Clinical decision-making competencies of undergraduate nursing students: A qualitative approach

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1 Abstract / Introduction

Professional nursing practice is a result of constant decision-making concerning the health-disease process of the person being cared for. The nursing decision-making process requires the ability of nurses to make decisions and prescribe nursing actions, through which specific responses occur in the client (Tanner, 2006). Clinical decision-making competence emerges as one of the fundamental competences in nursing practice (Arzani, Lotfi & Abedi, 2016; Espinosa-Rivera, Morán-Peña, García-Piña, González-Ramírez & López-Ruíz, 2019; Nibbelink & Brewer, 2018).

Preparing nurses for professional practice involves learning decision-making in the undergraduate program (Johansen & O’Brien, 2016). Higher education in nursing is increasingly using problem based learning (PBL) and simulation as the most effective pedagogical strategies (Lee, Lee, Gong, Bae & Choi, 2016; Nibbelink & Brewer, 2018).

Following the national guidelines, which pronounces nursing decision-making as what guides nursing professional practice (Regulamento No. 190/2015), the Lisbon School of Nursing (ESEL) has created a second year course, called Nursing Decision-making Process (NDMP) (ESEL, 2012). In its operationalization, the pedagogical team elected PBL as the teaching methods to promote nursing student decision making. Reflecting on NDMP’s contributions to student competencies acquisition, and since it is a relatively unexplored area in Portugal (Marques, 2019), the following research questions emerged:

• What are the clinical decision-making competencies perceived by second year students of ESEL’s undergraduate nursing program when they complete the NDMP course and the theoretical section of the graduation program?
• What are the clinical decision-making competencies perceived by the fourth year students of ESEL’s undergraduate nursing program when they complete one year of decision-making training in clinics?

For this reason, we designed a study to identify the perceptions of the second and fourth year students about the competences acquired in NDMP course, to understand which competences they considered to have the greatest impact on their clinical decision-making and to highlight similarities and differences among them.

2 Methodology

This study used a qualitative longitudinal design to understand the clinical decision-making competencies with greater impact in nursing student in the second and fourth years. Longitudinal qualitative research methods “can add depth and understanding to (...) health research” (Grossoehme & Lipstein, 2016, p.1).

¹ One year corresponds to the time required to complete, in clinical context, the first experience of process of decision making, as demonstrated through the learning outcomes of the two semesters.
The students' perceptions about decision-making competencies relevant to clinical practice, acquired in NDMP, were collected through two instruments, previously constructed:

• Open-ended questionnaires applied to 219 students who were attending the second year, at the end of the NDMP course.

• Focus group carried out with a convenience sample of 8 students who were attending the clinical course in the fourth year and who agreed to participate after being explained the current research. The open-ended questionnaire was used to identify the decision-making competencies that the students perceived as important in the NDMP course, whereas the focus group was planned to understand the perceptions of senior students about the skills acquired in the undergraduate program promoted by NDMP, with greater impact in the clinical practice and that more influenced their clinical decision-making.

In longitudinal studies, researchers must describe both methods of data collection, compare the study results from each method, and describe they were integrated, becoming study results (Grossoehme & Lipstein, 2016; Phillips et al., 2015; Rosser et al., 2019). Therefore, we analyzed data separately, synthesized similarities and differences, to conclude how the different experience influenced the results (Grossoehme & Lipstein, 2016) for a more comprehensive view of decision-making learning process.

Data from both studies were subject to content analysis according to Bardin (2013), using WebQdA® software. The categorization was made according to King's (1999) three categories: Personal System, Interpersonal System and Social System. The coding was done by giving the letter E (student) and a number (2 for second and 4 for fourth year). We also included the gender characterization by using F for (feminine) and M for (masculine).

ESEL Ethics Committee previously approved the study. Confidentiality was ensured and the participants' anonymity was guaranteed. All participants signed a consent form.

3 Results

The data analysis was organized in nineteen subcategories, grouped by the three categories of King’s model (1999). After establishing the categories, they were used in the two stages of the data analysis. The focus of students’ perceptions was, in both stages, on personal competencies, followed by social and interpersonal skills.

In the second stage, we did find similarities and differences in students' perceptions of clinical decision-making development, through the insights that the focus group made possible. With regard to similarities, the most important competencies are the same in each category.

As differences, the most highlighted competence is no longer the Decision-Making Capacity, but Knowledge about Nursing Process and Taxonomies, as some students stated: “To create a nursing care plan” (E2-130F); “learned to use the nursing taxonomies NNN and CIPE” (E2-36F); “was able to identify the adequate nursing diagnosis and the fundamental interventions” (E4-3F). This change translates the awareness that the most important and final product in clinical nursing must be a nursing care plan for a client (Zaybak et al., 2018).

4 Conclusions

Longitudinal qualitative research is a powerful approach to understand the complexities of health care and its learning process. In the present research, the analysis of students' perceptions about decision-making competencies acquired in NDMP by using PBL as a methodology, and its relevance,

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were related to two different moments: the second and fourth years, before and after clinical training.

The results obtained after clinical practice were consistent with the previous ones, allowing us to conclude in favour of the interiorization of the learning process, which began in the NDMP course. These results reinforce the pertinence of the teaching and learning objectives, strategies developed in NDMP and clarify the importance that knowledge about the nursing process, and taxonomies have for the learning of clinical decision-making in ESEL.

Further studies should contribute to a more comprehensive view of students learning along the four years program. This would allow a reflection on the quality of nursing education and the development of autonomous and independent decision-making strategies for future nurses.

Keywords: Clinical decision-making; Competency; Undergraduate nursing education; Student; Qualitative study.

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References


