

INVESTIGATION OF THE KNOWLEDGES AND OPINIONS OF FACULTY OF HEALTH SCIENCES FINAL YEAR STUDENTS ABOUT FORENSIC NURSING AND MIDWIFERY

SAĞLIK BİLİMLERİ FAKÜLTESİ SON SINIF ÖĞRENCİLERİNİN ADLI HEMŞİRELİK VE EBELİK HAKKINDAKİ BİLGİ VE GÖRÜŞLERİNİN İNCELENMESİ

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Özet

Amaç: Araştırma, bir devlet üniversitesinde hemşirelik ve ebelik bölümünde okuyan son sınıf öğrencilerin adli hemşirelik ile ebelik hakkında sahip oldukları bilgi ve görüşlerinin belirlenmesi amacıyla yapılmıştır.

Yöntem: Araştırma, tanımlayıcı-kesitsel olarak Nisan-Mayıs 2022 tarihleri arasında Türkiye'nin doğusundaki bir üniversitenin Sağlık Bilimleri Fakültesi'nde öğrenim gören 200 son sınıf hemşirelik ve ebelik öğrencilerinin katılımı ile gerçekleştirilmiştir. Araştırma verileri "Bilgi Formu" ile toplanmıştır. Verilerin analizinde tanımlayıcı istatistikler ve ki-kare önemlilik testi kullanılmıştır. İstatistiksel anlamlılık düzeyi $p < 0.05$ olarak kabul edilmiştir.

Bulgular: Araştırmada katılımcıların yaş ortalaması 22.75 ± 1.14 olup ve %89'unun herhangi bir adli, tıbbi olay yaşamadığı belirlenmiştir. Katılımcıların, %48'i adli hemşirelik/ebelik hakkında bilgisi olduğunu ve adli hemşirenin/ebenin rol ile sorumluluklarını %32.5'i öğrenmediğini belirtmiştir. Adli hemşirelik/ebelik hakkında eğitim alma durumu, konuyla ilgili alanda çalışmayı isteme durumu ve bölümü isteyerek seçme durumu ile bölümler arası fark istatistiksel olarak anlamlı saptanmıştır ($p < 0.05$). Ayrıca adli hemşirelikte/ebelikte çalışmayı isteme durumu ile cinsiyet grupları arasında fark istatistiksel olarak anlamlı bulunmuştur ($p < 0.05$).

Sonuç: Öğrencilerin adli hemşirelik/ebelik dersi verilmesi gerektiğini, adli hemşirelik/ebelik hakkında bilgi sahibi olmadıklarını ve ayrı disiplin olarak yer alması gerektiğini belirtmiş olması dikkat çekmiştir. Adli hemşirelik/ebelik hakkında yeterince bilgiye sahip olunması için uzman olan kişiler tarafından ders, sunum ya da kongre şeklinde düzenlenerek eğitim verilmesi gereklidir.

Anahtar Kelimeler: Adli, Ebelik, Hemşirelik, Öğrenci

Abstract

Purpose: The research has been made in order to determine the knowledges and opinions of final year students studying in the nursing and midwifery department at a state university about the forensic nursing and midwifery.

Material and Methods: The research has been conducted as a descriptive-cross-sectional study between April and May 2022, with the participation of 200 final year nursing and midwifery students studying at the Faculty of Health Sciences of a university in eastern Turkey. The research data has been collected with the "Information Form". The descriptive statistics and chi-square significance test have been used to analyze the data. The statistical significance level has been accepted as $p < 0.05$.

Results: In the research, the average age of the participants was 22.75 ± 1.14 and it has been determined that 89% of them has not been experienced any forensic or medical events. In this study, 48% of the participants have stated that they had knowledge about the forensic nursing/midwifery and 32.5% did not learn the roles and responsibilities of a forensic nurse/midwife. The difference between the departments has been found to be statistically significant based on the status of receiving training on the forensic nursing/midwifery, wanting to work in the relevant field, and choosing the department willingly ($p < 0.05$). Additionally, the difference between the willingness to work in the forensic nursing/midwifery and gender groups has been found to be statistically significant ($p < 0.05$).

Conclusion: It has been drawn attention that the students have stated that the forensic nursing/midwifery courses are required to be given, that they did not have knowledge about the forensic nursing/midwifery and that it is required to be included as a separate discipline. Training is required to be provided by the persons being expert in the form of lectures, presentations or congresses in order to have sufficient knowledge about the forensic nursing/midwifery.

Keywords: Forensic, Midwifery, Nursing, Student

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INTRODUCTION

The increase in the rate of forensic case involving crime and violence in the social life and in the media is considered a universal health problem (1). It is defined as the field of forensic science, which provides the collection, examination and evaluation of all kinds of evidence in these forensic cases (2). The year 2020 has been announced as the year of the forensic nurse and midwife by the International Association of Forensic Nurses and it has been emphasized the importance of improving the health of criminals and victims in the forensic cases at the international level and supporting the patient-centered care (3). Today, the developments in the science and technology have also helped the healthcare professionals meet the demands of their practices and roles in the field of forensic medicine (1,4). Although the field of forensic medicine is seen as the caregiving responsibility of only forensic medicine experts or forensic nurses, it is one of the services that can also be provided by midwives in certain cases (5). The field of gynecology and midwifery, which covers the medicine, law and criminology that deals with the health conditions legally, is defined as forensic midwifery (5-7). In forensic midwifery, there are areas in which the midwives serve, such as rape or domestic violence against women and children, women and children exposed to medical errors or maltreatment, legally intentional or unintentional injuries during pregnancy, and child neglect and abuse (5,6). On the other hand, the forensic nursing is the forensic field that examines and scientifically investigates the examination of criminals and victims in violent, traumatic or other criminal events, or victims in death cases, in accordance with the legal procedures of nursing science (8). Nurses are the first people to meet individuals, to contact and guide their families or relatives, to touch their belongings during the examination, and to come into contact with the laboratory sample (4). Nurses have an effective role in protecting the patient rights and improving the outcomes,

especially in the vulnerable groups in the society (5). Within the scope of the field of the forensic nursing and forensic midwifery, there are responsibilities such as case reporting, collecting and preserving evidence and providing care (7). Organizing and documenting the information they obtain in the forensic cases are one of their most important responsibilities, as it is used in the courts to illuminate the critical points of the case (9). In Turkey, the nurses and midwives have difficulty in fulfilling their responsibilities because they do not have sufficient knowledge about the forensic medicine, forensic nursing and forensic midwifery. It is important to know the techniques and procedures for identifying, collecting and storing the evidences in order for the justice to be carried out correctly, effectively and quickly (8). It is noteworthy that many universities in Turkey do not offer courses on the management of forensic cases, and in some universities, the courses about the forensic midwifery and forensic nursing are included in the elective category (10). It is thought that the lack of forensic midwifery, forensic nursing and forensic medicine education before and after the graduation will lead to an increase in the legal problems. For this reason, the forensic cases admitted to the hospitals are required to be handled safely, in order to increase the quality of education in the forensic field. Our study aims to contribute to the studies in the literature by comparing the knowledges and opinions of midwifery and nursing final year students on the subject of forensic nursing and midwifery.

MATERIALS AND METHODS

Type of the Research

This research has been conducted with a descriptive cross-sectional design.

Population and Sample of the Research

The population of the research has consisted of 270 final year nursing and midwifery students studying at a university's faculty of health sciences. The research has been conducted by random sampling method

with 200 students, 150 of whom were nurses and 50 of whom were midwives, who accepted the study.

Data Collection Tools of the Research Information Form

It consists of 34 questions that include the socio-demographic characteristics (age, class, marital status, family type, etc.) and their knowledges and opinions about the forensic nursing/midwifery of the students who volunteered to participate in the research in line with the literature review by the researcher (8,11,12).

Application of the Research

An explanation has been given to the students participating in the research about the research, and data has been collected between April and May 2022 by applying a self-report survey technique. These surveys have been completed by the students within an average of 10 minutes after signing the informed consent form.

Evaluation of the Data

The analysis of the data has been done in the "SPSS for Windows 22" package program. The data regarding the women's sociodemographic information have been stated through the descriptive analysis. The findings of the study have been expressed as mean \pm standard deviation or median (minimum-maximum), and the categorical variables have been expressed as number of the cases and percentage. Whether the research data were normally distributed or not has been evaluated according to the Kurtosis and Skewness coefficients. The number-percentage calculations and chi-square significance tests have been used to evaluate the data. The statistical significance level has been accepted as $p < 0.05$.

Ethical Dimension of the Research

Before starting the research, the ethics committee permission has been obtained from the ethics committee chairman of a state

university and institutional permission has been obtained from the institution where the study would be conducted. The ethical principles including the principle of "Informed Consent" have been fulfilled by informing the students included in the research about the study, and the principle of "Respect for Autonomy" has been fulfilled by recruiting those who wanted to participate in the research voluntarily. The ethical principles contained in the Declaration of Helsinki have been complied with in the research.

Limitations of the Research

This study is limited to Kafkas University Faculty of Health Sciences nursing and midwifery final year students. In addition, it can be generalized to students who voluntarily participated in the research during the time period when the research was conducted.

RESULTS

Of the students who participated in the study, 71% female and 29% male students have participated in our research. The average age of the participants is 22.75 ± 1.14 . In this study, 25% of the students are midwifery students and 75% are nursing students. It has been found that 79% of the students had an elementary family, 64.5% had an income equal to their expenses, 63% had a mother who was a primary school graduate, and 24.5% had a father who was a primary school graduate. It has been determined that 54% of the students' families lived in the city and 51.5% spent their lives in the city. It was found that 72% of the students chose their departments willingly and 57% have stated that their course success was average. It has been found that 89% of the students' mothers were housewives and 42.5% of their fathers were self-employed. 6.5% of the students' relatives are interested in the forensic medicine and 89% have not experienced a forensic medical incident. When it comes to the forensic medicine, the first concepts that come to mind are 13.2% autopsy, 12.8% forensic law/health law, police, criminal, 10.6% forensic cases/events and the word autopsy, and the

lowest 0.4% for medical malpractice is killer concepts. It has been stated that 30.5% of the students, it was necessary to uncover an uncertain situation or a forensic event related to the medicine, 22.5% have stated that the cause of death of the deceased was determined and collected evidence, 13% have stated that they did not know, and at least 0.5% has stated that they were in the hospital as the purpose of forensic medicine as ensuring security. Of the students who participated in the study, 28% of the students have not known the definition of forensic midwifery/nursing, 14% have defined it as helping to investigate the cause of death in the forensic cases, recording the data and concluding the case, and the lowest 2.5% has defined it as medically illegal situations and marriages under the age of 18 and it has been defined as reporting conditions such as pregnancy. It has been determined that 32.5% of the students did not know the roles and responsibilities of the forensic nurse/midwife, 15% stated that they reported the evidence collected to the competent authorities when faced with a forensic incident, and 3% stated that their aim was to ensure the safety of the patient and protect their privacy. Of the students who participated in the study, 48% of the students have stated that they had knowledge about the forensic midwifery/nursing, 48.5% took courses in the forensic nursing/midwifery at school, 87% said there was a need for the forensic nursing/midwifery courses and 75.5% thought that the forensic nursing/midwifery should be a separate discipline. It has been determined that 54.5% of the students did not know about the forensic nursing/midwifery, 39.5% learned it from the courses they took at university, 5.5% learned it from the internet/social media and 0.5% learned it from

television. It has been stated that 84.5% of the students are required to be given forensic nursing/midwifery training, 44% of forensic nursing/midwifery training are required to be given at the university, and 45% are required to take it as a semester course during the basic vocational education. The specific criteria and characteristics that the forensic nurses/midwives are required to have were defined by 31.2% of the students as not having sufficient knowledge about the forensic events, 30.7% as not knowing, and the lowest 0.9% as being acuminous and skeptical. While 40.2% of the students have define their work areas as hospitals, Community Health Centers and Family Health Centers; 15.2% have stated it as a criminal case and a criminal incident, and the lowest 0.8% has stated it as a sexual assault examination. The students have stated that 76.5% of the forensic nurses/midwives are required to have criteria, and 25.5% of these criteria have stated that they are required to be knowledgeable and have strong interpretation skills, 18.2% have stated that they are required to be careful and responsible, and 1.8% have stated that they are required to be courageous. It has been found that 89.5% of the students had a need for the forensic midwives/nurses in Turkey, and 38% have stated that they wanted to work in every field related to the subject.

In Table 1, a significant relationship has been found between the students' gender, mother's education level, and their voluntary choice of the department ($p<0.05$). There has been no statistically significant difference between the department the students studied and their family type, income level, father's education level, place the family lives, and course success ($p>0.05$).

Table 1. Comparison of the Socio-demographic Characteristics of the Nursing and Midwifery Students (n=200).

| Questions | | n | Departments | | p | X ² |
|--|---------------------------|-----|-------------|------------|--------------|----------------|
| | | | Nursing | Midwifery | | |
| Gender | Female | 142 | 92(%64.8) | 50(%35.2) | 0,000 | 27,230 |
| | Male | 58 | 58(%100) | 0(%0) | | |
| Family Type | Nuclear family | 158 | 118(%74.7) | 40(%25.3) | 0,841 | 0,040 |
| | Extended family | 42 | 10(%23.8) | 32(%76.2) | | |
| Income Status | Income less than expenses | 59 | 42(%71.2) | 17(%28.8) | 0,327 | 2,238 |
| | Income equals expenses | 129 | 97(%75.2) | 32(%24.8) | | |
| | Income more than expenses | 12 | 11(%91.7) | 1(%8.3) | | |
| Mother's Educational Status | Primary School | 126 | 100(%79.4) | 26(%20.6) | 0,003 | 14,083 |
| | Secondary School | 31 | 25(%80.6) | 6(%19.4) | | |
| | High School | 35 | 23(%65.7) | 12(%34.3) | | |
| | University | 8 | 2(%25.0) | 6(%75.0) | | |
| Father's Educational Status | Primary School | 74 | 59(%79.7) | 15 (%20.3) | 0,460 | 2,585 |
| | Secondary School | 49 | 36(%73.5) | 13(%26.5) | | |
| | High School | 42 | 28(%66.7) | 14(%33.3) | | |
| | University | 35 | 27(%77.1) | 8(%22.9) | | |
| Place the Family Lives | Village | 40 | 32(% 80.0) | 8(% 20.0) | 0,241 | 2,848 |
| | County | 54 | 36(%66.7) | 18(%33.6) | | |
| | City | 106 | 82(%22.6) | 24(% 77.4) | | |
| Place the Family Lives On | Village | 36 | 27(%75.0) | 9(%25.0) | 0,205 | 4,585 |
| | Town | 7 | 6 (%85.7) | 1(%14.3) | | |
| | County | 54 | 35(%64.8) | 19(%35.2) | | |
| | City | 103 | 82(%77.3) | 21(%25.8) | | |
| Choosing the Department Willingly | Yes | 144 | 101(%66.9) | 43(%30.1) | 0,011 | 6,481 |
| | No | 56 | 49(%88.9) | 7(%11.1) | | |
| Course Success Status | Bad | 9 | 2(%22.2) | 7(%77.8) | 0,321 | 2,274 |
| | Medium | 113 | 24(%21.2) | 89(%78.8) | | |
| | Good | 78 | 24(%30.8) | 54(%69.2) | | |

X²= Chi square test

In Table 2, the difference between the departments in terms of providing training related to the forensic nursing/midwifery, having certain criteria and characteristics of the forensic nurses/midwives, and wanting to work in the field of forensic nursing/midwifery has been found to be statistically significant (p<0.05). Experiencing a forensic medicine incident status, knowledge of the forensic nursing/midwifery status, needing to take courses related to the subject status, needing to take courses on the forensic nursing/midwifery status, being a separate discipline status, requiring to the forensic midwives/nurses status in Turkey and the difference between the departments. It was not found to be statistically significant (p>0.05).

In Table 3, it has been found that the genders of the students, their knowledge about the forensic nursing/midwifery, those who need to take courses, the status of being a separate discipline, providing training, status of presence of the certain criteria and characteristics of the forensic nurses/midwives, status of needing for the forensic midwives/nurses in Turkey, and the difference between the willingness to work were statistically significant (p<0.05). No statistically significant difference has been found between the gender, experiencing a forensic medicine incident and taking a forensic nursing/midwifery course (p>0.05).

In Table 4, a significant relationship has been found between the knowledge about the forensic nursing/midwifery and the definition of the forensic nursing/midwifery (p=0.000).

Table 2. Comparison of the Forensic Nursing/Midwifery Knowledge of the Nursing and Midwifery Students(n=200)

| Questions | | n | Departments | | P | X ² |
|---|-------------------------------|-----|-------------|------------|--------------|----------------|
| | | | Nursing | Midwifery | | |
| Status of Experiencing Any Event Related to the Forensic Medicine | Yes | 22 | 17(%77.3) | 5(%22.7) | 0,794 | 0,068 |
| | No | 178 | 133(%74.7) | 45(%25.3) | | |
| Information Status about the Forensic Nursing/Midwifery | Yes | 96 | 73(%72.5) | 23(%23.5) | 0,744 | 0,107 |
| | No | 104 | 77(%74.0) | 27(%26.0) | | |
| Status of Taking Courses on the subject of Forensic Nursing/Midwifery | Yes | 97 | 72(%74.2) | 25(%25.8) | 0,806 | 0,060 |
| | No | 103 | 78(%75.7) | 25(%24.3) | | |
| Status of Needing to Take Courses related to the Forensic Nursing/Midwifery | Yes | 174 | 127(%73.0) | 47(%27.0) | 0,089 | 2,888 |
| | No | 26 | 23(%88.5) | 3(%11.5) | | |
| Should Forensic Nursing/Midwifery Be a Separate Discipline? | Yes | 151 | 110(%72.8) | 41(%27.2) | 0,397 | 1,849 |
| | No | 28 | 22(%78.6) | 6(%21.4) | | |
| | I don't know | 21 | 18(%85.7) | 3(%14.3) | | |
| Should Training be Provided on Forensic Nursing/Midwifery? | Yes | 169 | 121(% 71.6) | 48(% 28.4) | 0,009 | 6,732 |
| | No | 31 | 29(%93.5) | 2(%6.5) | | |
| Should Forensic Nurses/Midwives Have Certain Criteria/Features? | Should be | 153 | 114(%74.5) | 39(%25.5) | 0,000 | 19,858 |
| | Shouldn't be | 31 | 30(% 96.8) | 1(%3.2) | | |
| | I don't know | 16 | 6(%37.5) | 10(%62.5) | | |
| Status of Requiring for the Forensic Nurses/Midwives in Turkey | Yes | 179 | 131(%73.2) | 48(% 26.8) | 0,083 | 2,997 |
| | No | 21 | 19(%90.5) | 2(%9.5) | | |
| Status of Wishing to Work in the Forensic Nursing/Midwifery | Yes | 49 | 27(%55.1) | 22(%44.9) | 0,000 | 16,215 |
| | No | 60 | 53(%88.3) | 7(%11.7) | | |
| | I don't know / I am undecided | 91 | 70(%76.9) | 21(%23.1) | | |

X²= Chi square test

Table 3. Comparison of the Students' Forensic Medicine/Nursing/Midwifery Knowledge by Gender

| Questions | | n | Gender | | P | X ² |
|---|--------------|-----|-------------|------------|--------------|----------------|
| | | | Female | Male | | |
| Status of Experiencing a Forensic Medicine-Related Event | Yes | 23 | 17(%77.3) | 6(%22.7) | 0,482 | 0,493 |
| | No | 177 | 124(%70.1) | 53(%29.9) | | |
| Information Status about the Forensic Nursing/Midwifery | Yes | 96 | 77(%80.2) | 19(%19.8) | 0,006 | 7,603 |
| | No | 104 | 65(62.5) | 39(%37.5) | | |
| Status of Taking Forensic Nursing/Midwifery Courses | Yes | 97 | 75(%77.3) | 22(%22.7) | 0,056 | 3,653 |
| | No | 103 | 67(%65.0) | 36(%35.0) | | |
| Status of Needing to Take Courses related to the Forensic Nursing/Midwifery | Yes | 174 | 131(%75.3) | 43(%24.7) | 0,001 | 11,949 |
| | No | 26 | 11(%42.3) | 15(%57.7) | | |
| Should Forensic Nursing/Midwifery Be a Separate Discipline? | Yes | 151 | 116(%76.8) | 35(%23.2) | 0,002 | 12,002 |
| | No | 28 | 17(%60.7) | 11(%39.3) | | |
| | I don't know | 21 | 9(%42.9) | 12(%57.1) | | |
| Should Training be Provided related to the Forensic Nursing/Midwifery? | Yes | 169 | 133(% 78.7) | 36(% 21.3) | 0,000 | 31,558 |
| | No | 12 | 4(%33.3) | 8(%66.7) | | |
| | I don't know | 19 | 5(%26.3) | 14(%73.7) | | |
| Should Forensic Nurses/Midwives Have Certain Criteria and Features? | Should be | 153 | 123(%80.4) | 30(%19.6) | 0,000 | 37,345 |
| | Shouldn't be | 31 | 8(% 25.8) | 23(%74.2) | | |
| | I don't know | 16 | 11(%68.8) | 5(%31.2) | | |
| Status of Requiring for the Forensic Nurses/Midwives in Turkey | Yes | 179 | 135(%75.4) | 44(% 24.6) | 0,000 | 16,168 |
| | No | 21 | 7(%33.3) | 14(%66.7) | | |
| Status of Wishing to Work in the Forensic Nursing/Midwifery | Yes | 49 | 41(%83.7) | 8(%16.3) | 0,000 | 21,709 |
| | No | 60 | 29(%48.3) | 31(%51.7) | | |
| | I don't know | 91 | 72(%79.1) | 19(%20.9) | | |

X²= Chi square test

Table 4. Comparison of the Students' Knowledge About the Forensic Nursing/Midwifery and Forensic Medicine/Nursing/Midwifery Knowledge

| Questions | n | Information Status about the Forensic Nursing/Midwifery | | p | X ² | |
|---|--|---|------------|-----------|----------------|--------|
| | | Yes | No | | | |
| Forensic Medicine Purpose | Determining the cause of death of the deceased and collecting evidences | 45 | 20(%44.4) | 25(%55.6) | 0,058 | 10,706 |
| | It is the branch of medicine that deals with/examines the forensic cases and collects evidence in the research. | 19 | 5(%26.3) | 14(%73.7) | | |
| | Preventing the illegal procedures and ensuring the justice in the medical procedures | 25 | 12(%48.0) | 13(%52.0) | | |
| | Providing the emergence of an uncertain situation or medical-related forensic event | 61 | 38(%62.3) | 23(%37.7) | | |
| | I don't know | 26 | 9(%34.6) | 17(%65.4) | | |
| | Other | 24 | 12 (%50.0) | 12(%50.0) | | |
| Definition of the forensic nursing/midwifery | Collecting the evidences in the forensic cases and reporting it to the necessary places (police, authorities) | 20 | 17(%85.0) | 3(%15.0) | 0,000 | 27,518 |
| | Assisting in the investigation of the cause of death in the forensic cases, recording the data and concluding the case | 28 | 18(%64.3) | 10(%35.7) | | |
| | Making a diagnosis by examining the signs and symptoms of the bruises, injuries, etc. on the bodies of forensic cases | 20 | 7(%35.0) | 13(%65) | | |
| | Investigating the body with people who have legal knowledge, follow the process and have knowledge on the subject of forensic matters | 22 | 11(%50.0) | 11(%50.0) | | |
| | A person who assists the other party in a legal incident/case, ensures the preservation of evidence and is aware of his/her responsibilities | 22 | 11(%50.0) | 11(%50.0) | | |
| | Other | 27 | 13(%48.1) | 14(%51.9) | | |
| | I don't know | 56 | 15(%26.8) | 41(%73.2) | | |
| | Reporting medically illegal situations such as marriage and pregnancy under the age of 18 | 5 | 4(%80.0) | 1(%20.0) | | |

X²= Chi square test

DISCUSSION

In the increasing crime and violence incidents in our country, midwives and nurses are the first healthcare professionals encountered by both the victim and the perpetrator in the healthcare institution. In this respect, having sufficient knowledge on the subject of forensic midwifery and nursing by midwives and nurses provides them to take the

necessary approach to judicial cases and facilitate the resolution of judicial cases (13). In our country, forensic case evaluation is carried out by midwives and nurses who are not trained on this subject. This situation causes deficiencies in the evaluation of forensic cases, collection, storage and delivery of evidence to the judicial authority, and an inadequate approach to forensic cases (8). It is thought that forensic medicine and forensic case subjects

should be included in national midwifery and nursing education. In this regard, in our study, it was aimed to determine the knowledge and opinions of midwifery and nursing senior department students, who are the healthcare personnel of the future, about forensic medicine, forensic sciences and forensic case management.

In the studies conducted in the literature review, it was found that the participants did not have knowledge about the forensic case process and did not receive education about the forensic case at school (13-16). In this study, it was determined that the majority of students did not have knowledge and did not receive any training about forensic nursing/midwifery. In the study of Özden et al., it was found that nursing students did not encounter forensic medicine-related incidents, did not have fully sufficient knowledge of forensic nursing, and education was necessary for their professional lives (4). In the study of Karabulutlu et al., (16) it was stated that physicians, nurses and midwives working in the emergency department did not receive information about forensic cases, forensic nursing and forensic midwifery, and that training should be given in schools about the approach to forensic cases. In other studies concluded with mostly female participants, it was stated that forensic nursing/midwifery training should be provided (1,6). In our study, it was determined that the majority of them did not encounter with a forensic medicine-related incident and did not take courses about forensic events, and that training about forensic case management should be provided. In the study of Öztürk et al., (7) it was determined that midwifery students wanted to work in the field of forensic midwifery. Moreover, in our study, it was found that midwifery students wanted to work in the field of forensic midwifery more (Table 2). This situation supports the result of our research. The reason why midwifery students want to work in the forensic field compared to nursing students is that they find forensic events more exciting, curious and interesting. Today, our study revealed that students need to take courses on

forensic nursing/midwifery and that a solution is required to be produced on this issue, and that they do not have information about the roles and responsibilities of them in approaching forensic cases.

In studies conducted in our country with a large number of female participants, it has been stated that there is a need for the field of forensic nursing/midwifery/medicine in Turkey (6,8,16). In our study, 89.5% of the students stated that the field of forensic nursing/forensic midwifery is required to be needed in Turkey. A significant relationship was found between the situation need in Turkey and the gender of students ($p = 0.000$) (Table 3). In the study conducted by Akcin et al., (17) it was determined that the forensic nursing/midwifery field of health professionals working in the emergency department is required to be a separate department. In a study conducted in Saudi Arabia intended to nurses, 80.0% stated that forensic nursing is required to be a subspecialty branch (18). In the study conducted intended to midwives in our country, it was determined that forensic midwifery is required to be taken place as a sub-discipline (6). In our study, it was determined that 75.5% of midwifery and nursing students thought that the forensic nursing/midwifery department is required to be a separate discipline. The difference between forensic nursing/midwifery being a separate discipline according to the gender of students was found to be statistically significant ($p=0.002$) (Table 3). The results of the studies concluded support our study. It is thought that the fact that the forensic nursing/midwifery department is not a separate discipline in our country will cause deficiencies or inaccuracies in the collection, protection and storage of evidence in forensic cases. Moreover, the judicial case management legal process should be managed without problem.

In this study, 30.5% of the students think that the purpose of the forensic medicine is to uncover an uncertain situation or a forensic event related to the medicine, and 22.5% think that the purpose of the forensic medicine is to determine the cause of death of the deceased

and collect evidences. 28% of the students have stated that they did not know the definition of the forensic midwifery/nursing. A significant relationship has been found between knowledge status about the forensic nursing/midwifery and the definition of the forensic nursing/midwifery ($p=0.000$) (Table 4). In the study conducted by Karabulutlu et al.,(16) 32.9% stated that they did not know the purpose of forensic medicine and 30.3% stated that it was to investigate and clarify the suspicious death. In a study conducted, 34% have stated it as revealing the unknown and 28% stated it as determining the cause of death (8). In the study conducted in terms of the midwives, 74.3% of them have found the purpose of the forensic medicine to be revealing the unknown in the forensic cases and 25.7% to determine the cause of death in the forensic cases. Additionally, in the study, 18.6% have stated that they did not know the definition of a judicial case (6). When we look at the data of our study, there is a similarity with the literature. It is thought that the students do not know the definition of the forensic nursing/midwifery as a result of not having received the forensic nursing/midwifery training and having no knowledge about this subject.

In our study, it was found that 71% of the students were women and 63% of their mothers were primary school graduates, and 57% of them stated that the success level was medium. 86% of midwifery students and 67.3% of nursing students chose the department willingly. According to the results of the comparison of the socio-demographic characteristics of the students and the department; the gender of the students, their mothers' educational status and a significant relationship was found between the choice of the department willingly and the departments ($p<0.05$) (Table 2). In the literature review, the rate of female students was found to be higher in nursing and midwifery students who participated in the studies (10,13). In another study, it was found that 73% of nursing students and 67.6% of midwifery students willingly chose the department (19). In other studies, it

was stated that the mothers of most of the nursing and midwifery students were primary school graduates (20,21). These results support our study. It is thought that the fact that the students have a female density is due to the fact that this profession is known as a female profession in the society and that there is an easy job opportunity for them to choose this department willingly.

CONCLUSION

In the research, it was found that the majority of nursing and midwifery students did not have sufficient knowledge about forensic nursing/midwifery, did not take courses at school, and that there was a need to give courses on this field. The majority of the students stated that they did not know the definition of forensic nursing/midwifery and its purpose was "to ensure that an uncertain situation or a forensic event related to medicine comes to light". While midwifery students stated that they wanted to work in the forensic field, nursing students stated that they were undecided. The majority of students stated that the field of forensic nursing/midwifery is required to be a separate discipline and that this field is needed in Turkey. According to the results of the study conducted to the students, it is recommended that students learn about forensic nursing/midwifery as a compulsory or elective course in the curriculum, support their participation in in-service training in their fields of study after graduation, and expand postgraduate training in this field. Because of students do not always encounter forensic medicine cases in clinics, it can be recommended to use simulation during the education provided in schools. It is recommended that this area be treated as a separate unit in hospitals in identifying, collecting evidence, providing care and handling the judicial process in avoiding problems.

Declarations

It was presented as an oral presentation at the 6th International Congress of Forensic Nursing held in Erzurum on 16-18 May 2022.

Conflict of interest

The authors declare that they have no conflict of interest.

Author Contributions

Idea and design: Ö.K. Data collecting: Ö.K, C.M.A. Data analysis and interpretation: Ö.K., C.M.A. Article writing: Ö.K., Critical review: Ö.K.

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