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ORIGINAL ARTICLE

Compassion Fatigue In Anesthesia Employees

Anestezi Çalişanlarinda Merhamet Yorgunluğu

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ABSTRACT

Objective: In this study, it is aimed to examine the compassion fatigue in anesthesia care providers based on the relationship between patients and anesthesia care providers.
Materials and Method: The research was carried out with 185 anesthesia care providers working in 4 different university hospitals in 3 different provinces (Kocaeli, İzmir, Konya) located in 3 different regions (Marmara, Aegean, Central Anatolia) in Turkey. The data of the study were collected by the online survey technique prepared by the researcher using the Google forms application. Compassion Fatigue Short Scale (MYLS) developed by Adams et al. was used in the study.
Results: As a result of the research, it is observed that the level of compassion fatigue of anesthesia care providers is moderate (67,24). In addition, a significant difference was found between the staff status of the participants, the status of being on duty, the province they worked in, the title and the number of weekly operations, and compassion fatigue. In terms of gender, a significant difference was obtained only with the secondary trauma dimension.
Conclusion: As a result of the research, moderate compassion fatigue was found in anesthesia care providers. It is predicted that this level may decrease to better levels if necessary precautions are taken, otherwise the level will rise. It is thought that with the increase of compassion fatigue, both the delivery of health services and health professionals will be adversely affected. Therefore, it is necessary to pay due attention to the issue.

Keywords: Healthcare Professionals, Compassion, Compassion Fatigue, Health

ÖZ

Amaç: Bu çalışmada hastalar ile anestezi çalışanları arasındaki ilişkiden yola çıkarak anestezi çalışanları üzerindeki merhamet yorgunluğunun incelenmesi amaçlanmaktadır.
Gereç ve Yöntem: Araştırma Türkiye'de 3 farklı bölgede (Marmara, Ege, İç Anadolu) bulunan 3 farklı ilde (Kocaeli, İzmir, Konya), 4 farklı üniversite hastanesinde görev alan 185 anestezi çalışanı ile gerçekleştirilmiştir. Çalışmanın verileri araştırmacı tarafından Google forms uygulaması kullanılarak hazırlanan online anket tekniği ile toplanmıştır. Araştırmada, Adams ve arkadaşları tarafından geliştirilen Merhamet Yorgunluğu Kısa Ölçeği (MYKÖ) kullanılmıştır.
Bulgular: Araştırma sonucunda anestezi çalışanlarına ait merhamet yorgunluğu düzeyinin orta derecede olduğu (67,24) gözlemlenmektedir. Bunun yanında katılımcıların kadro durumu, nöbet tutma durumu, çalıştığı il, unvan ve haftalık ameliyat sayısı ile merhamet yorgunluğu arasında anlamlı bir farklılık elde edilmiştir. Cinsiyet açısından ise sadece ikincil travma boyutu ile anlamlı bir farklılık elde edilmiştir.
Sonuç: Araştırma sonucunda, anestezi çalışanlarında orta düzeyde merhamet yorgunluğu saptanmıştır. Bu düzeyin gerekli önlemler alındığı takdirde daha iyi seviyelere gerileyebileceği aksi halde seviyenin yükseleceği öngörülmektedir. Merhamet yorgunluğunun artmasıyla gerek sağlık hizmetlerinin sunumu gerekse de sağlık profesyonellerinin olumsuz etkileneceği düşünülmektedir. Bu nedenle konuya gereken özenin gösterilmesi gerekmektedir.

Anahtar Kelimeler: Sağlık Profesyonelleri, Merhamet, Merhamet Yorgunluğu, Sağlık

Introduction

The working areas of the anesthesia branch consist of the operating rooms where surgical interventions are performed and the intensive care units where the care and treatment of patients with vital risks are carried out. Working areas defined as closed areas are among the most complex structures of hospitals (1). While operating rooms provide benefits to health personnel in matters such as professional satisfaction and personal development; On the other hand, it is considered as working environments that have negative effects on issues such as nutrition, social relations, psychology, and physical health (2). Anesthesiologists work in closed areas under a flexible and intense work tempo. In addition, anesthetists may encounter many factors that may cause burnout syndrome, such as radiation, infectious diseases, anesthetic gases, the risk of violence by the patient and patient relatives during the intense work process (3).

Relatives of patients who receive treatment and care in these complex structures cannot be with them. In this context, the emotional state of patients who feel lonely is seriously affected due to factors such as lack of knowledge about surgical processes, and the unusual environments of operating rooms. Therefore, patients need the compassion, support, and motivation of others much more because of the risks to their lives and the feeling of loneliness (4). As a result, patients expect health care providers to approach them with a sense of compassion while receiving health care. However, healthcare professionals may experience compassion fatigue when the compassion they have shown while providing services is abused by the patient or their relatives (5).

Compassion

According to the Turkish Language Institution, compassion means "sadness, pity for a person or a living thing in the face of a bad situation". The word "Compassion", which is the English equivalent of the word "Merhamet" in Turkish, means the desire to help people against their troubles, care, compassion (6). Compassion is also expressed as a feeling that enables people to turn to goodness and righteousness and positively affects their behavior, apart from the feeling of benevolence and pity (1).

Hospitals are one of the working environments where emotions are felt intensely. One of the factors that cause emotions to become complicated is that patients often need health care services at unexpected times. Providing health services to patients in these emotional and sensitive periods can sometimes cause a feeling of helplessness by making the work of health professionals difficult (7). It is very important to approach with a sense of compassion while providing care and treatment services to patients with high sensitivity. The first people to refer to in the traumatic processes of the patients are usually health professionals. Health professionals mostly establish face-to-face communication with patients and their relatives. For this reason, it is important for health professionals to be sensitive and compassionate. In addition, the fact that health professionals provide services with a sense of compassion also affects the care and treatment processes (5).

Compassion Fatigue

Compassion fatigue refers to the emotional and physical burnout that causes a decrease in the willingness to serve as a result of the empathy of the service providers (8). The concept of compassion fatigue was first discussed by Joinson (1992) in his study of burnout in nurses. According to Joinson, compassion fatigue is expressed as "a unique form of burnout that affects caregivers" (9).

Compassion fatigue can also be seen in disadvantaged groups such as healthcare professionals, social workers, law enforcement officers, teachers, and occupational groups that communicate one-on-one with people (10). Health professionals may encounter disasters, accidents, critical patients, and social events, which can sometimes be terrible, during the processes they serve. Health workers can feel various emotions in such events that they encounter during the processes they provide health services. Compassion fatigue is among the emotions they feel (11). Compassion fatigue can occur with stress and overexertion in healthcare professionals while giving treatment and care to patients. In addition, it was determined that there is a significant relationship between empathy ability and compassion fatigue levels in healthcare providers (12).

The common points of individuals who show signs of compassion fatigue are that the people they serve are traumatized. Smith (2012) stated that approximately 25-30% of healthcare professionals experience compassion fatigue in his study, which aims to prevent compassion fatigue before the productivity of healthcare professionals decreases as a result of compassion fatigue (13). According to Frigley (2002), three factors increase the level of compassion fatigue. These factors are; prolonged exposure, traumatic memories, and deterioration of life (14).

Anesthesiologists generally serve in closed areas/ operating rooms. Since the operating rooms are special working areas, the relatives of the patients cannot be with the patient and the patient is left alone. In addition, patients are often unconscious or under anesthesia, unable to express themselves, and are in a vulnerable state (3). For these reasons, it is normal for anesthetists to feel compassion. It is possible to associate this feeling of compassion with compassionate behaviors such as holding the hand of a child patient while giving anesthesia. Therefore, it is seen that anesthesia care providers may experience compassion fatigue (4).

There are other concepts related to compassion fatigue, which is frequently encountered in people working in areas that directly serve people. The concepts of burnout, traumatic secondary stress, post-traumatic stress disorder, compassion satisfaction are the concepts associated with compassion fatigue (15, 5, 16, 17). The scale used in the study has two sub-dimensions as secondary trauma and occupational burnout. Secondary trauma means that the person who is exposed to a traumatic event is also affected by the event at the same level (18). According to Maslach et al. (1997), occupational burnout is defined as the erosion experienced in integration with work. When the job is ignored and loses its meaning, the energies of the employees are depleted, as well as their competencies are reduced (19, 20).

In the literature, although there are studies that deal with anesthesia care providers, no cognitive study examining compassion fatigue has been found. In this study, it is aimed to examine the compassion fatigue on anesthesia care providers based on the relationship between patients and anesthesia care providers and the gap in the literature.

Method

Population and Sample of the Research

The research population consists of anesthesia care providers working in 4 different university hospitals in 3 different provinces (Konya, Kocaeli, İzmir) located in 3 different regions (Marmara, Aegean, Central Anatolia) in Turkey. There are approximately 350 anesthesia care providers in selected institutions. The required sample size for the study was determined by using the table created by Altunışık et al. (2012) (21). Accordingly, it was considered sufficient for the sample to consist of 185 people.

Ethics of Research

Ethics committee approval dated 29.09.2021 and numbered 1583 was obtained from Selçuk University Faculty of Health Sciences Non-Interventional Clinical Research Ethics Committee before the study. Ethical rules have been taken into account in citing references. Informed consent was obtained from the participants in the study.

Data Collection and Application

The data of the study were collected by the online survey technique prepared by the researcher using the Google forms application.

Scales Used in the Research

Compassion Fatigue Short Scale

The Compassion Fatigue Brief Scale was used as a data collection tool in the study. This scale, which was developed by Adams et al., was prepared in a 10-point Likert type (1 = Never and 10 = Too Much) (22). The scale consists of two sub-dimensions: secondary trauma and occupational burnout. The lowest 13 and the highest 130 points can be obtained from the scale. It is interpreted that the higher the score, the higher the level of compassion fatigue. The Turkish validity and reliability of the scale were made by Yıldırım and Cavcav (2020) (23).

Analysis of Data

Spss, a statistical measurement program, was used to analyze the data. In the study, first of all, it was examined whether the data were suitable for normal distribution. Then, skewness and kurtosis values were examined. In this direction, it has been observed that the skewness and kurtosis coefficients are within the limits of +1.5 and -1.5. In the literature, it is stated that the data are normally distributed when the skewness and kurtosis values are between +1.5 and -1.5 (24). In the study, the skewness and kurtosis coefficient for the compassion fatigue scale was determined as (0.136; -1.035). Since the data showed a normal distribution, the T-test was used to compare paired groups and the Anova test was used to compare more than two groups. As a result of the reliability analysis, the Cronbach Alpha value was very high as 0.930. This value was determined as 0.876 by Yıldırım and Cavcav (2020) in the Turkish validity and reliability study (23).

Results

The socio-demographic characteristics of the participants were examined. Accordingly, 56.2% (104 people) of the participants were women, 49.2% (91 people) were associate degree graduates, 55.1% were married (102 people), 80.5% (149 people) were assistant anesthesia health workers, 47.0% (87 people) were between the ages of 28-33, 74.6% (138 people) of the working year consisted of employees between 1-2 years, 51.4% (95 people) It is seen that he worked in Konya. Detailed information about the participants is given in Table 1.

Occupational characteristics of the employees participating in the research were examined. Accordingly, it was concluded that 60.5% (112 people) took part in the operations between 0-25 per week, 51.4% (95 people) were permanent staff, and 83.8% (155 people) were on duty. In addition, it was observed that 43.2% (80 people) took part in the surgery of each department. The professional characteristics of the employees are given in Table 2.

The average, standard deviation, minimum and maximum values obtained from the compassion fatigue scale of anesthesia care providers were examined. Hereunder, the mean of compassion fatigue was 67.24; standard error 2.84; min 16.00 and max 126.00. Therefore, as a result of the study, it was found that the compassion fatigue of anesthesia care providers was moderate. In the scale developed by Adams et al. (2006), it is stated that the lowest 13 and the highest 130 points will be obtained (22). In the study, this value was found as 67.24. Detailed information is given in Table 3.

A t-test analysis was carried out between the occupational and characteristic features of the anesthesia care providers in the research and the average of compassion fatigue. As a result of the analyzes performed, a significant difference was found between gender and compassion fatigue according to the results of the analysis performed by taking the genders of the anesthesia care providers included in the study and the averages of compassion fatigue ($t=-4.051$; $p<0.00$). When the relationship between staff status and compassion fatigue was examined, a significant difference was found between staff status and compassion fatigue ($t=2.786$; $p<0.05$). According to the results of the t-test analysis performed, there was no significant difference between the watch keeping status of the anesthesia care providers and the mean compassion fatigue, but a significant difference was found in the secondary trauma dimension ($t=2.328$; $p<0.025$). Considering the duties of the anesthesia care providers and the averages of compassion fatigue, a significant difference was found between the averages ($t=-2.174$; $p<0.05$). When the number of operations performed and the averages of compassion fatigue were examined, a significant difference was found between the number of operations and compassion fatigue averages ($t=4.556$; $p<0.05$). Detailed information is given in Table 4.

Finally, there are the findings of the one-way analysis of the independent groups made between the province where they work and the average of compassion fatigue of the anesthesia care providers participating in the research. According to the results of this analysis, a significant difference was found between the province studied and the mean of compassion fatigue

Table 1: Socio-Demographical Characteristics of the Healtcare Professionals

		Number (N)	Percent (%)
Gender	Female	104	56.2
	Male	81	43.8
Education Level	High school	7	3.8
	Associate degree	91	49.2
	Bachelor degree	59	31.9
	Graduate	28	15.1
Marital status	Married	102	55.1
	Single	83	44.9
Task	Anesthesiologists	36	19.5
	Anesthesia Assistant Health Personnel (technician, technician, nurse, *EMT, etc.)	149	80.5
Employee Age	22-27 years	62	33.5
	28-33 years	87	47.0
	34-39 years	16	8.6
	40 years and older	20	10.8
Institution Working Year	1-2 years	138	74.6
	2 years and above	47	25,4
Mission Province	Konya	95	51,4
	Kocaeli	36	19.5
	İzmir	54	29.2
Total		**185**	**100**
*EMT: Emergency medical technicians			

Table 2: Occupational Characteristics of Employees

		Number (N)	Percent (%)
Surgery with weekly attendance	0-25 surgeries	112	60.5
	26 or more surgeries	73	39.5
Staffing Status	Regular	95	51.4
	Contractual	90	48.6
Status of being on duty	On duty	155	83.8
	Off-duty	30	16.2
The Department Entered into the Surgery	All	80	43.2
	Plastic surgery	3	1.6
	General surgery	15	8.1
	Cardiovascular Surgery	12	6.5
	Brain and neurosurgery	12	6.5
	Orthopedics and traumatology	24	13.0
	Urology	5	2.7
	Pediatric surgery	2	1.1
	Gynecology surgery	9	4.9
	Otolaryngology	6	3.2
	Thoracic surgery	2	1.1
	Non-operating room anesthesia applications	13	7.0
	Eye diseases	2	1.1
Total		**185**	**100**

Table 3: Average, Standard Deviation, Minimum and Maximum Values of Anesthesiologists from Compassion Fatigue Scale

Scale	Avg.	Ss.	Min.	Max
Compassion Fatigue	67.24	2.84	16.00	126.00

Table 4: T-Test Analysis of Independent Groups Between Anesthesiologists' Characteristics and Compassion Fatigue Averages.

Compassion Fatigue		N	Avg.	Ss.	T	P
Gender	Male	81	58.06	25.413	-4.051	**.000**
	Female	104	74.45	28.687		
Staffing Status	Regular	95	72.84	27.905	2.786	**.006**
	Contractual	90	61.40	27.927		
Status of being on duty (Dimension)	On duty	155	24.4516	12.212	2.328	**.025**
	Off-duty	30	19.333	10.777		
Task	Anesthesiologists	36	59.36	22.966	-2.174	**.033**
	Anesthesia Assistant Health Personnel (technician, technician, nurse, *EMT, etc.)	149	69.19	29.340		
Number of surgeries	0-25 surgeries	112	74.58	28.494	4.556	**.000**
	26 or more surgeries	73	56.07	24.550		

*EMT: Emergency medical technicians

Table 5: One-Way Analysis of Variance (ANOVA) in Independent Groups Between the City of Work and the Average of Compassion Fatigue of the Anesthesiologists Participating in the Research

	Province	N	Avg.	Ss.	F	P	Post-hoc (scheffe)
Compassion Fatigue	1.Konya	95	62.14	25.475	**9.435**	**.000**	**3>1-2**
	2.Kocaeli	36	60.58	25.947			
	3.İzmir	54	80.78	30.755			
	TOTAL	**185**	**67.28**	**28.424**			

(p<0.05). Post hoc (scheffe) analysis was performed to determine which groups the difference originated from. According to the results of the analysis, it was found that the anesthesia care providers working in İzmir had higher levels of compassion fatigue than the provinces of Konya and Kocaeli. It is thought that this situation may be due to the high number of operations in İzmir due to the population density. Detailed information is given in Table 5.

Discussion

As a result of the research, it was concluded that first of all, the level of compassion fatigue in anesthesia care providers was moderate 67,24. It is known that this value can be at least 13 and at most 130. When the literature on the subject is examined, few studies have been found, especially with anesthesiologists. However, studies dealing with compassion fatigue in healthcare providers, in general, have been examined. In a study conducted with nurses in Australia in 2014 on compassion fatigue, the level of compassion fatigue was 20%. In our study, this rate was determined as 67% (25). It is thought that the difference may be related to the working conditions.

In addition, there was no significant difference between the socio-demographic variables such as age, marital status, education level, the working year, and the department where the operation was performed, and both the mean of compassion fatigue and the mean of its sub-dimensions. In addition, a significant difference was found between the staff status of the participants, the status of being on duty, the province they worked in, the title and the number of weekly surgeries, and compassion fatigue. In terms of gender, a significant difference was obtained only with the secondary trauma dimension. It is observed that compassion fatigue studies in healthcare providers are mostly conducted with oncology clinics, pediatrics clinics, intensive care clinics, and emergency service staff. When the studies were examined in this context, it was determined that the healthcare professionals working in these clinics showed moderate symptoms of compassion fatigue (26, 27, 28). In the study conducted by Hunt et al. on compassion fatigue with healthcare professionals working in the oncology clinic, it was found that healthcare professionals are at risk of compassion fatigue and their quality of life is affected (29). In the compassion fatigue study conducted by Klein on nurses, it was determined that providing personal care training with health professionals has positive effects on compassion fatigue and burnout levels over time (30). In their study on compassion fatigue and burnout, conducted by Wu et al. with oncology nurses in the USA and Canada, it was determined that health professionals working in different geographical regions had the same level of compassion fatigue and burnout (31). It was also concluded that there were

changes in the performance, work-related behaviors, and personal health levels of healthcare providers with symptoms of compassion fatigue (5). In addition, in another study conducted by Sprang et al. with health professionals, a significant relationship was found between the gender factor and compassion fatigue. It has been determined that women have higher levels of compassion fatigue than men (32). This result is in parallel with this research result.

When examining the ways that healthcare professionals resort to as a solution to compassion fatigue, it has been observed that they prefer methods such as quitting, changing departments, taking leave, and taking an active role. Looking at their individual coping strategies, it can be said that they resort to ways such as prayer, spiritual awareness, and self-evaluation (28). Programs have been established in some countries to prevent compassion fatigue. For example, a regeneration center was established for employees at a university hospital. In regeneration centers, practices such as dance, massage, and music, which are methods of coping with stress, are carried out. A 42% decrease was observed in the level of compassion fatigue in healthcare providers at this center (33). Unfortunately, it is not possible to come across a program created to prevent compassion fatigue in our country. In order to understand and care about the subject, it is necessary to conduct researches from different aspects of compassion fatigue.

Conclusion and Recommendations

As a result of the research, it is observed that the level of compassion fatigue of anesthesia care providers is moderate (67,24). It is thought that this level may decrease to better levels if necessary precautions are taken. However, the lack of due diligence on this issue has the potential to cause an increase in the average level. It is estimated that this increase may adversely affect the quality of health services provided and the behavior of health professionals. For this reason, it is important that all stakeholders give the necessary importance to the issue. It is essential to determine the risk factors for compassion fatigue in healthcare professionals and to take necessary actions for the prevention and treatment of compassion fatigue by taking these factors into account. Reducing the compassion fatigue level of health personnels is important in terms of increasing the individual health levels of health workers. As a result of the high level of individual health of healthcare professionals, the issue is important in many ways, as it will result in increasing the quality of the care and treatment processes of the patients and reducing the errors. Like other healthcare professionals, anesthesia care providers also show compassion, and empathy during the lonely and distressing processes of patients. Since the effects of the situations occurring in the working environment will be reflected in the work and daily life of the individuals, it is recommended to develop corporate strategies and policies in order to protect their emotional states. In addition, it is recommended to carry out studies that will address the compassion fatigue and professional satisfaction of anesthesia care providers. Moreover, it is thought that studies on the awareness in the field of anesthesia care and the quality of the health service can be carried out and contribute to the literature.

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