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Acil Serviste Ağrı Yönetimini Engelleyen DurumlarThe Effect of Pain Management Barriers in Emergency Deparment

Filiz Özel[1], Sevgin Samancıoğlu Bağlama[2]

1Kastamonu University, Faculty of Health Science, Nursing Department, Turkey
2Gaziantep University, Faculty of Health Science, Nursing Department, Turkey

ÖZ

GİRİŞ ve AMAÇ: *Bu araştırma, acil servis hemşirelerinin ağrı yönetiminde sağlık bakım sistemlerine, sağlık ekibine ve hastaya bağlı engellerin belirlenmesi amacıyla planlanmış tanımlayıcı tipte bir araştırmadır.*

YÖNTEM ve GEREÇLER: *Araştırmanın örneklemini Mayıs 2015-Mayıs 2016 tarihleri arasında iki devlet hastanesinin acil servislerinde çalışan hemşireler (n=81) oluşturmuştur. Araştırmada Tanımlayıcı Özellikler Veri Formu ve acil serviste ağrı yönetimini engelleyen durumları içeren 13 ifadeden oluşan Ağrı Yönetimini Engelleyen Durumları Değerlendirme Formu kullanılmıştır. Verilerin değerlendirilmesinde tanımlayıcı istatistiksel metodlar ve Kruskal Wallis testi kullanılmıştır.*

BULGULAR: *Araştırmaya katılan hemşirelerin %39.5'inin 26-35 yaş arası; %30.9'unun önlisans veya lisans mezunu ve %63.0'ünün 1 yıl ve altında acil serviste çalışma yılına sahip olduğu saptanmıştır. Ağrı yönetiminde engellere bakıldığında en yüksek düzeyde sağlık bakım sistemlerine bağlı engeller olduğu; bunu sağlık ekibine bağlı engeller ile daha düşük düzeyde hastaya bağlı engellerin izlediği saptanmıştır.*

TARTIŞMA ve SONUÇ: *Sonuç olarak, acil servislerde ağrı yönetimine ilişkin kurumlarda düzenlemeler ve sürekli eğitimler önerilebilir.*

Anahtar Kelimeler: *Acil servis, ağrı yönetimi, engeller*

ABSTRACT

INTRODUCTION: *This study aims to determine the barriers to managing the pain of nurses who work in emergency departments.*

METHODS: *The study sample included nurses (n=81) who worked in the emergency departments of two state hospitals between May, 2015 and May, 2016. The study was conducted using a Descriptive Characteristics Data Form, and an Assessment Form for Barriers to Pain Management, which includes 13 statements regarding barriers to pain management for nurses who work in emergency departments. The data were evaluated using descriptive statistical methods and the Kruskal–Wallis test.*

RESULTS: *Of the nurses, 39.5% were 26 to 35 years old, 30.9% held associate or bachelor's degrees, and 63.0% had been working in the emergency department for one year or less. Regarding the barriers to pain management, institutional barriers ranked first and were followed by barriers created by health care professionals, and then barriers created by the patients themselves.*

DISCUSSION AND CONCLUSION: *Regulations should be written and continuing education should be provided in the institutions regarding pain management for nurses in emergency departments.*

Keywords: *Emercency department, pain management, barriers*

İletişim / Correspondence:

Filiz Özel
Kastamonu University, Faculty of Health Science, Nursing Department, Turkey
E-mail: ayferacikgoz@mynet.com
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INTRODUCTION

Pain is a subjective experience that every individual experiences throughout their life (1-3). The International Association of Pain Research defines pain as an unpleasant emotional sensation and behaviour related to an individual's past experiences that are associated with real or probable tissue damage resulting from any part of the body (4). Pain management requires a multidisciplinary team approach, and the most important member of this team is the nurse (5-9).

The focus of the nursing profession is to comfort and relieve patients. The role of nurses, who are practitioners of this profession, in pain control includes the evaluation of factors causing pain, the characteristics of pain, factors that are effective in pain control, the prevalence of pain and the evaluation of pain with proper tools (10). Physical, psychological, social and environmental factors should be taken into consideration when evaluating patients, and it should be noted that these factors can mutually interact and have an effect on the pain levels (6-8). In the diagnosis of pain, nurses take into account the location of pain, its severity and nature, the duration of onset, the manner in which patients express the pain, the conditions that reduce or increase pain and the effects of pain on the patient and evaluate nonverbal and autonomic pain responses. By doing so, nurses share the patients' pain experience, relieve it and help in the healing process. The most important cause of referral to emergency departments is pain (1). However, some problems are associated with pain management. The primary problem is the obstacle to the use of analgesia. According to the Health Services Society, analgesia is administered in only 60% of patients who are referred to emergency services with complaints of pain (2-3). The obstacles preventing pain management are evaluated in three categories, namely obstacles due to healthcare systems, those due to healthcare teams and those due to patients (6-8, 11). The primary reasons for these obstacles are inadequate health policies, training and perspective of the health personnel working in emergency departments and problems associated with time management in emergency departments (12). The aim of this study was to thoroughly define the difficulties in pain management experienced by nurses working in emergency departments and the process of patients' identification, evaluation and expression of pain from the perspective of a healthcare personnel as well as patient and health institution.

MATERIAL AND METHODS

This study was conducted between May 2015 and May 2016 in the emergency departments of two state hospitals. Inclusion criteria were working as an emergency nurse and volunteering for participation in the study. The purpose of the study was explained to emergency nurses, and written and verbal consents for participation were obtained. The study population comprised nurses working in emergency departments (n = 81). Ethical committee approval (Gaziantep University Clinical Research Ethics Committee-09.03.2015-2015/73) and all necessary approvals from the institutions were obtained.

Two questionnaires were used in this study to collect data. The first questionnaire was the 'Descriptive Form' with questions on the socio-demographic characteristics of nurses who agreed to participate in the study and the second was the 'Obstacles in Pain Management Questionnaire', which comprised 13 statements on various situations preventing pain management in emergency departments. This questionnaire was previously used by Duignan and Dunn (2008) (13). Face-to-face interviews were conducted with the nurses, and each interview lasted for approximately 10 min. SPSS 21.00 software (IBM SPSS Statistics for Windows, Version 21.0, Armonk, NY: IBM Corp.) was used to analyse the data. Data were presented as mean, number and percentage, and the Kendall coefficient of concordance, factor analysis, Cronbach alpha coefficient and Kruskal–Wallis test were used to evaluate the data. $p < 0.05$ was accepted as statistically significant.

Descriptive Form: This form was prepared by the investigators to determine the socio-demographic characteristics of nurses who volunteered to participate in this study and the characteristics of working at the emergency department.

Obstaclesin Pain Management Questionnaire: Originally developed by Tanabe and Buschmann (2000), this form is a questionnaire adapted by

Duignan and Dunn (2009) (13). It was not evaluated as a scale. Turkish validity and reliability of the form was assessed. Nurses identified factors preventing pain management that comprised 13 statements. Evaluations were made between 0–100, and nurses rated the factors according to their own considerations.

RESULTS

Turkish Validity and Reliability of the Obstacles in Pain Management Questionnaire

In terms of language validity, the questionnaire was translated to Turkish and back into its original language, and the content validity was found to be consistent based on expert opinions (KW = 0.108, p = 0.296). In scale studies, sample size is recommended to be 5–10 times the number of items in the scale (14). For this reason, the population data was deemed adequate at this stage of study. In the validity and reliability study of the questionnaire, the total internal consistency reliability coefficient (Cronbach alpha) of the inventory was 0.90. In the questionnaire, the total item score correlation coefficients range from 0.43 to 0.76. For the data to comply with the factor analysis, the Kaiser-Meyer-Olkin (KMO) value should be higher than 0.60 and the Barlett's test result should be significant (15). For this purpose, the sampling adequacy calculated with the KMO coefficient applied to the scale was found to be 0.855 and the Barlett's test result was found to be highly significant (x2 = 584.016, p = 0.000) (Table 1). Based on these data, it was concluded that the Turkish version of the form can be used as a valid and reliable tool.

Characteristics of Emergency Nurses and Conditions Preventing Pain Management

All nurses participating in the study were female, 39.5% were aged 26–35 years, 30.9% had an associate or bachelor's degree, 54.3% were single and 63.0% had an emergency department work experience of ≤1 year **(Table 1).**

When the obstacles in pain management were examined, the following statements had the highest scores:

Table 1. Socio-demographic data of emergency nurses

		n	%
Age	18-25	26	32.1
	26-35	32	39.5
	36-54	12	14.8
	Over 54	11	13.6
Education	High school	17	21.0
	Associate Degree	25	30.9
	License	25	30.9
	Master / PhD	14	17.3
Marital status	Married	37	45.7
	Single	44	54.3
Emergency servicing work year	1 year and less	51	63.0
	2-5 year	7	8.6
	6-10 year	23	28.4
TOTAL		**81**	**100**

* Having responsibility for other acute patients in addition to patients with pain (60.12)

* Not having enough time for an adequate evaluation and pain control (62.96)

* Using narcotic medications in a timely manner (64.29). Based on these results, obstacles due to healthcare systems were found to be more prominent **(Table 2),** followed by those due to healthcare teams such as 'Inadequacy in evaluating pain and analgesic' and 'Use of alcohol or other sedatives'. The lowest scores were obtained by obstacles due to patients.

In the examination of independent variables and pain-related statements, scores for statement 8 were significantly lower in the 36–54 age group than in the other groups ($p < 0.05$) and those for statement 4 were significantly higher in the health vocational high school and associate degree graduates than in the faculty graduates and graduate degree holders ($p < 0.05$). There was no significant difference in the work experience between the groups in terms of pain scores ($p > 0.05$) **(Table 3).**

Table 2. Data Relating to the Causes of Emergency Nurses in Pain Management

Expressions	Point
Expression 1	60.12
Expression 2	54.93
Expression 3	54.93
Expression 4	52.67
Expression 5	58.95
Expression 6	56.48
Expression 7	62.96
Expression 8	53.88
Expression 9	56.35
Expression 10	57.96
Expression 11	41.74
Expression 12	56.30
Expression 13	64.29

Table 3. Comparison of Causes of Barrier in Emergency Department Nurses to Some Independent Variables in Pain Management

Variables	Age group		Education		Emergency department work year	
	KWH	P	KWH	P	KWH	P
Exp. 1	0.374	0.946	0.969	0.809	0.027	0.986
Exp. 2	1.8	0.598	0.412	0.938	1.7	0.419
Exp.3	1.06	0.785	0.757	0.861	2.2	0.326
Exp. 4	4.04	0.261	10.5	0.014	0.735	0.692
Exp. 5	4.7	0.191	3.55	0.313	0.223	0.895
Exp. 6	0.83	0.842	3.46	0.326	0.465	0.792
Exp. 7	5.9	0.116	5.3	0.152	1.4	0.481
Exp. 8	10.2	0.016	8.4	0.038	0.028	0.986
Exp. 9	0.31	0.959	4.6	0.202	2.7	0.252
Exp. 10	1.6	0.641	3.6	0.299	1.06	0.586
Exp. 11	6.03	0.111	1.3	0.715	2.6	0.267
Exp. 12	1.6	0.645	7.4	0.058	0.038	0.981
Exp. 13	0.715	0.651	1.6	0.655	0.18	0.914

DISCUSSION

Obstacles Due to Healthcare Systems

In this study, obstacles due to healthcare systems obtained the highest scores in terms of pain management, and this result is consistent with that obtained by Duignan and Dunn (2009) (13). In our study, time constraints and the high number of patients were the primary causes for the obstacles.

The primary reasons for obstacles due to healthcare systems are a lack of pain management guidelines in institutions, obstacles to accessing opioids, inadequate reimbursement, restrictions on prescription and inadequate healthcare personnel training and work-oriented studies for pain and pain treatment (11, 13). The difficulties in working conditions experienced by nurses are particularly important. The nursing profession has several difficulties such as an inadequate physical environment of hospitals, hospital watch (post) system, wages, occupational risks and intensive work schedules (16). In addition, day and night working conditions in healthcare services result in burnout and emotional fatigue in nurses and negatively affect patient care. Nurses have an excessive workload due to the inadequate number of employed nurses in institutions (17). In his study, Demir (2003) reported that 72.5% of nurses who worked day and night had stress due to excess workload in the clinic (18). Particularly in the emergency departments, healthcare personnel experience several serious problems associated with personal stress and emotional issues because emergency is the most intense and stressful department of hospitals. An intensive work tempo and excessive workload of nurses who are forced to work outside of the regular working hours in emergency services (overtime) and take on hospital watch (post) duty more frequently increase their occupational competence, but at the same time, physical and psychological fatigue experienced due to the lack of rest and limited social and cultural life cause burnout. Nurses working in emergency departments are exposed to extreme fatigue due to an intense work tempo, and when this cycle is continuously repeated, it can decrease job satisfaction and lead to burnout (19). In their study, Enns and Sawatzky (2016) found that nurses

defined their work environment as chaotic, fast-paced and a place often encountered with difficult situations. In the same study, nurses argued that they experienced time insufficiency, which affected the quality of care (20-22). For these reasons, more staff should be employed in institutions and workload should be well planned (20).

Obstacles Due to Healthcare Teams

In our study, we also determined that the lack of knowledge on narcotics, pain management and pain assessment caused obstacles in pain management.

The lack of knowledge regarding narcotics is due to the lack of the administration of these drugs at appropriate doses and time intervals or because of the fear of opioids (23). The underlying causes are a fear of developing dependence and tolerance and pharmacological effects of opioids other than analgesia, such as respiratory depression, sedation, nausea-vomiting, convulsion and hypotension–bradycardia. The prescription of opioids is subject to strict control. In their study, Yumak et al. reported that 77% of nurses and 40% of doctors were worried about the development of psychological dependence in their patients after opioid therapy (24). In fact, with the proper diagnosis and a well-planned treatment programme, patients should never be deprived of opioid use (25). The timely treatment of patients in emergency departments requires a frequent administration of medications to alleviate symptoms. Medication administration time is often seen as a quality-of-care indicator and contributes to the perception of patients regarding the care they receive in emergency care. However, the timely administration of medication in the emergency setting remains a challenge for clinicians working in emergency departments because they are constantly busy (26). For these reasons, pain treatment, particularly in emergency patients, should be thoroughly evaluated by healthcare personnel and the accidental reduction of medications in patients requiring analgesics should be avoided. In addition, training on this topic should be provided to these patients (27, 28).

Obstacle Due to Patients

In our study, obstacles due to patients had the least effect on pain management and were primarily caused by the fear of opioid use and reluctance of patients to express pain.

We have reviewed studies in the literature on obstacles due to patients. Yumak et al. have reported that among the patients who previously used opioids, 14% were reluctant to use opioids due to a fear of developing dependency, 14% due to side effects and 21% due to a fear of developing tolerance, whereas these rates were 45%, 47.5% and 40%, respectively, for patients with no previous opioid use. In the same study, 7% of patients did not express their pain at all due to fear, whereas 13% did not complain about not receiving the treatment they needed although they expressed their pain (24). In addition, the reluctance of patients and families to express pain and illness (due to the misconception that it shows disease progression and due to fear of being ‘a bad patient’) and reluctance to use painkillers (fear of dependence or side effects) are also mentioned among the obstacles in pain management. Therefore, communication is necessary to ensure the involvement of patients in treatment (29-30). Healthcare personnel should be aware that each patient reacts differently to the new state created by the disease. Some patients have an active role in treatment and care, whereas some show various responses and reactions. These reactions make the treatment even more difficult. In this case, the most common communication problem is the reluctance of the patient. Regarding obstacles experienced in pain management, healthcare personnel can use therapeutic communication techniques such as sharing silence with the patient, using positive reinforcement on the patient, giving the patient the opportunity to speak, letting the patient know that their feelings are understood and summarising the things spoken with the patient (31-32).

In effective pain management, it may be recommended to train healthcare personnel and patients with guidelines for pain treatment and to make necessary arrangements and regulations in healthcare institutions. It is important to increase the number of personnel working in emergency

departments and to make necessary improvements in the physical environments of institutions. Obstacles in pain evaluation and management can be overcome by continuing the education and training of emergency nurses. With respect to overcoming patient-related obstacles, patient and family education is recommended to increase patient satisfaction.

Limitations of the Study

This study was conducted with a limited population of nurses working in emergency departments of two state hospitals; therefore, the results of this study cannot be generalised.

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