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MEDICAL EDUCATION

Simulation of care for children affected by sexual violence: an experience report

Simulação de atendimento à criança acometida por violência sexual: relato de experiência

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ABSTRACT

The objective of the study was to report the experience with teaching medical students the approach to children in situations of domestic sexual violence in the Primary Health Care (PHC) context using clinical simulation. The simulation was performed for students attending the fifth semester, during the Child Health module, of the Medicine Course at the Multicampi School of Medical Sciences, Brazil. This activity was developed at the Clinical Skills and Simulation Laboratory of the school in the second half of 2019. A domestic child sexual violence scenario was then developed and executed. The simulation enabled a critical analysis of child violence, of the medical performance, and of how similar situations are conducted in the Primary Health Care context. As it is a complex and challenging scenario, it was possible to identify that the students have difficulties making decisions. The students evaluated the practice as a successful experience. Therefore, the simulation for teaching the approach to children in situations of domestic sexual violence in the PHC context can be a teaching and learning strategy with significant potential for the theoretical and practical consolidation of the theme in question.

Keywords: Education medical; High-fidelity simulation training; Child health; Child abuse.

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RESUMO

O estudo teve por objetivo relatar a experiência com o ensino da abordagem à criança em situação de violência sexual intradomiciliar no contexto da Atenção Primária a Saúde (APS), a partir do uso da simulação clínica, a estudantes de medicina. A simulação foi realizada para os estudantes do quinto período, durante o módulo de Saúde da Criança, do Curso de Medicina da Escola Multicampi de Ciências Médicas, Brasil. Esta atividade foi desenvolvida no Laboratório de Habilidades e Simulação Clínica da escola, no segundo semestre de 2019. Na oportunidade, foi desenvolvido e executado um cenário de violência sexual infantil intradomiciliar. A simulação possibilitou uma análise crítica acerca da violência infantil, da atuação médica e da condução de situações semelhantes no contexto da Atenção Primária à Saúde. Por ser um cenário complexo e desafiador, foi possível identificar que os estudantes possuem dificuldades em tomar decisões. Os estudantes avaliaram a prática como uma experiência exitosa. Portanto, a simulação, para o ensino da abordagem à criança em situação de violência sexual intradomiciliar no contexto da APS, pode ser uma estratégia de ensino e aprendizagem de grande potencial para a consolidação teórica e prática da temática em questão.

Palavras-chave: Educação médica; Treinamento com simulação de alta fidelidade; Saúde da criança; Maus-tratos infantis.

Introduction

In the Brazilian context, child health care is currently regulated by The National Policy for Integral Child Health Care of the Ministry of Health (MS), established by Ordinance No. 1130[1]. This document characterizes the axes of actions for comprehensive care of child health. Among these axes, attention to the health of children with disabilities or in specific situations and vulnerability stands out[2].

The situation of vulnerability has great notoriety in the view of child violence. In Brazilian society, the debate on this issue gains emphasis with the ratification of the Statute of the Child and Adolescent[3]. This statute, established by Law No. 8.069, guarantees children and adolescents full health care and requires identification, notification, and violence report[4].

Violence is defined as the application of physical force or any form of power that can result in injury, death, psychological harm, deprivation, or developmental disability to oneself or others[5]. In children specifically, violence can take the form of physical, sexual, emotional, or psychological abuse and neglect, resulting in physical and psychological harm and impairment of children's growth, development, and maturity[6].

In Brazil, neglect is the main form of violence suffered by children. Besides being a type of violence in itself, neglect opens the way for other forms of violence, especially sexual violence. Most cases of these types of violence against children and adolescents occur in the home environment, and the aggressor is usually a family member or close individual[3]. It is worth noting that sexual abuse does not refer only to sexual intercourse, but corresponds to any sexual act or game, whose victim has a lower psychosexual development to obtain any sexual satisfaction or sexually stimulate the victim[7].

All violence has a great potential stressor and the capacity to generate several damages to child development; however, sexual abuse strongly affects society. For this reason, a range of public policies is aimed at combating it[3]. However, despite the various mechanisms to prevent it, we see in practice ineffective resolution of cases, especially due to underreporting[7].

This underreporting can be due to multifactorial issues. However, the lack of professionals qualified on the subject has a great influence[8]. This lack of training produces a feeling of incapacity, powerlessness, and fear of the case being attended to[7]. This fact may be related to the tendency of professionals to consider this subject pertinent to the health area, due in part to the fact that educational institutions do not effectively address this subject in their curricula.

In this sense, it is necessary to encourage scientific and practical knowledge in the identification of violence against children and adolescents and the correct conduct of

professionals in these cases[8]. This training becomes necessary to sensibilize current and future professionals in the most apparent cases, but especially in veiled cases[7].

In this context, the use of simulated environments emerges as an important tool for training students. Previous exposure to the situations that future professionals will face in reality allows the development of the necessary knowledge in real time, as well as greater reliability and effectiveness in decision-making[9].

Studies have shown the effectiveness of clinical simulation in improving cognitive performance, increasing satisfaction and self-confidence in learning and self-efficacy; besides being an ethically recommended strategy[10-16]. Furthermore, simulation makes it possible to work on social aspects[17]. There is an improvement in clinical practice, critical-reflective thinking, communication skills, and teamwork through simulation, as well as greater self-confidence and satisfaction[18].

From this perspective, this article aims to report the experience of teaching medical students how to approach children in situations of intradomiciliary sexual violence in the context of Primary Health Care (APS), using clinical simulation.

Development

The simulation was performed for fifth-period medical students during the Child Health module at the Multicampi School of Medical Sciences/Federal University of Rio Grande do Norte (EMCM/UFRN). This activity was developed in the EMCM Skills and Clinical Simulation Laboratory, in the second semester of 2019.

The Child Health module has articulated components, and totals 120 hours divided into 60 hours of tutorial teaching, and 60 hours of skills and community. In this perspective, it contemplates the theme of "violence against children and adolescents".

It is important to point out that the EMCM has been working to expand its teaching and learning methodologies and has invested in the insertion of clinical simulation in all the course modules. It is in this perspective of expansion that we highlight the experience reported and the use of simulation in the aforementioned module.

Scenario structuring

To direct the scenario construction, an initial search of the MS [MOH] documents was conducted. After the consultation, a scenario of intradomiciliary sexual violence was built. The scenario was designed according to the following criteria a) student's prior knowledge; b) learning objective; c) theoretical basis of the activity; d) scenario development; f) debriefing and g) evaluation[19].

The scenario developed comprised the environment of a Basic Health Unit (Portuguese = UBS). Chart 1 presents the characterization of the scenario that is the subject of this report.

Scenario performance

Simulation occurred according to the *National League for Nursing* (NLN) conceptual model of Simulation. This model standardizes simulation as a teaching strategy and research involving simulation, categorizing variables and their relationships. According to the model, simulation is composed of: the facilitator (the researchers); participants (medical students); educational practices (clinical case and clinical simulation); characteristics of the simulation design (focused on problem-solving); and expectations of the simulation results (debriefing)[20].

Previously, a basic text was made available for study. The material made available - one week in advance - deals with conceptual issues and protocols for care and follow-up in situations of violence. The objective was to promote previous theoretical knowledge. This step is of fundamental importance as the clinical simulation is a strategy for higher cognitive domains and, therefore, requires the consolidation of previous knowledge for the scenario's performance. The same material served as the basis for the scenario construction described above.

After the written structure of the scenario, it was tested. To do so, we used the standard patient resource - which are actors trained to act and reproduce users' behaviors in several situations and health care facilities[16]. During testing, it was possible to establish the scenario's performance time. This step is of fundamental importance. Since it is a very complex scenario, and after it was carried out by specialists, the estimated time was 30 minutes. Therefore, it is characterized as a long scenario. Long scenarios can present disadvantages such as attention deviation. However, in the reality observed, this variable did not interfere with the success and performance of the students.

To perform the scenario, a medical teacher specialized in pediatrics, a teacher with experience in clinical simulation, and a nurse with experience in maternal and child care, and two psychologists with expertise in communication participated in its design. The qualification of the technical staff for clinical simulation practice is of paramount importance. From this perspective, in the Brazilian context, one can observe several large-scale qualification initiatives in medical education projects. As an example, a project of the Brazilian Association of Medical Education (ABEM) in partnership with the Brazilian Company of Hospital Services (EBSERH) and the Ministry of Health (MS) has recently trained professionals from all regions of Brazil in the clinical simulation strategy.

The medical students, forty in total, were divided into four groups of ten. In each group, one student participated directly in the care of the case. The others participated in the debriefing[21]. The group division strategy used followed the NLN recommendation. The literature recommends working in small groups[20]. Working in large groups makes debriefing difficult. Since it is the "heart" of the simulation, inadequate debriefing can fail in the simulated clinical experience.

Before starting the simulated clinical experience, the facilitators must ask the participants about the existence of

Chart 1. Scenario characterization: Caicó, 2019.

Scenario name: Intradomiciliary child sexual violence.
Previous experience of the participant: The scenario was developed for performance in medical care simulation. The student's previous experiences were discussed in the prebriefing.
Primary learning objectives: To experience situations of intradomiciliary child violence not verbalized by the genitor, in the context of Primary Health Care - PHC [Portuguese = APS]. **Secondary learning objectives:** Perform anamnesis directed to the case. Perform the child's physical examination with the urinary complaint. Perceive omission and denial behavior of the mother in situations of intradomiciliary child violence. Identify signs of physical violence in children in the context of Primary Care. Identify and conduct situations of childhood violence in the context of Primary Care.
Scenario time: 30 minutes.
Human resources: A medical faculty member specialized in pediatrics. One faculty member with experience in clinical simulation. One nurse with experience in maternal and child care. Two psychologists with expertise in communication. One student.
Scenario development: Proposed theme: intradomiciliary child sexual violence. The complexity of the scenario: High complexity. Clinical case: You are a medical student and you are attending a Primary Health Care Unit (Portuguese = UBS). You have a 24-year-old mother, illiterate, domestic worker, stable relationship for one year, who came to the UBS with her daughter for medical attention due to a (recurrent) episode of "urinary tract infection". **Physical examination:** General: the patient was normocorated and conscious. Genitourinary system: The child's diaper has traces of blood and yellowish purulent secretion. The child's genitalia present erythema. Management: The patient should be evaluated ethically. A case-specific history should be taken, a physical examination performed, recognition that the lesions are associated with sexual violence, and following child sexual assault protocols. Standard patient training script: You are the mother of a 2-year-old child and have come to the health center with your daughter for medical care because of a (recurrent) episode of "urinary tract infection". You ask the professional to prescribe an antibiotic for your daughter because she has been complaining of pain when urinating. She is not literate. Therefore, if the student verbalizes technical terms you may demonstrate a lack of understanding. Works full-time. Lives on a farm in precarious housing and hygiene conditions. The child does not attend daycare and stays in the care of the stepfather during the period in which the mother is absent. She cries a lot when she is alone with her stepfather. Family members: mother, partner, and child. Stable marital relationship. The husband presents aggressive behavior and is unemployed. He uses alcohol frequently. Characterization of the actor: Casual dress. The child simulator will be dressed in diapers and garments. **Material resources:** 1 Toddler (high fidelity pediatric simulator) 1 Table 2 Chairs 1 Calendar 1 Pen 1 Notepad 1 High-fidelity toddler simulator and a stretcher 1 Stretcher Physical space: Laboratory of Clinical Skills of the Multicampi School of Medical Sciences of Rio Grande do Norte. Ambiance: Doctor's office of a UBS [BHU].

Scenario development Suspected sexual assault clinical and follow-up protocols.
Debriefing The three proposed phases are reaction, analysis, and synthesis: 1. Initially the participants will describe the scenario used; 2. Participants in the scenario will discuss their feelings and reactions to what occurred in the simulation; 3. The positive aspects that occurred in the simulation will be enhanced; 4. Analysis and reflection will be made on the aspects experienced in the simulation that need to be improved; 5. Possibilities of applying the content in professional practice will be discussed
Evaluation - Knowledge evaluation; - Skills evaluation
Ação/Conduta/Intervenção: 1 - Greets the mother and asks her name. 2 - Shows interest in the patient. 3 - Listens carefully and identifies the reason for the consultation. 4 - Asks the child's full name. 5 - Asks the child's date of birth. 6 - Asks and identifies the reason for seeking service. 7 - Conducts anamnesis directed to the case. 8 - Performs a physical examination of the child and identifies the lesions on the genitals. 9 - Recognize that the lesions, associated with the anamnesis, are suggestive of interpersonal/intradomiciliary sexual violence (physical and behavioral signs not compatible with age). 10 - Convinces the mother about the importance of the notification and continuity of the case within the care and social protection network. 11 - Verbalizes the need to register the case in the medical record. 12 - Notifies or verbalizes the notification of the case (within 24 hours). Attaches a copy of the medical record. 13- Suggests that a prophylactic scheme for gonorrhea and other sexually transmitted diseases be administered within 72 hours and that serology be done or that the case be referred to a health care facility that has these resources. 14 - Notifies the guardianship council of the case as quickly as possible (by phone or by sending the notification) and/or the police. 15 - Make it clear to the mother that she needs to continue the subsequent assistance (follow up with the child and the family). Activates the network of care and social protection that exists in the territory. 16 - Offers humanized care 17 - Uses adequate/compatible language according to the user's level of education. Avoids medical jargon.

Source: Research database.

questions on the previous content provided[20-22]. They should acknowledge the elements of the scenario, its functioning, and support, as well as the execution of a confidentiality agreement. They should also clarify that the environment is protected and that the main objective is learning.

Because it is a complex and delicate subject, the most present feelings from the students' speeches during the debriefing were satisfaction, fear, anxiety, and insecurity. These feelings become even more present in critical moments. Despite all the technical study, manuals, and protocols, among other sources, when submitted to a scenario that simulates reality, the students are asked to develop and apply skills that reading alone would not make possible.

At EMCM, simulations are organized according to teaching modules from the first semester of the medical course. Thus, students participate in scenarios of different levels of complexity. Up to the fourth semester, the scenarios present low and intermediate complexity. From the fifth semester on, the scenarios of intermediate and high complexity are prioritized[23]. Therefore, they were already familiarized with the strategy. These feelings are attributed to the scenario's complexity.

In the reality observed, it was possible to notice that the students had previous knowledge about the theme, knew how to perform - structurally - the anamnesis, and requested exams. However, it was noticeable, in the four groups, the lack of consensus about referrals of the child victim of violence within the health care network. It was also possible to notice a lack of clarity about the roles of the services and agencies that protect children and adolescents. Upon identifying this lack, the coordinators of the module made adjustments in the subsequent offer and inserted in the program, as a reinforcement strategy, a conference on the theme.

Moreover, it was possible to identify a certain difficulty in the communication process between the students who attended the patient and her companion. The National Curriculum Guidelines for Undergraduate Medical

Education, about specific skills, highlight the need for students to communicate appropriately with their peers and patients[24,25]. Therefore, it is an ability that should be worked on throughout medical training. However, studies point to weaknesses in this teaching and learning process in the context of medical schools[25]. For this reason, in the following semesters, the module coordinators began to invite EMCM faculty members with expertise in communication as facilitators.

Experiences such as the one reported in this article contribute to increased satisfaction and self-confidence in students. The literature points to the various benefits of clinical simulation, such as self-efficacy, satisfaction, self-confidence, teamwork, patient safety, improved cognitive performance, and the development of competencies and skills[9,12,15,22].

The simulation enabled a critical analysis of child violence, raising questions about how the physician should act in such a delicate context, standing out and requiring greater care, which will positively contribute to a more humanized and coherent conduct in real situations.

In the reality reported, before the implementation of this practice, students experienced the theme only in practice settings (health services). Therefore, its insertion as a curricular activity in the laboratory expands the learning opportunities. It is known that clinical simulation is a potential strategy also because it contemplates aspects and principles of ethics and bioethics[14]. The literature points to the importance of clinical simulation as a strategy that allows the students to learn from their own mistakes and successes without harming a real patient[23].

The experience reported here, although it was a pilot project, was very successful. Due to its success, it became part of the curricular activities of the Child Health module of the EMCM. From this perspective, it contributed significantly to the consolidation of the theme in question, the improvement of the module's practices, and the training of students.

Conclusion

Childhood violence is a context of great relevance due to its great negative repercussion on the growth and development of children and adolescents, as a result of physical and psychological aggressions. It is the medical responsibility to be able to identify, notify, and act upon these cases, protecting the children and adolescents, as required by the Statute. For this, these professionals must be adequately prepared. Given this, clinical simulation was used as a teaching tool in the EMCM Medical School, with fifth-period students, preparing them to identify and intervene in situations of child violence.

Being a complex and challenging scenario, it was possible to identify that students have difficulties in making decisions despite all the technical and scientific knowledge about the subject. The students evaluated the practice as a successful experience. Therefore, simulation, for teaching the approach to children in situations of intradomiciliary sexual violence in the context of APS [PHC], can be a teaching and learning strategy of great potential for the theoretical and practical consolidation of the theme in question.

Authors' Contribution

We describe contributions to the papers using the taxanomy (CRediT) provide above: Conceptualization, Investigation, Methodology, Visualization & Writing – review & editing: Raphael Raniere de Oliveira Costa, José Sebastião de Araújo Júnior, Anna Santana Pereira Rolim de Araújo. Project administration, Supervision & Writing – original draft: Raphael Raniere de Oliveira Costa, Lia Maristela da Silva Jacob. Validation: Raphael Raniere de Oliveira Costa, Lia Maristela da Silva Jacob, Joelia Celeste Vieira Germano. Data curation & Formal Analysis: Raphael Raniere de Oliveira Costa, Ádala Nayana de Souza Mata, Liliane Pereira Braga.

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