







# REFLECTIVE THINKING IN NURSING: USE OF DEBRIEFING AS A PEDAGOGICAL ELEMENT

## PENSAMENTO REFLEXIVO NA ENFERMAGEM: O USO DO DEBRIEFING COMO ELEMENTO PEDAGÓGICO

### EL PENSAMIENTO REFLEXIVO EN ENFERMERÍA: EL USO DEL DEBRIEFING COMO ELEMENTO PEDAGÓGICO

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#### ABSTRACT

**Objective:** to understand how debriefing emerges as a pedagogical element in the development of reflective thinking in Nursing. **Method:** a single-case study with a qualitative approach developed in the Health Simulation Center (Centro de Simulación en Salud, CESISA) belonging to Universidad de Costa Rica. The data were collected between August and October 2018 through documentary analysis, non-participant observation and semi-structured interviews with professors, students and technicians. **Results:** the data indicate that debriefing is a pedagogical element in the development of reflective thinking when everyone understands the role of this method, they seek to follow the basic assumption that everyone is intelligent and willing to improve, ensuring a safe environment; when all stages of the simulation are planned with clear learning objectives; and when the professor assumes a facilitator stance. **Conclusion:** a debriefing session is a pedagogical element that needs other associated factors to fulfill its role in the development of reflective thinking.

**Keywords:** Simulation Exercise; Learning; Nursing; Students, Nursing; Thinking; Formative Feedback.

#### ABSTRACT

**Objetivo:** comprender como o debriefing se constitui como elemento pedagógico no desenvolvimento do pensamento reflexivo na Enfermagem. **Método:** estudo de caso único, de abordagem qualitativa, desenvolvido no Centro de Simulación en Salud (CESISA) da Universidad de Costa Rica. Dados coletados entre agosto e outubro de 2018 através de análise documental, observação não participante e entrevistas semiestruturadas com professores, estudantes e técnicos. **Resultados:** os dados apontam que o debriefing se constitui como elemento pedagógico no desenvolvimento do pensamento reflexivo quando todos compreendem o papel desse método, buscam seguir a suposição básica de que todos são inteligentes e estão dispostos a melhorar, garantindo-se um ambiente seguro; quando todas as etapas da simulação são planejadas com objetivos claros de aprendizado; e quando o professor assume uma postura de facilitador. **Conclusão:** o debriefing é um elemento pedagógico que necessita de outros fatores associados para cumprir seu papel no desenvolvimento do pensamento reflexivo.

**Palavras-chave:** Exercício de Simulação; Aprendizagem; Enfermagem; Estudantes de Enfermagem; Pensamento; Feedback Formativo.

#### RESUMEN

**Objetivo:** comprender cómo el debriefing se constituye como elemento pedagógico en el desarrollo del pensamiento reflexivo en Enfermería. **Método:** estudio de caso único, abordaje cualitativo, desarrollado en el Centro de Simulación en Salud CESISA de la Universidad de Costa Rica. Datos recogidos entre agosto y octubre de 2018 mediante análisis documental, observación no participante y entrevistas semiestruturadas a profesores, alumnos y técnicos. **Resultados:** los datos señalan que el debriefing se constituye como un elemento pedagógico en el desarrollo del pensamiento reflexivo cuando todos comprenden el papel de este método, se busca seguir el supuesto básico de que todos son inteligentes y están dispuestos a mejorar, se garantiza un ambiente seguro, cuando todas las etapas de la simulación se planifican con objetivos claros de aprendizaje y cuando el profesor asume una postura de facilitador. **Conclusión:** el debriefing es un elemento pedagógico que necesita de otros factores asociados para cumplir su función en el desarrollo del pensamiento reflexivo.

**Palabras clave:** Ejercicio de Simulación; Aprendizaje; Enfermería; Estudiantes de Enfermería; Pensamiento; Retroalimentación Formativa.

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## INTRODUCTION

Nursing is a profession that provides fundamental care in health promotion and recovery, in the prevention of complications and diseases and in relieving the distress of a person, the family and the collective. As a process of organizing its work, Nursing contemplates data collection, diagnosis, planning, implementation and evaluation.<sup>1</sup> For this purpose, Nursing needs an important reflective ability to intervene early in time and to understand the risk-benefit of certain behaviors, among other aspects that the complexity of care for human beings requires.<sup>2</sup>

Reflective thinking is the ability to think in a critical and deliberate way that makes sense. In this type of thinking, the students articulate their previous knowledge to their current experience, exerting a direct impact on the decision-making process. For reflective thinking to be effective, it is necessary that the students assume the role of active subjects in the development of their skills.<sup>3</sup>

In this perspective, simulation emerges as a possibility to provide reflective and safe teaching, capable of developing clinical reasoning, while preserving patients from the risks inherent to the care provided by an apprentice with limited skills. It comprises an active teaching method that seeks to create a reliable clinical situation in a controlled environment, with planned pedagogical objectives.<sup>4</sup>

In one of its stages, called “debriefing”, simulation provides a reflection moment guided by a facilitator. In “debriefing”, learners are encouraged to understand the line of reasoning that cause them to make certain decisions during the simulation and correct the flaws, so that, in a similar situation, they can provide care in an assertive manner.<sup>5</sup>

“Debriefing” is a reflective process that occurs immediately after the simulated experience, which is conducted by a trained facilitator grounded on an evidence-based model.<sup>6</sup> Several studies have pointed out “debriefing” as a central element of simulation learning, as identified in an integrative literature review.<sup>7</sup> However, few studies have been devoted to studying it and understanding it as a pedagogical element capable of developing reflective thinking in Nursing.

In Brazil, when we think of the number of undergraduate courses that adequately use the simulation system as a pedagogical method in Nursing education, we verify that it is still an incipient practice. This is because its use requires an appropriate physical structure and a pedagogically prepared faculty, in addition to its quite high costs. These factors limit its broad use in the nurses’ training process in Brazil. In addition, simulation is very frequently used in a wrong way, only developing parts of the process

and/or supposed “adaptations”. In other words, specific pedagogical preparation, consolidated experience and a highly-equipped simulation center are fundamental requirements for such method to attain the learning aimed at.

The implementation of simulation scenarios needs to meet pedagogical demands and be aligned with the principles that guide such method.<sup>8</sup> One of the most frequent misconceptions observed concerns “debriefing”, which is essential in simulation-based training. However, what it is that exactly constitutes a successful debriefing session is not clear.<sup>9</sup>

Understanding “debriefing” as a pedagogical element of a reality in which the clinical simulation that is consolidated in the Nursing curriculum, with pedagogically prepared professors and a simulation center of excellence recognized in Latin America can contribute to the advancement of this methodology in other contexts. In this sense, the objective of this research was to understand how debriefing emerges as a pedagogical element in the development of reflective thinking in Nursing.

## METHOD

This is a single-case study<sup>10</sup> with a qualitative approach conducted in the Health Simulation Center (CESISA) of *Universidad de Costa Rica* (UCR), in the city of San José. The theoretical framework used was the concept of critical pedagogy.<sup>11</sup>

UCR has offered a Bachelor in Nursing course since 1977. The Nursing practice laboratory was created in the 1980s, and simulations had already been made practically from the beginning of the course. The Simulation Center in its current format was only an improvement of the laboratory that has always existed - not only from the point of view of physical and material structure, but mainly in terms of teacher training and human resources. The Bachelor in Nursing course at UCR lasts five years and clinical simulation is included in the curriculum since first year of the course.

Choice of CESISA as the case of this study is due to its broad trajectory in the use of simulation; the certification that it has since 2015, by the *American Heart Association* (AHA), as a new international training center capable of offering refresher courses for students, professionals and the community; and the accreditation of the *Society for Simulation in Healthcare* (SSIH) as an entity that stands out for the quality of teaching, for satisfactorily responding to most of the strict international standards of clinical simulation training.

In order to conduct the research, an invitation letter was sent to the institution explaining the study objectives

and the data collection method. An approval letter was sent along with the research project for the appraisal by the Ethics Committee, via *Plataforma Brasil*. The project was approved under Opinion No. 2,675,941. It is to be noted that the Brazilian Ethics Committee regulated the process, as the research was developed during the main researcher's sandwich PhD internship, and that *Universidad de Costa Rica* presented a declaration of consent, committing itself to comply with the terms of Resolution No. 466/12. Data collection took place between August and October 2018 by means of documentary analysis, observation and semi-structured interviews.

The inclusion criteria for the students were as follows: attending the simulation classes and being in the university when the data were collected. The invitation to the students occurred from the contact of the researcher with the educational institution, with mediation of the course coordination. During the observation period at CESISA, all students who developed activities in the laboratory were informed that there was a researcher who would like to interview them about the use of clinical simulation in the training process. Thus, four (04) students expressed interest in participating, having left their names with the professors, for the researcher to subsequently contact them to schedule the interview.

In relation to the teachers, the contacts were mediated by the course coordination. The inclusion criteria were as follows: professors with experience or contact with simulation; being in the university when the data were collected; and making themselves available to take part in the study.

The research participants were the CESISA coordinator (1), a technician (1), the CESISA secretary (1) and professors (4), the course coordinator (1), professors teaching the academic disciplines (5) and undergraduate students (4). They totaled 17 participants, constituting a convenience sample. Data saturation guided the decision that a sufficient number of participants had been gathered to answer the research objective.<sup>12</sup>

For the documentary analysis, the documents were requested to the Nursing course coordinator via email and consulted *in loco*. The information was collected with the help of a script for documentary data collection, including the following information: type of document; year; content related to simulation/"debriefing"; content related to the reflective practice; and content related to characterization of the study locus.

The documentary sample consisted of documents equivalent to Teaching Plans of the following academic disciplines: Political Pedagogical Project and Guidelines for Simulation, as well as all the guiding documents

of the institution's simulation and "debriefing" process. The data obtained from the documentary analysis were used to identify elements that evidenced the pedagogical intention of developing reflective thinking, as well as to understand the context in which the case was included. In this way it would be possible to complement, confirm or contrast all the information in the data analysis process.

The main researcher monitored all the activities developed in the CESISA premises from September 30<sup>th</sup>, 2018, to October 24<sup>th</sup>, 2018, totaling 90 observation hours. In addition, a field diary and the audio from the debriefing session were used to record the observations of the gestures, habits and attitudes of those involved. These observations were employed to confirm or refute information that was subsequently collected in the formal interviews.

The interviews lasted a mean of 50 minutes and were conducted in the CESISA premises, audio-recorded and transcribed in the original language (Spanish). Once transcribed, they were emailed to each participant, along with a cession letter. The script for the semi-structured interviews included the following questions: When did clinical simulation begin to be used as a teaching strategy in this institution? Were you a participant at that moment? How did it progress? How did the professors prepare themselves to use this new technology? How important do you think each of the simulation stages is? Did you need to undergo any training? Where? How did it progress? How long have you been facilitating debriefing sessions? Do you use any model? What do you find most difficult in this activity? What do students find most difficult during the debriefing session? What benefits does the debriefing session proved? How does the reflection process take place in the debriefing session? How does it contribute to nurses' training? How do you perceive the teacher's role in the debriefing session and in the reflection process about the scene? Do you usually reflect on the way in which you conducted the debriefing session? When does that happen? Which of the professor's attitudes can stimulate or contribute to the development of reflective thinking?

Initially, the script was prepared to interview only the professors. However, during the interviews, the need to also hear the students' opinion was identified. Therefore, the script was adapted and the questions that were not pertinent to the group of students were removed.

The data were analyzed using the strategy of theoretical proposals and the explanation construction technique.<sup>10</sup> Once coded and transcribed, the data from the interviews and those of the observations were organized in the QDA Miner lite software (free version).

Based on the transcribed interviews and debriefing and on the field diary notes, a database organized into seven (7) categories was created, namely: Debriefing; Clinical Simulation; CESISA; Simulation Instructor; Student; Reflective Thinking; Clinical Field; and Professor of the Module. Each of these predefined categories were fed with corresponding text excerpts, grouped into subcategories. For example: the Debriefing category had the “concept”, “difficulty”, “importance”, “model”, “student’s reflection” and “professor’s reflection” subcategories. When analyzing this category, the report of the “concept” subcategory was generated and, thus, a document was obtained with all the excerpts from all data sources that dealt with the concept of “debriefing”. The analysis was performed by confronting the research findings with the literature and identifying the similarities and divergences of the topic in the case under study. The same procedure was performed with all the other categories, in order to gather elements that might confirm or not the thesis presented.

The following coding was used as a way to identify the data sources: documentary data (DD) and observation data (OD). Alphanumeric codes were used in the interviews, where the letter represents the group interviewed and the number, the sequence in which the interview was conducted: students (S1, S2...); coordinators (C1, C2...); technicians (T1, T2...); simulation professors (SP1, SP2...); and professors of the modules (PM1, PM2...).

The method followed the criteria indicated for qualitative research, described in the *Consolidated criteria for reporting qualitative research* (COREQ) checklist.<sup>13</sup>

## RESULTS

All study participants - coordinators, professors, students and technicians - define “debriefing” as an important learning moment, in which the students understand what they did and why they did it:

[...] para mí el debriefing es un momento importante, porque, como le digo, es ahí donde tenemos esa etapa reflexiva de pensamiento crítico donde el estudiante entiende el porqué y para qué, está haciendo lo que está haciendo, porque si no nos quedamos en lo técnico, verdad? (C2).

[...] el debriefing es una oportunidad de conocer cuál fue la experiencia de la persona, como la vivió, que fue lo que pasó en su mente en ese momento, porque decidió lo que decidió, desde cómo se sintió, hasta como lo ejecutó y cómo, desde donde se argumentó él para poder desarrollar esa intervención ¿verdad?y lo que no es el debriefing es, cómo lo evaluó yo a

usted, digamos, o cómo evaluó yo a esa persona, sino es más bien, como puedo comprender más la experiencia de esa persona y cómo podemos construir nosotros algo nuevo a partir de esas experiencias. (PM5)

[...] lo principal, siento que es darse cuenta, digamos de cosas que uno está realizando que de otra manera usted no se daría cuenta como de cosas que está haciendo mal, entonces el DEBRIEFING ayuda, es como ese proceso educativo continuo que le ayuda a usted, este, hacer mejor las cosas, eso y también, siento que..., que es como, un proceso enriquecedor digamos donde..., donde usted puede ver todo, todo eso y aplicarlo digamos, mas que todo eso, aplicarlo después, cuando ya usted labore o incluso en las pasantías. (S2)

The participants seek to follow the basic assumptions of CESISA, which are found in the documents and in physical spaces: “We believe that all participants in the simulation are intelligent, well-trained, always want the best and are willing to improve. - By the *Center for Medical Simulation Boston, Massachusetts*” (DD).

[...] el uso de la suposición básica creo que un muy importante yo les digo a los estudiantes inclusive que la suposición básica se la estoy aplicando hasta a la vida y yo digo bueno todos estamos tratando de hacer nuestro mejor esfuerzo, a veces es muy importante no ser tan rigurosos también con nosotros mismos en este momento estoy tratando de hacer mi mejor esfuerzo y tengo la oportunidad de mejorar en tanto me evalúe y pueda identificar en qué áreas puedo ir en qué áreas puedo ser mejor. (SP2)

[...] entonces esa actitud de que el docente está ahí da seguridad de que el docente... que él se puede equivocar, y no va ocurrir nada, pero que de ese error va aprender, miro que esto es básico, verdad? Y eso tiene que ser como una premisa en un centro de simulación, el estudiante tiene un conocimiento, el profesor tiene un conocimiento y vamos a compartir esos conocimientos o vamos a potenciar el conocimiento que el estudiante tiene o vamos a apoyarlo el aquello que él tiene duda o vamos apoyarlo”. (C1)

[...] creo que conforme uno va entiendo la intención de la suposición, entonces uno empieza a creérsela y es ahí donde tiene el efecto, creo que también yo que recuerde hasta esta vez la suposición se nos fue dicha varias veces, a mí me hacía sentir muy bien...mirá que...que lindo en verdad...piensen eso de... de todos los que estamos aquí...entonces...yo creo que yo sí la creo...igual siempre tengo el pensamiento de que...de que uno sabe pero puede saber más. (S4)

The data show that the debriefing session should take place in a non-threatening environment that values respect and confidentiality, where errors trigger knowledge rather than punishment. This is a space for students to learn and not to be evaluated, a dialogical setting, not hierarchical and psychologically safe:

*[...] en la medida que el debriefing no salga como una manera coercitiva, de una manera punitiva, así de castigo, si no que sea una metodología estrategia didáctica de socializar el conocimiento, de acceder a la construcción del pensamiento crítico, analítico, donde haya la libertad de nos podemos equivocar pero es para aprender, dónde se vale equivocarse porque estamos en formación y se buscar ir mejorando, una mejora continua, y no es una manera de castigo, a destruir las actitudes o el desconocimiento porque se construye juntos y es un medio que facilita una forma relajada o una forma controlada dese aprendizaje, y lo que no se sabe se pregunta y pueden tener guías o ayudas, fichas, o gráficos, o algo que le ayude con pequeñas instrucciones, para que en la vida real no sea tan memorístico, sí no por sentido común, por aprendizajes significativos. (PM3)*

*[...] el estudiante tiene que saber quiénes son los profesores de simulación, quiénes van a estar que están grabando, quién nos está viendo, excepto que el escenario haya sido planeado de esta manera.” [...] Para mí, por eso el centro de simulación tiene que tener ciertas condiciones de privacidad, de seguridad para el estudiante, el profesor tiene que darle esa seguridad al estudiante y si el estudiante se equivoca, no lo voy a corregir en este momento, sino que después los vamos a ver, esa es la maravilla de la simulación, verdad? (C1)*

*[...] when welcoming the students, the professor tries to calm them down by saying that the environment is safe, for learning, and that they should worry. She reinforces that what's going to happen in the simulation should stay with them and that only learning should stem from it. She presents the environment, the simulator that will be used, talks about the time they have, how the scenario will be closed, makes the fiction contract and says that, once the scene is finished, they will meet in the next room to discuss the debriefing. (OD)*

There are elements prior to “debriefing” that were identified as fundamental among the participants, namely: logistics, theoretical knowledge already worked on, objective of the well-defined scenario and clarifying pre-briefing.

*[...] no habría manera, digamos de que funcione porque si incluso no hubiera las etapa previas de que a uno le envíe qué es lo que uno va a realizar y la teoría digamos, no sé, bibliografía para que uno consulte y así entonces uno llegaría muy perdido acá y no podría como que, no podría realizar ese proceso de manera cómo fluido, entonces esa primera etapa me parece esencial, digamos porque así a uno hasta se les disminuye como los nervios de llegar acá porque ya sabe cómo es lo que va y ha estudiado antes y entonces todo eso también hace como más rico el proceso educativo, porque usted a partir de lo que leyó y todo puede como entrar en una discusión con los profesores de leí esto, no entiendo, se hace de tal manera y así y entonces todas las otras etapas [...] bueno pre-briefing que es de eso, digamos de esa aclaración de dudas, también es importante por eso para poder ejecutar como el escenario de la mejor manera y poder aclarar esas dudas o incluso compartir como conocimientos de lo que uno ha leído, el escenario ¿verdad? (S2)*

The role of the professor in mediation of “debriefing”, finally, is a determining element of the pedagogical success of clinical simulation, highlighting the following characteristics: active listening, facilitating communication, good mood, patience, passion, knowledge, interest and humility.

*[...] la paciencia primero, porque si, si son profes que usted sabe que a la primera vez que usted les pregunta algo y ya, ya te lo explican como súper rápido y decir usted no entiende entonces yo siento que eso hace como que ya usted no confíen en ellos entonces, por ejemplo, acá yo he preguntado cosas, o sea 5 veces, que las 5 veces me las han explicado de manera diferente y se aseguren que yo entienda, entonces para mí lo principal es, como esa paciencia, también la pasión digamos por estar realizando lo que hacen, este, y también el conocimiento y las ganas de crecer, porque tal vez usted está haciendo una pregunta que no saben la respuesta pero todos acá siempre tienen como mucha apertura de... ¡ok! Ninguno de los 2 sabemos pero vamos investigamos de una vez. Es decir, eso también me parece algo muy importante porque le genera a uno confianza que a usted le respondan así, como..., como porque tienen mucho conocimiento en eso pero también le genera a uno confianza que si no conocen la respuesta ellos mismo resuelven en el momento, digamos vamos a buscarlo ya, juntos y así nos quitamos los dos la duda entonces eso hace como que uno se, cómo, en una relación horizontal donde no los profesores están como por encima de los estudiantes, sino que es aprendizaje entre ambos entonces es eso lo que genera confianza (S2)*

## DISCUSSION

Debriefing is one of the clinical simulation stages that aims at gathering the participants of the activity to reflect on what happened in the scenario, their feelings, their decision-making, their doubts, etc. So that, mediated by a facilitator, the students can learn and improve their skills. By itself, “debriefing” is a teaching strategy, as the way in which the discussion is conducted, the type of questions asked and the participants’ stance are previously thought through, in order to favor learning.<sup>14</sup>

Allowing students to be the protagonists of their learning is often difficult for the faculty members accustomed to being the center of attention and providing all the necessary guidelines. A study identified that, after training teachers on how to conduct a debriefing session, there was a significant improvement in the use of simulations.<sup>15</sup>

When asked about what debriefing was and what it was for, several participants pointed out that it is nothing more than the awareness that students make by uniting the meaningful experience provided by the simulation with the theory worked on in the classroom, as well as the outcome resulting from its application or not at the time of the scene. When describing what happened, what they did and why they did it, the students identify where the failure in their cognitive process is, and can therefore adjust it.

Consciousness is the condition of man moving away from the scene to be present. “It is the presence that has the power to presenting: it is not representation, but condition of presentation. It is men’s behavior in the face of the environment that surrounds them, transforming it into a human world”.<sup>11:18</sup>

To stimulate the students, the professor assists in the decoding, analysis and consequent reconstitution of the situation experienced and, “mediated by objectification, immediacy of the experience is lucidified, inwardly, in a reflection of itself and encouraging criticism of new existential projects”.<sup>11:13</sup> Thus, students are able to integrate knowledge from encoding and decoding in their learning context. The students “conscientize” words as meaning, which was constituted in their significant intention, coinciding with the intentions of others, which mean the world itself. “This — the background — is the place of each one’s encounter with oneself and the others.”<sup>11:34</sup>

This process of rethinking what was thought at the time of the scene is also called metacognition. It is an element capable of generating a higher stage of thought, identifying failures in the cognitive process that lead to misunderstandings and can assist in improving the response in other similar situations. Metacognition is an

element of major importance in the training of critical and reflective professionals.<sup>16</sup>

Self-knowledge, provided by the identification of feelings that mobilize or immobilize the students’ performance in the face of a given simulated situation, can contribute to modulating these emotions and to confrontation or self-preservation in the face of certain contexts.<sup>17</sup> With regard to the CESISA case, it is a center that develops simulations with a focus on the idea that everyone wants to improve. To “realize”, the students need time to reflect, respect their limitations, support and encouragement to go further. The facilitator’s role is indisputable and has already been mentioned in other papers.<sup>14</sup>

It is noted that the environment issue is very emphatically presented by the participants. It should be challenging to the students, as it intends to mobilize learning with unusual situations, especially during the scenarios. A recent study showed that simulated environments provide greater satisfaction and self-confidence, helping students to become more independent and secure for decision-making.<sup>18</sup> The confidential nature of the simulated environment also contributes to the participants’ psychological safety. Psychological harms may occur during a simulation and should be avoided or mitigated whenever possible in order to increase the students’ safety and confidence.<sup>19</sup>

In this context, a safe environment, confidentiality, freedom and respect for the students at the “debriefing” moment enable them to externalize their naive world views without fear of being exposed to the group. It is from exteriorization of man’s vision of the world that the generating topics for new knowledge arise. In the cyclical process of permanent knowledge construction, especially in Nursing education, it is essential to have pedagogical spaces in which these elements can be identified, as they are significant clues about each student’s teaching-learning process.<sup>11</sup>

Motivation is an important element in learning, as it mobilizes for the search for knowledge. Students who experience failures tend not to be motivated to continue; therefore, it is extremely important to highlight successes in a simulated experience (even if small). It is necessary to foster motivation and self-confidence belief in the students to promote meaningful learning.<sup>16</sup> It is important that the simulated scene challenges the students to think, reflect and recreate their knowledge: “To do so authentically, it is also necessary that the situation in which they are in should not appear to them as something fatal and insurmountable, but as a challenging situation that only limits them”.<sup>11:42</sup>

Debriefing is an important element for learning; however, in isolation, it does not make sense, needing to be interconnected with all the other stages of the

simulation that precede it, such as choice of the objective, scenario design, choice of the resources, reliability of the case, clarifying pre-briefing, sufficient time to perform the task, previous training of required skills and theoretical foundation, among others.

In the literature, there are already indications that every simulation based on experiential learning has a “debriefing” moment, considered the most important part in the educational process, as it allows students to critically reflect on learning.<sup>2</sup>

The “debriefing” best practice standards establish 8 recommendations for its execution: i) “debriefing” is an essential component of simulation learning; ii) it must occur immediately after the scene; iii) it must be conducted by the professional who monitored the student’s performance; iv) this student must be trained in conducting the debriefing session; v) video can be used (although this feature is only complementary); vi) a safe and confidential environment must be ensured; vii) the discussion must be guided by predefined learning objectives; and viii) a structured model must be used.<sup>7</sup>

One study identified the central role played by the professor in the effectiveness of debriefing sessions, being significant for students’ participation, learning and feeling of security to discuss their experiences, allowing the learners to answer their own questions in order to facilitate the development of thinking and critical reasoning.<sup>20</sup>

It is noticed that the professor’s performance is intertwined in all aspects that determine the success of “debriefing” as a pedagogical element. From the teachers’ understanding of the importance of the teaching method as a space for decoding and recoding, to how they plan and lead, creating a safe and comfortable environment for the students. Patience and good humor, associated with knowledge and interest in teaching, seem to be important attributes of a good “debriefing”.

In debriefing, the student and the professor learn together. The teacher assumes a mentoring stance, offering subsidies for the students to recreate their own meanings about the experience they underwent. There is no professor, there is a coordinator whose function is to give the guidelines requested by the respective participants and provide favorable conditions for the group’s dynamics, minimizing their direct intervention during the course of the conversation.<sup>7:14</sup>

This space needs to be used to motivate people to perform transformative and care practices. Professors are the guides and need tranquility and confidence in the methodological strategy to provide a pedagogically and psychologically safe environment. In this sense, it is important to reinforce the importance of permanent education of

the faculty and institutional investment in the viability of spaces for exchange and pedagogical improvement.

It is believed that greater immersion in the context under study could highlight in more depth important aspects of the development of reflective thinking in Nursing students through “debriefing”. As limitations, this study highlights the brief time during which the activities were monitored *in loco*. It is suggested that new studies may explore the reflective thinking applied to the real clinical practice and the impact of reflective training on Nursing care quality.

## CONCLUSION

Debriefing is a pedagogical element in the development of reflective thinking in Nursing, as it allows decoding and recoding a situation experienced by the participants. It is guided by a pedagogically trained facilitator, who uses error as a learning opportunity, in a respectful and motivating way.

This study showed aspects that contribute to the success of “debriefing”, such as the understanding of the importance of simulation, the student’s role in knowledge construction by all involved and the climate of respect, safety and motivation that permeates the entire simulation process. For this, error is used as an opportunity for learning free from punishments, as well as for pedagogical planning and teacher training, which allow the students to feel welcomed, capable and motivated to continue seeking knowledge.

By following the scientific literature on simulation and the role of professors, CESISA demarcates the teacher’s place in the essentiality of simulation, associating, to this, a solid process of permanent training, so that professors act in a pedagogically planned and effective way.

## REFERÊNCIAS

1. Conselho Federal de Enfermagem. Aprova o novo código de ética dos profissionais de Enfermagem. Resolução COFEN nº 564/2017. Brasília: COFEN; 2017.
2. Dickison P, Haerling KA, Lasater K. Integrating the national council of state boards of Nursing clinical judgment model into Nursing educational frameworks. *J Nurs Educ*. 2019[cited 2022 Mar 11];58(2):72-8. Available from: <http://dx.doi.org/10.3928/01484834-20190122-03>
3. Collin ACV, Giuliano D. A concept analysis of critical thinking: a guide for nurse educators. *Nurs Educ Today*. 2017[cited 2022 Mar 11];49:106-9. Available from: <https://doi.org/10.1016/j.nedt.2016.11.007>
4. Bortolato-Major C. Debriefing evaluation in Nursing clinical simulation: a cross-sectional study. *Rev Bras Enferm*. 2019[cited 2022 Mar 11];72(3):825-31. Available from: <http://dx.doi.org/10.1590/0034-7167-2018-0103>

5. Oliveira SN, Massaroli A, Martini JG, Rodrigues J. From theory to practice, operating the clinical simulation in Nursing teaching. *Rev Bras Enferm.* 2018[cited 2022 Mar 22];71(Suppl4):1896-903. Available from: [http://www.scielo.br/pdf/reben/v71s4/pt\\_0034-7167reben-71-s4-1791.pdf](http://www.scielo.br/pdf/reben/v71s4/pt_0034-7167reben-71-s4-1791.pdf)
6. Inascl Standards Committee. INACSL standards of best practice: simulation SM simulation glossary. *Clin Simul Nurs.* 2016[cited 2022 Mar 20];12(Suppl1):39-47. Available from: <http://dx.doi.org/10.1016/j.ecns.2016.09.012>
7. Hall K, Tori K. Best Practice recommendations for debriefing in simulation-based education for Australian undergraduate Nursing students: an integrative review. *Clin Simul Nurs.* 2017[cited 2022 Mar 20];13(1):39-50. Available from: <http://dx.doi.org/10.1016/j.ecns.2016.10.006>
8. Inacsl, Standards Committee, Decker S, Alinier G, Crawford SB, Gordon RM, & Wilson C. Healthcare simulation standards of best practice TM the debriefing process. *Clin Simul Nurs.* 2021[cited 2022 June 19];58(1):27-32. Available from: <https://doi.org/10.1016/j.ecns.2021.08.011>
9. Secheresse T, Lima L, Pansu P. Focusing on explicit debriefing for novice learners in healthcare simulations: a randomized prospective study. *Nurse Educ Pract.* 2021[cited 2022 June 30];51(3):102914. Available from <https://doi.org/10.1016/j.nepr.2020.102914>
10. Yin RK. *Estudo de Caso: planejamento e métodos.* 5ª ed. Porto Alegre: Bookman; 2015. 290 p.
11. Freire P. *Pedagogia do oprimido.* São Paulo: Paz e Terra; 2019.
12. Minayo MCS. Sampling and saturation in qualitative research: consensus and controversies. *Rev Pesq Qual.* 2017[cited 2022 Mar 07];5(7):1-12. Available from: <https://editora.sepq.org.br/index.php/rpq/article/view/82/59>
13. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *IJQHC.* 2007[cited 2022 Mar 07];19(6):349-57. Available from: <http://dx.doi.org/10.1093/intghc/mzm042>
14. Teles MG, Mendes-Castillo AMC, Oliveira-Kumakura ARS, Silva JLG. Simulação clínica no ensino de Enfermagem pediátrica: percepção de estudantes. *Rev Bras Enferm.* 2020[cited 2022 Mar 09];73(2):e20180720. Available from: <http://dx.doi.org/10.1590/0034-7167-2018-0720>
15. Cockerham ME. Effect of faculty training on improving the consistency of student assessment and debriefing in clinical simulation. *Clin Simul Nurs.* 2015[cited 2022 Mar 09];11(1):64-71. Available from: <http://dx.doi.org/10.1016/j.ecns.2014.10.011>
16. Rosa CTW, Rosa AW. Aprendizagem autorreguladora: aportes teóricos para subsidiar a educação científica. *Res Soc Dev.* 2020[cited 2022 Mar 09];9(1):1-20. Available from: <http://dx.doi.org/10.33448/rsd-v9i1.1633>
17. Boostel R. Stress of Nursing students in clinical simulation: a randomized clinical trial. *Rev Bras Enferm.* 2018[cited 2022 Mar 08];71(3):967-74. Available from: <http://dx.doi.org/10.1590/0034-7167-2017-0187>
18. Bortolato-Major C, Mantovani MF, Felix JVC, Boostel R, Mattei AT, Arthur JP, et al. Autoconfiança e satisfação dos estudantes de Enfermagem em simulação de emergência. *REME - Rev Min Enferm.* 2020[cited 2022 Mar 14];24:e-1336. Available from: <http://10.5935/1415.2762.20200073>
19. Goncalves SAT. Sentimentos estressores em estudantes de Enfermagem no processo de ensino-aprendizagem utilizando a simulação realística: uma revisão de escopo [dissertação]. Alfnas: Universidade José do Rosário Vellano; 2021. 52p.
20. Mota LM, Santos ALF, Wyszomirska RM. Assessment of cognitive knowledge associated with debriefing in realistic simulation. *Res Soc Dev.* 2022[cited 2022 Mar 14];11(3):e38811326583. Available from: <https://10.33448/rsd-v11i3.26583>