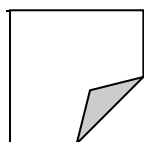
Inclusion criteria: Nurses who had cared for cancer patients for more than three months, providing care to adult and pediatric patients with cancer in outpatient and inpatient oncology units

Exclusion criteria: cancer care nurses on annual leave, student or those who have worked in oncology units/wards for less than three months and not consenting voluntarily.

Statistical analysis: Data was analyzed using descriptive statistics, T-tests and one-way analysis of variance were used to analyze demographic and work-related variables, Pearson's coefficient correlation was used to establish the relationships between the variables, and stepwise regression analysis was utilized to identify the predictors. The Statistical significance (p-value) set at 0.05 was tested at a 95% confidence level.

III. Results

The study sample size that was sought was 94 nurses caring for cancer patients. From the 94 questionnaires that were issued, 90 were filled and returned for data analysis indicating a 96% response rate.



Descriptive findings of demographic, personal, and work-related characteristics

Demographic characteristics as presented in Table 1 showed that the average age was 38± 9.7 years, 66.7% (n =60) were female, 74.4% (n =67) were married, 54.4% (n =49) of the respondents had a diploma in nursing as their highest level of education, while 97.8% (n =88) were Christians. The age of respondents less than 30 years was 30%, while 43.4% (N=31) of participants were 32-40 years, with those with more than ten years of work experience being 55.6%. Participants with less than five years of oncology experience were the majority 72.2% (n=65) and more than ten years 20% (N=18). 88.9% (N=80) of the cancer care nurses had no oncology specialization or training.

Table 1: Demographic characteristics of participants

	Mean ±SD	Frequency (n)	Percentage (%)
Age	38 (9.7) years		
Gender			
Male		30	33.3
Female		60	66.7
Marital status			
Single		16	17.8
Married		67	74.4
Separated		7	7.8
Level of education			
Diploma in nursing		49	54.4
Higher Diploma		15	16.7
Bachelor's Degree		19	21.1
Master's Degree		7	7.8
Religion			
Christian		88	97.8
Muslim		2	2.2
Received oncology training			
Yes		9	10
No		80	88.9
Age of the respondents			
Less than 30 years		27	30
31-40 years		31	34.4
41-50 years		23	25.6
Above 50 years		9	10
Years of experience			
Less than 5 years		19	21.1
6-10 years		21	23.3
Above 10 years		50	55.6
Years of oncology experience			
Less than 5 years		65	72.2
6-10 years		7	7.8
Above 10 years		18	20

The level of compassion fatigue and compassion satisfaction

In investigating the level of compassion fatigue and compassion satisfaction, the professional quality of life scale (PROQOL) scoring guide, was used. The mean scores were 42±4.76, 33±4.7, 27±8.7, respectively. Categories of Professional quality of life. Based on the PROQOL scoring as developed by Stamm (2009), 64.4% (n =58) of the respondents had high compassion satisfaction, 86.7% (n =78) and 25.6% (n =23) had high compassion fatigue as shown in Table 2.

Table 2: Average scores and categories of CS/CF levels respectively

	N	Min	Max	Mean	SD. Deviation	Interpretation
Compassion satisfaction	90	31.00	49.00	42.2667	4.75891	High
Compassion fatigue	90	12.00	50.00	26.6333	8.70677	Average

<i>Compassion satisfaction/ fatigue</i>	<i>Frequency</i>	<i>Percentage</i>
Compassion satisfaction		
High	58	64.4
Average	32	35.6
Compassion fatigue		
High	6	6.7
Average	33	36.75
Low	51	56.7

SD= Standard deviation

Coping strategies

The respondents were asked how they respond to a perceived stressful situation. Among the ways respondents respond to stressful situations, the common approaches utilized always include spirituality, 61.1% (n =55) and more often used techniques included positively reframing the stressful situation, 58.9% (n =53), work-life balance, 56.7% (n =51), 43.3% (n =39) often accept the situation and 41.1% (n =37) are often assertive about the situation as shown in Table 3 below.

Coping strategy	Always n (%)	Often n (%)	A little bit n (%)	Never n (%)
Religion (Spirituality)	55(61.1)	25(27.8)	8(8.9)	2(2.2)
Work-life balance	24(26.7)	51(56.7)	13(14.4)	2(2.2)
Positively reframe it	21(23.3)	53(58.9)	16(17.8)	0
Acceptance situation	38(42.2)	39(43.3)	12(13.3)	1(1.1)
Self-blame	3(3.3)	11(12.2)	37(41.1)	39(43.3)
Being assertive	15(16.7)	37(41.1)	33(36.7)	5(5.6)
Avoidance	9(10)	20(22.2)	28(31.1)	33(36.7)
Disengage from others	13(14.4)	13(14.4)	35(38.9)	29(32.2)
Humorous	17(18.9)	36(40)	29(32.2)	8(8.9)
Reflecting on situation	26(28.9)	31(34.4)	27(30)	6(6.7)
Seeking emotional support	19(21.1)	29(32.2)	26(28.9)	16(17.8)
Venting emotions	15(16.7)	29(32.2)	29(32.2)	17(18.9)
Depressed	8(8.9)	20(22.2)	40(44.4)	22(24.4)
Anxious	10(11.1)	20(22.2)	41(45.5)	16(17.8)

Determinants of Compassion satisfaction and compassion fatigue

The respondents were asked how they respond to a perceived stressful situation. The common approaches utilized always include spirituality, 61.1% (n =55) and more often used techniques included positively reframing the stressful situation, 58.9% (n =53), work-life balance, 56.7% (n =51), accept the situation 43.3% (n =39) and 41.1% (n =37) being assertive about the situation. However, some used a little bit of avoidance (31.1%), disengagement (38.9%), depressed and being anxious when faced with a stressful situation.

The respondents were asked to rate their perception of the patient-staff ratio in the unit; 53.3% (n = 47) of respondents described the patient-staff ratio as either poor or very poor, 58.9% (n = 53) described the relationship as not being stressful, but 31% (n =28) of the respondents affirmed having interpersonal conflicts at work majority of which were nurse-nurse. Further, 36% (n =32) had difficulties in handling cancer patients and their caregivers.

Table 3: Workplace characteristics

Workplace characteristics	Mean±SD	Frequency (n)	Percentage (%)
Staff patient ratio			
Very good		2	2.2
Good		9	10
Fair		32	34.6
Poor		31	34.3
Very Poor		16	18.9
Relationship with colleagues			
Very stressful		4	4.4
Moderately stressful		8	8.9
Mild stressful		25	27.8
Not stressful		53	58.9
Presence of interpersonal conflicts at work			
Yes		28	31
No		62	69
Common conflicts in the work environment			
Nurse-Nurse conflicts		55	60.7
Nurse-supervisor		12	13.3
Nurse-patients		13	14.3
Role conflict with doctors		10	10.7
Difficulty in handling patients and their relatives			
Yes		32	36
No		38	64
Work-related factors causing perceived burnout			
Workload	1.6±1.3		
Shortage of staff	1.51±1.3		
Exposure to chemotherapeutic	3.32±2.4		
Shortage of equipment	4±2.5		
Frequent ethical dilemmas	5.2±2		
Lack of support from the hospital	3.95±2		
Insufficient preparation	3.48±2		
Prolonged relationship with cancer patient	3.68±2.5		
Factors that cause the highest perceived stress			
Lack of equipment and supplies	1.8±0.6		
Lack of involvement in decision making	2.05±0.7		
Death and dying	1.85±0.7		
Communication challenges with caregivers	2.26±0.7		
Uncertainty in treatment	1.93±0.6		
Breaking sad news	1.72±1		

The association between independent variables and CS & CF

There was a significant difference in compassion satisfaction based on gender (p =0.007), marital status (p =0.001), oncology training, (p <0.0001), years of oncology experience (p =0.017) and relationship with colleagues (p = 0.047). There was a statistically significant difference in compassion fatigue levels and training (p = 0.02) as well as the presence of interpersonal conflicts at work (p =0.02).

The findings further showed that, there was significant differences in the levels of compassion satisfaction based on religion (p =0.044), work-life balance (p =0.043), being assertive, (p =0.044), humorous, (p =0.009), reflection on the situation, (p =0.038), seeking emotional support, (p =0.005), venting of emotions (p =0.001), depressed, (p =0.005) and anxious (p<0.0001).

Table 4: Association between Demographic characteristics and CS / CF

Demographic characteristic	Compassion satisfaction		Compassion fatigue	
	Mean	p-value	Mean	p-value
Male	40.37	t =1.341, p =0.007	26.13	t =1.613, p =0.702
Female	43.22		26.88	
Age		r =-0.160, p = 0.131		r =-0.144, p = 0.176
Single	42.81	F=7.154, p = 0.001	27.13	F=2.934, p = 0.058
Married	43.78		27.3	
Separated	36.14		19.14	

Diploma in nursing	42.49	F=0.64, p = 0.586	28.53	F=3.969, p = 0.011
Higher Diploma	41.07		20.8	
Bachelor's Degree	43.05		25.05	
Master's Degree	41.14		30.14	
Yes	42.22	t =1.841, p<0.0001	21.56	t = -1.341, p =0.020
No	36.96		27.2	
Years of oncology experience		r =0.267, p = 0.017		(r =-0.074, p = 0.489
Weekly working hours		r =-0.087, p = 0.234		(r =-0.507, p = 0.643
Not stressful	43.13	F=9.698, p<0.0001	27.7	F=1.772, p =0.159
Mild stressful	42.8		23.32	
Moderately stressful	40		28.75	
Very stressful	32		29	
Yes	41.54	F=0.797, p=0.374	29.82	t = -1.341, p =0.020
No	42.52		25.17	

Independent t-test, f = analysis of variance (ANOVA), r =Pearson correlation

Workplace characteristics and perceived CS and CF

There was a statistically significant difference in the levels of CS (p= 0.006) and CF (p= 0.001) based on the staff-patient ratio, CS levels based on the good relationship with colleagues (p<0.0001) and compassion fatigue levels based on the presence of interpersonal conflicts at work (p =0.03), (p=0.02) respectively. In addition, respondents experienced and compassion fatigue (p=0.012) emanating from handling patients with cancer and their relatives.

There was significant negative relationship between compassion satisfaction with exposure to chemotherapeutic, (r = -.343, p =0.002), frequent ethical dilemmas, (r = -.301, p =0.005) and insufficient preparation, (r = -.339, p =0.002). There was also negative relationship between insufficient preparation and Workload, (r = -.241, p =0.029), shortage of staff, (r = -.274, p =0.012), lack of support from hospital management, (r = -.262, p =0.018) and insufficient preparation (r = -.360, p =0.001) were negatively related to compassion fatigue

Table 4. Relationship between factors that cause perceived burnout and CS & CF

Factors		Compassion Satisfaction	Compassion fatigue
Workload	Pearson Correlation	0.134	-.241*
	P-value	0.229	0.029
Shortage of staff	Pearson Correlation	-0.017	-.274*
	P-value	0.882	0.012
Exposure to chemotherapeutic	Pearson Correlation	-.343**	-0.155
	P-value	0.002	0.164
Shortage of equipment	Pearson Correlation	0.124	0.032
	P-value	0.266	0.774
Frequent ethical dilemmas	Pearson Correlation	-.301**	-0.139
	P-value	0.005	0.206
Lack of support from the hospital management	Pearson Correlation	0.019	-.262*
	P-value	0.866	0.018
Insufficient preparation	Pearson Correlation	-.339**	-.360**
	P-value	0.002	0.001
Prolonged relationship with cancer patient	Pearson Correlation	-0.149	-0.165
	P-value	0.188	0.144

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Factors for Predicting the Level of CS and CF

The findings revealed that gender, years of experience, level of education, relationship with colleagues, and the patient-staff ratio were predictors of compassion satisfaction. Marital status and Patient staff ratio AR (0.2) and relationship with colleagues AR (0.29) were predictors of compassion fatigue, as shown in Table 6

Table 6: Summary of stepwise regression for predicting Compassion Satisfaction and Compassion fatigue

	Adjusted R square	R square change	F	Standardized Coefficients	t
Compassion satisfaction					
Gender	0.367	0.382	25.37	0.342	4.093
Years of experience	0.508	0.150	22.72	-0.222	-2.510
Level of education	0.621	0.116	23.91	0.212	2.181
Relationship with colleagues	0.684	0.066	23.69	-0.634	-6.407
Patient staff ratio	0.712	0.033	21.77	-0.356	4.133
Compassion fatigue					
Patient staff ratio	0.218	0.236	13.281	-2.776	4.568
Relationship with colleagues	0.296	0.488	2.544	-0.463	-3.82

IV. Discussion

The study sought to investigate the professional quality of life among nurses caring for cancer patients. The majority, 66.7%, were female. The level of care required given to cancer patients requires a high level of focus on the patient's needs which is synonymous with female nurses. These findings are consistent with (Wu et al., 2016) in a study conducted in the United States and Canada, revealing that most nurses managing cancer patients were female. In addition, the majority of the respondents had a diploma as their highest level of education. In Kenya, diploma certification is the least qualification to be a certified nurse, which may explain the present study trend. Very few participants affirmed to have received oncology training. The hospital has not provided specialized professional-based oncology training, which defines the trend observed in the present study where most knowledge is gained through experience.

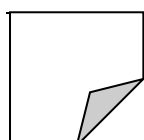
The results from the present study found that there was a high level of compassion satisfaction of 64.4% (N=58) and average levels of 35.6% (N=32), with a mean score of 42.3±4.75 among nurses. These findings are consistent with other studies, comparable to Baek et al., (2020), who found that satisfaction due to interpersonal relations led to good professional quality of life.

Female participants had a higher compassion satisfaction mean of 43.22 (p=0.007) than men, perhaps because they were the majority (66.7%). These findings are comparable to those (Kleiner & Wallace, 2017) who found that female gender was a significant predictor of higher compassion satisfaction (p= 0.012). Similarly, In Spain, a systematic review of studies (N =15) in oncology units indicated BO & CF affecting more females, The participants with more years of work experience, and those in oncology units were noted to have the highest levels. (Elena et al., 2019 ; Yu et al., 2016).

Married participants reported higher compassion satisfaction scores. This can be explained by shared burden between spouses, which results in increased satisfaction and reduced negative attitude among participants. Oncology education was also identified as a critical factor in compassion satisfaction. The present study found a statistical difference in compassion satisfaction scores based on oncology specialization (mean 42.2, p<0.0001). Participants who were trained had higher compassion satisfaction scores than those who did not. This concurs with a study that showed nurses with a high level of education had less compassion fatigue. (Wu et al., 2016) and (Hunsaker et al., 2019), who found that participants with high levels of education and managers support experienced compassion satisfaction.

The years of oncology experience had a significant relationship with the experience of compassion satisfaction (r=0.267, p=0.017), perhaps due to the development of appropriate coping mechanisms or increased resilience over time. These findings are consistent with (Duarte, 2017; (Wu et al., 2016), who reported that nurses with experience of more than 26 years had low secondary traumatic levels. Similarly, Jang et al. (2016) showed that the participants had a high compassion satisfaction and low fatigue. CS had a statistical significance with age, education, and years of experience, consistent with the current findings. The present results are contrary to Mohebi et al., (2018) and Ko & Kiser-larson (2016), who found that participants age and more years of work experience had high work-related stress cores. The current findings affirm the previous study that demographic variables have an association with burnout and compassion fatigue. However, Wahlberg (2016) and Wells-English et al. (2019) indicated no statistical significance was found between being depressed and professional quality of life and demographic characteristics, respectively. The difference could be due to advanced resources available to oncology nurses or train while on the job hence experience does not play a significant role in defining individual efficacy.

Personal characteristics such as Spirituality, maintaining a work-life balance, and positively reframing a stressful situation were associated positively with compassion satisfaction. This is consistent with studies that



showed personal factors such as openness, extraversion, and conscience correlated negatively with burnout and positively with anxiety and depression (Albendín-garcía et al., 2017). Verbalization, exercises, taking time off work, and relaxation was coping behaviors utilized by nurses in Sanford Roger Maris cancer center. (Ko & Kiser-larson, 2016). In his studies, Wahlberg et al. (2016) also demonstrated that the participants who had adopted appropriate coping mechanisms had low levels of distress. The current study also concurs with Kelly and Tyson (2017) and Kleiner and Wallace (2017). Dealing with a stressful situation requires integrating different aspects, including trained concepts and skill-based approaches that define individual responses to a stressful situation.

Not being assertive and being anxious had a significant statistical association with the experiences of burnout. This agrees with a study by Duarte et al., (2017), which indicated having self-compassion and empathy lead to a feeling of satisfaction while judging self and psychological inflexibility increased BO & CF. Participants who employed work-life balance, assertive, humorous, reflection on stressful situations, seeking emotional support, venting of emotions, less depressed and less anxious had higher compassion satisfaction scores similar to Ibrahim Jaleesah's (2019) and Cooper et al., (2020). The measures are crucial in boosting individual psychological wellbeing, concentration, and productivity by acting as stress-relieving approaches. Personal characteristics such as venting emotions, being depressed and anxious had a negative association with experience of compassion satisfaction.

In the work context, the participants in this study who did not perceive their relationship with their colleagues as stressful, 69% (N=62), had higher compassion satisfaction. This is because of an existing positive relationship within the workplace which improved the level of engagement at the workplace and commitment to improving patient care needs. This finding concurs with Wentzel & Brysiewicz (2018), who established that good relations at the workplace had a strong association with CS, The findings of this study confirm the results of other studies, which indicated workload, frequent ethical dilemmas ($r = -0.301$, $p = 0.005$), exposure to chemotherapy agents, insufficient preparation correlated positively with CF.

To assess the predictors of ProQoL, the stepwise regression analysis established that 53% of participants indicated a poor to very poor patient-staff ratio. Staff patient ratio due to inadequate staffing is a predictor of lower compassion satisfaction scores, higher burnout, and compassion fatigue scores. This agrees with Wentzel & Brysiewicz, (2018); which identified inadequate staffing and shortage of staff impacts staff and quality of care being given to patients. The patient staff ratio is essential in the delivery of quality care. Thus, a higher staff-patient ratio means less workload. Nurses have ample time to interact with their patients leading to positive professional quality of life since every staff has a manageable number of patients.

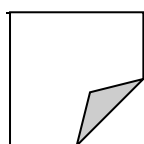
However, some conflicts at the workplace lead to CF scores. Conflicts at the workplace create a poor working environment because of the existing confrontations and conflicts especially considering that healthcare is multidisciplinary and team-based, which cannot be effective in a conflicting environment. These findings are similar to those (Kleiner & Wallace, 2017). The conclusions of this study found that gender, years of experience, levels of education, relationship with colleagues, and staff-patient ratio were predictors of compassion satisfaction. These findings are consistent with results from (Baek et al., 2020) which found that staffing was a significant predictor of compassion satisfaction in oncology nurses. The current findings affirm that a supportive work environment and years of experience in oncology and cancer care education strongly predict compassion satisfaction. This is similar to Duarte & Pinto (2017) and Wu et al., (2016), who showed that conducive work environment leads to an experience of compassion satisfaction in cancer care.

V. Conclusion

The findings of this study show majority of participants had compassion satisfaction which correlated positively with a combination of personal factors, a positive work environment, good interpersonal relationship at work place among the collaborative team, and organizational support. The findings confirm that demographic factors such as years of work experience in oncology and personal characteristics such as self-care, reframing of a situation, and being assertive in one work as a helper play a crucial role in propagating a favorable work experiences. Being trained to carry out one's duty may help match the job demands and personal resources hence mitigating the development of negative feelings. Young oncology nurses could be at risk of compassion fatigue hence this study reinforces the need for mentorship programs for newly employed cancer care staffs. Nurses' resilience training, improve the workforce, and empowerment of health care workers particularly oncology specialization due to rapid emerging incidences of cancers as well as being in alignment with vision 2030.

References

- [1] Albendín-García, L., Ortega-Campos, E., & Ca, G. A. (2017). European Journal Of Oncology Nursing Burnout And Its Relationship With Personality Factors In Oncology Nurses. 30, 91–96. <https://doi.org/10.1016/j.ejon.2017.08.004>.
- [2] Ann, H., Psychiatry, G., Jarrad, R. A., & Hammad, S. (2020). Oncology Nurses ' Compassion Fatigue, Burn Out And Compassion Satisfaction. Annals Of General Psychiatry, 1–8. <https://doi.org/10.1186/S12991-020-00272-9>.



- [3] Baek, J., Cho, H., Han, K., & Lee, H. (2020). Association Between Nursing Work Environment And Compassion Satisfaction Among Clinical Nurses. *Journal Of Nursing Management*, 28(2), 368–376. <https://doi.org/10.1111/Jonm.12937>.
- [4] Bahad, E. (2017). Resilience As A Strategy For Struggling Against Challenges Related To The Nursing Profession. 4, 9–13. <https://doi.org/10.1016/J.Cnre.2017.03.004>.
- [5] Banerjee, S. C., Manna, R., Coyle, N., Shen, M. J., Pehrson, C., Zaider, T., Hammonds, S., Krueger, C. A., Parker, P. A., & Bylund, C. L. (2016). Oncology Nurses' Communication Challenges With Patients And Families: A Qualitative Study. *Nurse Education In Practice*, 16(1), 193–201. <https://doi.org/10.1016/J.Nepr.2015.07.007>.
- [6] Bardeh, M., Naji, S., & Zarea, K. (2016). The Study Of Job Stress And Tension Management Among Oncology Nurses Of Ahvaz Hospitals In 2015. 5, 189–199.
- [7] Bonetti, L., Tolotti, A., Valcarenghi, D., Pedrazzani, C., Barello, S., Ghizzardi, G., Graffigna, G., Sari, D., & Bianchi, M. (2019). Burnout Precursors In Oncology Nurses: A Preliminary Cross-Sectional Study With A Systemic Organizational Analysis. *Sustainability (Switzerland)*, 11(5), 1–13. <https://doi.org/10.3390/Su11051246>.
- [8] Cañadas, G. A., Fuente, D., Urquiza, J. L. G., Elena, M., Gustavo, R., De, E. I., Solana, F., & García, L. A. (2018). Prevalence Of Burnout Syndrome In Oncology Nursing : A Meta - Analytic Study. July 2017, 1426–1433. <https://doi.org/10.1002/Pon.4632>.
- [9] Carver, C. S. (1997). Brief Cope Scale. *International Journal Of Behavioral Medicine*, 4, 92–100.
- [10] Chowdhury, S., & Chakraborty, P. Pratim. (2017). Universal Health Coverage - There Is More To It Than Meets The Eye. *Journal Of Family Medicine And Primary Care*, 6(2), 169–170. <https://doi.org/10.4103/Jfmpc.Jfmpc>.
- [11] Cocker, F., & Joss, N. (2016). Compassion Fatigue Among Healthcare, Emergency And Community Service Workers: A Systematic Review. *International Journal Of Environmental Research And Public Health*, 13(6), 1–18. <https://doi.org/10.3390/Ijerp13060618>.
- [12] Davis, S., Lind, B. K., & Sorensen, C. (2013). A Comparison Of Burnout Among Oncology Nurses Working In Adult And Pediatric Inpatient And Outpatient Settings. *Oncology Nursing Forum*, 40(4), 2013. <https://doi.org/10.1188/13.Onf.E303-E311>.
- [13] Duarte, J.&Pinto. (2017). The Role Of Psychological Factors In Oncology Nurses ' Burnout And Compassion Fatigue Symptoms. *European Journal Of Oncology Nursing* 28, 114–121.
- [14] Eelen, S., Bauwens, S., Baillon, C., Distelmans, W., Jacobs, E., & Verzelen, A. (2014). Risk Of Developing Burnout The Prevalence Of Burnout Among Oncology Professionals : Oncologists Are At Risk Of Developing Burnout. October 2017. <https://doi.org/10.1002/Pon.3579>.
- [15] Elena, O., Kenyala, V., Almudena, V., Nora, S., Guillermo, A., Jose & Luis, A. (2019). Compassion Fatigue. Compassion Satisfaction And Burnout In Oncology Nurses. A Systematic Review And Meta-Analysis. *Sustainability*. 12(1) 72.
- [16] Hunsaker, S., Chen, H., Maughan, D., & Heaston, S. (2015). Factors That Influence The Development Of Compassion Fatigue, Burnout, And Compassion Satisfaction In Emergency Department Nurses. 186–194. <https://doi.org/10.1111/Jnu.12122>
- [17] Ibrahim Jaleesah, R., & Author, C. (2019). Effective Personal And Organisational Coping Strategies Used By Oncology Nurses In Tertiary Care Institutions: A Systematic Review. Issue 1 Ser. VII, 8(1), 67–72. <https://doi.org/10.9790/1959-0801076772>.
- [18] Intan, N. O. R., Bt, S., & Aziz, A. (2016). Death And Dying : Stress Emerge Among Oncology Nurses In Non-Profit Organizations (Npo's).
- [19] Jang, I., Kim, Y., & Kim, K. (2016). Professionalism And Professional Quality Of Life For Oncology Nurses. *Journal Of Clinical Nursing*, 25(19–20), 2835–2845. <https://doi.org/10.1111/Jocn.13330>.
- [20] Kelly, L., Runge, C. Spencer. (2015). Predictors Of Compassion Satisfaction, Compassion Fatigue. *Journal Of Nursing Scholarship*, 47 (6), Pp. 522-528.
- [21] Kleiner, S., & Wallace, J. E. (2017). Oncologist Burnout And Compassion Fatigue: Investigating Time Pressure At Work As A Predictor And The Mediating Role Of Work-Family Conflict. *Bmc Health Services Research*. <https://doi.org/10.1186/S12913-017-2581-9>.
- [22] Ko, W., & Kiser-Larson, N. (2016). Stress Levels Of Nurses In Oncology Outpatient Units. 20(2).
- [23] Kutluturkan, S., Sozeri, E., Uysal, N., & Bay, F. (2016). Resilience And Burnout Status Among Nurses Working In Oncology. *Annals Of General Psychiatry*, 1–9. <https://doi.org/10.1186/S12991-016-0121-3>.
- [24] Lagerlund, M., Sharp, L., Lindqvist, R., Runesdotter, S., & Tishelman, C. (2015). Intention To Leave The Workplace Among Nurses Working With Cancer Patients In Acute Care Hospitals In Sweden. *European Journal Of Oncology Nursing*, 19(6), 629–637. <https://doi.org/10.1016/J.Ejon.2015.03.011>.
- [25] Mohebi, S., Parham, M., Sharifrad, G., & Gharlipour, Z. (2018). Social Support And Self - Care Behavior Study. 1–6. <https://doi.org/10.4103/Jehp.Jehp>.
- [26] Nolte, A., Downing, C., Temane, A. Hastings. T.M. (2017) Compassion Fatigue In Nurses: A Meta-Synthesis. *J Clin Nurs* 26: 4364-4378.
- [27] Tuna, R., & Baykal, U. (2017). A Qualitative Study On Emotional Labor Behavior Of Oncology Nurses And Its Effects Determining Nursing Service Management Standards In Turkey: A Delphi Study Nursing Service Management Standards (Running Title) Determining Nursing Service Management Stand. 10(2), 929–936. www.internationaljournalofcaringsciences.org
- [28] Vargas Celis, I., & Concha Méndez, C. (2019). Moral Distress, Sign Of Ethical Issues In The Practice Of Oncology Nursing: A Literature Review. *Aquichan*, 19(1), 1–16. <https://doi.org/10.5294/Aqui.2019.19.1.3>.
- [29] Wahlberg, Nirenberg, & Capezuti. (2016). Distress And Coping Self-Efficacy In Inpatient Oncology Nurses. 43(6). <https://doi.org/10.1188/16.Onf.738-746>.
- [30] Wells-English, D., Giese, J., & Price, J. (2019). Compassion Fatigue And Satisfaction: Influence On Turnover Among Oncology Nurses At An Urban Cancer Center. *Clinical Journal Of Oncology Nursing*, 23(5), 487–493. <https://doi.org/10.1188/19.Cjon.487-493>.
- [31] Wentzel, D. L., & Brysiewicz, P. (2018). A Survey Of Compassion Satisfaction, Burnout And Compassion Fatigue In Nurses Practicing In Three Oncology Departments In Durban, South Africa. *International Journal Of Africa Nursing Sciences*, 8(December 2017), 82–86. <https://doi.org/10.1016/J.Ijans.2018.03.004>.
- [32] Wu, S., Singh-Carlson, S., Odell, A., Reynolds, G., & Su, Y. (2016). Compassion Fatigue, Burnout, And Compassion Satisfaction Among Oncology Nurses In The United States And Canada. *Oncology Nursing Forum*, 43(4), E161–E169. <https://doi.org/10.1188/16.Onf.E161-E169>.
- [33] Yu, H., Jiang, A., & Shen, J. (2016). Prevalence And Predictors Of Compassion Fatigue, Burnout And Compassion Satisfaction Among Oncology Nurses: A Cross-Sectional Survey. *International Journal Of Nursing Studies*, 57, 28–38. <https://doi.org/10.1016/J.Ijnurstu.2016.01.012>.

