

THE MOST USED NURSING DIAGNOSES AT AN EMERGENCY SERVICE

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ABSTRACT: The objective was to identify the main nursing diagnoses used by experts in the emergency area. A descriptive study was undertaken at an emergency service between June and November 2011. The Delphi technique was used to reach a consensus among seven professionals from different Brazilian institutions about the prevailing nursing diagnoses at emergency care services. A consensus was reached on the following nursing diagnoses: Impaired gas exchange, Ineffective breathing pattern, Impaired spontaneous ventilation, Risk for infection, Risk for impaired skin integrity, Impaired tissue integrity and Risk for falls. In conclusion, the Delphi technique showed to be a great facilitator to reach a consensus about the prevailing nursing diagnoses at emergency care services related to the "safety and protection", "activity and rest" and "elimination and exchange" domains of the North American Nursing Diagnosis Association.

DESCRIPTORS: Nursing diagnosis; Emergency nursing; Nursing care.

DIAGNÓSTICOS DE ENFERMAGEM MAIS UTILIZADOS EM SERVIÇO DE EMERGÊNCIA

RESUMO: Objetivou-se identificar os principais diagnósticos de enfermagem utilizados por *experts* em área de emergência. Estudo descritivo realizado em Serviço de Emergência, período de junho a novembro de 2011. Utilizou-se a Técnica Delphi para a obtenção do consenso entre sete profissionais de diferentes instituições brasileiras, sobre os diagnósticos de enfermagem prevalentes em Serviços de Urgência e Emergência. Os diagnósticos de enfermagem que tiveram consenso foram: Troca de gases prejudicada, Padrão respiratório ineficaz, Ventilação espontânea prejudicada, Risco de infecção, Risco de integridade da pele prejudicada, Integridade tissular prejudicada e Risco de quedas. Conclui-se que a Técnica Delphi mostrou-se como grande facilitadora para a obtenção de consenso, sobre os diagnósticos de enfermagem prevalentes em Serviços de Emergência, relacionados aos domínios da North American Nursing Diagnosis Association de "segurança e proteção", "atividade e repouso" e "eliminação e troca".

DESCRIPTORIOS: Diagnóstico de enfermagem; Enfermagem em emergência; Cuidados de enfermagem.

DIAGNÓSTICOS DE ENFERMERÍA MÁS UTILIZADOS EN SERVICIO DE EMERGENCIA

RESUMEN: Fue objetivo del estudio identificar los principales diagnósticos de enfermería utilizados por *experts* en área de emergencia. Estudio descriptivo realizado en Servicio de Emergencia, periodo de junio a noviembre de 2011. Se utilizó la Técnica Delphi para obtener consenso entre siete profesionales de distintas instituciones brasileñas acerca de los diagnósticos de enfermería prevalentes en Servicios de Urgencia y Emergencia. Los diagnósticos de enfermería que tuvieron consenso fueron: Cambio de gases perjudicado, Patrón respiratorio ineficaz, Ventilación espontánea perjudicada, Riesgo de infección, Riesgo de integridad de la piel perjudicada, Integridad tisular perjudicada y Riesgo de caídas. Se concluye que la Técnica Delphi se mostró como gran facilitadora para obtener consenso acerca de los diagnósticos de enfermería prevalentes en Servicios de Emergencia, relacionados a los dominios de la North American Nursing Diagnosis Association de "seguridad y protección", "actividad y reposo" u "eliminación y cambio".

DESCRIPTORIOS: Diagnóstico de enfermería; Enfermería en emergencia; Cuidados de enfermería.

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INTRODUCTION

The search for emergency services has increased exponentially in the last 30 years, associated with patients' greater complexity and severity. In that context, the overcrowding of those services has been frequently discussed in the literature as a way to characterize the cause of this phenomenon and find means to solve or mitigate this problem⁽¹⁾.

In addition, the nursing team faces stressful factors at the emergency services, including the insufficient staff; lack of institutional and professional support; high work load; need to perform medical and nursing procedures in a short time period; inappropriate physical space; conflicting relationships in the workplace with professionals, family members and users, among others, which contribute to often hardly safe nursing care, which can injure the users, who are entitled to risk-free care, strongly affecting the care provided⁽²⁾.

In that context, not only the profile of emergency care nurses, but also the functioning of the health system is discussed, which permits the overcrowding of these sectors and does not provide sufficient human and material resources to deliver safe and high-quality care⁽³⁾.

During care for clinical and surgical emergencies, the medical interventions are the priority to reestablish the patient's vital functions. Once these have been established, however, even in case of continuing severity, other individual needs have to be attended to. Until today, the biomedical model remains predominant in healthcare, in which the patient is seen as a set of organs that can get ill and, when that happens, an isolated intervention prevails, aiming for immediate cure and devaluing the person as a whole⁽⁴⁾.

Nursing care is still influenced by the hospital-centered care model, and strongly centered on the disease instead of the human being⁽⁵⁾. In that context, the nursing process is important, as it puts in practice a work method that was elaborated to guide holistic care for individuals⁽⁶⁾. The more critical the patient's situation, the more important and necessary it is to systemize the nursing care. The use of a work method is fundamental with a view to organized actions and care that attends to the patients' needs⁽⁷⁾.

In COFEN Resolution 358 from October 15th 2009, the Federal Nursing Council established the need to implement the nursing process in health services, as a private activity of nurses, with a view to achieving a safe and humanized care model in response to the patient's requirements⁽⁸⁾.

The nursing diagnosis model of the North American Nursing Diagnosis Association (NANDA)⁽⁹⁾, a North American association that collects studies and research on nursing diagnoses, offers a standardized language and is used as a product of reasoning and clinical judgment about the human responses to the health problems and vital processes that are essential for critical patients⁽¹⁰⁾.

Overcoming the biomedical model is fundamental for nursing care delivery to patients at the emergency care service. Therefore, the objective in this study was to identify the main nursing diagnoses experts in the emergency area use, by means of the Delphi technique, with a view to guiding actions aimed at recovering concepts and humanizing practices in nursing care for patients in emergency situations.

METHOD

A descriptive study was undertaken at a teaching hospital in the State of São Paulo. It was developed between June and November 2011, involving professionals from different Brazilian institutions who were experts in care delivery to adult patients in emergency care situations.

The Delphi technique was applied, which allows a group of experts in a certain knowledge area to reach a consensus on a given phenomenon. The experts are defined as professionals who truly engage and are experienced in their activity areas⁽¹¹⁾. The literature does not mention an ideal number of participants, but states that a minimum of five is sufficient to control the agreement, which ranges between 50% and 80%⁽¹¹⁻¹²⁾.

To constitute the expert panel, 25 emergency care specialists were contacted in Brazil. Initially, the Lattes platform was screened for expert nurses with the descriptors nursing and emergency; another strategy used was the invitation extended to the professionals from two public and two private hospitals in the city of São Paulo who

work in emergency care.

The inclusion criteria for this study were: being a nurse; having five or more years of experience in direct care for patients at emergency care services and/or experience in teaching or research in this concentration area; being experienced in the use of nursing diagnoses and accepting to participate in this study.

The study was divided in four phases. The first phase involved the forwarding of an invitation letter and the informed consent form by e-mail. After receiving the acceptance, two forms were sent for completion. The first contained demographic data and the other all nursing diagnoses addressed in the NANDA Taxonomy 2009–2011⁽⁹⁾, together with a four-point Likert scale to classify the prevalence of each diagnoses at emergency care services: (1) "I use this diagnosis in less than 25% of the situations", (2) "I use this diagnosis in between 25% and 49% of the situations", (3) "I use this diagnosis in between 50% and 74% of the situations" and (4) "I use this diagnosis in 75% or more of the situations".

The participants included in the study had returned the questionnaires fully completed within the five-day deadline, totaling seven experts.

The second phase was the storage of the collected data in the software EXCEL® and their analysis in terms of absolute frequencies. The diagnoses with mean scores lower than 50% were excluded. The researchers had determined this cut-off point before the data collection.

In the third phase, after the exclusion of the nursing diagnoses with frequencies lower than 50%, the answers were resent by e-mail to the re-evaluation group. Each expert had contact with the other experts' answers, aiming to reach the highest consensus level possible. The respondents' anonymity was guaranteed. A new five-day deadline was set to return the completed questionnaires.

In the fourth phase, the collected data were again processed in the software EXCEL® and analyzed in terms of absolute frequencies. Diagnoses with means inferior to 50% were once again excluded. In this phase, only diagnosis with an agreement level higher than 70% were considered, as determined by the researchers.

This study was developed after received Institutional Review Board approval from the Universidade Federal de São Paulo (Protocol 0640/11).

RESULTS

The seven professionals included in the study were all female, with a mean age of 33.7 years and coming from three states: São Paulo (71.4%), Paraná (14.3%) and Rio Grande do Sul (14.3%).

The experts' activity areas were: care (28.4%), care/research (28.4%), care/teaching/research (14.4%), teaching/research (14.4%), teaching/research/management (14.4%). The institutions where they worked were: public institution (71.4%), private institution (14.3%) and one institution that received public and private funding (14.3%). As regards the size of the institutions, the majority (71.4%) worked at large hospitals and only two at medium hospitals (28.6%). Concerning the type of demand these institutions attended to, 100% of the experts answered that the institutions they were affiliated with attended to spontaneous and referred demands.

The length of the participants' experience in emergency care ranged between five and nine years (71.2%) and nine years or more (28.8%). The most prevalent nursing diagnoses at the Emergency Care services according to the experts are displayed in Table 1.

As regards the nursing diagnoses for which the consensus level among the experts surpassed 70%, 57.1% belonged to the NANDA domain "safety and protection", followed by 28.6% from the domain "activity and rest" and 14.3% from the domain "elimination and exchange".

Table 1 – Most prevalent nursing diagnoses at the Emergency Care Service according to experts in the area. São Paulo-SP-Brazil, 2011

Diagnoses	n	%
Impaired gas exchange	5	71,4
Ineffective breathing pattern	6	85,7
Impaired spontaneous ventilation	5	71,4
Risk for infection	6	85,7
Risk for impaired skin integrity	6	85,7
Impaired tissue integrity	5	71,4
Risk for falls	5	71,4

DISCUSSION

The objective in this study was to identify the main nursing diagnoses used in emergency care services through the opinions of experts in emergency care, using the Delphi technique. This identification can contribute to the nurses' activities in these services, who are currently facing the challenge of managing the overcrowding of these services and keeping up the quality of care⁽¹³⁾.

In this study, the diagnoses Impaired Gas Exchange, Impaired Spontaneous Ventilation and Ineffective Breathing Patterns were the most frequent. In comparison with the findings from a research in the State of Minas Gerais, which associated the Manchester Protocol with the nursing diagnoses, priority level I was also found for the nursing diagnoses mainly associated with the breathing function, ineffective breathing pattern and impaired gas exchange, but acute pain (65.0%) was the most frequent diagnosis⁽¹⁴⁾.

In this study, the three nursing diagnoses focused on patients' breathing function are probably associated with the characteristic of emergency care, which is to treat life-threatening causes. At these services, the prevalence of altered breathing function is high, which can be associated with clinical manifestations of oxygenation changes due to pulmonary events or not, which cause actual or potential health problems and make the clients seek care⁽¹⁵⁾.

Patients with respiratory problems demand nurses with specific knowledge, so as to be able to identify risk situations early, using clinical reasoning, and propose immediate interventions to preserve and save lives. Nurses are the professionals who spend most time at the patient's side and are responsible for the monitoring and constant observation of these patients⁽¹⁶⁾.

In this research, the experts also reached a consensus on the nursing diagnoses Risk for infection, Risk for impaired skin integrity and Risk for falls. The prevalence of the diagnosis Risk for infection may be related to invasive procedures and immunosuppression, often present in patients attended at emergency services⁽¹⁶⁾. The diagnoses Risk for impaired skin integrity and Impaired tissue integrity are prevalent in critical patients, as they often need rest due to their clinical condition and depend on the nursing team to be able to move in the bed⁽⁷⁾. The consensus on the prevalence

of the diagnosis Risk for falls may be associated to the fact that many patients at the emergency service are agitated, confused and aggressive, and take drugs like benzodiazepines and sedatives or hypnotics⁽¹⁷⁾.

These findings are in line with the results of another study developed at a Mobile Emergency Care Service of the Ribeirão Preto Municipal Health Secretary in the State of São Paulo, involving trauma victims. The following nursing diagnoses were identified in the subcategories oxygenation/breathing, tissue integrity and physical integrity, respectively: Ineffective airway clearance, Ineffective breathing pattern, Risk for aspiration and Risk for altered breathing function; Impaired skin integrity and Impaired tissue integrity; and Risk for falls and Risk for infection⁽¹⁸⁾.

Similarities were also found in a study developed at a tertiary hospital in São Paulo, which was aimed at identifying the nursing diagnoses associated with the occurrence of deaths in trauma victims, with nursing problems related to the airways, breathing pattern and the perfusion of organs and systems responsible for risk factors for patients' death. In the same study, however, it was evidenced that the diagnoses Ineffective airway clearance, impaired comfort and acute pain⁽¹⁹⁾ served as protection factors for the occurrence of deaths. These findings reaffirm the need to prioritize nursing problems/diagnoses in emergency situations in order to plan actions and make immediate decisions in response to these patients' complexity⁽²⁰⁾.

In this research, the nursing diagnoses on which the experts reached a consensus of more than 70% were mostly focused on biomedical aspects: (57.1%) in the NANDA domain "safety and protection", followed by 28.6% in the domain "activity and rest" and 14.3% in the domain "elimination and exchange". These results partially support two other Brazilian studies, one developed at an emergency service in Belo Horizonte⁽⁷⁾ and another involving nurses from different hospital services, including intensive care services and an emergency care service in Brazil⁽²¹⁾, in which the most represented domains were "activity and rest", "safety and protection", "nutrition" and "coping". These results may be related to the care delivered at the emergency service, a sector that demands care to critical patients at imminent risk of death. Complex care is

required from the nursing team, which prioritizes the patients' stabilization and life support⁽²²⁾.

Thus, as nursing team managers, the nurses should program and prioritize care, in view of the patients' peculiarities at the emergency care. The nursing diagnoses offer criteria to conduct care services in a context in which the time between life and death is subtle⁽²²⁾.

Also, the complexity of the patients attended in these services often justifies the stay of a companion/relative to help with the patient's needs. This scenario implies that not only the patient's, but also the relatives' needs should be attended to, who are frequently faced with fear and anxiety as a result of the patient's health situation and the rupture of the family structure. Independently of the place of care, the family should be considered an extension of the patient, which demands adaptations in the nursing team's actions to cope with this moment⁽²³⁾.

Finally, the Nursing Care Systemization has been widely used in recent years as a scientific method to equip the solving of patients' problems and individualize the care, besides supporting and providing scientific bases for nurses' actions. This process is considered an activity reserved for these health professionals⁽⁷⁾. Therefore, the creation of protocols at the emergency service based on the nursing diagnoses can guide the nurses' clinical judgment on the health problems critical patients face, permitting agility in the elaboration of a comprehensive care plan⁽¹⁶⁾.

The main limitation in this study was that only experts from three Brazilian states participated, that is, the consensus on the nursing diagnoses in this research may have been different if experts from other states had participated. Anyway, these study results can contribute to the creation of protocols that rest on the Nursing Care Systemization, enhancing the quality and safety of care delivery to emergency care patients.

CONCLUSION

The use of the Delphi technique was a great facilitator to reach a consensus on a given theme. It is important to highlight some aspects that hampered the study, such as the difficulty to find the experts to be included in the panel, problems with the return of questionnaires, like

part of the participants' abstention, that is, some of the participants did not return the completed questionnaires, leading to a loss of participants.

Further research is suggested to identify the most prevalent nursing diagnoses at emergency care services, with a view to guiding the nursing diagnoses that facilitate comprehensive nursing care, offering support to elaborate individual care plans for critical patients.

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