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INVESTIGATION OF NURSING STUDENTS' VIEWS ON REFLECTIVE THINKING EXPERIENCES IN CLINIC: "JOURNEY TO OURSELVES" (QUALITATIVE STUDY)

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ABSTRACT

Purpose: Reflective thinking is practice in nursing education in many countries to prepare and strengthen the students in the process of change and development in healthcare. This study was aimed at investigating the views of nursing students taking a surgery course on reflective thinking experiences in the clinic.

Material and Methods: The descriptive qualitative study was conducted with nursing students taking a 2nd-grade surgery course after reflective thinking practice. The reflective thinking is an implementation included in the curriculum of practical courses. The sample of the study consisted of students who took part in reflective thinking practice within the clinical practice of the course entitled "Surgical Diseases and Nursing". The data were analysed through content analysis.

Results: We identified the themes of "problem solving", "adding value", "awareness" and "adding power".

Conclusion: We found that utilising reflective thinking methods in clinical practices improves students' problem solving and reflective thinking skills, encourages the values of empathize and behaving ethically and makes students stronger in terms of professionalisation. We recommend that reflective thinking practice be conducted in clinical practices in nursing education under the guidance of educators.

Keywords: Nursing student, learning, reflection, qualitative research

INTRODUCTION

One of the methods that nursing students can utilise effectively to enhance their knowledge and skills is reflection (1,2,3). Studies on learning styles and how learning takes place focus on student-centred active methods (2,4). Kolb's "Experiential Learning Theory," one of the sources of these methods, asserts that learning occurs by the transformation of knowledge and experiences (3). As one of the higher-order thinking skills, reflective thinking is the process of an individual's in-depth thinking about their experiences—questioning, self-evaluating and defining what can be done to solve emerging problems (4,5). Through reflective thinking, the individual examines and thinks about a problem in detail and concentrates all their thoughts on it. All these activities enable the individual to analyse, question and examine their thoughts, actions, and feelings. Thus, they utilise the skills of defining, analysing, synthesising and evaluating the situation (6,7). The first stage in reflective thinking is an awareness of being surprised and annoyed by a situation/incident and being unable to explain it. The second stage consists of analysing the situation/incident, examining it in the light of the available information, analysing perceptions and

attitudes and acquiring the new information needed. The final stage is the creation of an action plan with a new perspective that is based on the new information (1,8, 9). (Figure 1).

For students, nursing education is a complex process that includes clinical practices, along with intensive theoretical training, based on current practices and ethical values. This is likely to make clinical education and its evaluation difficult and negatively affect students' learning and problem solving (10,11,12,13). In this context, reflective thinking helps nursing students to develop critical thinking skills, recognise problems, cope and deal with situations that challenge them and achieve the best results. Thus, nursing practices are investigated through a different perspective, and the current situation/practice system is questioned (13,14). Reflective thinking is practice in nursing education in many countries to prepare and strengthen the students in the process of change and development in healthcare (1,7,15,16). The aim of this study was to explore the opinions of nursing students taking a surgery nursing course regarding their reflective thinking experiences in the clinic.

MATERIAL AND METHODS
Study Design
A descriptive qualitative research design was used. The research was conducted in the nursing department of a university in the Aegean region of Turkey between February and May 2019.

Participants and Settings
The study was conducted with nursing students taking a 2nd-grade surgery course after reflective thinking practice. The reflective thinking practice is an implementation included in the curriculum of practical courses. The sample of the study consisted of students who took part in reflective thinking practice within the clinical practice of the course entitled "Surgical Diseases and Nursing" (N = 112). All students taking the course volunteered to participate in the study. The mean age of the students in the study was 22 ± 08, with females constituting 71.4% of the students (n = 80) and males making up 28.6% (n = 32).

Data Collection
The students first received theoretical information on reflective thinking prior to clinical practices. They learned about the stages of reflective thinking formulated by the authors on the basis of the literature

(1,2,3,7). After the clinical practices, the students took part in reflective thinking practice in groups (five groups) on the basis of the stages of reflective thinking. The reflective thinking practice was carried out by research assistants who had experience in reflective thinking. These research assistants also received training in qualitative research. Students did not receive points from this implementation. After the implementation, the students were briefed about the study and the volunteering students gave written and verbal consent. We reassured the students that the information they shared was to be kept confidential. The students filled in the Reflective Thinking Feedback Form and stated their age and gender but not their names. This form contained one open-ended question: "What are your views on reflective thinking practice?". Participants wrote their opinions in the given 30 minutes. The evaluation of the data collected from the students was carried out by the researchers. Researchers are women, nurses, and academics. They are also certified in qualitative research and have research in this area.

Ethical Considerations
Written consent was obtained from all participants prior to data collection. The study protocol was approved by the non-invasive clinical research ethical committee at the authors' institution (Date: 27.02.2019, No: 2019/03, Kutahya Health Sciences University Non-Invasive Clinical Researches Assessment Commission). Approval was given by the administration of the university where the study was conducted.

Data Analysis
The data from the forms were transferred to a computer in raw form by the researchers. The data analyzed manually with content analysis. Two independent researchers identified the themes and categories. The steps involved in the analysis are given in Figure 2. In presenting the data, students' age, and gender (F: Female, M: male) have been stated.

Study Rigour
In qualitative research, the concepts of Trustworthiness and Rigor are used instead of validity and reliability. These concepts define the fact that the researched phenomenon is presented as unbiased as possible. For this, the strategies applied in our study are as follows;
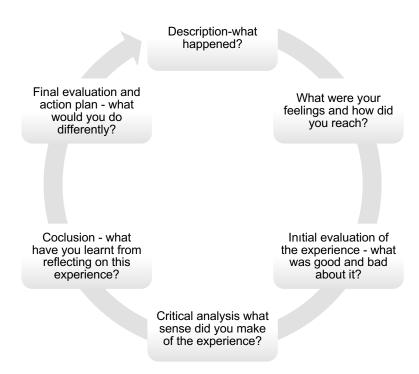
Figure 1. Reflective Cycle (Adapted and updated from Gibbs et al. (1988))

(1) Credibility: Researchers have long-term interaction with participants (prolonged involvement). Researchers are experienced in both reflective thinking and qualitative studies and have collected depth-focused data. Data analysis and interpretation of the study was done independently by two researchers. Another researcher examined the data and compared it with those encoded (external check). A consensus was reached on the latest themes and categories (Triangulation). The findings obtained at the end of the study were shared with the participants and confirmed (Member checking).

(2) Transferability: Detailed description and purposive sampling methods are recommended to increase the "transferability" of research results. The data analysis and results have been identified in sufficient detail for understanding clearly. Participants' data has been cited without making any interpretations for the reader to compare the data one-on-one (detail description). Students with different demographic characteristics and experiences (maximum variation) were included. Thus enhancing transferability of the findings.

(3) Consistency: Researchers reported the research steps clearly. In this way, it was ensured that the study was fully and carefully reflected (Confirmability) (17).

Study Limitations
Collecting the opinions of the participants in writing is one of the limitations of this study. Deeper insights could have been obtained if it was done by interview method. Although the high number of participants was the strength of the study, it caused difficulties in data analysis. However, the diversity of data has enriched the study.

RESULTS
The themes and categories emerged from the analysis of participant data are presented in Figure 3.

Theme 1. Problem Solving
The theme of Problem Solving involves the stages of problem solving that students employ to deal with the problems they encountered, and it includes the categories "Analysis" and "Critical Thinking."
Analysis: The students stated that within the scope of reflective thinking practice, they had to analyse and think about the problems in detail to solve the problems they encountered, which helped them to see different ways of arriving at solutions.
"In this practice, I was able to evaluate a situation again and review it, and I reconsidered how I should behave" (21 years old, M).
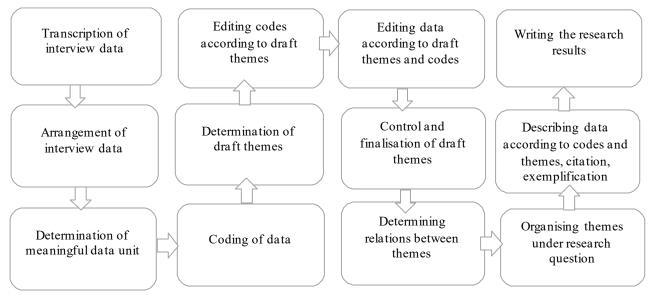
Figure 2. Steps of analysis

"It helped me to look at the incident in more detail, and I relived what I had lived and felt at that time. I asked: 'What else could I have done? What would have made it better?' I reviewed my shortcomings and mistakes by making an analysis" (22 years old, F).

"We evaluated the topics we investigated during reflective thinking practice by presenting different opinions and perspectives. We found out that there were additional solutions that we were unable to see before. This showed us that there might be various solutions to a problem" (23 years old, M).

"Reflective thinking practice forced us to think and look for solutions for problems. I can deal with such problems more comfortably if I experience them again" (20 years old, F).

Critical Thinking: The participants indicated that reflective thinking practice enabled them to look at the situations/incidents they experienced through a critical perspective.

"Reflective thinking enabled me to approach an incident critically. I weighed my opinions within myself" (20 years old, M).

"Interpreting an incident we experienced in a different way eliminated our deficiencies by making us ask ourselves: "What would someone else do here?" or "What did I do?" (21 years old, F).

"In fact, this practice made me more excited. I wonder whether other things that I believe to be correct are actually wrong" (22 years old, F).

Theme 2. Adding Value
The theme of AddingValue consists of the categories of "Empathize" and "Behaving Ethically," and the students stated that they were able to integrate important issues such as understanding patients and patients' rights into their professional lives.

Empathize: The students stated that they were able to empathize with both their own and their peers' experiences.

"Everyone may look at an incident from a different perspective. In fact, thanks to reflective thinking, we were able to look from other people's perspectives" (20 years old, F).

"We developed our empathy skills by listening to the incidents we never experienced, but may experience" (23 years old, M).

"I was able to understand the patients and their relatives" (21 years old, M).

"I was very interested in the incidents I never experienced. I thought about what I would do" (22 years old, F).

Behaving Ethically: The students stated that their approach towards ethics approaches improved after reflective thinking practice as follows:

"I believe this practice has an ethical aspect. I understood that I need to defend my rights, as well as those of the patients, and pursue it" (24 years old, F).

"I think it helps us to make ethical decisions" (21 years old, F).

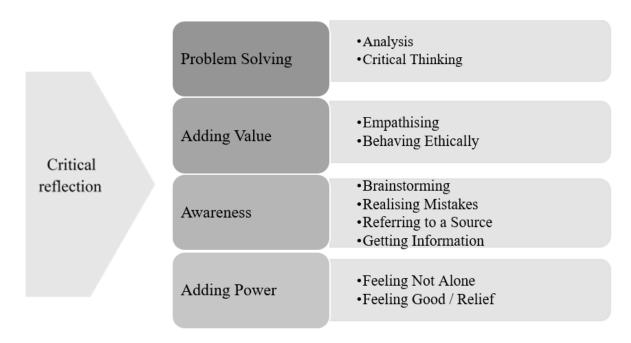"I became aware of thinking and acting ethically" (23 years old, M).

Figure 3. Themes and categories

Theme 3. Awareness

The theme of Awareness comprised the categories of "Brainstorming," "Realising Mistakes," "Referring to a Source," and "Getting Information." This theme revealed the positive effects of reflective thinking on students' learning processes.

Brainstorming: The students considered thinking with their peers while analysing a situation/incident during reflective thinking practice as brainstorming.

"I enjoyed seeing a coordinated brainstorming in the class" (21 years old, F).

"Sometimes, we can experience really weird incidents. There was an exchange of ideas, and this was great" (22 years old, M).

"We worked towards finding different solutions by seeing and discussing different problems people experienced. The most important thing was that we were completely active and at the forefront of this practice (22 years old, F).

Realising Mistakes: The students revealed that within the scope of this practice, they realised the mistakes that they had not previously.

"Reflective thinking helped me to see my deficiencies and find the right thing to do in the incidents we live through" (20 years old, F).

"This practice gave us an opportunity not to repeat the mistakes we made in the past and ascertain the things about which we thought wrongly" (21 years old, M).

"It helped us to know ourselves and become conscious of the incidents that we were unable to recognise and deal with (23 years old, M).

"This practice taught me that I could review the mistakes I made and not repeat them again" (20 years old, M).

Referring to a Source: The participants stated that they could refer to the right sources to get the information they needed during reflective thinking practice.

"I understood that I needed to deal with my lack of information by doing research" (20 years old, F).

"I realised that I could refer to sources where I could find solutions to problems. Now I have an idea about where and in which cases to refer" (21 years old, F).

"I believe that reflective thinking helps us to react to incidents not randomly but based on the information we acquire through research" (23 years old, M).

Getting Information: The students stated that they were able to share information with their peers during reflective thinking practice and that this practice was beneficial in terms of getting information as follows:

"It helped me to learn about the challenges I might encounter in my professional life" (21 years old, F).

"We expressed our opinions freely. We received, transferred and shared information" (21 years old, M).

"I received information about the issues in which I was curious of what I was supposed to do. I realised that I was ignorant about most issues" (22 years old, M).

"I learned about different incidents. The practice was insightful and fun" (20 years old, M).

"I saw that I had many deficiencies, and I learned what to do at the time of an incident. It is quite good to debate over incidents and learn things. It was fun and informative practice" (22 years old, F).

"We learned what was right through discussion, and thus, I believe that we gained experience because experience is not gained only through living but also through knowing and learning" (24 years old, F).

Theme 4. Adding Power
The categories under the theme of Adding Power were "Feeling Not Alone" and "Feeling Good/Relief."
Feeling Not Alone: The students realised that their peers also experienced the same situations that affected them and in which they were not able to decide the course of action.

"I learned how to react and how others reacted to the incidents that we all experience. Seeing that there are many others who experience similar things showed me that I was not alone" (23 years old, F).

"I saw that the problems I had in the clinic were not exclusive to me and that my peers also experienced them" (22 years old, M).

"It made me realise that there are people who understand us when we feel desperate and alone in the encounter of the incidents we live through at the hospital" (21 years old, F).

"I saw that it was not only I who experienced bad incidents. There were people who had even worse experiences, but they had not shown it" (20 years old, M).

"I liked seeing that the professors did not ignore the students' problems. We felt that the incidents in the clinic would not go unnoticed" (20 years old, M).

Feeling Good / Relief: The students stated that in this practice, they were able to talk about the problems that they lived through but could not solve, and that they felt better.

"I was able to talk about the things that I had not been able to express thanks to reflective thinking. I think it was useful for me" (23 years old, F).

"It felt good to talk about what we lived through. It was the best experience of my life. It was something great" (21 years old, F).

"Even though we usually ignored and repressed our feelings, we also realised our own feelings in this practice" (21 years old, F).

DISCUSSION
In our study, we found that the students had the opportunity to think in greater depth, examine from a critical perspective and analyse the situations/problems they encountered within the scope of reflective thinking practice. This way, the problem-solving skills of the students developed. The literature suggests that reflective thinking enables students to concentrate on a problem and question and examine it, thereby developing their ability to analyse/synthesise (7,13). Therefore, when students encounter a problem, they do not only think about the problem but focus on its solution as well (6). Problem solving is a basic skill in nursing education and includes the stages of the nursing process (18,19). Nurses need to have attained high levels of problem-solving skills in order to be able to quickly detect and resolve problems that may develop in patients and solve conflicts (20,21).

Gaining value is one of the important goals of education for nursing students. The concept of value is defined as the sum of the beliefs that constitute the moral foundations of how an individual behaves, and in decision making processes, it is the key to solving many problems (22). Being aware of their values and knowing how they affect human behaviour help nurses to be more empathetic and sensitive in caring for their patients (23, 24). The students stated that after reflective thinking practice, they were able to empathize both with their peers' experiences and with the patients and their relatives. Empathy skills are very important in terms of initiating and sustaining basic communication (25). Through an empathic approach, the needs of patients can be understood correctly, and patients can feel the value afforded as well as accorded to them (26). Thus, the quality of care and patient satisfaction increase. Earlier studies found the empathy skills of the nurses to be quite high (25,27,28). Because reflective thinking practice also requires a detailed analysis of the situation, it enables students to reflect on the situation, re-evaluate their own feelings and thoughts and develop their empathy skills. These skills constitute an important basis for students in making the right decision and help to solve ethical dilemmas. Ethical behaviour is a characteristic that can be developed not only theoretically but also through experiences. This

finding in our study is consistent with the literature (7,11,14).

The students stated that when they analysed the situation/incident they experienced through reflective thinking, they realised the mistakes in their behaviours. The most important result here is that this awareness directs them to the process of seeking information. While the students were re-evaluating the incidents within reflective thinking practice, they perceived the practice as brainstorming among themselves and felt the urge to refer to sources when they needed information. It is believed that this situation might contribute significantly to the students' learning processes (3,10,16). In their study, Tanrıkulu, Erol, & Dikmen (13) argued that the reflective thinking method used in clinical practices in the training of nursing students enabled them to evaluate themselves from different perspectives, helped them to review their positive and negative experiences in the clinic and developed their critical thinking skills. In the same study, they determined that reflective thinking practice motivated the students to learn, explore and learn on their own (13). It has been emphasised that reflective thinking practice enables students to become aware of their actions in clinical practice, think critically on them, recognise and correct their mistakes, undertake learning responsibilities and develop research skills (7,12). All these results can strengthen students' ability to make decisions in the clinic. In nursing, clinical decision making is defined as the implementation of professional nursing knowledge and skills. Adopted as a problem-solving approach for nurses and students, clinical decision making is also an essential part of the nursing process (18,29). It is stated that clinical decision making is a skill that can be improved, and correct clinical decisions improve the quality of care and patient satisfaction by reducing medical errors (18,30,31,32). The World Health Organization recommends the development of clinical decision making, problem solving and critical thinking in nursing school curricula as the gold standard in professional nursing education (33).

In our study, the students realised that their peers also experienced similar situations when they shared their experiences within the scope of reflective thinking practice. The students stated that they felt not alone when they saw that everyone else lived through the experiences, they thought to be unique to them. This allowed them to express their experiences more easily, observe them critically and come up with solutions. Thus, the students revealed the experiences that they were afraid to speak about, they were not able to find a solution for or had an ethical dilemma in—and developed proposals for a solution. One of the most important benefits of reflective thinking practice is that it enables individuals to enhance their self-recognition by identifying their strengths and weaknesses (6,11,14). Contributing to students' personal development, this result also contributes to their professional development and makes them stronger (7,15).

CONCLUSION

Through reflective thinking practice, the students felt better by sharing their experiences. In addition, we found that it supported the values of empathize and behaving ethically and strengthened them in terms of professionalisation. We recommend that reflective thinking practice be conducted in clinical practices in nursing education under the guidance of educators.

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