Educational intervention concerning urgency and emergency in Primary Health Care

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Abstract

Primary health care is considered a component of the fixed prehospital emergency care network and the preferred gateway for first contact with the user. Therefore, the teams of the basic health units need to be able to offer quality care to the patient, facing acute and unforeseen conditions, focusing on reducing morbidity, mortality and sequelae. This study aimed to describe an educational intervention process for basic and advanced life support care for health professionals in the primary care network. This was a descriptive study on an educational intervention process conducted with the multiprofessional team of five basic health units in the city of Maringá, Paraná. Initially, a situational diagnosis was made through a questionnaire applied to 57 primary care professionals. From this, the educational intervention was built, which was performed by a training given to 65 professionals from the pre-established units. Regarding the difficulties encountered in urgent/emergency care, the professionals cited the team's lack of preparation, associated with a lack of training, as the major obstacle. Regarding the topics to be addressed in the training, the participants opted for Cardiac arrest; Foreign Body Airway Obstruction and Convulsive Crisis. The study identified the main difficulties faced by the professionals of the BHU when dealing with health conditions, as well as the issues that they considered deficient in their work practice. This highlights relevancy to perform an educational intervention using a strategy mediated by training.

Key words: Urgent Care. Emergencies. Primary Health Care. Continuing Education.

INTRODUCTION

The Primary Health Care (PHC) has universality, equity and comprehensiveness as its principles, and it aims to promote the decentralization of care by approaching the reality of the users lives, since it can be found in the same residential territory as the populations[1,2].

Ministry of Health Ordinance No. 2.048/2002, approving the Technical Regulation of State Emergency Systems, provides for the organization of the care network from fixed and mobile prehospital components, from primary levels to high complexity, assigning each of them their share of responsibility for urgent and emergency care. In the regulation, Primary Care is one of the components of the fixed prehospital network, responsible for the first care given to the patient that needs immediate stabilization, in addition to assistance with acute or chronic conditions, to all individuals in its territory of coverage, in any situation[3].

According to Ordinance Nº. 2.436

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of September 2017[1], article 10, it is the responsibility of the Municipal Health Departments as the main system for organizing Primary Care, involving the Family Health Strategy (FHS) in their work network, in order to solidify the precepts of the Brazilian health reorientation model. This is through activities for promoting, preventing and protecting the community's health, by being the first option of the user's search to solve problems inherent to their health. From this perspective, PHC through the Family Health Units are pointed as the gateway to the Unified Health System (SUS) and are often the primary resource for attending clinical instability, and the team must be able and prepared to recognize, stabilize and refer when needed[4].

Despite the urgent and emergency care network being legally considered a component of the fixed prehospital, the reality of care in this area shows the opposite, given that it is not routine for these services[5]. Related to this, the units should have a well-formed referral network for the forwarding and transportation of the health complications they receive, through a regulation center, coordinated by the Mobile Emergency Care Service (SAMU), which aims to arrive at the victim first and refers them to a hierarchical service integrated with the SUS according to the patient's need[5].

Based on the above, there is concern regarding the observation of the care provided by the SAMU basic and advanced support units within Basic Health Units (BHU), regarding clinical conditions that could receive initial care or be resolved/ stabilized in the service itself. However, to do so, the teams need to be fit. Thus, there is a need to know the main difficulties encountered by primary care teams in situations that pose a risk to users' lives, and to supply them through a health education strategy. This strategy should allow for adequate care and provide information, as well as prepare working professionals for urgent and emergency situations, considering that health problems can happen at any time and place. The result is quality care and increased chances of survival of the population, as well as reducing of sequelae.

From this perspective, health education is defined as a set of didactic skills of a participative nature, which crosses various fields of action and aims to raise awareness and mobilize communities and individuals to face circumstances which interfere with the quality of life; this is developed to achieve proper health[6]. It is typically characterized as health information propaganda, using technology, requiring an understanding of the theme and its scope. Moreover, the association of this practice is characterized with communication and qualified listening, which considers any place used as an ideal environment for these purposes[6].

Still on this aspect, the literature shows different concepts for the terms "health education health" and "education on health", the first being defined as education actions aimed at the knowledge and appropriation of the population, contributing to increase the autonomy of health system users under by their own care[7]. Meanwhile, education on health is focused on professionals and consists of the elaboration and systematization of knowledge related to professional training, involving didactics and teaching practices[7]. Therefore, there are two categories of education at work in health: continuing and permanent education[7].

In this sense, professional nurses have been designated as a fundamental piece for the development of educational practices in health, due to their broad and contextualized knowledge, which is a characteristic of their education[8].

Thus, this study aimed to describe an educational intervention process for basic and advanced life support for health professionals from the primary care network.

METHODOLOGY

This was a descriptive study on a process of educational intervention with primary care health professionals, related to urgent and emergency care, directed at basic and advanced

life support.

The study was conducted in the city of Maringá, located in the northwest of the state of Paraná. The municipality has an estimated population of 417,010 thousand inhabitants. The local health network has 1,490 health facilities, divided between clinics and specialized outpatient clinics, general hospitals, diagnostic support service units, psychosocial care centers, emergency care units, prehospital mobile services and basic health units[9].

According to data from the municipal health department10, the city currently has 34 Basic Health Units (BHU), 32 in the municipality and two in its districts, Iguatemi and Floriano. The study was conducted in five BHU selected by lot according to their distribution on the local map, reaching the North, South, East, West and central regions of the municipality.

The population of the five BHUs consisted of 66 professionals. For sample calculation, a simple random sampling process was used considering a sampling error of 5% and a confidence interval of 95% for sample calculation. The study sample resulted in 57 people.

The participating professionals are part of the multiprofessional team of the drawn BHUs and the Family Health Support Center (FHSC), from various fields of health practice: nurses, doctors, technicians, nursing assistants, social workers, nutritionists, psychologists, pharmacists, dentists and community health agents (CHA). Inclusion criteria were: providing direct patient care and being associated with the institution for at least one year. Those that were on vacation, taking time off or were on leave, were excluded.

The study's development process involved three phases: the first phase was characterized by a situational diagnosis composed of applying a questionnaire consisting of questions that referred to the participants' knowledge of urgencies and emergencies, of the physical and material structure for this type of care in a BHU, training and qualification in the area, situations that they had already witnessed and topics they considered important and would like to be addressed during the training. The questionnaire was previously tested with 10 participants, where the need to add two questions related to profession and time of employment in the unit was observed, totaling seven open questions. This phase was performed from September to November 2018, with the morning and afternoon shift teams.

In the second phase, the answers obtained through the questionnaire were analyzed and the material related to the themes emerged. Subsequently, the third phase began, that is, the educational intervention. At this stage, the themes raised served as a guide for building the training following the recommendations of international protocols based on scientific evidence[11].

The training sessions were given at the five selected BHUs, and 65 professionals participated in the training, among which are the 57 participants of the first stage, plus eight professionals who requested to participate in the intervention. The intervention was carried out in rooms made available by the directors of the units, at the intermediate time between work shifts, so that the teams of the two shifts could participate.

The activities were performed by exposing the theoretical content by slides and the practical class was performed on inflatable dummies for training.

The study met the ethical requirements of the National Health Council in accordance with resolution 466/2012[12]. The project was forwarded to the CECAPS (Permanent Training and Health Training Advisory Office). After authorization it was submitted to the Standing Committee on Ethics in Human Research (COPEP), obtaining approval under Opinion No. 2.730.919/2018. All subjects involved signed two copies of the Informed Consent Form.

To preserve the identity of the BHU, fictitious names were given, identified here as: BHU 1, 2, 3, 4 and 5.

RESULTS

The characterization of the participants of the first phase of the study is described in Table 1.

Table 1- Characterization of the professionals participating in the situational diagnosis, regarding their category and length of service at the BHU. Paraná, Brazil, 2018.

Professional Category	No. of participants	Average time at job (years)
Nurses	08(14%)	4.2
Nursing Technicians	15(26.3%)	7.8
Nursing assistants	21(36.8%)	8.0
Physicians	13(22.8%)	3.7
Total	**57**	

According to the inclusion criteria, only professionals who provide direct patient care were part of this stage. Among them, it was observed that the professional category with the largest number of participants were the nursing assistants and those who had the longest time at this job.

Table 2 presents the main difficulties raised by the situational diagnosis.

Table 2- Main difficulties encountered for urgent and emergency care at the BHU. Paraná, Brazil, 2018.

Difficulties found	No. of repetitions
Team unpreparedness, associated with lack of training	23
Lack of materials and equipment	14
Lack of medication	11
Absence of medical professional	09
Delay in transportation for removal	07
Adequate physical space	06
Proper monitoring	04

Among the difficulties raised by professionals, the "unpreparedness of the team due to a lack of training" was the most reported. In the applied questionnaire, the respondent was asked to list topics to be addressed in the training. The answers obtained showed various contents of interest; however, the three themes that stood out: Cardiac arrest (CA) (26); Foreign Body Airway Obstruction (FBAO) (19) and Seizure Crisis (18), which are highlighted in Table 3.

Table 3- Urgency and emergency topics considered relevant by the BHU professionals for covering in training. Paraná, Brazil, 2018.

Contents	No. of repetitions
CA*	26
FBAO*	19
Seizure crisis	18
Stroke*	12
AMI*	11
Hypertensive crisis	10
Decompensated Diabetes	08
Psychiatric Emergencies	04
Exogenous intoxication	03
Burns	03
Tachyarrhythmias	02
Childbirth	01
Drowning	01
Hypovolemic shock	01

*CA - Cardiopulmonary arrest; FBAO - Foreign Body Airway Obstruction; AMI - Acute Myocardial Infarction

At first, the training was aimed at the professional categories that were part of the process of filling out the questionnaires (nursing staff and doctors). However, there was a positive repercussion of the training reaching other professional categories of health workers, who showed interest in being involved in the study by participating and interacting during the intervention. These professionals were namely dentists, community health agents and FHSC team members represented by a pharmacist, social worker, nutritionist and psychologist. They were all at the BHU on the day of the activities, totaling 65 participants in the intervention. Table 4 describes the participating professionals in each BHU.

Table 4- Professionals participating in the training, by category and BHU. Paraná, Brazil, 2018.

BHU	Enf.*	Téc. Enf.*	Aux. Enf.*	Médico	Dentista	ACS	NASF	Total
BHU 1	1	3	2	1	-	-	-	07
BHU 2	2	4	3	2	1	4	-	16
BHU 3	2	2	3	2	1	1	-	11
BHU 4	2	3	7	3	1	3	4	23
BHU 5	1	2	3	2	-	-	-	08
Total	8	14	18	10	3	8	4	**65**

*Nurs. - Nurse; Nurs. Tech - Nursing Technician; Nurs. Assist. - Nursing assistant

DISCUSSION

According to the National Primary Care Policy (NPCP)[13], family health teams must be made up of doctors, nurses, nursing technicians or assistants and community health agents, and may include other professional categories. Thus, the study initially allowed the characterization of mandatory health categories; except for CHAs, because this category is not involved with urgent and emergency care.

It was observed that most professionals had over three years of work, creating a connection with the user, which enables closer relationships, allowing the worker to know and identify the patient's health needs. According to the NPCP, the construction of the bond between health professionals and users implies effective and person-centered clinical and sanitary interventions, which is a presumption of the Primary Care resolution[13].

The guidelines and norms established in the Ministry of Health ordinances, related to the structuring of the urgency and emergency network, indicate several aspects of accountability attributed to primary care[3,4]. However, in the participants' answers, it was observed that there are serious difficulties that interfere in treating emergency situations; highlighting "Team unpreparedness associated with lack of training" and "Lack of materials and equipment". A study conducted in Campina Grande (PB) in 2015, aiming to analyze the ability to resolve and the reception provided in urgent and emergency situations in primary care, showed that professionals had difficulties recognizing urgent situations seen in the handling of essential drugs at the first contact during urgent care[14].

In addition, the technical regulation of state urgency and emergency systems addresses the need for certifying BHU professionals to handle these situations, as well as describing the materials and inputs that units should provide to assist cases. Moreover, there is the need for physical structure, highlighting the importance of having an environment prepared for the first encounter during urgent/ emergency care where a room can be made available for up to eight hours of observation[3,15].

The reality of urgent and emergency care in primary health care is worrying due to the lack of sufficient physical and material resources, the low ability of professionals to deal with these cases and the lack of a bond between staff and community, resulting in excessive demand for care in other complexity levels. This then results in the overloading and overcrowding of secondary and tertiary care services with complaints that could be resolved at the primary care level[2].

It should be borne in mind that family health facilities are viewed by most users as a choice to meet their needs, whether basic or

complex. They are a way of minimizing harm, suffering and anxieties, or even because there is no other another point of health care near their home[4].

The study also demonstrated the absence of medical professionals as being a difficulty to perform emergency care in BHU. According to a study conducted with nurses from a municipality in the interior of Santa Catarina, respondents highlighted this condition as an obstacle[16].

With regard to the themes chosen by primary care professionals for the training approach, the Cardiac Arrest (CA) stood out. With the progressive increase in cases of CA, the need for training health workers is evident, since the patient's chances of survival depend on their competence to perform Cardiopulmonary Resuscitation (CPR) maneuvers immediately[17]. Also, Foreign Body Airway Obstruction (FBAO) appeared, which can lead a person to asphyxiation to and even death when not rescued in a timely manner[18]; also, there convulsive crisis appeared.

All contents fit the objective assigned to PHC, which aims at the first contact of emergency care in an adequate way until they are transferred to other health care centers, if necessary, as well as assessing the risk classification of vulnerabilities[19]. Thus, the contents CA, FBAO and convulsive crisis were the themes addressed for the construction of the educational intervention.

The educational intervention carried out fits into the mode of permanent education, defined as didactic practices based on the problems encountered in the work environment, whose focus is to transform workers' actions, taking as reference the health needs of the community7. The formation of the intervention was based on an active methodology, which is an educational concept that stimulates reflective critical teaching-learning processes, where professionals actively participate since the formation started from the approximation of the real problems. Reflections on such problems encountered in the daily work environment generate curiosity and challenge, promoting that those involved themselves seek the solution of the problems raised, and identify and organize the most appropriate solutions to the situation[20,21].

It is observed that, in order to improve health actions, with regard to urgent and emergency care at the primary care level, in addition to training of teams, the definition of the primary level of health care needs to be reformulated, since it brings the assumption of low complexity care where human and material resources are focused primarily on prevention and health promotion. Thus, many may relate urgent and emergency care as a hospital-only responsibility. A study conducted in Campina Grande (PB) showed a similar result, where participants reported not feeling responsible for this type of care[14].

The concept of urgent and emergency care at the BHU is not clearly established and is fraught with gaps, giving rise to confusion among caregivers as well as users. The responsibility of the teams should be better defined, in order to reduce morbidity and mortality, and alleviate the more complex network services[2,4].

CONCLUSION

The study allowed identifying the main difficulties faced by the professionals of the BHUs when dealing with health conditions, as well as the issues that they considered to be deficient in their work practice. Thus, those issues of greater relevance were highlighted for carrying out an educational intervention, using a strategy mediated by training.

This study described aspects related to urgent and emergency practices in Primary

Health Care, from a sample of professionals from five units of a municipality in the interior of Paraná. Therefore, it is not possible for the results to extend to the entire national health system, which constitutes the limitation of this study. However, it does encourage further research aimed at the reality from other regions in order to broaden the understanding of the issue studied; given that there was positive feedback from participants who showed interest in the new approaches.

Finally, the challenges encountered in applying the educational intervention was to encourage professionals to reflect on the work reality in which they are inserted and their responsibility for the training process of their teams.

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