



Defensive practices of nurses

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ABSTRACT

Introduction: Through the developments in science and technology, in health-care services, roles and responsibilities of nurses are changing, and nurses are frequently faced with risky circumstances in terms of malpractice. In this case, it is thought that nurses may be inclined to exhibit defensive practices.

Methods: This study was carried out in descriptive type to determine the defensive practice status of nurses. The population of the study consists of the nurses working at a university and private hospital, and the sample comprises 345 nurses working at inpatient departments in hospitals. This study was approved by the ethical board of Istanbul Medipol University. Data were analyzed using SPSS 21.00.

Results: About 91.9% of the nurses who were included within the scope of the research are female, and the mean age is 35.67 ± 8.89 . It was found that 60.9% of the nurses, who were included within the scope of the research, sometimes had concerns about making a mistake in nursing care, 60.9% of them never administered any drug he/she thought to be unnecessary, 55.7% of them never kept away from the patients who are more likely to file a lawsuit to protect themselves, 48.7% of them sometimes explained nursing practices in more detail to protect themselves from the allegations of malpractice, 44.1% of them never avoided practices with high complications to guard themselves against malpractice lawsuits, 65.5% of them always kept the records in a more detailed way to protect themselves from allegations of malpractice, and 52.2% of them considered there was a high risk of encountering with a malpractice case at any time according to the conditions of the environment.

Conclusion: The data obtained have indicated that nurses sometimes perform defensive practices. Thus, it is necessary to develop and implement strategies to prevent nurses from performing defensive practices

Key words: Defensive practices; malpractice; nurse; role and responsibility; law

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INTRODUCTION

Today, defensive practices are generally regarded as a situation applied by health team members with the aim of not taking risks (1). Within this scope, defensive practices are defined as the medical conduct that shows itself when especially doctors order tests and further research from the patients although there is not any medical necessity or when they



refrain from examining high-risk patients. In fact, defensive practices are the deviations from the standard medical practices that are done primarily to avoid litigation within the rules of evidence-based medicine (2,3).

Defensive practices can be grouped into two categories as positive and negative. Positive defensive practices (assurance-based approach) are the additional interventions and practices carried out for the cases that may lead to litigations for medical malpractice regardless of the benefit to the healthy/sick individual, in line with the service standards of the legal system. On the other hand, negative defensive practices (avoidant approach) are the ones, especially doctors, apply in high-risk situations when they do not want to accept the responsibility to guard themselves against the legal risks. These practices can be exemplified as behaviors such as refusing to undertake high-risk procedures and treatments, avoiding invasive procedures, and eliminating high-risk patients off the surgery list (3-5).

In Turkey, awareness of defensive practices and discussion of it in literature are a recent issue; and it is a fact that especially doctors are under legal responsibility with the enforcement of Turkish Criminal Law (TCL) no. 5237 (6). Indeed, the practice of medicine or the assessment of the practiced medicine must be carried out within a scope that covers not only medical science but also legal principles (7). Defensive medicine manifests itself when the practitioner attaches more importance to protecting himself/herself than the recovery of the health/illness individual. Actually, defensive practices are against patients' rights and can result in malpractice. Thus, these practices are often associated with particularly malpractice lawsuits and financial liability (3,8).

Defensive medicine seems to have become a prevalent phenomenon, affecting all the diagnostic-therapeutic areas and some disciplines to a greater degree, and leading to a large waste of human, organizational and economic resources (9). From the viewpoint of the patient, on the other hand, this may lead to delayed care and treatment, application of invasive procedures such as unnecessary diagnostic tests, and a higher risk of complication. Furthermore, these practices shake trustworthiness of the health staff in the eye of the patient and

patient's family. These kinds of defensive behaviors, which are mostly against patients' rights, inept, and with legal responsibility aspects, can bring up the legal and penal liability of the health staff. Nurses adapt their individual philosophy to nursing philosophy by combining scientific knowledge and skills gained by professional education with values, ethical principles, and codes, thereby protecting human and patients' rights (10). However, in the literature, data regarding the question of whether nurses apply defensive practices or not is unavailable.

In the health-care system, with the advancements in science and technology, the roles and responsibilities of the nurse are constantly changing and increasing. As health-care services increase, also the legal dimension concerned with nurses shows a similar trend (1,11,12). Therefore, current states of nurses in terms of defensive practices must be examined; to prevent procedures that might be defensive such as performing unnecessary procedures to the healthy/sick individual strategies must be developed, and the evidence base of these strategies must be investigated.

Purpose

This study was carried out to determine the defensive practice status of nurses.

Research questions:

1. What are the sociodemographic and professional characteristics of the nurses?
2. What are the defensive practices of the nurses?
3. Are defensive practices of the nurses affected by their sociodemographic and professional characteristics?

METHODS

Design and study population

This study is a descriptive study. The population of the study comprised nurses working at a university and a private hospital between January 2017 and April 2018; while the sample consisted of nurses working at the inpatient department in hospitals. The number of nurses in the inpatient department of the mentioned university hospital was 569, on the other hand, the number of nurses in the inpatient

department of the private hospital was 100. The sample was made up of 345 nurses: Three hundred nurses from the university hospital (52.72% of the total number of the nurses); and 45 nurses from the private hospital (45% of the total number of the nurses). The nurses who worked in the inpatient department of the hospital and accepted to participate in the study met the inclusion criteria to the study; while the ones excluded from the study consisted of the nurses working in operating rooms, polyclinic, blood center, etc., and the nurses who were out of the hospital physically during the data collection due to several reasons such as maternity leave and unpaid leave.

Instruments

Structured questionnaire

This form had two parts: The first section covered the sociodemographic data of the nurses such as age, gender, marital status as well as the variables that might have an effect on the defensive practices (such as the status of professional education, total period of service, the clinic where he/she works, and working time). In the second section, to determine the defensive practices, the questions were concerned with refraining from making a mistake, administering unnecessary drug, and avoiding patients who are more likely to file a lawsuit, explaining nursing practices in more detail, avoiding practices with high complications, keeping the records in a more detailed way, the risk of encountering with malpractice lawsuit, and concerns about nursing practices after the new TCL was introduced.

Data collection

Nurse information forms were handed down to the nurses by the researchers themselves. They were requested to fill in the form when they are available, and due date was agreed on. Furthermore, it was reported that the forms are going to be collected back by the researchers themselves. It was emphasized that the information in the form shall be kept highly confidential, and not be used for any corporate or individual judgment neither in favor of nor against the participant. It took approximately 15 minutes to fill in the forms.

Ethical consideration

Before obtaining the research data, written permission was obtained by applying to the two institutions where the research would be executed and with an information form covering the purpose and the content of the research. To perform the research, Istanbul Medipol Ethical Committee was consulted and ethical approval was received (Date: 04.01.2018, No: 10840098-604.01.01.E.466). The purpose and benefits of the research and their roles in the research were explained to the nurses in the sample group; they were also asked not to write their names on data collection forms; furthermore; the nurses gave the approval that they were well-informed under the light of willingness and voluntariness principle.

Data analysis

In the analysis process, SPSS 21.00 version was used; ordinal data were evaluated as an arithmetic mean, standard deviation, and minimum and maximum values; while nominal variables were evaluated as frequency and percentage. To compare two grouped data, Pearson Chi-square method was used; $p \leq 0.05$ was considered significant.

RESULTS

Nurses' sociodemographic and professional characteristics

About 91.9% ($n = 317$) of the nurses in the research were female, the mean age was 35.67 (SD = 8.89; minimum = 17; maximum = 61), 55.7% ($n = 192$) had a bachelor's degree, 48.1% of them ($n = 166$) worked at adult surgery departments, and 76.8% ($n = 265$) worked as bedside nurses. Moreover, the average period of professional experience was 13.85 years (SD = 9.08; minimum = 1; maximum = 39); and the average working period at the department was 9.75 years (SD = 8.52; minimum = 1; maximum = 38). Finally, 80% of them ($n = 276$) were not a member of the National Nursing Association (Table 1).

Nurses' defensive practices

The responses given to the topics that are thought to be related to defensive practices of nurses were

TABLE 1. Nurses' individual and professional characteristics (n=345)

Individual and professional characteristics	n (%)
Sex	
Female	317 (91.9)
Male	28 (8.1)
Age groups (years)	
17-31	132 (38.3)
32-46	162 (47.0)
47-61	51 (14.8)
Age (Mean±SD)	35.67±8.89
(Minimum-Maximum)	(17-61)
Professional education	
High school graduate	37 (10.7)
Vocational high school graduate	51 (14.8)
Undergraduate	192 (55.7)
Graduate	65 (18.8)
Department	
Pediatrics	72 (20.9)
Gynecology	21 (6.1)
Psychiatry	11 (3.2)
Adult surgery departments	166 (48.1)
Internal departments	75 (21.7)
Duty	
Nurse	265 (76.8)
Chief nurse	80 (23.2)
Professional experience	
1-13 years	179 (51.9)
14-26 years	130 (37.7)
27-39 years	36 (10.4)
Professional experience (Mean±SD)	13.85±9.08
(Minimum-Maximum)	(1-39)
Period of work at the department	
1-13 years	251 (72.8)
14-26 years	74 (21.4)
27-39 years	20 (5.8)
Period of work at the department (Mean±SD)	9.75±8.52
(Minimum-Maximum)	(1-38)
Membership to National Nursing Association	
Yes	69 (20.0)
No	276 (80.0)

recorded based on the groups that formed the majority. In the light of this; 60.9% of the nurses (n=210) were concerned about making a mistake in nursing, and 60.9% of the nurses (n=210) reported that they never administered any drug that he/she thought to be unnecessary to protect himself/herself. from the

malpractice allegations. In addition, 55.7% (n=192) never avoided the patients who are more likely to file a lawsuit to protect himself/herself from the malpractice allegations. And 48.7% of them (n=168) stated that they sometimes explained nursing practices in more detail to protect themselves from the malpractice allegations, 45.8% (n = 158) sometimes avoided practices with high complications to avoid malpractice allegations. 65.5% of the nurses (n=226) always kept the records in a more detailed way to guard themselves against allegations of malpractice. 52.2% (n=180) reported that there was a high risk of encountering with a malpractice case at any time according to the conditions of the environment, and 39.7% of them (n = 137) were unsure about feeling concerned over nursing practices after the new TCL' was put into effect. About 51% (n = 176) did not read the "Patients' Rights Regulations" published in the Official Gazette (Table 2).

Nurses' defensive practices being affected by professional characteristics

It was found that nurses' professional education status affected their defensive practices and thoughts on it. In line with this, the findings showed that undergraduate and graduate nurses were more concerned about making mistakes in nursing care ($\chi^2 = 20.016$; $p < 0.01$), moreover, they scored lower in administering drugs that they thought to be unnecessary to protect themselves from malpractice allegations ($\chi^2 = 25.403$; $p = 0.000$) (Table 3).

It was also identified that the department in which the nurse is working had an influence on some thoughts and feelings about defensive practices. Accordingly, the nurses working in the psychiatric and pediatric clinic reported that the risk of encountering with a malpractice lawsuit at any time according to the conditions of the environment was profoundly high ($\chi^2 = 19.364$; $p < 0.05$). Besides, the number of nurses who felt concerned about nursing practices after the new "Turkish Criminal Code" on June 1, 2015, was put into effect was the highest in the pediatric clinic ($\chi^2 = 29.506$; $p < 0.001$; Table 4).

The findings also revealed that the period of professional experience affected nurses' defensive practices and thoughts upon it. According to these findings, concerns about making a mistake in nursing care raised as the period of professional experience

TABLE 2. Characteristics of nurses' defensive practices (n=345)

Characteristics of defensive practices	n (%)
Do you ever have concerns about making mistakes in nursing care?	
Always	65 (18.8)
Sometimes	210 (60.9)
Never	70 (20.3)
Do you ever administer drugs that you think to be unnecessary to protect yourself from malpractice allegations?	
Always	10 (2.9)
Sometimes	125 (36.2)
Never	210 (60.9)
Do you ever avoid patients who are more likely to file a lawsuit to protect yourself from malpractice allegations?	
Always	28 (8.1)
Sometimes	125 (36.2)
Never	192 (55.7)
Do you ever explain nursing practices in more detail to protect yourself from malpractice allegations?	
Always	135 (39.1)
Sometimes	168 (48.7)
Never	42 (12.2)
Do you ever avoid practices with high complications to protect yourself from malpractice allegations?	
Always	35 (10.1)
Sometimes	158 (45.8)
Never	152 (44.1)
Do you ever keep the records in a more detailed way to protect yourself from malpractice allegations?	
Always	226 (65.5)
Sometimes	95 (27.5)
Never	24 (7.0)
What is your risk of being faced with a malpractice lawsuit at any time according to the conditions of the environment?	
Profoundly high	87 (25.2)
High	180 (52.2)
Not high at all	78 (22.6)
Have you felt concerned about nursing practices after the new "Turkish Criminal Code" on June 1, 2015, was put into effect?	
Yes	90 (26.1)
Not sure	137 (39.7)
No	118 (34.2)
Have you read "Patients' Rights Regulations" published in the Official Gazette?	
Yes	169 (49.0)
No	176 (51.0)

increased ($\chi^2 = 12.133$; $p < 0.05$); furthermore, the rate of avoiding practices with high complications to avoid malpractice allegations was higher among the nurses with more years of professional experience ($\chi^2 = 13.036$; $p \leq 0.01$), in addition; it was also derived that the nurses with 1-13 years of experience were not sure about feeling concerned over nursing practices after the introduction of the new TCL on June 1, 2015 ($\chi^2 = 11.418$; $p < 0.05$; Table 5).

DISCUSSION

It is apparent that defensive practices have an impact on the health-care system worldwide. Perceptions and concerns toward medical responsibilities and liability guide defensive practice (13). Nurses perform their roles and responsibilities through related law codes and regulations, mainly being the nursing law. As well as the laws, the ethical principles lay responsibilities on nurses, too (10). Within

TABLE 3. Nurses' characteristics of defensive practice in regard to their professional education status (n=345)

Characteristics of defensive practices	Professional education status				χ^2, p
	High school n (%)	Voc. High School n (%)	Undergraduate n (%)	Graduate n (%)	
Do you ever have concerns about making mistakes in nursing care?					
Always	0 (0.0)	7 (13.7)	39 (20.3)	19 (29.2)	$\chi^2=20.016^*, p=0.003$
Sometimes	33 (89.2)	33 (64.7)	110 (57.3)	34 (52.3)	
Never	4 (10.8)	11 (21.6)	43 (22.4)	12 (18.5)	
Do you ever administer drugs that you think to be unnecessary to protect yourself from malpractice allegations?					
Always	5 (13.5)	3 (5.9)	1 (0.5)	1 (1.5)	$\chi^2=25.403^*, p=0.000$
Sometimes	7 (18.9)	15 (29.4)	77 (40.1)	26 (40.0)	
Never	25 (67.6)	33 (64.7)	114 (59.4)	38 (58.5)	

*Pearson Chi-square

TABLE 4. Nurses' characteristics of defensive practice in regard to the department (n=345)

Characteristics of defensive practices	Department					χ^2, p
	Pediatrics n (%)	Gynecology n (%)	Psychiatry n (%)	Adult surgery Dept. n (%)	Adult internal Dept. n (%)	
What is your risk of being faced with a malpractice lawsuit at any time according to the conditions of the environment?						
Profoundly high	21 (29.2)	3 (14.3)	4 (36.4)	46 (27.7)	13 (17.3)	$\chi^2=19.364^*, p=0.013$
Yüksek	45 (62.5)	12 (57.1)	5 (45.5)	83 (50.0)	35 (46.7)	
Very little	6 (8.3)	6 (28.6)	2 (18.2)	37 (22.3)	27 (36.0)	
Have you felt concerned about nursing practices after the new "Turkish Criminal Code" on June 1, 2015, was put into effect?						
Yes	33 (45.8)	2 (9.5)	1 (9.1)	33 (19.9)	21 (28.0)	$\chi^2=29.506^*, p=0.000$
Not sure	25 (34.7)	10 (47.6)	5 (45.5)	62 (37.3)	35 (46.7)	
No	14 (19.4)	9 (42.9)	5 (45.5)	71 (42.8)	19 (25.3)	

*Pearson Chi-square

TABLE 5. Nurses' characteristics of defensive practice in regard to their period of professional experience (n=345)

Characteristics of defensive practices	Professional experience			χ^2, p
	1-13 years n (%)	14-26 years n (%)	27-39 years n (%)	
Do you ever have concerns about making mistakes in nursing care?				
Always	27 (15.1)	27 (20.8)	11 (30.6)	$\chi^2=12.133^*, p=0.016$
Sometimes	123 (68.7)	72 (55.4)	15 (41.7)	
Never	29 (16.2)	31 (23.8)	10 (27.8)	
Do you ever avoid practices with high complications to protect yourself from malpractice allegations?				
Always	20 (11.2)	8 (6.2)	7 (19.4)	$\chi^2=13.036^*, p=0.011$
Sometimes	89 (49.7)	51 (39.2)	18 (50.0)	
Never	70 (39.1)	71 (54.6)	11 (30.6)	
Have you felt concerned about nursing practices after the new "Turkish Criminal Code" on June 1, 2015 was put into effect?				
Yes	34 (19.0)	45 (34.6)	11 (30.6)	$\chi^2=11.418^*, p=0.022$
Not sure	82 (45.8)	41 (31.5)	14 (38.9)	
No	63 (35.2)	44 (33.8)	11 (30.6)	

*Pearson Chi-square

this framework, this study has been carried out to determine the defensive practice status of nurses in descriptive type.

Medical errors occur by malpractice, not doing the right practice (omission) and doing the right practice wrongly. Each medical error made by health professionals may not lead to harms to the patient (14). Indeed, medical practice errors cover a large range of circumstances from delayed recoveries to death of the patient, diverting the illness away its normal course, as a result of suggestions or practices of health professionals such as health-care nurses, doctors, and physiotherapists, psychologist and dietitian authorized with practice in line with the related law (10,15,16). At the same time, Ertem et al. (17) suggest in the article titled "A Retrospective Review About the Malpractice Applications in Medicine" that nurses were held responsible of 12% of medical errors. Furthermore, in the present study, it was discovered that more than half the nurses have concerns about nursing care. It can be surmised that as a health team member, the nurse acts in accordance with the ethical principle of do-no-harm first and he/she has the awareness of legal sanctions that might be posed by medical errors.

It was found out that a significant number of the nurses never "administered any drugs they thought to be unnecessary to guard themselves against malpractice allegations." Defensive practice entails the medical practices health professionals execute/do not execute because they are concerned over the possible penalties not to be faced with medical practice errors (18). To illustrate, although the patient resorting to the emergency service does not need to be given in liquid, applying intravenous liquid because "the patient wants to receive liquid" is a defensive practice. In this study, a large majority of the nurses reported that they did not perform these kinds of needless practices. Apart from that, violence against health team members have become a threatening problem in Turkey, and of all the health team members, nurses are among the most damaged party due to this violence. Nurses can experience verbal, physical, etc., violence in the cases when they do not fulfill the demands of the doctors and patients (19). For this reason; it was speculated that 36.2% of the nurses reported that they sometimes and 2.9% of them stated that they always administered the drug that he/she thought to be needless.

It was also realized that almost more than half the nurses never "avoided the patients who are more likely to file a lawsuit to protect themselves." Nursing is a risky profession, and each practice has its own risks and deviations on the individual (20). Malpractice is a medical error; however, it is a fact that there exist medical errors that are not regarded as malpractice because they did not cause any harm. When making a distinction between malpractice and complication, the key points are as follow: To know the difference between omission and complication, to inform the patient, and to take accurate and proper record (21). Therefore, it is of major importance that nurses must endow themselves with the skills of the modern era such as independence, critical thinking, open-mindedness, entrepreneurship, self-confidence, and risk-taking, instead of traditional attitudes such as patience, acceptance without questioning, unconditional obedience and respect, and labeling (22). This finding of the study can be interpreted as the positive output of the nurses' formal and continuing education.

Nearly half of the nurses were seen to sometimes "explain nursing practices in more detail to protect themselves from the allegations of malpractice." Informed consent is a basic concept that sets its base on the fact that each individual has the right to know and determine the procedure aimed at care and treatment applied to his/her body (23). At the same time, informed consent is a major indication of respect for human and human dignity, which is one of the basic values of nursing (22). In Turkish Constitution Law number 17, physical integrity is put under protection as being stated: "Except from medical obligations and some circumstances written in the law, the individual cannot be subject to any scientific or medical experiments without the individual's consent." (24). Hence, the finding that almost half of the nurses explained the nursing procedures in detail corresponds with laws, basic nursing philosophy, and values. Here, the issue that needs to be focused on and looked into is that the nurses do this task, not for his/her role, but to shelter themselves from malpractice lawsuits.

It was also observed that approximately half of the nurses "avoided practices with high complications." Many health professionals feel the need to do defensive practices with an urge to protect themselves

at the first stage. Defensive practices are primarily the result of health professionals adapting to the pressure of litigation risks, and whose behavior is motivated by fear of malpractice claims rather than by the patient's health (21,25). Here, the main objective is to protect themselves against possible malpractice litigation (26). To illustrate, especially recently, group of doctors has started to avoid treatment when the patient or patient's relative is inclined to cause trouble or arguments in terms of malpractice lawsuits. This finding of the study can be explained with that not only the doctors but also the nurses have encountered with dramatically increasing numbers of punishment and actions of compensation in recent years.

It was found out that nearly more than half of the nurses "always kept the records in a more detailed way to protect themselves from allegations of malpractice." Nurses have a professional and legal responsibility to keep proper records. Nursing and Midwifery Council states the reasons why good record-keeping is an integral part of nursing practice and is essential to the provision of safe and effective care. The first one is that it will help them in the scientific evaluation of their patient profile, helping in analyzing the caring results, and plan care protocols. It also helps with planning governmental strategies for future medical care (27). Regular record-keeping is one of the methods of the fight against malpractice (21,28). The legal system relies mainly on documentary evidence in a situation where medical negligence is alleged by the patient or the relatives. The absence of proper records makes it difficult for practitioners to prove they provided appropriate care should they be asked to do so in a professional or legal hearing. This is particularly pertinent since litigation against health professionals is increasing rapidly. However, no matter how busy the nurse is, lack of time is not a defense against litigation (29). All in all, the nurses within the scope of the study are aware of their roles and responsibilities within laws and ethical principles of nursing.

It was detected that half of the nurses reported that "the risk of encountering with a malpractice case at any time according to the conditions of the environment was high." There has been an increase in the malpractice lawsuits due to increased expectations, patient safety, and the recent developments

in patients' rights (17). In Turkey, it must be noted that malpractice lawsuits against nurses have shown an expanding trend. Within the law encompassing the roles and responsibilities, nurses are held responsible for the practices they have executed. It has been determined that there are seven categories that cause the nurse to face litigation, which is patient safety, medication administration errors, procedures, and treatments, error or failure in using medical equipment, record-keeping, and communication (17). According to research, it is predicted that the rate of nurses' is being sued due to medical malpractice has increased by 10% in the past 4 years (30). According to this finding of the research, nurses' carrying the high risk of malpractice litigations, who provide health care services 24/7 to people from every segment of society regardless of one's language, religion, nation or gender, is an expected result. Nevertheless, nurses' behaving, in accordance with the ethical codes and principles within their roles and responsibilities, will protect them legal-wise.

It was also pointed out that 39.7% of the nurses "unsure about feeling concerned over nursing practices after the new TCL" was put into effect. In fact, dramatic alterations in penal laws were made in 2005, and there are similar implementations in force for a long time in many other countries, as well. TCL (abbreviated as TCL in Turkish) does not separate penal responsibility of doctors and nurses; nurses in the health-care system take part in prosecution and improvement of community health and all the efforts aimed at recovery in case of illness. In nursing care, situations such as not doing the standard practice, lack of knowledge and skills/ineptitude, imprudence, and failing to provide care to the patient are termed as nursing malpractice (21). After the new TCL and Penal Procedure Law (abbreviated as TCL in Turkish) were put into effect, there was a panic wave in our country, and the situation is still valid (20). In a study conducted in Turkey, between 1992 and 2002, all the malpractice lawsuits were analyzed, and it was detected that 159 midwives and 227 nurses were denounced. After the official investigations held, 62 of the nurses (27.3%) were found guilty (31). This finding may mean it was normal that the nurses in the study experienced unsure feelings.

It was observed that half of the nurses did not read the "Patients' Rights Regulations" published in the

Official Gazette. The right to life and health covered within the scope of human rights brought about the concept of patients' rights (30). Patients' rights are the notion that defines health care receiving individuals' rights confronting health professionals and institutions (32,33). The rights of a patient include the tasks that a medical center and the treatment team are obliged to implement and abide to for the physical, mental, spiritual, and social legitimate needs embodied as standards, rules, and regulations of therapy (34). Nurses' professional practices and legal responsibilities have been established through various laws, codes, and regulations (10) and practices conducted without knowing about the law and regulations may put the nurse in the guilty position (35). In our country, between the days February 15 and August 14, 2004, 3646 applications of complaint about the violation of the patients' rights were submitted to the "patients' rights" units opened in 60 hospitals in 38 cities and online complaint website. Teke et al. (32) stated in their study that 55% of the nurses had received training on the patients' rights before and 21.7% had never encountered with the notion of patients' rights, 35.8% encountered with the notion of patients' rights during their education at school. Zincir and Erten (33) noted that 42.4% of 610 health team members told that they did not know the Patients' Rights Regulations. When the above taken into consideration, though the education of the nurses or nurse candidates encompasses the patients' right quite often, many nurses do not know the Patients' Rights Regulations, and this is a significant problem that needs to be resolved.

In the study, it was discovered that undergraduate and graduate nurses are more concerned about nursing care, besides, to protect themselves from malpractice allegations, the rate of administering the drug they thought to be needles was less in this group. In Turkey, unfortunately, nurses from different educational backgrounds (high school, vocational high school, and undergraduate) possess the same roles and responsibilities (36). In fact, according to the "Amendment Law on the Nursing Law" put into effect in 2007, after this date, only certain nurses are accepted to serve and those are the ones who "graduated from the faculties and colleges which give undergraduate education in nursing in Turkey and whose certificates are registered by the

Ministry of Health, who studied related to nursing at an abroad institution recognized by the state and whose equivalency is approved and certificates are registered by the Ministry of Health" (37). However, due to various reasons, high school graduates, and vocational high school graduates are still given the nurse title; therefore, they execute the roles and responsibilities of nurses. University education does not only provide professional education but also it enables higher-thinking skills to enhance (38). Consequently, undergraduate and graduate nurses' refraining from making mistakes and avoiding administering needless drugs can be explained with that they possess professional autonomy.

It was also determined that the nurses working in the psychiatric and pediatric clinic reported that "the risk of encountering with a malpractice lawsuit at any time according to the conditions of the environment was profoundly high." In cases of malpractice occurring during nursing care, nurses face penalties due to the practices that contradict with the ethical principle of do no harm to physical integrity, namely, nonmaleficence (21). This risk increases more particularly in special areas (such as pediatrics, psychiatry, emergency, and intensive care unit). In the study conducted by Ertem et al. (17), it was observed that the clinic where medical error is made most is operating room surgery clinic with a rate of 43.6%, which is followed by operating room anesthesia department (8.1%), gynecology (13.4%), pediatrics (11%), and emergency service (6.4%). Consequently, it is an expected outcome that the nurses working in the pediatrics and psychiatry clinics have more concerns over encountering with malpractice lawsuits.

It was also detected that the nurses' concerns about making a mistake in nursing care raised as the period of professional experience increased, besides the rate of avoiding practices with high complications to avoid malpractice allegations was higher among the nurses with more years of professional experience. It was emphasized that even though medical errors are a fundamental issue among all the health professionals, nurses encounter with the risk of making a medical error more than the other health profession groups due to various reasons such as nurses' having many roles and responsibilities and having a direct role inpatient care. (39,40). Apart from this, nursing

is a health discipline that requires a combination of knowledge and experience (41). In this respect, the professional experience of the nurse may affect his/her decisions in a positive or negative way. It was interpreted that the nurses' increased year of professional experience, and parallelly, increased concerns about making mistakes and showing behaviors of protecting himself/herself can be explained with the professional experience of the sample group.

After the new "Turkish Criminal Code" put in effect on June 1, 2005, it also concluded that the nurses with 1-13 years of experience were more unsure about feeling concerned over nursing practices. Especially due to the new clauses found in the new "Turkish Criminal Code," medical malpractice has gained more and more significance among health professionals and has started to be a matter of debate. The penalties gave also led to some consequences for doctors, such as dislike for the profession, burnout, and avoiding practices to the patients (18). It is thought that these problems of doctors are the case for nurses, too; however, it has not been explored thoroughly, yet. As a result, it was assumed that in the research, feeling unsure about the concerns over nursing practices, demonstrated by the nurses with 1-13 years of experience, is a trait that is specific to the sample.

Limitation

The study presented has a limited sampling method due to having been held in two hospitals, despite being in accordance with the criteria of the methods.

CONCLUSION

It has been determined that the nurses have feelings of concern about making mistakes and conducted certain practices (such as administering the medicine that is considered to be needless, avoiding the patients who are more likely to file a lawsuit, and keeping the records in more detail) to guard themselves against the allegations of malpractice. These data obtained have indicated that nurses sometimes perform defensive practices; thus, it is crucial to develop and implement strategies to prevent nurses from performing defensive practices not to make concessions on quality in the care of a healthy/sick individual and to ensure a fair distribution of the

health system resources. Finally, it is suggested that the fear of medical litigation will dissipate through ensuring that the nurse-patient relationship is impenetrable.

CONFLICTS OF INTEREST

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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REFERENCES

- Azmi F, Husain M, Vashist S, Usmani, JA. In defense of defensive nursing practice. *Int J Nurs Care* 2014;2:11-3.
<https://doi.org/10.5958/2320-8651.2014.01262.9>.
- Cramer P. Defense mechanisms in psychology today. Further processes for adaptation. *Am Psychol* 2000;55:637-46.
<http://dx.doi.org/10.1037/0003-066X.55.6.637>.
- Mullen R, Admiraal A, Trevena J. Defensive practice in mental health. *N Z Med J* 2008;121:85-91.
- Başer A, Kolcu Mİ, Kolcu G, Balcı UG. Validity and reliability of the Turkish version of the defensive medicine behaviour scale: Preliminary study 1. *Tepecik Train Hosp J* 2014;24:99-102.
<http://dx.doi.org/10.5222/terh.2014.29494>.
- Studdert DM, Mello MM, Sage WM, DesRoches CM, Peugh J, Zapert K, *et al*. Defensive medicine among high-risk specialist physicians in a volatile malpractice environment. *JAMA* 2005;293:2609-17.
<https://doi.org/10.1001/jama.293.21.2609>.
- Turkish Criminal Law; 2004. Available from: <https://www.tbmm.gov.tr/kanunlar/k5237.html>. [Last accessed on 2018 Jul 12].
- Malone JC, Cohen S, Liu SR, Vaillant GE, Waldinger RJ. Adaptive midlife defense mechanisms and late-life health. *Pers Individ Dif* 2013;55:85-9.
<https://doi.org/10.1016/j.paid.2013.01.025>.
- Chiarella M. 'Is there such a thing as defensive nursing practice? *Aust Health Rev* 1992;15:382-91.
- Panella M, Rinaldi C, Leighab F, Donnarumma C, Kul S, Vanhaecht K, *et al*. The determinants of defensive medicine in Italian hospitals: The impact of being a second victim. *Rev Calid Asist* 2016;31 Suppl 2:20-5.
<https://doi.org/10.1016/j.cali.2016.04.010>.
- Keskin G, Kıvanç M. Legal responsibilities in nursing. In: Aştı TA, Karadağ A, editors. *Principles of Nursing*. İstanbul: Academy Press and Publications; 2012. p. 124-36.
- Paker JM. Evidence-based nursing: A defence. *Nurs Inq* 2002;9:139-40.
<https://doi.org/10.1046/j.1440-1800.2002.00152.x>.
- Pazvantoğlu O, Gümüş K, Böke Ö, Yıldız I, Şahin AR. Perception of patient aggression among nurses working in a university hospital in Turkey. *Int J Nurs Pract* 2011;17:495-501.
<https://doi.org/10.1111/j.1440-172x.2011.01967.x>.
- Panella M, Leighab F, Rinaldi C, Donnarumma C, Tozzi Q, Di Stanislao F,

- et al.* Defensive medicine: Defensive medicine: Overview of the literature. *Ig Sanita Pubbl* 2015;71:335-51.
14. Karataş M, Yakıncı C. Causes of medical errors and solutions. *J Inonu Univ Med Fac* 2010;17:233-6.
 15. Kumral B, Özdeş T. The approach and evaluation of the doctors in Tekirdag city to the concept of malpractice. *Int J Basic Clin Med* 2013;1:83-93.
 16. Polat O, Pakiç I. Physician liability in medical malpractice. *Acibadem Univ J Health Sci* 2011;2:119-25.
 17. Ertem G, Oksel E, Akbıyık A. A retrospective review about the malpractice applications in medicine. *Dirim J Med* 2009;84:1-10.
 18. Akbaba M, Davutoğlu V. The doctor in a vise between health and the law: What to do? *Turk Soc Cardiol Arch* 2016;44:609-16.
 19. Cerit K, Keskin ST, Erdem R. Investigation of exposure to nurses' violence in the workplace and related factors. *Pamukkale Univ J Inst Soc Sci* 2018;31:231-42.
 20. Altun G, Yorulmaz AC. Physician responsibility and medical malpractice after the legal regulations. *J Trakya Univ Med Fac* 2010;27:7-12.
 21. Sahin D, Faikoglu R, Sahin I, Gokdogan MR, Yasar S, Alparslan N, *et al.* Malpractice in nursing: Case reports. *J Forensic Med* 2014;19:100-4. <https://doi.org/10.17986/bim.2014192767>.
 22. Babadağ K. *Nursing and Values*. Ankara: Alter Publishing; 2010.
 23. Tumer AR, Karacaoğlu E, Akçan R. Problems related to informed consent in surgery and recommendations. *Natl Surg J* 2011;27:191-7. <https://doi.org/10.5097/1300-0705.ucd.1167-11-02>.
 24. The Constitution of the Republic of Turkey; 2011. Available from: https://www.tbmm.gov.tr/anayasa/anayasa_2011.pdf. [Last accessed 2018 Jul 10].
 25. Yigitbas Ç, Oğuzhan H, Tercan B, Bulut A. Nurses' perception, attitudes and behaviors concerning malpractice. *Anatol Clin* 2016;21:207-14.
 26. Yılmaz K, Polat O, Kocamaz B. The legal analysis of defensive medicine acts. *Tex Assoc Apprais Dist* 2014;5:19-51.
 27. Thomas J. Medical records and issues innegligence. *Indian J Urol* 2009;25:384-8. <https://doi.org/10.4103/0970-1591.56208>.
 28. Kaya H, Özdemir G. In: Aştı TA, Karadağ A, editors. *Registration and Reporting, Principles of Nursing Nursing Science and Art*. Istanbul: Academy Press and Publication; 2012. p. 209-17.
 29. Wood C. The importance of good record-keeping for nurses. *Nurs Times* 2003;99:26-7.
 30. Kuşuoğlu S, Çövener Ç, Tanır M, Aktaş E. Professional and legal responsibilities of nurses in drug administration. *Maltepe Univ J Nurs Sci Art* 2009;2:86-93.
 31. Safran N. *Malpractice in Nursing and Midwifery*, Doctoral Thesis, Istanbul Forensic Medicine Institute of the University of Social Sciences Department PhD Thesis; 2004.
 32. Teke A, Uçar M, Demir C, Çelen Ö, Karaalp T. Evaluation of knowledge and attitudes of the nurses working in a training hospital about patients' rights. *TAF Prev Med Bull* 2007;6:259-66. <http://dx.doi.org/10.1590/1806-9282.61.05.452>.
 33. Zincir H, Kaya Z. Knowledge levels of the health care employees working at the primary health institutions about patient rights. *Int J Hum Sci* 2009;6:877-85.
 34. Farzianpour F, Rahimi Foroushani A, Shahidi Sadeghi N, Ansari Nosrati S. Relationship between 'patient's rights charter' and patients' satisfaction in gynecological hospitals. *BMC Health Serv Res* 2016;16:476. <https://doi.org/10.1186/s12913-016-1679-9>.
 35. Kızıl EG, Incazlı SB, Erken S, Güntürkün F, Özkan B. Nurses' knowing, accepting and fulfilling their responsibilities: Izmir sample. *J Educ Res Nurs* 2015;12:215-23. <https://doi.org/10.5222/head.2015.215>.
 36. Nursing Law. Law Number: 6283, Accepted: 25/2/1954, Published in the Official Gazette: Date: 2/3/1954 Issue: 8647. Available from: http://www.ttb.org.tr/mevzuat/index.php?option=com_content&view=article&id=502:hemrel-kanunu-6283. [Last accessed on 2018 Jun 29].
 37. Law On Changes In Nursing Law. Law Number: 5634, Date of Acceptance: 25/4/2007, Published in Official Gazette: Date: 2/5/2007 Issue: 26510. Available from: <https://www.resmigazete.gov.tr>. [Last accessed on 2018 Jun 10].
 38. Masa'deh RE, Shannak R, Maqableh M, Tarhini A. The impact of knowledge management on job performance in higher education: The case of the university of Jordan. *J Enterp Inf Manag* 2017;30:244-62. <https://doi.org/10.1108/JEIM-09-2015-0087>.
 39. Ersun A, Başbakkal Z, Yardımcı F, Muslu G, Beytut D. A study of the malpractice trends in pediatric nurses. *Ege Univ J Nurs Fac* 2013;29:33-45.
 40. Öztürk Y, Ozata M. The research of the relation between organizational citizenship behavior and malpractice trend in nurses. *Suleyman Demirel Univ J Fac Econ Adm Sci* 2013;18:365-81.
 41. Muslu L, Ozsoy SA. Nursing, aesthetics and art. *J Educ Res Nurs* 2017;14:287-92.