

The Relationship between Intensive Care Nurses' Attitudes towards the Elderly and Their Use of Physical Restraints

Yoğun Bakım Hemşirelerinin Yaşlılara Yönelik Tutumları ile Fiziksel Tespit Edici Kullanımları Arasındaki İlişki

Gulsen KILIC¹, Ulku POLAT²

¹ Baskent University Ankara Hospital, Intensive Care Unit of Internal Medicine, Ankara, Turkey

² Gazi University, Faculty of Health Sciences, Department of Nursing, Ankara, Turkey

Özet

Amaç: Yoğun bakım hemşirelerinin yaşlılara yönelik tutumları ile fiziksel tespit edici kullanımına ilişkin bilgi, tutum ve uygulamaları arasındaki ilişkiyi belirlemek.

Gereç ve Yöntemler: Araştırma, kesitsel tipte olup, Şubat-Nisan 2016 tarihleri arasında iki üniversite hastanesi ve bir özel hastanenin yoğun bakım ünitelerinde çalışan 107 hemşire ile yapılmıştır. Araştırmada veriler, "Anket Formu", "Hemşirelerin Fiziksel Tespit Edici Kullanımına İlişkin Bilgi Düzeyi, Tutum ve Uygulamaları Ölçeği" ile "Yaşlı Ayrımcılığı Tutum Ölçeği (YATÖ)" kullanılarak toplanmıştır.

Bulgular: Yoğun bakım hemşirelerin fiziksel tespit kullanımına ilişkin bilgi puan ortalaması 7.22 ± 1.59 , tutum puan ortalaması 31.60 ± 5.80 , uygulama puan ortalaması 37.64 ± 2.99 olarak bulundu. Yoğun bakım hemşirelerinin YATÖ toplam puan ortalaması 86.13 ± 9.44 olarak bulundu. Hemşirelerin fiziksel tespit kullanımına ilişkin bilgi düzeyi, tutum ve uygulamaları ile yaşlılara yönelik tutumları arasında istatistiksel olarak anlamlı ilişki bulunmadı ($p > 0.05$).

Sonuç: Hemşirelerin fiziksel tespit edici kullanımına ilişkin bilgi düzeylerinin iyi, tutumlarının olumlu ve uygulamalarının yeterli düzeyde olduğu ve yaşlılara yönelik tutumlarının ise olumlu olduğu bulundu. Yoğun bakım hemşirelerinin fiziksel tespit uygulamasını, yaşlı hastanın güvenliğini sağlamada bakımın bir parçası olarak gördükleri düşünülmektedir.

Anahtar kelimeler: Fiziksel tespit, Hemşire, Tutum, Yaşlı, Yoğun bakım

Abstract

Objective: This study aimed to investigate the relationship between the attitudes among intensive care nurses towards older people and the use of physical restraints.

Material and Methods: This cross-sectional study was performed between February-April 2016. The study designed in survey method was conducted on 107 nurses working in intensive care units of three hospitals. In the study, data were collected by using the "Survey Form", "The Scale for Measuring Nurses' Knowledge Level, Attitudes and Practices regarding the Use of Physical Restraints" and Ageism Attitude Scale (AAS).

Results: The average scores of intensive care nurses regarding the use of physical restraints were found to be 7.22 ± 1.59 for their knowledge, 31.60 ± 5.80 for their attitudes and 37.64 ± 2.99 with respect to the practice of restraining devices. Their average score regarding the Ageism Attitude Scale, on the other hand, was 86.13 ± 9.44 . There was no correlation between the level of knowledge, attitudes and practices of the nurses about the use of physical restraint and their attitudes towards the elderly.

Conclusion: It was found that the knowledge level of the nurses about the use of physical restraints was good, their attitudes were positive and their practices were sufficient, and their attitudes towards the elderly were positive. It is thought that intensive care nurses consider physical restraint practice as a part of the care to ensure the safety of the elderly patient.

Keywords: Attitude, Intensive care unit, Nurse, Older people, Physical restraints

Yazışma Adresi: Gülşen KILIC, Başkent Üniversitesi Ankara Hastanesi, Dâhiliye Yoğun Bakım Ünitesi, Ankara, Türkiye

Telefon: 05073056712

Email: klegulsen@gmail.com

ORCID No (Sırasıyla): 0000-0003-2882-6077, 0000-0002-4293-1394

Geliş tarihi: 16.06.2021

Kabul tarihi: 12.10.2021

DOI: 10.17517/ksutfd.1055412

INTRODUCTION

A physical restraint is any mechanical device, equipment, material or tool widely used to restrict the movements of patients (1,2). Previous studies conclude that physical restraints are most widely used in intensive care units and most often on older people (3-5). Cognitive disorders (often seen due to diseases such as dementia, Alzheimer's disease), impaired muscle coordination and balance, and dependence on daily living activities are often seen in older people (3,6).

These problems affect the attitude of nurses towards older patients and are shown as the main reasons for the use of physical restraints in particular on older patients (7,8). It is reported that physical restraints are used on older people also to prevent falls and injuries arising from falls, and to prevent that patients having acute states of confusion, also known as delirium or agitation, inflict damage on themselves or other people by removing the tubes and drains fixed on them (6,8,9). Some authors report, on the other hand, that the use of physical restraints on older people are preferred by nurses because they reduce the workload and facilitates their work, also compensating for shortage of personnel and giving them a sense of confidence against legal responsibilities (9-11). Physical restraints are seen as a method of protecting and preventing interference in treatment. However, it is still being argued about its benefits, risks and ethical concerns associated with its use in critical care settings (12,13). The risks associated with the use of physical restraints include ecchymosis, pressure ulcers, complications of respiratory tract, urinary incontinence and constipation, insufficient nutrition, an increase of dependence on other people in daily activities, a decline in cardiovascular resistance, increased agitation, depression, delirium, low ego, low self-esteem, asphyxia, serious injuries or even conditions leading to fatal outcomes (10,12,13). The attitudes and beliefs of nurses with respect to the use of physical restraints and their attitudes towards patients of advanced age are considered as strong indicators affecting the usage of physical restraints in providing care to older people (7,10). While some of the existing studies investigating the attitudes of nurses towards older patients suggest that they display positive attitudes towards such patients (15-17) there have also been studies reporting negative attitudes (18,19). In their qualitative study Saarnio and Isola (2010) conclude that nurses, feeling that older patients are not able to take correct decisions for themselves,

find it justifiable to use, and apply to a greater extent, physical restraints in older people (20). Few studies have so far been performed in the world, which have investigated the attitude of nurses towards older people and their use of physical restraints (21,22). We believe that the current study will contribute to the existing literature in terms of providing insights into the effects of attitudes of intensive care nurses towards older people and the proper usage of physical restraints.

This study aimed to investigate the relationship between the attitudes among intensive care nurses towards older people and the use of physical restraints.

MATERIALS AND METHODS

Study Design

This cross-sectional study was performed to investigate the knowledge, attitudes and practices of intensive care nurses regarding the use of physical restraints, while investigating their attitudes towards elderly patients. The study was conducted in the intensive care units of three hospitals, two university hospitals and one private hospital, between February-April 2016. Verbal consent was obtained by the researchers after informing the nurses, who participated in the study on voluntary basis, about the purpose of the study.

Participants and Sampling

Information on the intensive care units, the number of nurses and the weekly average number of elderly patients in the hospitals were collected from three hospitals. The population of the study consists of 198 nurses, and considering the average number of elderly patients treated according to the units, nurses working in hematology intensive care, general surgery intensive care, and burns intensive care units were not included in the study. It consisted of 107 nurses who had at least 6 months of experience in an intensive care unit, who, according to own statements, have applied physical restraints on older patients and also agreed to fill in the questionnaire form. In this study, it is known that all nurses received training on elderly patient care. They reported that they received these **trainings** during the school/university process, orientation time or in-service training.

Data Collection and Tools

Tools

The study data was collected by means of a 'Questionnaire Form', 'the Scale for Measuring Nurses' Know-

ledge Level, Attitudes and Practices regarding the Use of Physical Restraints' and 'the Ageism Attitude Scale (AAS)'.

Questionnaire Form

The questionnaire form was designed on the basis of the models available in previous research (10,11,13,14,23-25). The questionnaire consisted of 16 questions in total, 10 questions designed to investigate the socio-demographic profile (age, gender, educational background, marital status, total period of service etc.) and professional features of nurses, and 6 questions (whether they have ever lived with an older person, education about elderly patient care and use of physical restraints received by the nurses etc.) aiming at investigating the factors that could affect the nurses' use of physical restraints and their attitudes towards older patients.

The Scale for Measuring Nurses' Knowledge Level, Attitudes and Practices Regarding the Use of Physical Restraints

This scale which was developed by Suenin 1999 has been adapted to Turkish society by Kaya et al. (2008). The scale consists three sections. The first section includes 11 items designed to measure the nurses' knowledge regarding the use of physical restraints. The scores in this section range between 0-11, and a higher score represents a higher level of knowledge. The second section includes 12 items set out to measure the attitudes of nurses with respect to the use of physical restraints. In this section in which scores range between 12 and 48, lower scores indicate negative attitudes. The third section, on the other hand, includes 14 items that aim to measure the nurses' practices regarding the use of physical restraints. The scores in this section range between 14 and 42. While higher scores obtained in this section indicate perfect practices, lower scores represent inappropriate practices (23,26). The test-retest total coefficient of the original scale developed by Suen (1999) 26 ranged between 0.85-0.99. Whereas the test-retest value of the scale adapted by Kaya et al. (2008) to Turkish society was found to be between 0.88-0.90, the Cronbach's Alpha value of the adapted scale was 0.69. In the present study the Cronbach's Alpha reliability coefficient was 0.742 (23).

Ageism Attitude Scale (AAS)

AAS is a scale developed by Vefikuluçay in 2008 it consists of 23 items (27). The items of the scale inclu-

ding statements concerning older people include the options 'strongly agree', 'agree', 'neither disagree nor agree', 'disagree' and 'strongly disagree'. The scores one can obtain in the scale range between 23 and 115. Higher scores obtained in this scale indicate a positive attitude in respect of ageism and vice versa for negative attitudes (27). AAS comprises three sub-dimensions (restricting the life of older people, positive ageism, negative ageism). The first sub-dimension is about the restrictions in the life of older people, i.e. opinions and perceptions of society regards restricting the social life of older individuals. An average score of around '45' obtained in this section shows that the nurses had a positive attitude in respect of the dimension of restricting the life of older people. The second subdimension is about positive ageism, i.e. positive opinions and perceptions towards older people. That nurses had an average score of around '40' in this section indicates that they had a positive attitude with respect to positive ageism. The third section involves negative ageism, i.e. negative opinions and perceptions society has towards older people. The nurses obtained an average score of around '30' in this section, which shows that they had less negative ageism as far as the dimension of negative ageism is concerned.

The scale was tested by Vefikuluçay (2008) in terms of validity and reliability, whereby Cronbach's alpha reliability coefficient was found to be 0.80. The Cronbach's alpha reliability coefficient of the present study, on the other hand, was 0.66 (27).

Data Collection

The data in the study were collected on the basis of self-reporting from nurses working in the intensive care units of three hospitals allowed to study. The questionnaire forms were administered on the basis of the information and on-call schedule received from the nurses in-charge, taking special care to allow nurses to fill them in when they worked during day-shift. The forms were distributed to the nurses early in the morning and returned in the afternoon in completed form. A time of about two hours was allowed for the forms that could not be completed in the determined time, at the end of which the forms were returned.

Statistical Analysis

To statistically analyse the data, SPSS 20.0 (IBM SPSS Inc., USA) software package was used. To test the assumption of normality for continuous variables involved in the study, the Shapiro Wilk test was used.

To examine the differences between the groups, while Mann Whitney U Test was used to compare two groups of variables that showed no normal distribution, Kruskal-Wallis test was used to compare three and more groups. Spearman's Correlation Coefficient was used to examine the relationship between variables that showed no normal distribution.

Ethical Considerations

Prior to commencing the study, ethical clearance was obtained from the ethical committee of Gazi University (code: 77082166) (02.03.2016). In addition, a written permission was obtained from Başkent University Ankara Hospital Chief Physician and Nursing Services Directorate, Gazi University Health Application and Research Center, Gazi Hospital Chief Physician and Private Bayındır Hospital Nursing Services Directorate. The participating nurses were also informed about the purpose and method of the study in oral and written form, with the annotation that the participation was voluntary.

RESULTS

Personal Information about Intensive Care Nurses

Of the nurses who participated in the study, 71% (n=76/107) were women, 62.6% (n=67/107) single and 42% (n=45/107) between 18-25 years of age. While the majority (92.5%, n=99/107) expressed living in a nuclear family, 57% (n=61/107) expressed having lived together with an older individual over a certain period of time in their life. In respect of educational background, 57% (n=61/107) expressed having an under- or post-graduate degree. While more than half (53.2%, n=57/107) of the intensive care nurses expressed working between 1-5 years in an intensive care unit, 79.4% (n=85/107) reported providing care to 0-3 patients (Table 1).

Results Concerning Some Personal Information about Intensive Care Nurses Regarding Usage of Physical Restraints and Care of Older People

Of the nursing staff who participated in the study, 50.5% stated that they applied physical restraint with the decision of the physician, 42.1% stated that they sometimes applied it in consultation with the physician, and 7.4% of them applied physical restraint by their own decision. In addition, 73.8% of the nurses stated using physical restraints to prevent the damages patients may inflict on themselves and other people, which would probably

Table 1. Certain descriptive features of intensive care nurses (n=107)

Descriptive features	
Gender	
Women	71.0% (n=76/107)
Men	28.9% (n=31/107)
Age	
18-25	42.0% (n=45/107)
26-30	32.7% (n=35/107)
30-47	25.2% (n=27/107)
Marital Status	
Married	37.3% (n=40/107)
Single	62.6% (n=67/107)
Educational Background	
High School	29.9% (n=32/107)
Associate's Degree	13.0% (n=14/107)
Undergraduate and higher level	57.0% (n=61/107)
Family Type	
Nuclear Family	92.5% (n=99/107)
Extended Family	7.4% (n=8/107)
Working time in the profession	
6 months - 1 year	12.2% (n=13/107)
1-5 years	46.7% (n=50/107)
5-18 years	41.1% (n=44/107)
Working time in the intensive care department	
6 months-1 year	14.9% (n=16/107)
1-5 years	53.2% (n=57/107)
5-18 years	31.7% (n=34/107)
Weekly working time	
30-48 hours	90.6% (n=97/107)
48-56 hours	9.3% (n=10/107)
Number of patients cared for on daily basis	
0-3	79.4% (n=85/107)
3-5	20.5% (n=22/107)

arise from removing medical equipment fixed on them such as tubes or drains in a state of agitation or delirium, 72.9% (n=79/107) said they did it to prevent a non-adherence to treatment due to a removal of restraining devices by patients. Some nurses (16.8%, n=18/107), on the other hand, expressed using such equipment to prevent patients from falling off of the bed. As regards the fixing place of devices, 87.8% (n=94/107) stated they fixed them on the wrist. In connection with the training they received in respect of using such equipment and tools, 56% (n=60/107) of the intensive care nurses stated having received training in this field, whereas 68.3% (n=41/60) stated that they received the training in an in-service educational programme, and 78.5% (n=84/107) expressed receiving it previously during their school/university studies (71%, n=76/84) (Table 2).

Table 2. Nurses' use of physical restraint and some descriptive characteristics of elderly patient care (n=107)

Descriptive features	
*Reason to use physical restraints on older patients	
**Inflicting self-damage or damage on others by the patient	73.8% (n=79/107)
*** Non-adherence to treatment	72.9% (n=78/107)
Risk of falling	16.8% (n=18/107)
*Place of the physical restraint used on the older patient	
Wrist	87.8% (n=94/107)
Fixed on four points	79.4% (n=85/107)
Ankle	28.9% (n=31/107)
Participation in a training regards the use of physical restraints	
Received training	56.0% (n=60/107)
Received no training	43.9% (n=47/107)
*Mode of training regards the use of physical restraints (n=60)	
In-service training	68.3% (n=41/60)
During under-graduate study	41.6% (n=25/60)
From books and journals	18.3% (n=11/60)
In congresses and seminars	16.6% (n=10/60)
Internet environment	10% (n=6/60)
Other sources (TV programmes)	1.67% (n=1/60)
Participation in a training regards old age and care of older patient	
Received training	78.5% (n=84/107)
Received no training	21.4% (n=23/107)
* Mode of training regards old age and care of older patient (n=84)	
During school / university studies	71.0% (n=76/84)
In-service training	45.7% (n=49/84)
Other sources (books, seminars, congresses)	5.6% (n=6/84)

* Given more than one responses

**To prevent that patients having states of agitation or delirium inflict damage on themselves or other people by removing the tubes, drains and other medical devices fixed on them

***Prevention of the continuity of the treatment by removing the medical equipment

Average Scores of Nurses on the Use of Physical Restraints and Ageism Attitude Scales

The results concerning the score averages nurses obtained in the sub-dimensions related to the knowledge level, attitudes and practices regarding the use of physical restraints show that they obtained a score of 7.22 ± 1.59 in the sub-dimension of knowledge, 31.60 ± 5.80 in that of attitudes and 37.64 ± 2.99 in the sub-dimension of practices.

The study findings indicate that the nurses obtained an average score of 86.13 ± 9.44 in total in AAS. The average scores of the nurses in the sub-dimensions of AAS were as follows: 36.48 ± 4.32 in the sub-dimension of 'restricting the life of older people', 30.76 ± 5.17 in that of 'positive ageism' and 18.90 ± 4.00 in the sub-dimension of 'negative ageism' (Table 3).

The study found, based on the evaluation of the scores nurses had in the sub-dimensions related to the knowledge level, attitudes and practices regarding the use of physical restraints with focus on the personal information, no statistically significant differences between sub-dimension mean scores and the gender, education level, marital status, total period of work of the nurses and the state of living with an older person. The mean knowledge scores regarding the use of physical restraints of nurses between the ages of 30-47 were significantly higher than those in the 26-29 age group (6.69 ± 1.76 ; $p=0.047$). Based on the evaluation of AAS sub-dimension scores of nurses according to their personal information, the study found no statistically significant differences between AAS subdimension mean scores and the age, gender, education level, marital status, total period of work of nurses as well as the state of living with an older person. In the present study, AAS 'negative ageism

Table 3. Comparison of the relationship between the Physical Restraints Scales Sub-Dimensions and The Ageism Attitude Scales Scores (n=107)

Sub-dimension average scores of the knowledge level, attitudes and practices concerning the use of physical restraints (min-max)	Mean	SD	Min	Max
Physical restraints dimension of knowledge (0-11)	7.22	1.59	3.00	10.00
Physical restraints dimension of attitude (12-48)	31.60	5.80	17.00	46.00
Physical restraints dimension of practices (14-42)	37.64	2.99	28.00	42.00
Average scores obtained in the sub-dimensions of Ageism Attitude Scale (min-max)				
Sub-dimension restricting the life of older people (9-45)	36.48	4.32	22.00	44.00
Sub-dimension of positive ageism (8-40)	30.78	5.17	12.00	40.00
Sub-dimension of negative ageism (6-30)	18.90	4.00	10.00	30.00
Ageism attitudes scale total scores (23-115)	86.13	9.44	57.00	106.00

SD: Standard Deviation

sub-dimension mean scores of nurses who had a work experience of between 1 and 5 years (19.61 ± 4.33) in an intensive care unit were significantly higher than the scores of those with a length of working time between 6 months and 1 year (16.31 ± 3.93 ; $p=0.023$).

Intensive care nurses (31.30 ± 5.06) who had received education about older patient care had higher mean scores for positive ageism sub-dimension scores than those who had not received such an education (28.78 ± 5.20 ; $p=0.028$).

The Relationship between The Use of Physical Restraints and Average Scores Achieved in The Ageism Attitude Scales and Its Sub-Dimensions

Our study found no statistically significant relationship between the total and sub-dimension average scores measured in the scale for measuring the knowledge, attitudes and practices of intensive care nurses regarding the use of physical restraints and those measured in the ageism attitude scale ($p>0.05$) (Table 4).

DISCUSSION

Nurses play a key role in deciding whether to use physical restraints. However, previous studies report that the majority of nurses in intensive care units take their decisions to use physical restraints on the basis of experience rather than sufficient clinical knowledge and evidences. For example, the majority of nurses believe that the use of physical restraints can prevent unplanned extubation and interruption of nursing interventions without considering psychological and physiological harmful effects of physical restriction (2).

Research reports conflicting results about nurses' knowledge, attitudes, and practices regarding the use of physical restraints (23). The present study found that the nurses had a good level of knowledge with respect to the

use of physical restraints, a result that is consistent with the results observed in previous studies (23,24). Several studies report, unlike the results of our study, that nurses have inadequate knowledge about physical restraints, display negative attitudes and demonstrate a lack of awareness regarding alternatives to physical restraints (13,28).

The attitudes and beliefs of nurses regarding the use of physical restraints are considered as key determinants on the application of physical restraints on patients (7,12,29). Our study found that intensive care nursing staff had a positive attitude in respect of the use of physical restraints. This result is similar to those observed in previous studies conducted in our country (25,26). Some studies report that nurses have positive attitude towards the use of physical restraints because they are not aware of the negative aspects of their usage, and apply physical restraints for practical reasons or consider it as a natural part of care and treatment responsibilities (30,31).

On the other hand, a review of previous studies performed in different countries on the use of physical restraints reveals that while some studies indicate positive attitudes of nurses in this respect (26,32), some studies report that nurses tend to have negative attitudes and harbour complicated feelings regarding the use of physical restraints (7,9-11,33). Some authors underline that the aim of the use of physical restraints by nurses is the key factor as to whether they display a positive or a negative attitude in this respect (11,34). The majority of the nurses participating in our study expressed using physical restraints to ensure the safety of patients. We believe that this factor may have created a positive attitude towards this practice, which, in turn, may have been reflected in the positive perception towards the application of physical restraints.

Table 4. The Sub-Dimension Average Scores Regarding The Relationship Between The Scale of Knowledge Level, Attitudes and Practices Concerning The Use and Physical Restraints By Intensive Care Nurses and The Ageism Attitude Scale (n=107)

	Restricting the life of older individual		Sub-dimension of positive ageism		Sub-dimension of negative ageism		AAS total score	
	r	p	r	p	r	p	r	p
Dimension of knowledge about physical restraints	0.135	0.164	0.095	0.332	0.105	0.284	0.130	0.182
Dimension of attitude regards physical restraints	0.50	0.608	-0.111	0.255	-0.083	0.394	-0.103	0.291
Dimension of practice of physical restraints	-0.036	0.714	0.063	0.518	-0.180	-0.079	-0.079	0.419

r= Spearman' correlation coefficient; $p < 0.05$, AAS: Ageism Attitude Scale

In a world of rapid increase of the older population and the increasing chronic diseases and the consequent need for care, the attitudes towards aging and older people among nurses working in direct close contact with patients are factors of great importance in determining the quality of health care (16,17). Our study found that intensive care nurses had positive attitudes towards ageism. While some of the previous studies performed on ageism report positive attitudes of nurses towards ageism (15-17), some studies have shown that nurses display a negative attitude in this respect (18,19,35). Higgins *et al.* (2007) conclude that nurses prefer to work with younger people rather than with older individuals (35). Attitudes towards older people can also vary depending on the socio-cultural structures and traditions prevailing in societies (17). Almost all the studies performed in our country with nurses and nursing students report findings indicating that nurses have positive attitudes with respect to ageism (16,17). We believe that the findings in our study indicating the positive attitudes of intensive care nurses towards ageism can be explained by traditional and uniform attitude of mind embedded in Turkish culture as far as the way of approaching older people is concerned.

Nurses should use physical restraints primarily with focus on specific safety features and their benefits in older people (11). Feeling that older patients are not able to take correct decisions for themselves, nurses find it justifiable to use and apply to a greater extent physical restraints in older patients (20). It is reported that the factors that prompt them to think so are care procedures developed for older patients and the risk of falling off of the bed with the consequent risk of being injured, and the risks to which patients with cognitive disorders and those who are dependent on others in daily activities are exposed (7,8,20). Even though evidence exists to suggest that practice of physical restraining does not have a reducing effect on falls or injuries arising from falls (11,32), nurses generally tend to consider the practice of physical restraints in caring older patients as a routine nursing intervention, without questioning its effects on older people and without taking other alternatives into consideration (20,36). The nurses who participated in our study believed that they applied physical restraints to the benefit of older patients, as a result of which they had a positive perception towards the use of such equipment.

In his study he performed with 52 nurses working in acute medical-surgical departments, Helmuth (1995)

reports that nurses who have a negative attitude towards older people do tend, in relatively higher rates, to apply physical restraints to older people (21). In another study they conducted with 201 nurses working in different departments of a hospital, Myers *et al.* (2001) found no relationship between the attitudes of nurses concerning the use of physical restraints and their attitudes towards older people (22). Similarly, our study also found no statistically significant relationship between the level of knowledge, attitudes and practices of intensive care nurses regarding the use of physical restraints and their attitudes towards older people. We believe that this finding can be attributed to the conviction of intensive care nurses that the use of physical restraints in older people is a part of the care of older people with the primary aim to ensure the safety of patients. Their attitudes resulting from the cultural and traditional structure of Turkish society characterized with due consideration and habitual protective approach towards older people and respect for their ideas may have also played an important role in this respect.

Limitations of the Study

Among the hospitals included in the study, only one hospital has a special form to evaluate the use of physical restraints. It is not known whether the nurses tried any alternative method before the restraint without recording the physical restraint application. It is thought that this situation may affect nurses' knowledge, attitudes and behaviors towards physical restraint. In addition, a relatively low number of samples the results can only be generalized to this group.

CONCLUSION

The study found that while intensive care nurses had a good level of knowledge, their attitudes and practice were at a positive level. Another result is that they had a positive attitude in respect of ageism.

The study found no statistically significant relationship between the sub-dimension average scores obtained in the scale for measuring the knowledge level, attitudes and practices regarding the use of physical restraints by intensive care nurses and those obtained in the Ageism Attitude Scale.

The study recommends, in light of the findings of our study, that nurses should receive in service training, or that nursing education/training programmes should be organised in a way that allows increasing their awareness towards appropriate use of physical restraints in

older patients. Furthermore, it is recommended that further studies with larger samples or more comprehensive studies should be conducted to better understand the attitudes of nurses towards older people and their knowledge level, attitudes and practices with regard to the use of physical restraints.

Acknowledgements: The authors want to thank the participants in the study.

Financial Disclosure and Conflict of Interest: The author declared that this study has received no financial support. No conflict of interest was declared by the authors.

Ethical considerations: Prior to commencing the study, ethical clearance was obtained from the ethical committee of Gazi University (code: 77082166) (02.03.2016). Informed consent from patients have been obtained.

Author Contributions: Concept –GK; Design –UP, GK; Supervision – UP; Data Collection and/or Processing –GK; Analysis and/or Interpretation – GK, UP; Literature Search –GK,UP; Writing Manuscript –GK; Critical Review – UP

REFERENCES

- Şahin S, Hatunoğlu Z. Geri dönüşüm sistemlerine yönelik algı düzeyi, finansmanı ve muhasebeleştirilmesi: Kahramanmaraş Sütçü İmam Üniversitesi Örneği. *Ekonomik ve Sosyal Araştırmalar Dergisi*. 2016;12(2):73-93.
- Li X, Fawcett TN. Clinical decision making on the use of physical restraint in intensive care units. *Int J Nurs Sci*, 2014;1:446-450.
- Burk R, Grap M, Munro C, Schubert C, Sessler C. Predictors of agitation in critically ill adults. *Am J Crit Care*. 2013;23(5):414-422.
- Kandeel NA, Attia AK. Physical restraints practice in adult intensive care units in Egypt. *Nurs. Health Sci*. 2013;15(1):79-85.
- Stinson KJ. Nurses' attitudes, clinical experience, and practice issues with use of physical restraints in critical care units. *Am J Crit Care*. 2016;25(1):21-26.
- Bai X, Kwok TCY, Ip IN, Woo J, Chui MYP, Ho FKY. Physical restraint use and older patients' length of hospital stay. *Health Psychol Behav Med*. 2014;2(1):160-170.
- Hamers JPH, Huizing AR. Why do we use physical restraints in the elderly? *Z Gerontol Geriat*. 2005;38(1):19-25.
- Scheepmans K, Dierckx de Casterlé B, Paquay L, Milisen K. Restraint use in older adults in homecare: A systematic review. *Int J Nurs Stud*. 2018;79:122-136.
- Chuang YH, Huang HT. Nurses' feelings and thoughts about using physical restraints on hospitalized older patients. *J Clin Nurs*., 2007;16(3):486-494.
- Hamers JPH. Review: Nurses predominantly have negative feelings towards the use of physical restraints in care of older patient, though some still perceive a need in clinical practice. *Evid Based Nurs*. 2015;18(2):64.
- Ralph M, Gabrielea M. Attitudes of nurses towards the use of physical restraints in care of older patient: A systematic review of qualitative and quantitative studies. *Int J Nurs Stud*, 2014;51(2):274-288.
- Eskandari F, Abdullah KL, Zainal NZ, Wong LP. Use of physical restraint: Nurses' knowledge, attitude, intention and practice and influencing factors. *J Clin Nurs*. 2017;26 (23-24):4479-4488.
- Salehi Z, Joolae S, Hajibabae F, Ghezjelh TN. The challenges of using physical restraint in intensive care units in Iran: A qualitative study. *J Intensive Care Soc*. 2021;22(1):34-40.
- Coşgun T, Kısacık GÖ, Stinson KJ. Evaluation of physical restraint practices and their neurovascular effect on intensive care unit patients. *Yoğun Bakım Dergisi*. 2019;10(2):1-10.
- Liu Y, Norman IJ, While AE. Nurses' attitudes towards older people: A systematic review. *Int J Nurs Stud*. 2013;50(9):1271-1282.
- Özer ZC, Terkeş N. Evaluation of nursing students' attitudes towards ageism in Turkey. *Procedia Soc Behav Sci*. 2014;116:2512-2515.
- Ünal D, Soyuer F, Elmalı F. Evaluation of the attitudes of the care of older patient center workers towards elderly patient. *Kafkas J Med Sci*. 2012;2(3):115-120.
- Hanson RM. Is elderly care affected by nurse attitudes? A systematic review. *Br J Nurs*. 2014;23(4):225-229.
- Kydd A, Engstrom G, Touhy T, Newman D. Attitudes of nurses, and student nurses towards working with older people and to gerontological nursing as a career in Germany, Scotland, Slovenia, Sweden, Japan and the United States. *Int. J Nurs Stud*. 2014;6:182-190.
- Saarnio R, Isola A. Nursing staff perceptions of the use of physical restraint in institutional care of older people in Finland. *J Clin Nurs*. 2010;19 (21-22): 3197-3207.
- Helmuth AM. Nurses' attitudes toward older persons on their use of physical restraints. *Orthop Nurs*. 1995;14:43-51.
- Myers H, Nikolett S, Hill A. Nurses' use of restraints and their attitudes toward restraint use and the elderly in an acute care setting. *Nurs Health Sci*. 2008;3(1):29-34.
- Kaya H, Aşti T, Acaroğlu R, Erol S, Savcı C. Hemşirelerin fiziksel tespit edici kullanımına ilişkin bilgi tutum ve uygulamaları. *Maltepe Üniversitesi Hemşirelik Bilim ve Sanat Dergisi*. 2008;1(2): 21-29.
- Moradimajd P, Noghabi AA, Zolfaghari M, Mehran A. Physical restraint use in intensive care units. *Journal of Critical Care Nursing*. 2015; 8(3):173-178.
- Celik S, Kavrazlı S, Demircan E, Güven N, Durmuş Ö, Duran ES. Yoğun bakım hemşirelerinin fiziksel tespit kullanımına ilişkin bilgi, tutum ve uygulamaları. *Acıbadem Üniversitesi Sağlık Bilimleri Dergisi*. 2012;3:176-183.
- Suen LKP. Knowledge, attitudes and practice of nursing home staff towards physical restraints in Hong Kong nursing homes. *Asian J Nurs Stud*, 1999;5:73-86.
- Vefikuluçay D. Üniversitede öğrenim gören öğrencilerin yaşlı ayrımcılığına ilişkin tutumları (Doktora Tezi). Ankara, Hacettepe Üniversitesi, 2008.
- Suen LKP, Lai CKY, Wong TKS, Chow SKY, Kong SKF, Ho JYL. et al. Use of physical restraints in rehabilitation settings: staff knowledge, attitudes and predictors. *J Adv Nurs*. 2006;55(1):20-28.
- Agens EJ. Chemical and physical restraint use in the older person. *Br J Med Prac*. 2010;3(1):302-307.
- Fashafsheh I, Mohamed S, Ayed A, Al -Rababah D. A descriptive cross-sectional study to assess the perception and knowledge of staff nurses regarding physical restraints. *Open J Nurs*. 2019;7(9): 239-248.

31. Jiang H, Li C, Gu Y, He Y. Nurses' perceptions and practice of physical restraint in China. *Nursing Ethics*. 2015;22(6): 652-660.
32. Köpke S, Mühlhauser I, Gerlach A, Haut A, Haastert B, Möhler R, Meyer G. Effect of a guideline-based multi component intervention on use of physical restraints in nursing homes: A randomized controlled trial. *JAMA*. 2012;307(20):2177-2184.
33. Balcı H, Arslan S. Nurses' information, attitude and practices towards use of physical restraint in intensive care units. *J Caring Sci*. 2018;7(2):75-81.
34. Lai, CK. "Nurses using physical restraints: are the accused also the victims? -A study using focus group interviews". *BMC Nursing*. 2007; 6(1):5.
35. Higgins I, Van Der Riet P, Slater L, Peek C. The negative attitudes of nurses towards older patients in the acute hospital setting: a qualitative descriptive study. *Contemp Nurse*. 2007;26(2): 225-237.
36. Natan BM, Akrish O, Zaltkina B, Noy RH. Physically restraining elder residents of long-term care facilities from a nurses' perspective. *Int J Nurs Pract*. 2010;16(5): 499-507.