

Alexithymia Levels in Oncology Nurses and Their Impact on Occupational Burnout, Compassion Satisfaction and Compassion Fatigue: A Cross-Sectional Study

Onkoloji Hemşirelerinde Aleksitimi Düzeyleri ve Mesleki Tükenmişlik, Merhamet Doyumu ve Merhamet Yorgunluğuna Etkisi: Kesitsel Bir Çalışma

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ABSTRACT Objective: Nurses working with cancer patients face unique psychological and emotional challenges due to the intense nature of their work environment. Alexithymia, characterized by difficulty in identifying and expressing emotions, may significantly impact these nurses' professional well-being. This study aims to explore the correlation between the levels of alexithymia and the experiences of occupational burnout, compassion satisfaction, and compassion fatigue among nurses in oncology settings. **Material and Methods:** A descriptive and correlational research design was employed at Gaziantep University Şahinbey Research and Application Hospital. The study involved 80 nurses from different oncology services. Assessment tools included the Toronto Alexithymia Scale, Maslach Burnout Inventory, Compassion Satisfaction Scale, and Compassion Fatigue-Short Scale. **Results:** The study found a moderate positive correlation between alexithymia and occupational burnout ($r=0.418$). Additionally, significant relationships were noted between burnout and compassion fatigue, and various demographic factors (age, marital status, voluntary work in oncology) were found to influence alexithymia and burnout levels. **Conclusion:** The findings highlight the need for targeted psychological support and interventions for nurses in oncology settings, given the identified relationship between alexithymia, burnout, and compassion fatigue. This study contributes to the understanding of the emotional dynamics in high-stress healthcare environments and emphasizes the importance of addressing these issues to improve patient care quality.

Keywords: Alexithymia; occupational burnout; compassion satisfaction; compassion fatigue; oncology nursing

ÖZET Amaç: Kanser hastalarıyla çalışan hemşireler, çalışma ortamlarının yoğun doğası nedeniyle benzersiz psikolojik ve duygusal zorluklarla karşı karşıyadır. Duyguları tanımlama ve ifade etmedeki zorlukla karakterize edilen aleksitimi, bu hemşirelerin mesleki refahını önemli ölçüde etkileyebilir. Bu çalışma, onkoloji ortamlarında çalışan hemşirelerin aleksitimi düzeyleri ile mesleki tükenmişlik, merhamet tatmini ve merhamet yorgunluğu deneyimleri arasındaki ilişkiyi araştırmayı amaçlamaktadır. **Gereç ve Yöntemler:** Gaziantep Üniversitesi Şahinbey Araştırma ve Uygulama Hastanesinde tanımlayıcı ve ilişkisel bir araştırma tasarımı uygulandı. Çalışmaya farklı onkoloji servislerinden 80 hemşire katıldı. Değerlendirme araçları arasında Toronto Aleksitimi Ölçeği, Maslach Tükenmişlik Envanteri, Merhamet Memnuniyeti Ölçeği ve Merhamet Yorgunluğu-Kısa Ölçeği yer aldı. **Bulgular:** Araştırmada aleksitimi ile mesleki tükenmişlik arasında orta düzeyde pozitif bir ilişki bulunmuştur ($r=0,418$). Ayrıca tükenmişlik ile merhamet yorgunluğu arasında anlamlı ilişkiler bulunmuş ve çeşitli demografik faktörlerin (yaş, medeni durum, onkolojide gönüllü çalışma) aleksitimi ve tükenmişlik düzeylerini etkilediği bulunmuştur. **Sonuç:** Bulgular, aleksitimi, tükenmişlik ve merhamet yorgunluğu arasında belirlenen ilişki göz önüne alındığında, onkoloji ortamlarında hemşirelere yönelik hedefe yönelik psikolojik destek ve müdahalelere duyulan ihtiyacı vurgulamaktadır. Bu çalışma, yüksek stresli sağlık hizmeti ortamlarındaki duygusal dinamiklerin anlaşılmasına katkıda bulunmakta ve hasta bakım kalitesini artırmak için bu sorunların ele alınmasının önemini vurgulamaktadır.

Anahtar Kelimeler: Aleksitimi; mesleki tükenmişlik; merhamet doyumu; merhamet yorgunluğu; onkoloji hemşireliği

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Cancer represents a significant medical challenge necessitating extended treatment and management, which culminates in a range of both physiological and psychological complications for those affected.^{1,2} Therefore, an approach to the care and treatment of cancer patients should involve a multidisciplinary team understanding. Nurses, as essential and complementary members of this multidisciplinary team, bear significant responsibilities in helping both patients and their families cope with psychosocial issues and adapt to the treatment process.³

Dealing with a patient group experiencing intense issues such as fear of death, helplessness, uncertainty, and despair, and attempting to provide support to their families, lead nurses working with cancer patients to be more affected and worn out compared to nurses in other fields. In addition to these challenges, factors such as high workload, irregular working hours, role ambiguity, highly stressful work environments, and providing long-term healthcare services to patients in the terminal stage contribute to the susceptibility of nurses working with cancer patients to alexithymia.^{4,5}

Alexithymia is a concept that encompasses the absence of words in expressing emotions, difficulties in recognizing, distinguishing, and verbalizing emotions, as well as limitations in imagination and empathy.⁶ Moreover, the level of alexithymia among nurses working with cancer patients can have significant effects on the quality of care they provide. The emotional challenges and alexithymic tendencies of nurses can directly impact their interactions with patients, thus affecting the effectiveness of patient care. This situation may lead to difficulties in understanding and addressing the emotional needs and psychosocial issues of patients. Additionally, nurses with alexithymic tendencies may have limited abilities to establish empathy and manage patient relationships, potentially reducing their occupational satisfaction and commitment to their work.

In this context, not only the effects of the alexithymia levels of nurses working with cancer patients on personal health and occupational burnout should be considered, but also their impact on overall patient

care and healthcare service quality. The inability to recognize one's emotions can result in the individual not providing the necessary reactions in the face of events, leading them to be perceived as emotionless, dull, cold, and distant by their surroundings. In individuals with deep sense of meaninglessness both in their inner world and in the external world they experience, various problems may arise over time, such as occupational burnout, compassion fatigue, and compassion dissatisfaction.^{7,8}

The sense of exhaustion resulting from alexithymia makes nurses feel physically and mentally drained, tired, and overwhelmed. Communication breakdown occurs between nurses experiencing these feelings and cancer patients facing intense stress, leading nurses to behave insensitively towards these patients. Additionally, nurses working with patients in need of long-term care and support demonstrate a compassionate approach to establish a therapeutic nurse-patient relationship. As a consequence of this approach, they are exposed to the suffering of the individuals they care for, and prolonged exposure can result in compassion fatigue and compassion dissatisfaction.^{9,10}

In recent years, studies have focused on alexithymia, burnout, and related factors among healthcare professionals, particularly nurses providing cancer care. For instance, a study conducted by Aldaz et al. explored the relationship between alexithymia, emotional intelligence, and burnout among nurse assistants working in nursing homes. The study found that alexithymia explained the burnout of nurse assistants more effectively than emotional intelligence.¹¹ Additionally, a study by Pei et al. examined the relationships between alexithymia, social support, depression, and burnout among emergency department nurses in China, revealing a positive correlation between alexithymia and the levels of burnout and depression among nurses.¹² Furthermore, a study by Seo and Yeom investigated psychological burnout among nurses providing care to terminal cancer patients, identifying end-of-life care competence and ethical dilemmas as significant factors in this burnout.¹³

These studies contribute to a deeper understanding of the psychological well-being of nurses and its

impact on patient care, playing a crucial role in the field of healthcare services.

Cancer patients and their families expect nurses providing treatment and care to be more compassionate, caring, attentive, responsive, sensitive, and supportive under all circumstances. However, providing long-term care and support to these patients can be emotionally challenging and draining for nurses. To achieve this, it is crucial for nurses working with cancer patients to develop awareness and insight. In the literature, studies investigating occupational burnout, compassion satisfaction, and compassion fatigue were conducted on various nurse groups, such as oncology, pediatrics, and palliative care nursing.^{11,14-16} However, no national or international studies were found that examine the relationship between the alexithymia levels of nurses working with cancer patients and their occupational burnout, compassion satisfaction, and compassion fatigue. Therefore, this study, which is thought to make a significant contribution to the literature, aims to determine the relationships between the alexithymia levels of nurses working with cancer patients and their occupational burnout, compassion satisfaction, and compassion fatigue.

MATERIAL AND METHODS

RESEARCH TYPE

The investigation was conducted by employing descriptive and correlational methodologies.

LOCATION AND TIME OF THE RESEARCH

The research was conducted between October 2022 and January 2023 at Gaziantep University Şahinbey Research and Application Hospital, specifically in the Adult Oncology Service, Bone Marrow Transplantation Service, Oncology Outpatient Clinic, Pediatric Oncology Service, and Hematology Service.

POPULATION AND SAMPLE OF THE RESEARCH

The study's population included individuals seeking treatment at the Oncology and Hematology Services and Outpatient Clinics of Gaziantep University's Şahinbey Research and Application Hospital. The sample size was determined by referencing the study

entitled "Compassion Fatigue in Anesthesia Employees" using the G*Power program (ver. 3.1.9.7; developed at Heinrich-Heine-Universität Düsseldorf, Germany).¹⁷ Specifically, the calculation was based on a t-test comparing the means of two independent groups, with a one-tailed test, an effect size (d) of 0.60, an alpha error probability (α) of 0.05, and a power (1- β) of 0.80. The output indicated a required total sample size of 70 participants. To strengthen the results and enhance generalizability, the study aimed to reach 80 nurses. The research included voluntary nurses working in the relevant clinics where the study was conducted.

DATA COLLECTION TOOLS

Personal Information Form

Developed from a comprehensive literature review by the research team, the questionnaire encompasses 20 items designed to assess the socio-demographic profiles (8 items), professional details (9 items), and the extent of social engagement and interpersonal communication abilities (3 items) among nurses in oncology and hematology.⁴⁻⁷

Toronto Alexithymia Scale-26

The instrument, originally crafted by Taylor et al., underwent localization and validation for Turkish use by Dereboy. This tool, comprising 26 statements of both affirmative and negative nature, utilizes a 5-point Likert response format. It is structured around three distinct facets: the challenge in expressing emotions, the challenge in recognizing emotions, and a tendency towards externalized thought processes. Items framed negatively are subject to reverse scoring. The instrument's score spectrum extends from 26 to 130, where elevated scores denote a greater manifestation of alexithymic characteristics. Dereboy's investigation into the tool's reliability yielded a Cronbach's alpha coefficient of 0.65, whereas in the current study, it stood at 0.81.^{18,19}

Maslach Burnout Inventory

The Maslach Burnout Inventory, crafted by Maslach and Jackson for assessing occupational burnout experiences, was subjected to validation and reliability assessment for the Turkish context by Ergin. This

adaptation ensures the instrument's applicability and relevance in measuring burnout among Turkish professionals.^{20,21} The scale is a 5-point Likert type (never=0-every day=4) scale consisting of 3 sub-dimensions and 22 items. The emotional exhaustion sub-dimension describes feelings of being emotionally drained and exhausted. Scores for this sub-dimension range from 0 to 36, and increasing scores are considered indicative of higher emotional exhaustion. The Cronbach's alpha value for this sub-dimension was 0.83.²⁰ In this study, the Cronbach's alpha value was 0.89. The depersonalization sub-dimension evaluates indifferent and impersonal responses towards care or healthcare recipients. Scores for this sub-dimension range from 0 to 20, and increasing scores indicate higher levels of depersonalization. The Cronbach's alpha value for this sub-dimension was 0.65.²⁰ In this study, the Cronbach's alpha value was 0.88. The reduced personal accomplishment sub-dimension defines an individual's sense of achievement and competence in working with people. Scores for this sub-dimension range from 0 to 32, and increasing scores are associated with higher levels of personal accomplishment. Low scores on this sub-dimension are correlated with a high level of burnout. The Cronbach's alpha value for this sub-dimension was 0.72.²⁰ In this study, the Cronbach's alpha value was 0.85.

Compassion Satisfaction Scale

The scale developed by Nas and Sak is used to determine the compassion satisfaction levels of adults (18 years and older). The scale is unidimensional and consists of 12 items. There are no reverse-coded items in the scale.

The scale's scoring range is from 12 to 60, indicating that higher scores denote greater levels of compassion satisfaction. The reliability of the scale, demonstrated through a Cronbach's alpha of 0.92, was affirmed in prior research.²² In the context of this study, the Cronbach's alpha achieved a value of 0.97.

Compassion Fatigue-Short Scale

The Compassion Fatigue-Short Scale, initially formulated in 2006, was later adapted and its reliability confirmed for Turkish populations through research

conducted in 2019.^{23,24} This assessment tool is structured as a 10-point Likert scale, with options spanning from rarely or never to very frequently. It is divided into two main areas: Secondary Traumatic Stress and Job Burnout, with reliability scores (Cronbach's alpha) for these areas reported to be in the range of 0.80 to 0.90. The scale's total possible scores vary from 13 to 130, indicating that higher scores suggest a greater presence of compassion fatigue symptoms. While the scale's reliability was previously established at 0.82, it was found to be 0.90 in our application.

EVALUATION OF DATA

Data analysis within this investigation was executed utilizing the SPSS 24.0 software suite, developed by IBM Corporation, Armonk, New York, USA. To assess categorical variables, tables displaying frequencies and percentages were compiled. For numerical variables, descriptive metrics, including averages and standard deviations, were applied. The Shapiro-Wilk test, conducted via SPSS, served to determine the normality of the data distribution. Comparative analysis between two independent groups with normally distributed data was achieved through the independent samples t-test, whereas the one-way analysis of variance technique was applied for the comparison of three or more groups. The exploration of correlations between two numerical variables was facilitated by Pearson's correlation analysis. In all such statistical examinations, a significance threshold of $p < 0.05$ was upheld.

Research Ethics

Ethical approval for this study was secured from the Gaziantep University Clinical Research Ethics Committee (date: September 28, 2022; number: 2022/272). Additionally, institutional consent was granted by the hospital in which the research was undertaken. Prior to the initiation of data collection, the objectives, duration, and methodology of the investigation were thoroughly communicated to the nursing staff, in alignment with the ethical principle of "informed consent". The conduct of this study was in strict adherence to the principles outlined in the Helsinki Declaration.

Strengths and Limitations of the Study

The absence of any national or international studies investigating the relationship between alexithymia levels of nurses working with cancer patients and occupational burnout, compassion satisfaction, and compassion fatigue is a strength of the research. However, conducting the study with the nurses from a single city and a single healthcare institution, and the potential reluctance of the nurses to participate due to their demanding work environments are limitations of the study.

RESULTS

The study included 80 nurses, of whom 53.8% were below the age of 27, 65% were female, 51.2% were single, 83.8% had a bachelor's degree, 52.5% participated in social activities, 50% chose the profession because it guaranteed employment, 32.5% had been working for 7 years or more, 52.5% worked on a shift basis, 51.2% worked more than 8 hours per shift, 87.5% preferred working in the oncology service, and 67.5% were satisfied with working in the oncology service (Table 1).

The total score on the Toronto Alexithymia Scale was significantly higher in those nurses who were 27 years old or older (77.51 ± 13.84), married (77.21 ± 13.60), and voluntarily chose to work in the oncology service (81.80 ± 19.34) ($p < 0.05$) (Table 1).

The total score on the Maslach Burnout Inventory was significantly higher in those nurses who voluntarily chose to work in the oncology service (54.50 ± 23.16) ($p < 0.05$) (Table 1).

The total score on the Compassion Fatigue-Short Scale was significantly higher in those nurses who were not satisfied with working in the oncology service (67.96 ± 31.42) ($p < 0.05$) (Table 1).

The total score on the Toronto Alexithymia Scale was 73.01 ± 14.07 ; the total score on the Maslach Burnout Inventory was 44.42 ± 16.32 ; the total score on the Compassion Satisfaction Scale was 48.56 ± 11.95 ; and the total score on the Compassion Fatigue Short Scale was 55.53 ± 30.10 (Table 1). In the study, the Cronbach's alpha values for the scales were found to be 0.81, 0.89, 0.97, and 0.90, respectively.

There was a moderate positive and significant correlation between the Toronto Alexithymia Scale and the Maslach Burnout Inventory ($r = 0.418$). Similarly, there was a moderate positive and significant correlation between the Maslach Burnout Inventory and the Compassion Satisfaction Scale ($r = 0.320$), as well as between the Maslach Burnout Inventory and the Compassion Fatigue-Short Scale ($r = 0.397$) ($p < 0.05$) (Table 2).

DISCUSSION

Based on the conducted analyses, significant statistical differences were observed among various variables. There was a statistically significant difference between the marital status factors. The married participants obtained a higher average score from the Toronto Alexithymia Scale than the unmarried participants (Table 1). Some studies, however, indicated no significant statistical difference between marital status and alexithymia.^{25,26} However, Boukar and Dane found that unmarried individuals had higher average alexithymia scores than married participants.²⁷ These findings suggest the need for further research to determine the relationship between alexithymia and marital status.

There was a statistical significance between the nurses' working conditions based on their own preference and the average scores on the Toronto Alexithymia Scale and the Maslach Burnout Inventory. The scores of the participants working in this service against their own preference were lower, and these differences were statistically significant. Despite nurses choosing to work in oncology voluntarily, the higher average scores in Alexithymia and Burnout may be attributed to various reasons. Voluntary nurses may initially experience higher job satisfaction as they have chosen their work voluntarily, but over time, this could bring more emotional burden. Additionally, voluntary nurses may take on more responsibilities and face increased workload and pressure, which can contribute to elevated levels of occupational burnout over time (Table 1). Korkmaz et al. found a positive relationship between alexithymia and burnout.²⁸ Moreover, several studies suggested that emotional labor impacted burnout.^{29,30} Nurses working in emotionally demanding fields,

TABLE 1: Comparison of socio-demographic characteristics of nurses working with cancer patients and Total Scores on Toronto Alexithymia, Maslach Burnout, Compassion Satisfaction, and Compassion Fatigue Scales.

Descriptive characteristics	n (%)	Toronto Alexithymia Scale X̄±SD	Maslach Burnout Inventory X̄±SD	Compassion Satisfaction Scale X̄±SD	Compassion Fatigue- Short Scale X̄±SD
Age (X̄±SD): 27.44±6,04 (minimum: 20, maximum: 42)					
<27	43 (53.8)	69.14±13.23	44.02±17.71	46.44±13.02	56.26±27.71
>27	37 (46.3)	77.51±13.84	44.89±14.79	51.03±10.21	54.70±33.04
Statistical analysis (t/p value)		-2.76/0.00	-0.23/0.81	-1.73/0.08	0.22/0.82
Gender					
Female	52 (65)	71.15±10.40	46.35±15.63	50.06±11.48	58.90±30.32
Male	28 (35)	76.46±18.86	40.86±17.26	45.79±12.51	49.29±29.21
Statistical analysis (t/p value)		-1.62/0.10	1.44/0.15	1.53/0.12	1.37/0.17
Marital status					
Married	39 (48.8)	77.21±13.60	47.31±15.27	49.38±10.06	53.92±30.03
Single	41 (51.2)	69.02±13.49	41.68±17.00	47.78±13.59	57.07±30.47
Statistical Analysis (t/p value)		2.70/0.00	1.55/0.12	0.59/0.55	-0.46/0.64
Educational status					
Undergraduate	67 (83.8)	72.66±12.19	43.94±15.06	49.15±11.55	53.49±27.45
Graduate	13 (16.2)	75.78±25.41	48.22±25.07	43.89±14.65	71.67±45.01
Statistical analysis (t/p value)		-0.62/0.53	-0.73/0.46	1.25/0.21	-1.72/0.08
Do you participate in social activities?					
Yes	42 (52.5)	72.90±14.16	45.71±15.85	49.17±11.29	54.29±30.48
No	38 (47.5)	73.13±14.17	43.00±16.93	47.89±12.76	56.92±30.03
Statistical analysis (t/p value)		-0.07/0.94	0.74/0.46	0.47/0.63	-0.38/0.69
Occupation preference reason					
My own preference	26 (32.5)	75.81±13.61	41.38±14.50	51.08±9.20	60.23±31.37
Family/environmental pressure	14 (17.5)	78.29±13.92	45.14±11.97	47.86±8.68	60.14±34.94
Job security	40 (50)	69.35±13.74	46.15±18.65	47.17±14.27	50.88±27.44
Statistical analysis (F/p value)		2.99/0.05	0.68/0.50	0.95/0.38	0.86/0.42
Work experience					
Less than one year	19 (23.8)	68.89±11.09	38.11±12.77	47.11±12.88	50.63±26.34
1-3 years	23 (28.7)	70.96±15.93	48.78±21.42	46.78±13.70	52.78±26.54
4-6 years	12 (15)	80.25±17.36	49.17±15.01	52.17±10.35	58.25±34.38
7 years and above	26 (32.5)	74.50±11.70	43.00±12.69	49.54±10.38	60.31±34.22
Statistical analysis (F/p value)		1.92/0.13	1.96/0.12	0.67/0.56	0.47/0.70
What is your working style?					
Shift work	45 (52.5)	74.93±14.23	44.81±15.71	49.71±10.65	57.76±34.00
Fixed hours	35 (47.5)	70.89±13.77	44.00±17.18	47.29±13.27	53.08±25.33
Statistical analysis (t/p value)		1.28/0.20	0.22/0.82	0.69/0.49	0.90/0.36
How many working hours do you have in one shift?					
8 hours	39 (48.8)	71.38±14.42	44.13±19.56	48.95±13.17	50.41±29.27
More than 8 hours	41(51.2)	74.56±13.73	44.71±12.76	48.20±10.82	60.41±30.43
Statistical analysis (t/p value)		-1.00/0.31	-0.15/0.87	-1.49/0.13	0.28/0.78
Did you choose to work in the oncology service?					
Yes	10 (12.5)	81.80±19.34	54.50±23.16	54.10±9.56	65.00±40.66
No	70 (87.5)	71.96±12.98	42.69±14.89	47.94±12.24	54.04±28.82
Statistical analysis (t/p value)		2.09/0.04	2.16/0.03	1.52/0.13	1.06/0.29
Are you satisfied with working in the oncology service?					
Yes	56 (67.5)	72.78±13.58	43.35±14.70	48.56±12.31	49.56±27.80
No	26 (32.5)	73.50±15.31	46.65±19.40	48.58±11.41	67.96±31.42
Statistical analysis (t/p value)		-0.21/0.83	-0.84/0.40	-0.00/0.99	-2.65/0.01
Total X±SD (minimum-maximum)		73.01±14.07 (29-125)	44.42±16.32 (0-88)	48.56±11.95 (12-60)	55.53±30.10 (13-118)

p<0.05; SD: Standard deviation.

TABLE 2: Examination of the relationship between Toronto Alexithymia, Maslach Burnout, Compassion Satisfaction, and Compassion Fatigue Scales.

	Toronto Alexithymia Scale	Maslach Burnout Inventory	Compassion Satisfaction Scale	Compassion Fatigue-Short Scale
Toronto Alexithymia Scale	1			
Maslach Burnout Inventory	0.418**	1		
Compassion Satisfaction Scale	0.161	0.320**	1	
Compassion Fatigue-Short Scale	0.166	0.397**	0.139	1

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

such as oncology, may experience increased burnout and alexithymia over time due to the high emotional labor they endure. This suggests that the significance of voluntary work may diminish over time.

The study revealed that job satisfaction plays a significant role in influencing compassion fatigue among nurses. Those who were not satisfied with their work demonstrated higher levels of compassion fatigue compared to those who reported being satisfied. This finding indicates that job satisfaction has an impact on compassion fatigue (Table 1). According to Kışmır and İrge, healthcare professionals may change their perspectives on their work over time due to intense and stressful working conditions, and the work environment, where pain, sorrow, and joy co-exist, can lead to compassion fatigue.³¹ Dissatisfaction with their salary among healthcare professionals also increases compassion fatigue, leading to a loss of compassion. Ryu and Shim stated that compassion fatigue was influenced by variations in the environmental context of nursing care delivery and the professional conditions within the workplace.³²

When examining the age variable, it was observed that nurses aged 27 and older may have higher levels of alexithymia compared to their younger counterparts, indicating that age may play a role in the development of alexithymia traits (Table 1). Mattila et al. also reported that there was a very strong relationship between the age factor and the level of alexithymia.³³ Some studies also reached similar conclusions.^{34,35} Although our study did not find a significant difference between gender and alexithymia, Mattila et al. demonstrated a significant difference

between alexithymia and male gender.³³ Szepletowska et al., in their study on adolescents, showed that female gender experienced higher alexithymia.³⁶ On the other hand, Moriguchi et al. did not find a significant difference in terms of gender.³⁵ Studies generally suggest that increasing age is more closely associated with alexithymia. However, it can be stated that more research is needed to reach universally applicable results regarding the relationship between gender and alexithymia.

In all other categories (participation in social activities, educational status, reasons for choosing the profession, work experience, working hours, shift work), there was no statistically significant difference between groups. This indicates that these variables did not have a significant impact on the emotional well-being and work life of the nurses.

The findings emphasize the need for further research to understand the emotional well-being and work life of nurses caring for cancer patients. The study is an important step in identifying factors that affect nurses' work life and emotional well-being, aiming to improve the quality of work life for this professional group and enhance the quality of care they provide to their patients. However, since the study was based on data from a specific time period, it is limited in its ability to fully understand long-term changes or cause-and-effect relationships. The fact that the study's sample was selected from a specific region or hospital also restricts the generalizability of the results. Therefore, it is crucial to approach the results with a more general perspective by using larger and more diverse sample groups.

LIMITATIONS

The research was conducted at a single institution, Gaziantep University Şahinbey Research and Application Hospital, and involved a relatively small sample of 80 nurses. This specificity limits the generalizability of the findings to broader populations and settings. The results may not fully represent the experiences of nurses in different oncological or geographical contexts.

CONCLUSION

This investigation explored the correlation between the alexithymia levels of nurses serving cancer patients and their experiences of occupational burnout, compassion satisfaction, and compassion fatigue. The findings revealed that such nurses exhibit elevated alexithymia, burnout, compassion satisfaction, and fatigue levels. Furthermore, a moderate correlation was observed between emotional awareness and burnout, with a more pronounced linkage between burnout and compassion fatigue identified. These outcomes imply that an increase in emotional awareness might elevate burnout levels, potentially leading to compassion fatigue. Based on these insights, it is advised to offer psychological support to nurses caring for cancer patients and to extend research in this domain.

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Source of Finance

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Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

Idea/Concept: Soner Berşe, Emine Karacan, Emine Karacan; **Design:** Soner Berşe, Emine Karacan; **Control/Supervision:** Soner Berşe, Emine Karacan, Emine Karacan; **Data Collection and/or Processing:** Soner Berşe, Emine Karacan; **Analysis and/or Interpretation:** Soner Berşe, Emine Karacan; **Literature Review:** Soner Berşe, Emine Karacan; **Writing the Article:** Soner Berşe, Emine Karacan, Emine Karacan; **Critical Review:** Soner Berşe, Emine Karacan, Emine Karacan; **References and Fundings:** Soner Berşe, Emine Karacan, Emine Karacan.

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