Nursing teaching in emergency care in a mass event: Experience report

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Abstract— Objective: to reflect on the knowledge, skills and abilities that should be fostered during academic nursing education for an effective professional performance in the face of a mass event, describing the experience of professors and students of the Nursing Undergraduate course in emergency teaching in this scenario. Methods: experience report, with participatory observation, experienced by teachers and students in nursing education in Urgent and Emergency care during mass events in partnership with the Brazilian Red Cross. The experience took place between September and October 2019, from the training process of the volunteers to the days of the event. Results: at the help stations, strategically dimensioned along the procession path, the students developed diversified actions, involving the management of the environment, planning and direct care. Such experience is a strategy that values the construction of knowledge in a participatory and questioning way, allowing direct contact with the user, providing a unique opportunity to apply the theoretical knowledge acquired in the academy, develop skills and dexterity in nursing actions, in addition to work as a team with the various actors in the state Urgency and Emergency network. Conclusion: the reflective study allowed us to glimpse several aspects regarding the thematic pillars peculiarities that involve nursing teaching in mass events, allowing to raise discussions about the competencies and skills essential to the performance of nurses and teaching strategies to promote teaching in this context.

Keywords— Mass Casualty Incidents, Education, Nursing, Emergencies, Emergency Treatment, Emergency Nursing.

I. INTRODUCTION

Mass events are defined as meetings of a large contingent of people, usually motivated by work, political, sporting, religious or recreational activities, which occur in a pre-programmed or not manner, and which, in general, has the potential to impact and cause consequences in several sectors of society, including Public Health. Corroborating this definition, the Ministry of Health, Brazil, through the Resolution of the Collegiate Board no. 13, of March 28, 2014, article 5, item I, conceptualizes a mass event as: any collective activity of a cultural, sporting, commercial, religious, social or political nature,
for a predetermined time, with an exceptional concentration or flow of people, of national or international origin, and who, according to the assessment of threats, vulnerabilities and risks to public health, require coordinated action by the health agencies of municipal, state and federal management(2).

According to the World Health Organization (WHO), a mass event is a gathering of people that is generally defined as “the congregation of a specific number of people (it may be just one thousand people; although most of the available literature, describe them as meetings that exceed 25,000 people) in a specific location for a specific purpose (a social function, a major public event, a sports competition) for a defined period of time”, which can be planned or spontaneous and recurring or sporadic. Those planned may include sporting, social, cultural, religious and political events. Examples include music festivals, Olympic Games; spontaneous by their nature are more difficult to plan and may include events such as funerals of religious and political figures, meetings of displaced populations due to natural disasters, conflicts and wars(3).

One of the great mass events in Brazil takes place during the “Quadra Nazarena”, in the city of Belém, State of Pará, Brazil, when religious events occur, such as novenas and translations in the “Círio de Nazaré”(4).

“Cirio de Nazaré” is a cultural and religious event held in Belém since 1793, when the region was divided between the Province of Grão-Pará and Rio Negro (in the colonial and imperial periods). The territory was not yet configured geographically as we know it today. This was divided by the North and Northeast regions. In the meantime, the “Cirio de Nazaré” has been gathering people from all over the world for more than two centuries; devotees, visitors and tourists, and each year, this number has been increasing and consolidating itself in the tourist and cultural aspect(4).

It is recognized that the concentration of people of national and international origin, of different habits and cultures, exposed to different risk factors to health, with possible illnesses, which can be enhanced and disseminated, constitutes a risk factor for health and damage environmental, requiring adequate planning and interaction of different sectors, public and private, in the prevention, response and recovery to possible emergencies and disasters(1).

Regarding the relevance of this theme to health, in addition to communicable diseases, participants in mass events are prone to food infections, increased consumption of legal and illegal drugs, accidents (such as fires, landslides, trampling and crushing), respiratory diseases (asthma), suicides, animal and insect bites, diseases related to temperature and humidity (dehydration, heat stroke, sunburn, respiratory conditions and hypothermia), injuries and traumas with lacerations and other degrees of injuries, cardiovascular diseases, among other conditions(3). It should be noted that, in this study, the terminology adopted by the Trauma Committee of the American College of Surgeons is used in order to standardize the terms used in the care of trauma victims in a universal way, namely: Incidents with Multiple Victims for the events with more than five victims and Events with Mass Victims when there are natural or man-made disasters, involving 20 or more victims(5). It is considered that in this context, the public and private sectors should be able to host large events satisfactorily and, for this, they should follow the recommendations of WHO, with regard to the strengthening of disaster risk management systems and their reduction in three levels of government management (municipal, state and national), as well as capacity development and increased resilience of health systems when dealing with multiple victims(1,3).

Various scenarios of society emerge as spaces for learning. In this context, in view of the essentiality of a generalist training of the nursing professional and, therefore, the building of a trained professional, in a comprehensive and specific way, to act in the various contexts and levels of complexity, especially in the scenarios involving urgencies and / or emergencies, including events with mass victims, this event emerges as a unique opportunity for teaching. We are convinced that the integral training of nurses must include the promotion of reflections about the knowledge, skills and competences required for an effective and resolute performance, as an articulator and fundamental member of the multidisciplinary health team, in face of events of this nature(5).

A The Brazilian Red Cross branch, Belém, State of Pará, actively participates in the festivities by strengthening the Emergency Care Network in the metropolitan region of Belém, through service at strategically set up stations during the processions in partnership with health, public and private health services, fire brigade, civil defense, rescue groups and State Higher Education Institutions(6).

In this context, the research questions that we put on the agenda are: what knowledge, skills and abilities should be fostered during academic nursing education for an effective professional performance in face of a Mass Event? And, what teaching strategies are being implemented in the academy to consolidate these skills and competences? Aiming to train professional nurses aware of
their role in a society that increasingly demands creative, critical and reflective work, the professors of the nursing course at the Metropolitan University Center of the Amazon and the State University of Pará have developed over 12 years activities that go beyond the walls of the academy.

In summary, this study aims to reflect on the knowledge, skills and abilities that should be fostered during academic nursing education for an effective professional performance in the face of a mass event, describing the experience of professors and students of the Undergraduate Nursing course in emergency teaching in this scenario.

II. METHOD

Experience report, with participatory observation, experienced by teachers and students in nursing education in Urgent and Emergency care during mass events in partnership with the Brazilian Red Cross. The experience took place in the period from September to October 2019, from the training process of the volunteers to the days of the event, allowing to know the work of the Brazilian Red Cross as an indispensable support in mass events, making it possible to experience the actions taking place and the main difficulties faced in assisting victims of the most varied clinical entities in the crowd during the “Círio de Nazaré” events.

III. RESULTS AND DISCUSSION

Círio festival is a sequence of rituals that make it, during the fifteen days that it takes place, a pole of attraction for devotees, visitors, tourists and pilgrims. Hosting mass events brings numerous challenges related to the crowding of people, demanding greater supply and organization of health services. The Círio festival impacts the entire State of Pará, mobilizing all forces around this event, constituting what Marcel Mauss called total social fact. Even when Círio de Nazaré is compared with some other social mobilization, and with other total social facts, it is nicknamed “Natal Paraense” and “Carnaval devoto”(7). The nursing professional acts in front of events with mass victims supported by the Professional Nursing Practice Law n. 7498/86, which establishes as a private activity of the nurse the direct assistance to the critical patient and the execution of activities of greater technical complexity and which require knowledge with a scientific basis and the ability to make an immediate decision(5). At the help stations, strategically dimensioned along the procession path, the students developed diversified actions, involving the management of the environment, planning and direct care. It is emphasized that such an experience constitutes a strategy that values the construction of knowledge in a participatory and questioning way, allowing direct contact with the user, providing a unique opportunity to apply the theoretical knowledge acquired in the academy, develop skills and dexterity in the actions of nursing, in addition to working as a team with the various actors in the state network of Urgency and Emergency, accompanied by teachers who develop the same work, enabling the exchange of knowledge and experiences in a realistic setting. Events of this magnitude are distinguished by climatic conditions, duration of the event, age and crowd behavior, specific dangers, use of alcohol and drugs, origin and number of participants, spatial distribution and attention to public services given to the event. Such variability leads to different scales of preparation of public health systems for the provision of health services(1).

Currently, the training of nursing professionals has been and is the focus of major changes in our historical process, being influenced by the representation that this profession had over time. In 2001, however, a major advance was consolidated, when, through Resolution National Council of Education / Higher Education Chamber n. 3, of November 7, 2001, the National Curricular Guidelines for the Undergraduate Nursing Course are instituted. In summary, the pedagogical principles elucidated by the National Curriculum Guidelines are: the pedagogy of competences; the principle of learning to learn; generalist, humanist, critical and reflective training; and student-centered training, with the teacher as a mediator / facilitator(5).

Different studies converge on the importance of participation and cooperation between different spheres of government, interdisciplinarity, intersectoriality in the planning and implementation of preventive actions and the reduction of health problems. They point out that joint work between different sectors of society is essential, with a view to better responding to situations with the potential to compromise and impact the lives and health of populations. In Brazil, one of the most recent norms, Ordinance Cabinet of the Ministry n. 1139/2013, highlights the need for coordinated action between the Public Health bodies of the three governmental spheres, as well as the provision of special health services according to the assessment of threats, vulnerabilities and risks to public health(13).

It is in this context that nursing stands out as a unique member of the attendance to this catastrophic event, having to act in a joint and synchronized way with the other professionals, uniting care actions and dialogical
approaches with the victims and family members, providing the essential psychological support in its entirety, health care\(^5\).

Risks to public health during the realization of major events must be considered in the planning and management stages of actions, especially with regard to emergency management, avoiding that the damaging events are of such magnitude that they become disasters\(^1\).

In this perspective, we bring the academic training of the nursing professional as the foundation of this process, which is permeated by some fundamental subjective aspects that must be intentionally worked on, namely: the student, at that moment, experiences the inexperience and immaturity inherent in the phase of life in which they find themselves; most of them experience the traditional pedagogy model, which makes it difficult to understand the transforming function of the knowledge worked on; express communication difficulties during their first practical contacts with users, when they have to deal not only with their emotions, but also with those of the other; and as a complex result of these elements, they report signs of anxiety, fear and anguish\(^5\).

The use of active methodologies and the role of co-responsible students for their education currently point to the revision of strategies that enable new and varied learning experiences\(^1\).

A study revealed that the students want a form of teaching in which the teacher is stimulating the student, using practical classes, involving the participation of the student in their planning, with their considered experiences; that privileges the student's learning and not the teacher's teaching; that provides the student with reflection on learning and relating it to his life; in short, the students aim at teaching by discovery, which represents meaning to them\(^5,8\).

In this way, the ideal teacher is defined as one who deeply knows the discipline he teaches, has clarity, demonstrates that there are different ways of teaching, does not discriminate between students, knows how to organize teaching and maintains a good relationship with learners\(^5,9\).

Training of critical, reflective, creative nurses with technical and political skills for professional practice, in line with the National Curriculum Guidelines for the undergraduate Nursing course, necessarily involves the adoption of new teaching strategies, as well as the improvement existing ones, aiming at favoring different forms of content appropriation. The use of active methodologies and the role of co-responsible students for their training currently point to the revision of strategies that enable new and varied learning experiences\(^10\).

It is based on this understanding, that the teaching experienced and reported in this experience emerges as a facilitating tool, from a “peculiar laboratory” to teach and learn. We believe that the role of nurses in urgent and emergency services requires a variety of knowledge, which is essential for the care of patients with complex needs. The present technologies, the permanent need for scientific improvement and the humanization of care configure particularities to nurses' actions\(^10\).

In this conception, it is essential that the professionals involved in this assistance maintain tranquility and at the same time agility associated with making quick and safe decisions. For this, scientific knowledge and practical experience are required, in addition to training and implementation of protocols. Practical experience can be initiated during graduation, through simulations, considering that written tests are not able to fully guarantee the competence of the student, the quality of his assistance and the safety of critical patients. Simulations are important during the teaching process, because in addition to improving knowledge and psychomotor and cognitive skills, they encourage communication between the team involved in care in an environment very close to reality and allow the analysis of individual performance\(^11\).

A study carried out in Saudi Arabia, describes that despite the central role of frontline nursing teams in emergency departments in response to disasters, little is known about the knowledge and skills required by this group of health professionals for effective performance in this area. scenario. There is a scarcity of studies that directly measure aspects of preparation for emergency nurses in the context of mass events\(^12\).

Rescue authorities recognized several essential factors in preparing for mass meetings. These factors can be categorized in cooperation in the pre-planning phase, factors to be observed in the emergency plan and actions during the event. Mass meetings are part of society, requiring planning and management of the various segments of society, in order to ensure sufficient operational resources, such as the ability to deploy resources in advance on site, improving disaster preparedness, which also requires sufficient financial resources and cooperation\(^13\).

In this understanding, it is suggested that the organizers of future events of this nature should consider the early and wide integration of public health and other segments of organized society, with a focus on disaster risk reduction for the management of these events\(^14\).
IV. CONCLUSION

The reflective study allowed us to glimpse several aspects related to the thematic pillars peculiarities that involve nursing education in mass events, allowing to raise discussions about the competencies and skills essential to the performance of nurses and teaching strategies to promote teaching in this context.

In the search for strategies for the training of professional nurses who meet the demands of the market, we emphasize that the academy should provide students with learning opportunities that enable development beyond the cognitive field, expanding critical-scientific reflection, capacity in decision-making in situations that are not always predictable, and insertion in the social context of these learning scenarios, not only performing specific actions to fulfill the tasks that are demanded, but showing interest in implementing relevant actions for the development of quality care regardless of the context of performance.

In this perspective, we argue that academic training is the foundation of this process. That said, based on the assumption that there are essential knowledge, skills and abilities inherent in the training of nurses to act in the face of a mass event, we believe that these experiences should be initially promoted and developed in the academic environment. We reiterate that under no circumstances do we advocate specific training with a focus on the nurse's specialty, but rather envision a comprehensive training that allows health professionals to refine their care excellence from a generalist perspective.

Thus, we hope to contribute to the development of new studies, which can demystify the role of nurses in mass events and cooperate with the affirmation of the educational process as the guiding axis of professional qualification, and, therefore, for the improvement of the process of health education and work.

In addition, we seek to apprehend the aspects that must permeate the academic education of nurses and, thus, contribute to the elucidation of teaching strategies that facilitate the teaching-learning process, through general training, of problematizing educational practices that promote knowledge, competencies and skills essential for professional performance.

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