

## RESEARCH ARTICLE (ORIGINAL)

## Evaluation of structured debriefing as a pedagogical strategy in family health nursing

*Avaliação do debriefing estruturado como estratégia pedagógica em enfermagem de saúde familiar*

*Evaluación del debriefing estructurado como estrategia pedagógica en la enfermería de salud familiar*

Margarida Alexandra Nunes Carramanho  
Gomes Martins Moreira da Silva<sup>1</sup>

<https://orcid.org/0000-0003-0031-271X>

Maria Teresa de Oliveira Soares Tanqueiro<sup>1</sup>

<https://orcid.org/0000-0003-1606-7464>

Cristina Maria Figueira Veríssimo<sup>1</sup>

<https://orcid.org/0000-0002-8836-2828>

Marília Maria Andrade Marques Conceição  
Neves<sup>1</sup>

<https://orcid.org/0000-0001-6087-1869>

Clarinda Maria Prazeres Ferreira Silva da  
Rocha Cruzeiro<sup>1</sup>

<https://orcid.org/0000-0003-2926-8804>

Verónica Dias Coutinho<sup>1</sup>

<https://orcid.org/0000-0001-8073-4562>

<sup>1</sup> Health Sciences Research Unit: Nursing,  
Nursing School of Coimbra, Coimbra,  
Portugal

### Corresponding author:

Margarida Alexandra Nunes Carramanho  
Gomes Martins Moreira da Silva  
Email: [margarida@esenfc.pt](mailto:margarida@esenfc.pt)

Received: 06.11.19

Accepted: 13.01.20

### Abstract

**Background:** The impact of simulation with structured debriefing as a pedagogical strategy in nursing education is unquestionable today. However, no references were found regarding the use of this strategy in family health nursing education.

**Objective:** To evaluate structured debriefing associated with simulation as a pedagogical strategy in family nursing consultations.

**Methodology:** A quantitative cross-sectional descriptive study was conducted with a sample of 169 students attending the 2<sup>nd</sup> year of the Bachelor's Degree in Nursing. The Simulation Debriefing Assessment Scale (*Escala de Avaliação do Debriefing Associado à Simulação - EADaS*) was applied in laboratory classes.

**Results:** The scale had an overall mean score of 4.25 ( $SD = 0.400$ ), with a minimum of 3.03 and a maximum of 5.00. The highest mean scores ( $M = 4.58$ ;  $SD = 0.462$ ) were found in the Affective Value Dimension and the lowest mean scores ( $M = 3.87$ ;  $SD = 0.621$ ) were found in the Psychosocial Value Dimension. The Cognitive Value Dimension had  $M = 4.35$  points and  $SD = 0.435$ .

**Conclusion:** Structured debriefing associated with simulation proved to be a suitable pedagogical strategy for the acquisition and development of students' competencies in family health nursing, facilitating critical and reflexive learning that is essential to intervene within the family and should, therefore, be implemented in this area.

**Keywords:** debriefing; simulation; family nursing

### Resumo

**Enquadramento:** O impacto da simulação com *debriefing* estruturado como estratégia pedagógica na formação em enfermagem é hoje inquestionável, contudo, não se encontraram referências à utilização desta estratégia no ensino de enfermagem em saúde familiar.

**Objetivo:** Avaliar o *debriefing* estruturado associado à simulação em consultas de enfermagem à família como estratégia pedagógica.

**Metodologia:** Estudo quantitativo, descritivo e transversal. Amostra de 169 estudantes, 2<sup>o</sup> ano, do Curso de Licenciatura em Enfermagem. Aplicada a Escala de Avaliação do *Debriefing* Associado à Simulação (EADaS), em aula de prática laboratorial.

**Resultados:** A escala revela média global de 4,25 ( $DP = 0,400$ ) mínimo 3,03 e máximo 5,00. Verifica-se média mais elevada ( $M = 4,58$ ;  $DP = 0,462$ ) na Dimensão Valor Afetivo e mais baixa ( $M = 3,87$ ;  $DP = 0,621$ ) na Dimensão Valor Psicossocial. A Dimensão Valor Cognitivo apresenta  $M = 4,35$  pontos e  $DP = 0,435$ .

**Conclusão:** O *debriefing* estruturado associado à simulação, revelou-se uma estratégia pedagógica adequada à aquisição e desenvolvimento de competências dos estudantes em enfermagem de saúde familiar, facilitando a aprendizagem crítica e reflexiva essencial para intervir na família, devendo implementar-se nesta área.

**Palavras-chave:** *debriefing*; simulação; enfermagem familiar

### Resumen

**Marco contextual:** El impacto de la simulación con *debriefing* estructurado como estrategia pedagógica en la formación en enfermería es incuestionable hoy en día. Sin embargo, no se encontraron referencias al uso de esta estrategia en la enseñanza de la enfermería de salud familiar.

**Objetivo:** Evaluar el *debriefing* estructurado asociado a la simulación en las consultas de enfermería familiar como estrategia pedagógica.

**Metodología:** Estudio cuantitativo, descriptivo y transversal. Muestra de 169 estudiantes de 2.º año del Grado de Enfermería. Se aplicó la Escala de Evaluación del *Debriefing* Asociado a la Simulación (*Escala de Avaliação do Debriefing Associado à Simulação - EADaS*) en las prácticas de laboratorio.

**Resultados:** La escala muestra una media global de 4,25 ( $DE = 0,400$ ), mínimo de 3,03 y máximo de 5,00. La media más alta ( $M = 4,58$ ;  $DE = 0,462$ ) se encuentra en la Dimensión del Valor Afectivo y la más baja ( $M = 3,87$ ;  $DE = 0,621$ ) en la Dimensión del Valor Psicossocial. La Dimensión del Valor Cognitivo tiene  $M = 4,35$  puntos y  $DE = 0,435$ .

**Conclusión:** El *debriefing* asociado a la simulación demostró ser una estrategia pedagógica adecuada para la adquisición y el desarrollo de competencias de los estudiantes en enfermería de salud familiar, pues facilita el aprendizaje crítico y reflexivo esencial para intervenir en la familia, por lo que se debería poner en práctica en esta área.

**Palabras clave:** *debriefing*; simulación; enfermería de la familia



**How to cite this article:** Silva, M. A. N., Tanqueiro, M. T. O., Veríssimo, C. M. F., Neves, M. M. A., Cruzeiro, C. M. P., & Coutinho, V. D. (2020). Evaluation of structured debriefing as a pedagogical strategy in family health nursing. *Revista de Enfermagem Referência*, 5(2), e19081. doi:10.12707/RIV19081



## Introduction

Family care has accompanied the development of nursing as a profession and discipline of knowledge, and today nurses' responsibility in monitoring the family's health throughout the life cycle is remarkable (Silva, 2016).

In the literature on family health nursing, difficulties have been identified in the development of nurses' clinical practices associated with the gap between theory and practice (Figueiredo, 2009; Hanson, 2005; Martins, 2004; Santos, 2012; Segaric & Hall, 2005; Silva, 2016; Wright & Leahey, 2013). A primary study conducted in the central region of Portugal has revealed that nurses perceive a divergence between their competencies and the demands of the political guidelines in the area of family health nursing, with the nursing schools having to find pedagogical strategies to facilitate the acquisition and development of students' skills in this area (Silva, 2016). Constructivist pedagogical models, where experiential learning plays a key role and clinical simulation is a strategy of recognized value, are essential for the development of these skills (Martins, 2017).

Therefore, this study aimed to evaluate structured debriefing associated with simulation in family nursing consultations as a pedagogical strategy to develop students' skills to respond to the political guidelines in Portugal, where the family nurse should focus on the family throughout the life cycle, thus contributing to bring theory closer to practice.

## Background

The importance of family-centered health care has been evidenced in the theoretical development in the nursing area and the implementation of health policies in Portugal, and today the importance of family nurses in primary health care (PHC) is evident in the creation of family health units (*Unidades de Saúde Familiar*, USF) where nurses play a key role in multiprofessional teams (Silva, Costa, & Silva, 2013).

The principles and the framework of family nurses' activity, as defined in Decree-Law no. 118/2014 of 5 August, highlight their responsibility for the delivery of comprehensive nursing care to the family, at all stages of the life cycle and in all community settings, being clear that the family nurse "cares for the family as a unit of care and provides general and specific care at different stages of the life of the individual and the family . . ." (Decreto-Lei n.º 118/2014 de 5 de agosto, p. 4070).

However, the implementation of these policies, as well as the theoretical development in the area of family health nursing require a realignment of nursing education so that nurses move from an individual-centered paradigm where the family is a context to a family-centered paradigm where the family is the focus and unity of care (Silva, 2016).

This shift can help to overcome the several difficulties in clinical practice, which many authors have identified. Martins (2004) argues that some nurses believe that the

presence of the family in care means that their work is being observed and evaluated and that they feel threatened. Hanson (2005) points out that: nursing still has strong historical ties with the biomedical model, where the family is only viewed as a context of the individual and not as a client; the majority of nurses has no training on family health nursing, continuing to guide their practices based on an individual focus; and nurses believe that family and family health nursing are part of common sense and, for this reason, they do not need training. Silva (2016) argues that the delivery of nursing care to the family in PHC is strongly associated with nurses' identity processes, which includes their training, either more focused on the family or the individual.

Therefore, the faculty of the Nursing School of Coimbra has been concerned with using pedagogical strategies focused on the students and the development of their overall skills. The teachers lecturing the subject of Community and Family Health Nursing in the 2<sup>nd</sup> year of the Bachelor's Degree in Nursing have been using simulation with structured debriefing to teach contents related to the area of family health nursing, namely in family nursing consultations, in theoretical, theoretical-practical, and laboratory classes.

The curricular models focused on the students as active agents in their own learning, where the teacher facilitates the development of skills, bring us to concepts that define competence as the ability to mobilize resources, knowledge, and skills to address complex situations of daily practice, requiring the student to have the critical thinking, autonomy, creativity, and ability to adapt (Alarcão, 2001; Le Boterf, 1997; Perrenoud, 2001).

The advantages of replacing passive learning methods by experiential learning are now recognized, and simulation is part of this group (Martins, 2017). Simulation is a pedagogical strategy that uses a situation or creates an environment to allow the trainees to experience a representation of a real-life event with the purpose of practicing, learning, evaluating, testing, or understanding systems or human actions (Costa, Medeiros, Martins, & Coutinho, 2019).

Simulation allows trainees to make decisions, consolidate their knowledge, and develop a set of skills that promote their technical, relational, and ethical development (Martins, 2009). It is an important pedagogical strategy in nursing education at all levels of training, including lifelong learning (continuous training). On the other hand, the impact of simulation on the trainees' satisfaction is also recognized (Martins, 2017), which contributes to the quality of education.

As an active pedagogical strategy, it:

helps to consolidate knowledge and gives it value, develops technical and relational skills, helps to create rules and habits for thinking and reflection, and contributes to the development of competent professionals within a safe environment for students, teachers, and for the person and family targeted for care. (Martins, 2017, p.157)

The use of debriefing after simulation is a structured way of helping the trainees to reflect about and for action,



helping them not only to consolidate knowledge, but also to change behaviors by reflecting on what they did, how they did it, why they did it, and how they can improve their performance (Coutinho, Martins, & Pereira, 2014). However, the same authors highlight the scarce evidence available on results associated with debriefing, and no studies were found on the use of this pedagogical strategy in the development of competencies in the area of family health nursing.

## Research question

Is structured debriefing associated with simulation an appropriate strategy in family nursing consultations for the development of students' skills?

## Methodology

A quantitative descriptive cross-sectional study was conducted with a nonprobability convenience sample of 169 students in the laboratory classes of the course unit of Community and Family Nursing of the 2<sup>nd</sup> year of the Bachelor's Degree in Nursing at the Nursing School of Coimbra, Portugal. Inclusion criteria were being over 18 years of age and attending the laboratory classes. Data were collected during January 2019.

Authorization was requested from the School's dean, and the study was submitted to the Ethics Committee of the Health Sciences Research Unit: Nursing of the Nursing School of Coimbra (Opinion No. 542/11-2018). Participants signed the informed consent form where their right to voluntary participation, anonymity, and confidentiality was ensured. They were also informed that they would suffer no harm from participating or not in the study and that it would not interfere with the assessment of the course unit.

The questionnaire was applied at the end of a 2-hour laboratory class where the students who were present in the classroom and agreed to participate in the study developed simulation scenarios and their debriefings.

The data collection instrument was a questionnaire with two questions for sociodemographic characterization (age and gender) and the Simulation Debriefing Assessment Scale (*Escala de Avaliação do Debriefing associado à Simulação - EADaS*) by Coutinho et al. (2014), which assesses the impact of structured debriefing associated with simulation on students. The scale is composed of 34 items rated on a 5-point Likert-type scale ranging from *totally disagree* to *totally agree*. It has three dimensions: Psychosocial Value Dimension (13 items), Cognitive Value Dimension (9 items), and Affective Value Dimension (12 items). Cronbach's alpha values are very good for the total scale (0.899) and each of its dimensions: 0.884 for the Psychosocial Value Dimension, 0.859 for the Cognitive Value Dimension, and 0.889 for the Affective Value Dimension.

In this study, the scale also showed very good Cronbach's alpha values for the total scale (0.91) and its dimensions:

0.87 for the Affective Value Dimension, 0.84 for the Cognitive Value Dimension, and 0.90 for the Psychosocial Value Dimension. Data were analyzed using IBM SPSS Statistics, version 24.0.

The simulated clinical experience in laboratory classes took place at the School's simulation center, where a scenario was created for the first consultation of a family (heterosexual couple) in a family health unit. The scenario aimed to: develop nursing consultation, guided by the Calgary Evaluation Model and the national health programs.

The simulation lasted for 20 minutes, followed by 40 minutes of debriefing. After the presentation of the simulation objectives to all of the students (15 students per class), the scenario was then explained to three students who volunteered to perform the simulation: two students were the couple, and one student was the nurse. Students who represented the couple were instructed and trained to know how to act during the scenario. The student who played the role of the nurse had no prior knowledge of the scenario. The remaining 12 students knew the scenario and observed the simulation (in a mirrored room), using a structured observation grid provided by the teacher to record the interventions that were accomplished and not accomplished. The observation grid was built by the authors based on the Calgary Assessment Model, whose contents had already been discussed in the theoretical classes and applied in clinical cases in the theoretical-practical classes.

At the end of the simulation, the three students who simulated the scenario assessed the simulated clinical experience as a whole, and then the group of observers took stock of the properly developed interventions, with positive reinforcement. The student who played the role of the nurse specified the interventions to be improved and what he/she would do differently in the future, stating the reasons. Finally, the teacher mentioned the key points regarding the objective of the simulated clinical experience, always giving positive reinforcement.

The following outcomes were expected for that class: Students should develop a nursing consultation based on the national health programs; use the Calgary Assessment Model during the consultation; distinguish the several phases of the consultation; establish an adequate relationship with the *family*; demonstrate knowledge about the theoretical model; select the information to be collected during the interview while integrating the theoretical model; use instruments for family assessment; interpret; organize; record the data collected; and manage the time available for the consultation.

## Results

The participants had a mean age of 20.38 years, with a minimum age of 18 years and a maximum age of 37 years, a standard deviation of 2.97, and a median of 19.0; 81% (136) of participants were women, 19% (32) were men, and one participant did not answer. A total of 169 subjects participated in the study but, in the following tables, the different values of *N* refer to the total number

of answers to the item.

Table 1 shows that the overall mean of the scale was 4.25, with a standard deviation of 0.400, a minimum of 3.03, and a maximum of 5.00. The highest mean score was found in the Affective Value Dimension (4.58), with

a standard deviation of 0.462. The lowest mean score was found in the Psychosocial Value Dimension (3.87), which was also the dimension with the highest standard deviation (0.621). In the Cognitive Value Dimension, the mean score was 4.35, with a standard deviation of 0.435.

Table 1

*Mean scores for each dimension of EADaS*

Dimension	<i>N</i>	Min	Max	<i>M</i>	<i>DP</i>
Affective Value	165	3.08	5.00	4.58	0.462
Cognitive Value	164	2.44	5.00	4.35	0.435
Psychosocial Value	164	2.00	5.00	3.87	0.621
Total	157	3.03	5.00	4.25	0.400

*Note.* *N* = Population size; *M* = Mean; *SD* = Standard deviation; EADaS = Simulation Debriefing Assessment Scale (*Escala de Avaliação do Debriefing associado à Simulação*).

Table 2 shows that the lowest scores were found in the Psychosocial Value Dimension, even though all mean scores were above 3 points, that is, above the midpoint of the scale. In this dimension, the mean score ranged from 3.31 in item 17 - "Developing leadership skills" to 4.33 in item 33 - "Feeling that the teacher has a genuine interest in my professional development". The following items also had scores equal to or greater than 4 points: 22 - "Strengthening my initiative in future situations" (4.02); 23 - "Developing the helping relationship" (4.15); 19 - "Increasing the potential of teamwork" (4.20); 26 - "Identifying difficulties in my performance" (4.21), and 25 - "Strengthening my autonomy to act as a future nurse" (4.28).

In the Psychosocial Value Dimension, the highest scores (above 4 points) indicate that students perceive the debriefing technique as an added-value for their professional future, namely because it increases the potential of teamwork, strengths the initiative in future situations, develops the helping relationship, strengths the autonomy as future nurses, identifies difficulties in the performance, and makes them feel that the teacher has a genuine interest in the student's professional development.

In the Cognitive Value Dimension, the mean scores are above 4 points, ranging from 4.20 in item 6 - "Reflecting on my skills" to 4.56 in item 3 - "Learning more". The following mean scores were also obtained: 4.49 in item

12 - "Identifying aspects that I need to improve in future interventions", 4.43 in item 4 - "Focusing on important aspects of the performance"; 4.38 in item 13 - "Developing skills for making the right decisions"; and 4.33 in item 7 - "Identifying priorities in the performance" (4.33). Item 1 - "Structuring my thoughts" and item 8 - "Better identifying the resources to use in the performance" scored the same mean points (4.24).

In this dimension, the results show that the pedagogical strategy develops clinical reasoning in, about, and for the concrete action of clinical practice, which facilitates learning in a future intervention.

In the Affective Value Dimension, where the items were reversed for statistical analysis, the following items scored equal to or greater than 4.5 points: 24 - "Feeling that it was a waste of time" (4.93); 20 - "Feeling disrespected" (4.86); 14 - "Creating conflicts in the group" (4.80); 15 - "Not wanting to participate in any more simulations" (4.76); 9 - "Humiliating me in front of others" (4.72); 18 - "Feeling misunderstood" (4.64); 34 - "Confusing my ideas about the performance" (4.56); and item 2 - "Embarrassing me in front of my colleagues because of my mistakes" (4.51).

In this dimension, the item with the lowest score was item 5 - "Making me feel very anxious/stressed" (3.98). The highest scores also reveal that debriefing is an important technique in the student's affective development.

Table 2

*Descriptive values of EADaS*

Dimension	<i>N</i>	<i>M</i>	<i>DP</i>	Min	Max
Psychosocial Value Dimension	164	3.87	0.621	2.00	5.00
16 - Increasing my self-confidence	168	3.58	0.993	1.00	5.00
17 - Developing leadership skills	169	3.31	0.994	1.00	5.00
19 - Increasing the potential of teamwork	168	4.20	0.719	2.00	5.00
21 - Feeling accomplished	167	3.45	0.948	1.00	5.00
22 - Strengthening my initiative in future situations	168	4.02	0.844	1.00	5.00
23 - Developing the helping relationship	168	4.15	0.739	1.00	5.00
25 - Strengthening my autonomy to act as a future nurse	168	4.28	0.781	2.00	5.00

26 - Identifying difficulties in my performance	168	4.21	0.928	1.00	5.00
27 - Promoting self-awareness (Knowing my own emotions)	168	3.98	0.925	1.00	5.00
28 - Feeling at the center of the training process	167	3.33	1.14	1.00	5.00
30 - Improving my ability to manage emotions	168	3.64	1.03	1.00	5.00
32 - Feeling proud for being able to perform many interventions correctly	167	3.69	0.981	1.00	5.00
33 - Feeling that the teacher has a genuine interest in my professional development	168	4.33	0.730	2.00	5.00
Cognitive Value Dimension	164	4.35	0.436	2.44	5.00
1 - Structuring my thoughts	169	4.24	0.622	3.00	5.00
3 - Learning more	169	4.56	0.554	3.00	5.00
4 - Focusing on the important aspects of the performance	168	4.43	0.662	1.00	5.00
6 - Reflecting on my skills	168	4.20	0.736	1.00	5.00
7 - Identifying priorities in the performance	169	4.33	0.634	1.00	5.00
8 - Better identifying the resources to use in the performance	168	4.24	0.694	1.00	5.00
10 - Further exploring specific knowledge associated with the performance	168	4.22	0.669	1.00	5.00
12 - Identifying aspects that I need to improve in future interventions	168	4.49	0.675	1.00	5.00
13 - Developing skills for making the right decisions	169	4.38	0.586	3.00	5.00
Affective Value Dimension	165	4.57	0.462	3.08	5.00
2 - Embarrassing me in front of my colleagues because of my mistakes	169	4.51	0.832	1.00	5.00
5 - Making me feel very anxious/stressed	168	3.98	1.00	1.00	5.00
9 - Humiliating me in front of others	168	4.72	0.647	2.00	5.00
11 - Being in panic just to think that I will have to intervene again in a similar situation	169	4.43	0.840	1.00	5.00
14 - Creating conflicts in the group	169	4.80	0.580	1.00	5.00
15 - Not wanting to participate in any more simulations	169	4.76	0.603	1.00	5.00
18 - Feeling misunderstood	169	4.64	0.686	1.00	5.00
20 - Feeling disrespected	168	4.86	0.384	3.00	5.00
24 - Feeling that it was a waste of time	168	4.93	0.281	3.00	5.00
29 - Being afraid to intervene in future similar situations	168	4.33	0.844	2.00	5.00
31 - Blocking my thinking	167	4.31	0.812	2.00	5.00
34 - Confusing my ideas about the performance	168	4.56	0.764	1.00	5.00
Total	157	4.25	0.400	3.03	5.00

Note. *N* = Population size; *M* = Mean; *SD* = Standard deviation; EADaS = Simulation Debriefing Assessment Scale (*Escala de Avaliação do Debriefing associado à Simulação*).

## Discussion

Nursing education requires the development of skills for the performance of an active role in favor of the quality and safety of care (Valenzuela-Suazo, 2016). Although studies on structured debriefing in nursing education have revealed a very positive impact on the development of students' skills (Coutinho et al., 2014; Coutinho, Martins, & Pereira, 2016; Coutinho, Martins, & Pereira, 2017), these studies have been conducted in the area of medical-surgical nursing.

The results obtained through the application of the scale for assessing the impact of debriefing in family nursing consultations show that this strategy is also appropriate for the area of family health nursing and that it contributes to improving pedagogical practices, which will lead to higher quality in the provision of nursing care to the family. In the Psychosocial Value Dimension, it was clear that students perceive the technique of debriefing associated with simulation as an added-value for their professional

future. This fact is also confirmed in other studies (Coutinho et al., 2014; Coutinho et al., 2016; Coutinho et al., 2017) where the pedagogical strategy shows better performance and development of teamwork skills as in this study, as well as proximity between the students and the teacher as a facilitator of the students' performance. This fact is also associated with the students' perceptions that the teacher has a genuine interest in their professional development. In the training focused on the reflection about clinical practice, the teacher not only teaches but also encourages the student to make decisions and observations, perceive relationships and work with questions, in order to promote professional skills, but also attitudes that in the future lead to the acquisition of powers to act for the benefit of society (Valenzuela-Suazo, 2016). This finding highlights the strengthening of autonomy to act as future nurses, as well as the environment created in the classroom to enable students to identify the difficulties experienced during their performance and overcome them as active agents in their own development. However, the

fact that this strategy requires students to be at the center of the formative process implies that they should have more initiative, greater self-awareness, and better emotion management skills, which has not been a constant attitude throughout their education process and may explain the lower scores found in this dimension when compared to the Cognitive Value and Affective Value dimensions. Therefore, at the beginning of the simulation, the teacher should talk to the students about: the simulation environment, the simulation objectives, the possibilities for help and/or interventions of others during the implementation of the scenario, description of the case and the possibility of previous manipulation of the equipment available in the scenario (Costa et al., 2019).

In the Affective Value Dimension, where the total score was higher, it is clear that the environment created by the teacher and the relationship established with and among the students is very important, providing an environment that not only enables and promotes learning, but also improves performance, promotes teamwork, and improves the quality of the performance in clinical practice (Valenzuela-Suazo, 2016). This fact reinforces the results found in other studies (Coutinho et al., 2014; Coutinho et al., 2016; Coutinho et al., 2017), where the students perceive structured debriefing as a method that gives them greater motivation and interest. However, for that to happen, the trainer should master the debriefing strategy in order to facilitate learning in an environment that promotes the trainee's safety, confidence, and confidentiality (Costa et al., 2019).

The organization of simulated clinical practice based on objectives that are already known by the students and the use of structured, well-defined debriefing, together with positive reinforcement of the students' attitudes and behaviors, allows them to reflect on and to action, facilitating the transfer of knowledge to future situations and contexts (Martins, 2017) and making them active agents in their own learning process.

In the Cognitive Value Dimension, it was also clear that the pedagogical strategy is very appropriate for the development of clinical reasoning about and to the concrete action of clinical practice, which facilitates learning in a future intervention. Students' perception that they learn more, are able to identify the aspects to be improved, can focus on the important aspects of their performance, develop skills for making the right decisions while identifying priorities in their performance reinforces the results obtained in other studies with other scenarios and other goals, namely that the use of structured debriefing after simulation makes students reflect on the action and helps them to consolidate knowledge and change behaviors (Coutinho et al., 2014).

Self-reflection is an instrument of autonomy that promotes the transition between the practice based on technical rationality and the reflective practice that leads to behavior change (Coutinho et al., 2017). It is essential because the delivery of quality care requires nurses to have a critical and reflexive attitude towards the clinical reality, which will allow them to build it and transform it (Valenzuela-Suazo, 2016).

This study shows that the use of structured debriefing after

simulation is also a very suitable strategy for learning how to interact with the family, where a systemic intervention oriented towards the delivery of care throughout the life cycle is necessary.

However, a limitation of this study was the lack of a control group, which made it impossible to compare the traditional method with the pedagogical strategy, as well as the use of a nonprobability sample. Another limitation was the fact that some questionnaires had unanswered items, causing different *N* values in these items and hampering the analysis of the results.

## Conclusion

It can be concluded that the simulation with structured debriefing in family health nursing education is an adequate strategy that allows the development of students' affective, cognitive, and psychosocial skills, as was found in other studies on the development of students' skills using medium- and high-fidelity simulation.

It is believed that the use of this pedagogical strategy in family health nursing education can contribute to empowering future nurses and decreasing the gap between the political guidelines and clinical practice. Therefore, the strategy is also important in family health nurses' advanced training, where actions and solutions must be analyzed to change the interventions oriented towards the family as the focus of care.

It is suggested that simulation with structured debriefing should be used in nursing education to train students and professionals on how to develop clinical interventions focused on the family throughout the life cycle.

Research on pedagogical practices should be a concern of the faculty. Thus it is also suggested that further studies should be conducted in the area of family health education.

## Author contributions

Conceptualization: Silva, M., Tanqueiro, M., Verissimo, C., & Coutinho, V.

Data curation: Verissimo, C., & Coutinho, V.

Methodology: Silva, M., Tanqueiro, M., Verissimo, C., & Coutinho, V.

Writing – original draft: Silva, M., Tanqueiro, M., Verissimo, C., Neves, M., & Coutinho, V.

Writing – review & editing: Silva, M., Tanqueiro, M., Verissimo, C., Neves, M., Cruzeiro, C., & Coutinho, V.

## References

- Alarcão, I. (2001). Formação reflexiva. *Revista de Enfermagem Referência*, 1(6), 53-59. Retrieved from [https://rr.esenfc.pt/rr/index.php?module=rr&target=publicationDetails&pesquisa=&id\\_artigo=2076&id\\_revista=5&id\\_edicao=21](https://rr.esenfc.pt/rr/index.php?module=rr&target=publicationDetails&pesquisa=&id_artigo=2076&id_revista=5&id_edicao=21)
- Costa, R. R., Medeiros, S. M., Martins, J. C., & Coutinho, V. R. (2019). Percepções de estudantes de enfermagem acerca das dimensões estruturais da simulação clínica. *Scientia Medica*, 29(1), e32972. Doi:10.15448/1980-6108.2019.1.32972



- Coutinho V. R., Martins, J. C., & Pereira, F. (2014). Construção e validação da Escala de Avaliação do Debriefing associado à Simulação (EADaS). *Revista de Enfermagem Referência*, 4(2), 41-50. doi: 10.12707/RIII1392
- Coutinho, V. R., Martins, J. C., & Pereira, F. (2016). Structured debriefing in nursing simulation: Student's perceptions. *Journal of Nursing Education and Practice*, 6(9), 127-134. doi: 10.5430/jnep.v6n9p127
- Coutinho, V. R., Martins, J. C., & Pereira, F. (2017). Student's opinion about feedback Vs structured debriefing: A randomized controlled trial. *International Journal of Nursing Didactics*, 7(4), 63-68. doi: 10.15520/ijnd.2017.vol7.iss4.215.63-68
- Decreto-Lei nº 118/2014 de 5 de Agosto. *Diário da República nº 149/2014 - I Série*. Ministério da Saúde. Lisboa, Portugal.
- Figueiredo, M. H. (2009). *Enfermagem de família: Um contexto do cuidar* (Doctoral thesis). Retrieved from <http://hdl.handle.net/10216/20569>
- Hanson, S. M. (2005). *Enfermagem de cuidados de saúde à família: Teoria prática e investigação* (2ª ed.). Lisboa, Portugal: Lusociência.
- Le Boterf, G. (1997). *De la compétence à la navigation professionnelle*. Paris, France: Editions d'Organisation.
- Martins, M. M. (2004). *O adulto doente e a família uma parceria de cuidados*. (Master's dissertation). Retrieved from <http://hdl.handle.net/10216/64647>
- Martins, J. (2009). Atuação do enfermeiro no sector de urgências: Gestão para o desenvolvimento de competências. In Malagutti, W. & Cardoso, K. (Eds.), *Gestão do serviço de enfermagem no mundo globalizado* (pp. 175-189). Rio de Janeiro, Brasil: Rubio.
- Martins, J. C. (2017). Aprendizagem e desenvolvimento em contexto de prática simulada. *Revista de Enfermagem Referência*, 4(12), 155-162. doi: 10.12707/RIV16074
- Perrenoud, P. (2001). *Porquê construir competências a partir da escola?: Desenvolvimento da autonomia e luta contra as desigualdades*. Porto, Portugal: Asa Editoras.
- Santos, M. L. (2012). *Abordagem sistémica do cuidado à família: Impacto no desempenho profissional do enfermeiro* (Doctoral thesis). Retrieved from <http://hdl.handle.net/10451/6979>
- Segaric, C., & Hall, W. (2005). The family theory: Practice gap a matter of clarity? *Nursing Inquiry*, 12(3), 210-218. doi: 10.1111/j.1440-1800.2005.00270.x
- Silva, M. A., Costa, M.A., & Silva, M. M. (2013). A família em cuidados de saúde primários: Caracterização das atitudes dos enfermeiros. *Revista de Enfermagem Referência*, 3(11), p. 19-28. doi: 10.12707/RIII13105
- Silva, M. A. (2016). *Enfermagem de família: Contextos e processos em cuidados de saúde primários* (Doctoral thesis, Universidade do Porto, Instituto de Ciências Biomédicas Abel Salazar, Portugal). Retrieved from <https://repositorio-aberto.up.pt/bitstream/10216/84294/2/113541.pdf>
- Valenzuela-Suazo, S. (2016). La práctica de enfermería como foco de reflexión. *Aquichan*, 16(4), 415-417. doi: 10.5294/aqui.2016.16.4.1
- Wright, L. M., & Leahey M. (2013). *Nurses and families: A guide to family assessment and intervention* (6ª ed.). Philadelphia, PA: FA Davis Company.

