

Use of distraction by nursing students to care patients' pain: A focus-group study

Hemşirelik öğrencileri tarafından ağrılı hastaya bakımda dikkati başka yöne çekme yönteminin kullanılması: Odak grup çalışması

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ABSTRACT

Aim: Pain is an important stimulus to the body. Both pharmacological and non-pharmacological methods are used in pain management. The aim of this study is to determine the methods used by nursing students while using the "distraction techniques" method in pain management and the ways of applying these methods, and to determine what problems they encounter during the application process. **Method:** The focus-group interview, one of the qualitative methods, was used in this study. The sample of the research consisted of first, second, third and fourth year students who had experienced clinical practice and who volunteered to participate in the study. The data for the study were collected using a semi-structured questionnaire form which consisted of six questions regarding their approach to pain. Qualitative data obtained from the interviews were recorded. Seven focus group interviews were held with 69 nursing students. The recorded interviews were transcribed and interpreted. The data were analyzed by the two researchers. In terms of the qualitative data analysis, three themes and 16 sub themes emerged. **Result:** The nursing students (N=69) defined a "distraction" as "ensuring someone forgets about the pain" and their techniques included chatting, watching TV, activities enjoyed by the patient, visualizations, breathing exercises, games, mobilization and hot and cold applications. The most common difficulty that students experience in using these methods is the high number of patients. **Conclusion:** The study showed that students often preferred to use distraction in pain management during clinical practice. It is thought that the reason why students often use this method is because they have an independent role in the application and the method is easy. It was determined that students frequently used cognitive-behavioral techniques and physical techniques to distraction. Nursing students believe that distraction is effective in reducing the pain of the patient.

ÖZ

Amaç: Ağrı vücut için önemli bir uyarandır. Ağrı tedavisinde hem farmakolojik hem de farmakolojik olmayan yöntemler kullanılmaktadır. Araştırma, hemşirelik öğrencilerinin ağrı yönetimi için hangi dikkat dağıtma tekniklerini kullandıklarını belirlemek amacıyla yapılmıştır. **Yöntem:** Görüşmelerden elde edilen nitel veriler kayıt altına alınmıştır. Bu çalışmanın analiz birimleri kelimeler veya kavramlar, temalar ve aynı kavramları veya temaları tanımlayan konu sayısıdır. **Bulgular:** Hemşirelik öğrencileri (N=69) Öğrenciler "dikkati başka yöne çekme" yöntemini "ağrının unutulmasını sağlama" olarak tanımlarken, yöntemi uygulama şeklini; sohbet etme, televizyon izleme, sevdiği aktiviteleri yaptırma (müzik dinletme gibi), hayal kurdurma, solunum egzersizi yaptırma, oyun oynatma, mobilize etme ve sıcak-soğuk uygulama yaptırma olarak ifade etmişlerdir. Öğrencilerin bu yöntemleri kullanırken yaşadıkları en yaygın zorluk hasta sayısının fazla olmasıdır. **Sonuç:** Çalışma, öğrencilerin klinik uygulamalar sırasında ağrı yönetiminde sıklıkla dikkat dağıtmayı tercih ettiklerini göstermiştir. Hastanın ağrısını etkili bir şekilde yönetmek önemlidir. Bu nedenle öğrencilerin eğitimleri süresince ağrı yönetimine ilişkin bilgi ve uygulamalarını geliştirecek planlamaların yapılması gereklidir.

Key Words:
Nursing students, pain management, distraction, focus group.

Anahtar Kelimeler:
Hemşirelik Öğrencileri, Ağrı Yönetimi, Dikkati Başka Yöne Çekme.

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INTRODUCTION

The International Association for the Study of Pain (IASP) defines pain as an unpleasant sensory and emotional feeling experienced due to actual or potential tissue damage in a particular area of the body (1). Pain is an important stimulus to the body and poses physiological or psychological threats to the health of the individual when not eliminated (2). Moreover, when it cannot be controlled, it increases mortality

and morbidity rates and treatment costs, prolongs the length of hospital stay of the individual, and causes rehospitalizations (3-6).

Pharmacological (7-9) and non-pharmacological (10-14) methods are used in pain management. The use of non-pharmacological methods in pain management reduces the use of medication and the stress and anxiety levels of the patient, and increases the sense of control, activity level, and functional capacity of the individual

(15). One of the non-pharmacological methods used for short-term management of acute or chronic pain is distraction (11-16). Distraction involves focusing on a stimulus other than the pain. The purpose of this method is to provide the individual with a sense of being able to control the pain by directing their attention to what they like (6,17). Distraction techniques should attract the attention of the individual and target multiple sensory organs. These techniques can include activities such as doing puzzles, playing games, talking, watching movies, listening to music and the spoken word, painting, and breathing exercises (6,17,18)

The training and experience of health personnel are very important, especially in pain management. The knowledge and practices of health personnel about how to assess and manage pain are inadequate as a result of there being insufficient content related to pain in the educational curricula (19). The literature emphasizes that the concept of pain and methods for pain control are taught during the education of nursing students (20); however, the focus placed on these topics remains insufficient (21-23). Nursing students most frequently prefer to use distraction for pain management when using non-pharmacological methods to supplement recommended medications, and they believe that distraction is effective in reducing the pain of the patient (23,24). A study conducted by Ünver et al. (2016) in Turkey reported that 55.5% of students used methods such as books/newspapers and television for distraction in pain management (25). Another study stated that one non-pharmacological method often used by student nurses with their patients was distraction (18.6%) (20).

Studies examining the use of distraction are limited (25-27). There is no study on how students use these techniques or how they have gained the relevant skills. The aim of this study is to determine the methods used by nursing students while using the “distraction techniques” method in pain management and the ways of applying these methods, and to determine what problems they encounter during the application process. Since distraction is the most frequently used non-pharmacological method for pain by students, it is thought that the data obtained from the research results can be used in the development of the course content, the training provided can contribute to the effectiveness of the application, the patient will have positive effects on pain management and will contribute to the field in this sense.

Research Objective

The study was conducted in order to determine the methods used by nursing students when using the distraction techniques in pain management, their

practice methods and the problems they encounter in practice.

MATERIALS AND METHODS

Design

The focus-group interview, one of the qualitative methods, was used in this study.

Sample

In this qualitative study, the population of the research consisted of 544 students who were receiving education in the nursing department of a university. The sample of the research consisted of first-, second-, third- and fourth-year students who were receiving education about how to approach patients in pain within their professional courses, who had experienced clinical practice and who volunteered to participate in the study. A total of 69 students, 20 students each from among the first-, second- and third-year students, and nine fourth-year students, participated in the research.

Ethical considerations

Permission was received from the Ethics Committee of Ankara Yıldırım Beyazıt University (No: 23.08.2018/60). After obtaining this approval, permission was received from the institution where the study was conducted. Verbal and written consent was obtained from the students who participated in the research.

Measurements/instruments

The data for the study were collected using a semi-structured questionnaire form which consisted of questions regarding the students' characteristics (age, gender) and six questions regarding their approach to pain (Box 1).

Box 1: Questions for focus-group interviews

Questions for focus-group interviews

What non-pharmacological methods are used to manage of pain?

What is the “distraction technique”?

Have you ever used it?

How do you use it? Explain with examples.

What kind of difficulties have you encountered?

Do you think that it had an effect on your patients' pain?

DATA COLLECTION AND ANALYSIS

Qualitative data collection and analysis

Seven focus group interviews were held with 69 nursing students. Interviews, each lasting approximately half an hour, were conducted with a total of seven groups: six groups each consisting of 10 students from the first, second and third years, and one group consisting of nine students from the fourth year. All focus group interviews were held in a meeting room at the university. Before starting the interview, the purpose of the research was explained to the students. The qualitative data obtained from the interviews were audio recorded. All students who participated in the study were informed that the interviews would be recorded and their written and verbal consent was obtained.

Seven focus group interviews were conducted using the six open-ended questions on the questionnaire to drive the discussion. No additional questions were needed. The researcher helped students to understand the questions and to address each question adequately. The interviews were audio recorded. At the same time, a researcher took notes during the interviews. The recorded interviews were then transcribed. The data were analyzed by the two researchers. The units of analysis for this study were words or concepts, themes (three themes and 16 sub themes emerged from the qualitative data analysis [Table 1], and the numbers of subjects who described the same concepts or themes.

The transcribed data from the focus group discussions were grouped by theme and concept, and the statements of the participants were coded numerically according to these groupings. The main purpose of grouping and coding was to make data analysis easier.

Table 1: Themes and Sub themes

Defining the technique	Techniques Used	Difficulties
Ensuring someone forgets their pain	<i>Cognitive-Behavioral Techniques</i>	High number of patients
	a) Chatting	Lack of materials
	b) Watching television	Attitude of health personnel
	c) Performing activities enjoyed by the patient (e.g. listening to music)	Attitude of patient and patient's relative
	d) Breathing exercises	Distrust of students
	e) Visualization	Inappropriate hospital environment
	f) Playing games	Pain severity
	<i>Physical Techniques</i>	
	a) Mobilization	
	b) Hot and cold applications	

RESULTS

Of the students who participated in the study, 17.39% (n:12) were male and 82.61% (n:57) were female. The mean age of the students was determined to be 20.21 ± 1.38.

In terms of the qualitative data analysis, three themes and 16 sub themes emerged. These themes are presented in Table 1.

First theme: Defining the technique

The students participating in the study stated that distraction meant "ensuring someone forgets their pain". Some of the students statements are given below:

"When the patient focuses on pain, his/her pain is relieved through another subject/activity." (Student 41)

"Performing activities enjoyed (by the patient)" and "Distraction is reducing the patient's pain using the gate-control theory." (Students 42,45,47,48 and 63)

Second theme: Technique used

The students stated that they used cognitive-behavioral and physical techniques when they wanted to distract patients.

Cognitive-Behavioral Techniques

Some of the students' statements are given below:

Chatting/communication

"We heard about what the patient likes while previously chatting to collect data. I tried to talk about things s/he liked." (Student65).

“In the pediatric clinic, children were crying while vascular access was being established. I tried to talk to them. When I distracted them, they stopped crying and calmed down.”(Student 33)

“The patient’s pain was at a moderate level. I talked about her/his favorite football team. ... S/he forgot her/his pain.”(Student 68).

Watching television

“My patient said that s/he relaxed most while watching television. So I suggested it.”(Student 62).

“I learned that the patient liked watching television while taking the anamnesis. After everything had been organized during the hours of treatment, s/he watched television for about two hours daily.”(Student 37)

“Patients with a pain level lower than five on the pain scale watched television.”(Student 55).

Performing activities enjoyed by the patient

“While I was preparing a care plan for my patient, I learned that she liked knitting. According to the VAS, she evaluated the pain as four. I asked relatives to bring a knit; we did not apply analgesic medication when after she knitting had been brought.”(Student 7)

“S/he was painting out of boredom and showing us the paintings s/he had done. S/he stated that this relieved her/his pain. S/he particularly expressed that.”(Student 22)

Breathing exercises

“I explained the importance of breathing exercises to the patient. When her/his pain increased, s/he called me and asked to practice the exercises. S/he was getting distracted while practicing. Though the pain relief was only temporary and the pain started up again at least it decreased during the breathing exercises.”(Student 58)

“I talked to a patient who had undergone laparoscopic surgery. Her/his pain was between two and four. I taught breathing exercises to the patient. As I was talking, s/he was trying to do it and said that her/his pain was relieved a bit.”(Student 61).

Visualization

“My patient had an infectious wound on her/his foot. S/he had severe pain. When we talked, s/he said that s/he wanted to be a doctor in the future. To relieve the pain, I asked her/him to imagine that s/he was a doctor going to her/his village and holding children’s hands. This made her/him happy. The expression of pain on her/his face was gone.”(Student 43)

“When the patient was in labor, she had severe pain. When I encouraged her to think about what she would do with her baby when it was born, how she would spend time with the baby and what the baby would look like, her excessive screams decreased and she talked more. This made it easier for her to cope with.”(Student 59)

Playing games

“The child was crying, holding her/his stomach. We talked about pain. Then we started playing games. At first, the child was crying a bit and did not want to talk, but after a while, s/he started talking and playing and then the crying decreased. Then s/he forgot her/his pain.”(Student 57)

PHYSICAL TECHNIQUES

Mobilization

“I made the patient walk around. S/he said that this relaxed her/him.”(Student 35)

“One of my middle-aged patients did not have much pain, the score was two to three. S/he said that the pain increased while resting. That’s why I suggested walking together. My patient said it was very good for her/him.”(Student 31)

Hot and cold applications

“I applied cold to the patient’s left arm at the orthopedic clinic.”(Student 5)

“Generally, hot and cold applications are used. I applied cold. I saw that my patient’s pain decreased.”(Student 3).

Third theme: Difficulties encountered when applying the technique

The students stated that they had communication problems while applying the distraction techniques. The students also stated that the attitude of the health personnel and, the patients and their relatives, the patients’ distrust of students, the high number of patients, an inappropriate hospital environment, lack of materials, and severe pain made it difficult to use distraction.

The following are some sample responses:

Communication problems

“Some of our patients did not want to communicate with students.”(Student 16),

“Sometimes, the language is different. There are many patients in the pediatric clinic who do not speak Turkish.”(Students 41,42,44,48 and 49)

"The patient was reacting more to us because we could not relieve their pain. They were always restless and did not communicate with us. In other words, it was difficult to communicate with them and thus to distract them due to their thoughts and approach towards nurses and the hospital."(Student 29).

Attitude of health personnel

"The people who Show the greatest resistance in the field the most are nurses. They consider these methods useless."(Student 51)

"Non-pharmacological methods are not taken seriously; they are considered worthless."(Student 52)

"I tell the nurse that the patient has pain. Instead of giving me any ideas, she says that she is going to ask the doctor right away and use analgesics."(Student 39)

"Generally, medication is used. I have never seen anyone using a non-pharmacological method."(Student 36)

Attitude of patient and patient's relatives

"The patient's relatives were not satisfied with what we were doing. They constantly asked if we would give them medication."(Student 53 and 56)

"We already had a stressor there. We were already under stress at that moment. The patient was suffering in front of us and we tried to do something. Someone said, 'Don't do anything, don't touch her/him, s/he is already suffering, s/he has just got out of surgery,' and this stressed us out."(Student 54)

"The patient did not believe in the results of the breathing exercises, s/he was just doing it." (Student 66)

"I had a patient saying, 'I am in pain, how can I do visualizations? Is there any time to visualize things when I'm in pain?'"(Student 8)

"The patient stated that s/he was in pain and we tried to talk. The patient got angry, saying 'I said "I am in pain"', and thought that I didn't believe her/him."(Student 55, 58)

"Patients request medications very frequently. Even though the pain is relieved in that moment, they want medication."(Students 61, 63, and 64)

"Patients say, 'Now I am relieved but the pain will start again in half an hour; I want medication.'"(Student 64)

Lack of materials

"The necessary materials may not be available in the room."(Student 11)

"The patient enjoys watching television, chatting and knitting but says they cannot knit in the hospital."(Student 7)

Distrust of student

"...Being a student affects our position for the patients. If we were nurses, may be they would believe in us more and let us do it."(Student 62)

"Due to their background, some patients may think that our treatments are the cause of their pain. For example, they say, 'Call the nurses, they don't hurt me. You hurt me a lot.'"(Student 21)

Inappropriate hospital environment

"The patient next to her/him gets very uncomfortable. S/he might say, 'The other patient in the room is watching television and I can't sleep very easily; I am very disturbed by the noise in the hospital.'"(Student 1)

"The rooms are generally crowded. For example, when the patient has a headache, the noise increases the pain even more. The patient next to her/him can speak loudly or insist on watching television. Since s/he can't hear the television, s/he will turn the volume up..The sound of medical devices also increases the pain. I think that the sound of medical devices increases pain psychologically."(Student 59)

"People feel uncomfortable when they hear the sound of the monitor."(Student 57)

Pain severity

"I think it depends on the severity of the pain. I work at the oncology clinic. There was a patient with bone metastasis. We administered an IV analgesic, but somehow the pain was not relieved. It was a strong analgesic. The pain continued and s/he stopped communicating. S/he couldn't talk at that moment. She said that the pain had increased when s/he talked and even coughed due to the pressure on the bone. Then, the pain continued. You can think about using such methods depending on the severity and type of pain. We can't use this for every patient or every level of pain severity."(Student 18)

"The patient can't talk or answer because of pain."(Student 13)

"I wanted to talk to the patient to learn how much pain s/he had. S/he couldn't answer. I guess the pain was too high, s/he couldn't even talk about it at that moment. I did not push harder."(Student 13)

High number of patients

“We do not have enough time to chat, watch television or read something with every patient. The clinic being very busy clinic affects this.”(Students 14,18 and 20)

“There are few members of staff.” (Students 43,44 and 49)

“For example, we need to have a lot of time to play with a child. We can't spend much time with everyone due to the number of staff and patients in the units.”(Student 43)

DISCUSSION

Despite developments in health and medical fields, patients' problems with pain have remained to the present (17). Since pain is a subjective experience, its assessment and management are also complex. For this reason, nurses need to define pain, apply a treatment, and assess its outcomes (28). The nurse should apply both pharmacological and non-pharmacological methods for managing a patient's pain, using a multimodal approach (25,29).

In pain management, nurses sometimes use pharmacological and non-pharmacological methods together and sometimes they prefer to use only one of them or one more than the other (20,30-34). One of the most frequently used non-pharmacological methods is distraction. Lewis et al. (2018) determined in their study that 97% of nurses applied the positioning method, that 95.6% applied hot and cold applications, and that 92.7% used distraction (35). Another study evaluating the non-medication pain treatments used by oncology nurses found that 54% of the nurses used music, that 40% used visualization, that 82% applied relaxation techniques and that 80% used distraction (36). Özveren et al. (2018) stated that 27.3% of nurses used distraction techniques whereas this rate was reported to be 42.2% in the study conducted by Gumuş et al. (2020) (34,36).

Given that health personnel's education affects the development of their behaviors and attitudes regarding pain assessment and management, studies investigating the knowledge and attitudes of nursing students regarding pain are important. Kuenzang et al. (2018) conducted a study to determine the knowledge and attitudes of student nurses and midwives regarding pain and found that 81% of students had low pain knowledge and attitude scores (37). This rate was less than 50% in the study conducted by Gadallah et al. (2017). Gretasdottir et al. (2017) and Chan and Mahamura (2016) reported that there was a lack of knowledge and education about pain and its treatment among nurses and nursing students and that it is important to provide training on this subject (38,40).

Nursing students receive information about pain, physiopathology, pain management, drug treatment,

non-pharmacological methods during their education, but this information remains inadequate (41,42). However, the number of studies examining how students obtain this information and how it affects their practice are limited. Ung et al. (2016) stated in their study that there is no standardized guide for the evaluation of student nurses' attitudes, behaviors and knowledge regarding pain management, that this will lead to issues despite the variety of methods and techniques used by students for pain management because students will experience difficulties while applying these methods (43). In this study, although the students stated that distraction means “ensuring the patient forgets their pain”, it was considered that the practice of distraction techniques was inadequate due to lack of knowledge. It is known that, especially during nursing education, the courses on pain management are insufficient (44) and non-pharmacological methods are discussed more limitedly. In addition, as the students stated, health personnel, especially nurses, generally prefer pharmacological methods in pain management. For this reason, it is thought that students have a lack of knowledge on this subject.

Within the scope of distraction, which is a non-pharmacological method, the students stated that they used techniques such as chatting, watching TV, performing an activity that the patient enjoyed, breathing exercises, visualization, playing games, mobilization, and hot and cold applications. It is thought that the students preferred these methods since they are easy to apply, do not require many technical materials, are easily understood by patients, and because the students are authorized to use them.

In the study, the students stated that they faced issues such as difficulties in communicating with the patients' relatives and health personnel, distrust of students, a lack of materials, an inappropriate hospital environment, a high number of patients, and high pain severity. Al-Khawaldeh et al (2013) stated that the difficulties most frequently encountered by students in pain management were high pain severity (25.8%) and an inappropriate hospital environment (37.9%) (23). Taylor and Stanbury (2009) reported “inaccurate pain assessment, communication problems, lack of information, difficulties in integrating evidence into practice, and challenges in the modern healthcare setting” as difficulties in pain management (45). It is seen that the results of the stated study and the result obtained from our study are similar.

CONCLUSION

Having sufficient knowledge about and skills to practice about non-pharmacological methods for pain management is important for student nurses to

demonstrate their ability to function independently. Student nurses need to feel that they are capable and have the individual experience which enables them to carry out these techniques (20). The clinical setting is important in preparing them for this (45,46). At this point, educators play an important role. This shows that important roles also fall to trainers and it is necessary to update the curriculum content and to develop innovative educational strategies such as laboratory environments, simulations, videos, electronic environments, standard patients and problem-solving skills in order to increase the use of pharmacological methods in education (46). Moreover, it is clear that collaborating with hospital management and health professionals is important to eliminate the difficulties that hinder the use of these methods.

This study is expected to be the first study to determine how distraction, which is one of the most frequently used non-pharmacological methods in the literature, is perceived and used by students. It is thought that conducting similar studies to improve the knowledge and practices of nursing students on pain management will help in the provision of high-quality pain treatment to the patient.

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