Osmangazi Journal of Med, 2025;47(3):358-366
DOI: 10.20515/otd.1532963

Research Article
Araştırma Makalesi

Osmangazi Journal of Medicine
e-ISSN: 2587-1579

Evaluation of the Knowledge Levels of Family Medicine Assistants Receiving Specialty Training in İzmir About Pressure Ulcer

İzmir'de Uzmanlık Eğitimi Alan Aile Hekimliği Asistanlarının Basınç Ülseri Hakkındaki Bilgi Düzeylerinin Değerlendirilmesi

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Ethics Committee Approval: The study was approved by Izmir Katip Celebi University Noninterventional Clinical Research Ethical Committee (Decision no: 267, Date: 15.06.2023).

Informed Consent: The authors declared that informed consent form was signed by the participants.

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Copyright Transfer Form: Copyright Transfer Formwas signed by all authors.

Conflict of Interest: No conflict of interest was declared by the authors.

Financial Disclosure: The authors declared that this study received no financial support.

Received : 16.08.2024

Accepted : 11.03.2025

Published :18.03..2025

Abstract: This study aims to assess the knowledge levels regarding pressure ulcers among family medicine residents undergoing specialty training in Izmir. This study is a cross-sectional study. 216 family medicine residents who received specialization training at Izmir Katip Çelebi University (IKÇÜ), Dokuz Eylül University(DEU), Izmir Bozyaka Training and Research Hospital and Tepecik Training and Research Hospital were included in our study after giving their permission to participate. The participants were administered a sociodemographic data survey prepared by the researchers after reviewing the relevant literature and the 'Pressure Ulcer Prevention Knowledge Assessment Survey'. Data were evaluated using the SPSS 22 (Statistical Package for the Social Sciences) package program. The mean age of the participants was 30.12±5.81 years, the median number of years spent in the profession was 4 years, and the median time spent in residency (months) was 17 months. When evaluated statistically, the scores of the Knowledge Assessment Questionnaire on Pressure Ulcer Prevention (KAPQ) were found to be significantly higher in physicians who used a source for pressure ulcers (38.9%, n=81), received training on the diagnosis, treatment, and prevention of pressure ulcers (37.5%, n=81), worked in a home health unit during their residency (53.7%, n=116), encountered pressure ulcers frequently (25.9%, n=56), and used a scale for the assessment of pressure ulcers (31.5%, n=68). The aim of family medicine specialization training is to train physicians who can provide primary health care services through theoretical and practical training. Pressure ulcers are one of the most common diagnoses encountered during mandatory and elective clinical rotations. Our study shows that family medicine assistants' awareness and knowledge about pressure ulcer, which is a preventable health problem, are not at a sufficient level. In this context, necessary arrangements should be made in educational curricula and applied training programs.
Keywords: Family Medicine, Pressure ulcer, Wound

Özet: Bu çalışmanın amacı, İzmir'de uzmanlık eğitimi alan aile hekimliği asistanları arasında basınç ülseri hakkındaki bilgi düzeylerini değerlendirmektir. Bu çalışma kesitsel bir çalışmadır. İzmir Katip Çelebi Üniversitesi (IKÇÜ), Dokuz Eylül Üniversitesi (DEÜ), İzmir Bozyaka Eğitim ve Araştırma Hastanesi ve Tepecik Eğitim ve Araştırma Hastanesi'nde uzmanlık eğitimi alan 216 aile hekimliği asistanı, katılım izinleri alınarak çalışmamıza dahil edildi. Katılımcılara, ilgili literatür tarandıktan sonra araştırmacılar tarafından hazırlanan sosyodemografik veri anketi ve 'Basınç Ülseri Önleme Bilgi Değerlendirme Anketi' uygulandı. Veriler SPSS 22 (Sosyal Bilimler için İstatistik Paketi) paket programı kullanılarak değerlendirildi. Katılımcıların yaş ortalaması 30,12±5,81 yıl, meslekte geçirilen yıl ortancası 4 yıl, asistanlıkta geçirilen süre ortancası (ay) 17 ay olarak bulundu. İstatistiksel olarak değerlendirildiğinde, basınç ülseri için kaynak kullanan (38,9%, n=81), basınç ülserlerinin tanısı, tedavisi ve önlenmesi konusunda eğitim alan (37,5%, n=81), asistanlığı sırasında evde sağlık biriminde çalışan (53,7%, n=116), basınç ülserleriyle sık karşılaşan (25,9%, n=56) ve basınç ülserlerini değerlendirmek için ölçek kullanan (31,5%, n=68) hekimlerde Basınç Ülseri Önleme Bilgi Değerlendirme Anketi (KAPQ) puanları anlamlı derecede daha yüksek bulundu. Aile hekimliği uzmanlık eğitiminin amacı, teorik ve pratik eğitim yoluyla birincil sağlık hizmeti sunabilen hekimler yetiştirmektir. Basınçülseri, zorunlu ve elektif klinik rotasyonlar sırasında karşılaşılan en yaygın tanılardan biridir. Çalışmamız, aile hekimliği asistanlarının önlenebilir bir sağlık sorunu olan basınç ülseri konusunda farkındalık ve bilgilerinin yeterli düzeyde olmadığını göstermektedir. Bu bağlamda, eğitim müfredatlarında ve uygulamalı eğitim programlarında gerekli düzenlemeler yapılmalıdır.
Anahtar Kelimeler: Aile Hekimliği, Basınç Ülseri, Yara

How to cite/ Atıf için: Köseoğlu E, Koç EM, Öksüz S, Pamuk G, Öztop MB, Evaluation of the Knowledge Levels of Family Medicine Assistants Receiving Specialty Training in Izmir About Pressure Ulcer, 2025;47(3):358-366

1. Introduction

Advances in medicine have led to remarkable successes in the diagnosis and treatment of diseases. However, the increase in life expectancy has led to the emergence of different health problems. The increase in the geriatric population, the restriction of mobility of individuals and the presence of various diseases that cause them to be bedridden have created a new and serious problem for healthcare professionals in the form of pressure sores (1). The aging of the population in the world and our country, the decrease in fertility, and the increase in life expectancy have resulted in the necessity of long-term care services. It is estimated that in the coming years, more people will be at risk due to chronic diseases and increasing care needs that accompany old age. By 2050, there will be 2 billion people over the age of 60, 80% of whom are expected to be in developing countries (2).

A pressure ulcer is damage to the skin and subcutaneous tissues in an area that remains ischemic under direct pressure and/or under the influence of mechanical friction forces (3). Pressure ulcers are frequently seen in elderly patients. This causes significant morbidity and mortality and leads to high costs in health services (4). In elderly patients, both age-related physiological changes and age-related comorbid diseases facilitate the formation of pressure ulcers (5). The incidence of pressure ulcers varies according to the patient group examined. The incidence of pressure ulcers is usually higher in patients in intensive care units, geriatrics, and neurology clinics (6).

According to the guidelines published in 2014 by the International Pressure Ulcer Advisory Panel (NPUAP), the prevalence in literature records examined between 2000 and 2012 was reported as 0%-46% in acute care units, 13.1%-45.5% in intensive care units, and 4.1%-72.5% in elderly care settings. According to the same reports, the incidence rate was 0%-12% in acute care units, 3.3%-53.4% in intensive care units, and 1.9%-59% in elderly care units (1).

Various studies have been conducted on this issue in our country. Hug et al. found the incidence of pressure ulcers to be 7.2%, Kurtuluş and Pınar found it to be 18.3% in neurology intensive care units, Karadağ and Gümüşkaya found it to be 54.8% in surgical unit patients, and Şenturan et al. found it to be 16.7% in intensive care unit patients (7-10). In a study conducted by Leblebici et al. for 1 year, the overall incidence of pressure ulcers was found to be 1.6% and the incidence in intensive care units was found to be 4.30% (11).

In a study conducted in our country, it was found that 70% of the patients with pressure ulcers were detected after passing stage 1; therefore, it was emphasized that preventive activities against pressure ulcer formation are of great importance (12). It is crucial that family physicians, as the first point of contact with the patient, carry out the necessary preventive health services to avoid the occurrence of pressure ulcers in risky patients.

The present study aims to evaluate the knowledge levels of family medicine residency students, who are continuing their specialty training in İzmir, regarding pressure ulcers.

2. Materials and Methods

Our cross-sectional study was conducted between July 1, 2023, and September 30, 2023, with family medicine residents studying at the Department of Family Medicine of İzmir Katip Çelebi University (IKCU) , the Department of Family Medicine of Izmir Health Sciences University Tepecik Training and Research Hospital, the Department of Family Medicine of Izmir Health Sciences University Bozyaka Training and Research Hospital, and the Department of Family Medicine of Dokuz Eylül University (DEU).

a. Population and Sample of the Study

Our study universe consisted of 430 resident physicians in the Family Medicine specialization training process in Izmir. Table 1 shows the universities where the participants received their education and the number of participants. Sample size was calculated using the Open Epi sample calculation tool. Taking 50 percent as the unknown frequency, the sample size was calculated as at least 204 people with a 95% confidence interval and a 5% margin of error. The participants were informed about the study. Informed consent was obtained from the participants who agreed to participate in the study. A total of 216 resident physicians participated in the study.

Method of Implementation of the Study and Collection of Data

The researcher applied a questionnaire form to the participants using a face-to-face interview technique. A 43-question sociodemographic data questionnaire

and the "Pressure Ulcer Prevention Knowledge Assessment Tool (PUPKAI)" prepared by the researchers in line with the relevant literature were applied to the participants (13,14). In the sociodemographic data scale, the questions related to age, gender, graduation year, units worked during general practice, duration of specialty training, experiences related to pressure ulcers, and evaluation of pressure ulcers were included. The Pressure Ulcer Prevention Knowledge Assessment Instrument includes 30 questions on the diagnosis, predisposing, and preventive factors and treatment of pressure ulcers.

b. Data Evaluation

The data obtained were analyzed using SPSS 22 (Statistical Package for the Social Sciences) package software. In the study, descriptive analyses were presented using mean, median, standard deviation, and minimum-maximum value for numerical variables, and number, frequency, and percentage for categorical variables. The conformity of the normal distribution of the data was tested with Kolmogorov Smirnov. the Chi-square and Mann-Whitney U tests were used in intergroup comparisons depending on the variable characteristics. Each correct answer of the participants to the questions related to pressure ulcers in the questionnaire was evaluated as 1 point and each incorrect answer was evaluated as 0 points. Thus, a score was obtained for each participant. The total score is 30 when each of the nonparametric questions is answered correctly. P values below 0.05 were considered statistically significant.

c. Ethical Consideration

In accordance with Non-Interventional Clinical Research Ethics Committee Directive, Ethics Committee approval was received with the decision number 0267 dated 15.06.2023.

3. Results

A total of 216 resident physicians receiving family medicine residency training in Izmir participated in the study. The mean age of the participants was 30.12±5.81 years (Median: 28.00, Min: 25.00, Max: 58.00). Data regarding the participants' gender, the institution they work at, and the unit they work in related to pressure ulcers are provided in Table 1.

Of the participants, 37.5% (n=81) had received training on pressure ulcer prevention, and 31.5% (n=68) used a scale to assess pressure ulcers. Of the participants, 38.9% (n=81) utilized a resource for pressure ulcer prevention. Among participants who used resources to prevent pressure ulcers, 96.3% (n=78) used the internet, 44.3% (n=36) used books, and 8.6% (n=7) used journals.

Among the participants, 25.9% (n=56) frequently, 38% (n=82) occasionally, 28.2% (n=61) rarely, and 7.9% (n=17) never encountered a patient with pressure ulcers. 11.6% (n=25) of the participants had a relative with pressure ulcers.

Table 1. Sociodemographic Data and General Information of Participants

	n	**%**
Gender		
Female	128	59.3
Male	88	40.7
General practice process*		
Emergency room	156	72.2
Home Health Services	28	13.0
112 unit	26	12.0
Family Medicine	44	20.4
Community Sealth Center	39	18.1
Other (Occupational medicine-palliative care)	10	4.6
Not employed	25	11.6
Working institution		
[1]IKCU	96	44.4
[2]DEU Faculty Of Medicine	48	22.2
University of Health Sciences Bozyaka Training and Research Hospital Faculty of Medicine	33	19.9
University of Health Sciences Tepecik Training and Research Hospital Faculty of Medicine	29	13.4

Working Status in Units Where Pressure Ulcers Are Common*		
Home Health Services		
Palliative care	116	53.7
Intensive care unit	88	40.7
Plastic surgery	18	8.3
	2	0.9

**Participants indicated more than one option.*
[1]IKCU: İzmir Katip Çelebi University, [2]DEU: Dokuz Eylül University

The participants' level of knowledge about the factors predisposing to pressure ulcers revealed that the question with the most correct answers was "Low albumin (<3) increases the risk of pressure ulcer formation" and the question with the least correct answers was "Moist skin reduces the risk of pressure ulcers" (Table 2).

Table 2. Frequency of Participants' Correct Knowledge of Factors Predisposing to Pressure Ulcers

	n	**%**
Moist skin reduces the risk of pressure ulcers.(F)	84	38.9
Hypertension increases the risk of pressure ulcers. (T)	173	80.1
A hypothermic patient is not considered at risk for pressure ulcers. (F)	195	90.2
Anemia (hb<12) increases the risk for pressure ulcer formation. (T)	200	92.6
Low albumin (<3) increases the risk of pressure ulcer formation. (T)	211	97.7

**T: True, F: False*

When examining the frequency of correct answers given by participants regarding the prevention and treatment of pressure ulcers, it was found that the most correctly answered question was "Highly absorbent incontinence products should be used for individuals with pressure ulcers or those at risk of pressure ulcers who have urinary incontinence." and the least correctly answered question was "Moisturizing cream is used to protect reddened skin." The frequency of correct knowledge of the participants regarding the prevention and treatment of pressure ulcers is presented in Table 3.

Table 3. Distribution of Participants' Correct Answers Regarding Pressure Ulcer Prevention and Treatment

	n	**%**
Moisturizing cream is used to protect reddened skin. (T)	43	19.9
Highly absorbent incontinence products should be used for individuals with pressure ulcers or those at risk of pressure ulcers who have urinary incontinence.(T)	198	91.7
The individual should be placed in a prone position frequently during the day. (F)	109	50.5

**T: True, F: False*

When examining the frequency of correct answers given by participants regarding the diagnosis of pressure ulcers, it was found that the most correctly answered question was "When classifying, the wound size/depth, wound edges, presence of odor/exudate, infection, tunneling, and pain indicators are evaluated." and the least correctly answered question was "The Bates-Jensen Wound Assessment Tool is one of the scales used for pressure ulcer risk assessment." (Table 4).

Table 4. Frequency of Participants' Correct Answers Regarding the Diagnosis of Pressure Ulcers

	n	%
When classifying, the wound size/depth, wound edges, presence of odor/exudate, infection, tunneling, and pain indicators are evaluated. (T)	215	99.5
The Braden Scale evaluates parameters such as sensory perception, moisture, activity, mobility, nutrition, and the effects of friction and shear.(T)	202	93.5
A Braden scale assessment score below 10 indicates an increased risk for pressure ulcer formation.(F)	77	35.6
The Bates-Jensen Wound Assessment Tool is one of the scales used for pressure ulcer risk assessment. (F)	22	10.2

A pressure ulcer originating from the operating room is defined as a pressure ulcer that develops within the first 24 hours after surgery. (F)	59	27.3
The presence of tunneling or bridging in the wound bed is a sign of infection. (F)	178	82.4
If a pressure ulcer reveals exposed bone, or the bone feels either hard or soft, or if the ulcer has not healed despite appropriate treatment, an evaluation for osteomyelitis should be conducted. (T)	209	96.8
The presence of adipose (fat) tissue, granulation tissue, fibrinous scar tissue (slough), and crusted dead skin (eschar) are the findings observed in stage 2 pressure ulcers. (F)	78	36.1
Full-thickness skin and tissue loss in ulcers with exposed or directly palpable fascia, muscle, tendon, ligament, cartilage, or bone, epibole (rolled edges), undermining under wound edges, and/or tunneling are indications of stage 4 pressure ulcers.(T)	207	95.8

T: True, F: False

When examining the frequency of correct answers given by participants regarding the treatment of pressure ulcers, it was found that the most correctly answered question was "Heels at risk of pressure sores should be elevated using a splint or a pillow/foam cushion to distribute the weight of the leg along the calf without putting pressure on the Achilles tendon and popliteal vein." and the least correctly answered question was "Adults with malnutrition or at risk of malnutrition and with pressure ulcers should be provided with 0.6-0.9 grams of protein per kilogram per day." (Table 5).

Table 5: Frequency of Accurate Knowledge of the Participants Regarding the Treatment of Pressure Ulcers

	n	**%**
For uninfected Category/Stage III and IV pressure ulcers with minimal exudate, a hydrogel dressing can be used.(T)	166	76.9
For uninfected Category/Stage II pressure ulcers, hydrogel dressings can be used depending on the clinical condition of the pressure ulcer.(T)	205	94.9
Adults with pressure ulcers who are malnourished or at risk of malnutrition should be offered high-calorie, high-protein supplements in addition to their regular diet if their nutritional needs cannot be met by their regular diet. (T)	207	95.8
For individuals at risk of heel pressure ulcers, heels should be elevated with a device or a pillow/foam cushion that distributes the leg's weight along the calf, avoiding pressure on the Achilles tendon and popliteal vein. (T)	208	96.3
Skin at risk of pressure ulcers should be massaged and a warm compress applied. (F)	150	69.4
If the patient is in poor health, he/she is not moved (in bed).(F)	193	89.4
Antiseptics such as povidon iodine, H2O2, and chlorhexidine should be the first choice for pressure ulcer cleaning. (F)	75	34.7
Adults with malnutrition or at risk of malnutrition and with pressure ulcers should be provided with 50-55 kcal/kg/day of energy. (F)	30	13.9
Adults with malnutrition or at risk of malnutrition and with pressure ulcers should be provided with 0.6-0.9 grams of protein per kilogram per day. (F)	28	13
Adults with Category/Stage II or higher pressure ulcers and with malnutrition or at risk of malnutrition should be given high-calorie, high-protein, arginine, zinc, and antioxidant oral food supplements or enteral formula. (T)	198	91.7
To relieve or redistribute the pressure, the individual should be positioned using manual handling techniques and equipment that reduces friction and tearing. (T)	209	96.8
The head of the bed should be kept as upright as possible. (F)	113	52.3
Even in the absence of infection, stable, hard, dry, and crusted dead skin (eschar) on ischemic extremities and the heel should be removed.(F)	82	38.0

T: True, F: False

The participants had a mean correct response rate of 20.03±2.68 on the 'Pressure Ulcer Prevention Knowledge Assessment' (median: 20.00, range: 11.00–30.00). A statistically significant relationship was found between their scores and factors such as the use of resources for pressure ulcers, prior training on pressure ulcers, experience working in a home healthcare unit, frequent encounters with pressure ulcers, and the use of a scale for diagnosing pressure ulcers. (Table 6).

Table 6. Comparison of participants' knowledge levels and influencing factors

	Questionnaire score			
	Ortanca	**Min**	**Max**	**p**
Time spent in the profession				
Less than 4 years	20,00	11,00	26,00	0,359
More than 4 years	20,00	15,00	30,00	
Time spent as an assistant				
Less than 17years	20,00	11,00	27,00	0,668
More than 17 years	20,00	13,00	30,00	
Resource use status for pressure ulcers				
yes	21,00	13,00	30,00	**0,020**
no	19,00	11,00	30,00	
Pressure ulcer education status				
yes	21,00	15,00	30,00	**0,025**
no	19,00	11,00	30,00	
Working situation in units where pressure ulcers are common during the assistantship period				0,262
Yes	20,00	11,00	30,00	
no	20,00	13,00	25,00	
Working status in home health				
yes	20,00	13,00	30,00	**0,014**
no	19,00	11,00	30,00	
Frequent encounter with pressure ulcers				
yes	21,00	17,00	26,00	**0,042**
no	20,00	11,00	30,00	
Scale usage status				
yes	21,00	13,00	30,00	**0,011**
no	19,00	11,00	30,00	

4. Discussion

This study was conducted to evaluate the knowledge levels of family medicine residents receiving specialization training in Izmir province regarding pressure ulcers. 216 resident physicians in the Family Medicine specialization training process participated in the study.

In a study conducted by Ünal et al., 54.6% of the family physician residents who participated in the study were found to have inadequate knowledge (15). A study carried out in the USA in 2009 with resident physicians, the mean score was found to be 69%, which is at a low level (16). According to a study conducted with healthcare workers, including doctors, in Pakistan, it was found that the knowledge, attitudes, and behavior levels of healthcare workers regarding pressure ulcers were inadequate (17). In a study by Çetin et al, it was determined that the knowledge level of the majority of family physicians was at an adequate level according to the questionnaire results. This could be attributed to the fact that actively practicing family physicians are primarily responsible for patients with pressure ulcers (18). In our study, the mean correct response rate of the participants to the questionnaire "The Pressure Ulcer Prevention Knowledge Assessment" was 20.03±2.68 (median: 20.00, min: 11.00, max: 30.00).

In studies conducted by Beeckman et al., Simonetti et al., Tülek et al., and Usher et al. examining the effect of years in the profession on pressure ulcer knowledge levels, it was found that those with more years of experience had higher questionnaire scores. (19, 20,21,22). In a study conducted with 155 family physicians in the State of Minnesota in the USA, the level of pressure ulcer knowledge of physicians with 3 years or more in the profession was found to be statistically significantly higher (23).

In a study by Şenkul et al. involving family medicine residents, no significant correlation was identified between the length of professional experience and the questionnaire scores (24). Conversely, Ünal et al. found that residents with one year or less of professional experience had significantly lower levels of knowledge (15). The literature supports that the time spent in the profession is positively correlated with the level of knowledge. However, in our study, although the median number of years spent in the profession was 4 years, no significant relationship was found

between time spent in the profession and knowledge. This could be attributed to the inability of resident physicians to complete their mandatory and elective rotations appropriately due to the pandemic for a large part of their training period.

In studies conducted by Simonetti et al. and Usher et al., it was determined that nursing students with more years of study and a higher number of departments they have worked in had higher questionnarie scores (20, 22). In our study, the median duration (months) of residency was 17 months and no significant relationship was found between the duration of residency and the PUPKAI score. This could be due to the fact that the decisions regarding patients with pressure ulcers were taken together with the training supervisor, not on their own during the residency period. In addition, the fact that nurses are trained to provide care to patients may also be effective in this.

Regarding the level of knowledge about pressure ulcers and the use of resources about pressure ulcers, Şenkul et al. found that the questionnaire scores of those who used a resource for pressure ulcers were significantly higher (25). A study found that Şengül et al, it was observed that nurses who closely followed the progress related to pressure ulcers and benefited from a resource had higher questionnaire scores (26). Similarly, in our study, it was observed that participants who benefited from any source for pressure ulcers had higher scores in the PUPKAI, which was statistically significant.

In a study conducted by Usher et al., participants who attended a course on pressure ulcers had higher questionnaire scores (22). According to research Ünal et al., the questionnaire scores of residents who received pressure ulcer training were found to be statistically significantly higher (15). According to a study by Çetin et al., 76.3% of the participating family physicians stated that they did not receive pressure ulcer training (18). In addition, the level of knowledge of those who received training was found to be higher than those who did not receive training. In a study conducted in Pakistan in 2022 for a total of 350 healthcare workers, 150 of whom were physicians, the change in pressure ulcer knowledge, attitude, and behavior levels before and after the training was examined; a significant increase was observed in the level of knowledge after the training (17). In our study, 37.5% (n=81) of the participants had received training to prevent pressure ulcers. Consistent with the literature, a statistically significant higher PUPKAI score was found for participants who received training.

In a survey conducted in Riyadh in 2018 among doctors working in palliative care, oncology, and hematology services, the level of knowledge was found to be adequate (27). In a study by Ünal et al., the questionnaire score of family physicians who worked in palliative care was found to be statistically significantly higher (15). In a study conducted with intensive care physicians in the USA, the Pieper-Zulkowski Pressure Wound Knowledge Test was administered; the average score of the participants was 75%, which was considered to be at an adequate level (28). In another study conducted by Şenkul et al., it was observed that resident physicians who worked in palliative service and home health units provided a statistically significant high rate of correct answers to the questions related to preventive interventions (25). In this study, no statistical significance was found between the participants' PUPKAI scores and their experience of working in units frequently encountering pressure ulcers during their specialist training. However, the PUPKAI score of participants working in home health units was determined to be statistically significantly higher. We believe that this is the result of physician assistants being responsible for the identification of patients with pressure ulcers in the home health unit.

Sahar Dalvand et al. found that respondents who frequently encountered patients with pressure ulcers had higher questionnaire scores (29). According to a study Şenkul et al., the questionnaire scores of participants who frequently encountered patients with pressure ulcers were found to be higher (25). In a study conducted by Ünal et al., the questionnaire score of respondents who answered the question "How often do you encounter pressure ulcers?" as "Once a day" or "Once a week" was found to be statistically significantly higher (15). A study conducted with 155 family physicians in Minnesota State in the USA determined that the mean scores of knowledge, attitude, and behavior of the ones who had more frequent encounters with pressure ulcers were significantly higher (23). Consistent with the literature, PUPKAI scores of participants who frequently encountered pressure ulcers were found to be statistically significantly higher in our study.

The literature presents different scales (Sarcopenia scale, mini malnutrition test, Braden risk scale, Norton risk scale, etc.) used in pressure ulcer assessment. The use of an appropriate scale for the early detection of conditions that facilitate pressure ulcer formation may help to prevent ulcer formation. Using a scale to assess and prevent pressure ulcer risk is an essential factor in improving the quality of

patient care. In addition, it can provide a standard in patient care and ensure objective evaluation by healthcare professionals. In the study by Ünal et al., it was found that 81.6% of participants did not use a scale, and the questionnaire scores of those who used a scale were significantly higher compared to those who did not (15). According to a study Çetin et al., when family physicians were asked whether they used scales such as the Mini Nutritional Assessment and Sarcopenia Scale to evaluate patients, the majority responded that they would decide based on the patient's medical condition, and this finding was statistically significant (18). In our study, 31.5% (n=68) of participants used scales, and similar to the literature, participants who used a scale had statistically significantly higher PUPKAI scores.

5. Conclusion

With the aging population globally and in our country, long-term care services have become increasingly important. Pressure ulcers are frequently observed in geriatric patients and can lead to serious morbidity and mortality, as well as high costs in healthcare services. For family physicians, who are the first point of contact with patients, it is crucial that they receive appropriate training and possess adequate resources, which can be achieved through family medicine residency training, in order to manage the diagnosis, treatment, and rehabilitation of pressure ulcers effectively. The knowledge and skills that family medicine residents are expected to acquire regarding this topic should be thoroughly covered in both theoretical and practical training curricula. Our study is believed to raise awareness on this issue and contribute to improving approaches to pressure ulcer patients in primary care settings.

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