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## PERSPECTIVE OF HANDLERS/STRETCHERS-BEARERS THROUGH THE INCIDENTS OCCURRED IN TRANSPORTATION OF PATIENTS

PERSPECTIVA DOS CONDUTORES/MAQUEIROS DIANTE DOS INCIDENTES OCORRIDOS NO TRANSPORTE DE PACIENTES

### PERSPECTIVA DE LOS CONDUCTORES DE CAMILLAS FRENTE A LOS INCIDENTES **OCURRIDOS EN EL TRANSPORTE DE PACIENTES**

Claudia Maria de Sousa<sup>1</sup>, Ana Lúcia Queiroz Bezerra<sup>2</sup>, Regiane Aparecida Santos Soares Barreto<sup>3</sup>, Marinésia Aparecida do Prado Palos⁴, Gabriela Camargo Tobias⁵, Thatianny Tanferri de Brito Paranaguá<sup>6</sup>

Objective: to analyze the incidents that occurred during the in-hospital transport of patients from the perspective of the handlers/stretchers-bearers. Method: this is a quantitative, exploratory, descriptive study, carried out with 10 nurses from a university hospital. The data collection was performed through a structured form, with a descriptive analysis of the data. Results: 60% of workers reported participation in training courses; among the incidents that occurred during intra-hospital transport, the disconnection of O2 (oxygen), probe, serum equipment, breakage of the stretcher, a patient with cardiac arrest, the crisis of vomiting and falls were identified. Conclusion: the incidents reported by the stretcher-bearers, arising from the patient's transportation, are in disagreement with the guidelines because they place workers in a situation of vulnerability to these incidents. Descriptors: Patient safety; Risk management; Accidents; Delivery of Health Care; Health Personnel; Quality Indicators.

Objetivo: analisar os incidentes ocorridos durante o transporte intra-hospitalar dos pacientes na perspectiva dos condutores/maqueiros. *Método*: estudo quantitativo, exploratório, descritivo, realizado com 10 maqueiros de um hospital universitário. A coleta de dados foi realizada por meio de um formulário estruturado, com análise descritiva dos dados. *Resultados*: 60% dos trabalhadores relataram participação em cursos de capacitação; dentre os incidentes ocorridos durante o transporte intra-hospitalar, identificou-se a desconexão de O2 (oxigênio), de sonda, de equipo de soro, quebra de maca, paciente com parada cardíaca, crise de vômitos e quedas. Conclusão: os incidentes relatados pelos maqueiros, advindos do transporte do paciente, configuram-se em uma inconformidade com as diretrizes, pois colocam os trabalhadores em situação de vulnerabilidade a estes incidentes. Descritores: Segurança do Paciente; Gestão de Riscos; Acidentes; Assistência à Saúde; Profissional da Saúde; Indicador de Qualidade.

Objetivo: analizar los incidentes ocurridos durante el transporte intra-hospitalario de los pacientes en la perspectiva de los conductores de camillas. Método: estudio cuantitativo, exploratorio, descriptivo, realizado con 10 conductores de maquilas de un hospital universitario. La recolección de datos fue realizada por medio de un formulario estructurado, con análisis descriptiva de los datos. Resultados: 60% de los trabajadores relataron participación en cursos de capacitación; dentro de los incidentes ocurridos durante el transporte intra-hospitalario, se identificaron la desconexión de  $O_2$  (oxígeno), de sonda, de equipo de suero, quiebra de la camilla, paciente con parada cardíaca, crisis de vómitos y caídas. Conclusión: los incidentes relatados por los conductores de camillas, em el transporte del paciente, se configura em una inconformidad con las diretrices, pues colocan a los trabajadores en situación de vulnerabilidad a estos incidentes. Descriptores: Seguridad del paciente; Gestión de Riesgos; Accidentes; Prestación de Atención de Salud; Personal de Salud; Indicadores de Calidad.

<sup>1</sup>Nurse, Municipal Health Secretary, Senador Canedo (GO), Brazil. E-mail: <u>claudiamariasous</u> 2743-0612; <sup>2,3,4</sup>Ph.D., Professor, Nursing School, Federal University of Goiás/UFG. analuciaqueiroz@uol.com.br; https://orcid.org/0000-0002- 6439-9829; remajuau@yahoo.com.br; Goiânia (GO). https://orcid.org/0000-0003-0680-7588; marinesiaprado@gmail.com; https://0000-0003-4652-0733; 5Ph.D. student, Post-graduate Program in Tropical Medicine of the Federal University of Goiás. Goiânia (GO), Brazil. E-mail: gabicamargo22@gmail.com; https://orcid.org/0000-0003-0607-4687; 6Ph.D. Professor, Faculty of Health Sciences, University of Brasília/UNB. Brasília (DF), Brazil. E-mail: <a href="mailto:ttb.paranagua@gmail.com">ttb.paranagua@gmail.com</a>; https://orcid.org/0000-0003-0562-8975

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#### INTRODUCTION

Healthcare with quality denotes safety for the patient, preserving him from incidents that can cause damages in healthcare. Concern about safety has been evident in recent decades due to the high incidence of adverse events that put the recovery of patients admitted to health facilities at risk. The World Health Organization (WHO) and the Ministry of Health through the National Health Surveillance Agency (ANVISA) have developed strategies aimed at reducing the occurrence of adverse events, as well as their imminent risks, through strategies to achieve quality improvements in health care assistance. <sup>2,4</sup>

Among these strategies, the World Alliance for Patient Safety was launched with the aim of raising professional awareness and political commitment for improved health care security.<sup>1</sup>

Together, other organizations such as the Joint Commission on Accreditation of Health Care Organizations (JCAHO) and the Centers for Medicare & Medicaid Services (CMS) have also launched programs to promote patient safety and minimize the occurrence of the AD. From this perspective, we highlight the Sentinel Hospitals Project, instituted by ANVISA, which consists of a network of services in medium and large hospitals that develop actions of varying complexity using various technologies. This project aims to incidents related to in-hospital processes and technical complaints from products, supplies, and equipment, seeking safety for patients and health professionals.<sup>2</sup>

Intra-hospital transportation is considered one of the processes that deserve to be highlighted because it includes a series of challenges and nuances in the safety of patients and workers. This activity is common in the health environment and translated by the patient's need to be submitted to the diagnostic and therapeutic processes resulting from the treatment. For example, the performance of diagnostic tests and when the patient presents the need for additional care that is not available in their inpatient unit. <sup>5-6</sup>

During transportation, the risks are varied, but not easy to identify. These include, for example, pain due to displacement, respiratory changes related to change of decubitus, others that may occur if venous infusions or oxygen support are interrupted, among others. In this context, patients who need to be transported require the care of everyone who performs the work, including inhospital transportation.<sup>7-8</sup> In the context of patient safety, the WHO considers these

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incidents as damages to this patient/user of health service. 1,9

One study showed that during the inhospital transportation, blood pressure (13%) and peripheral oxygen saturation (3%) were the vital signs that most varied when they were associated with adverse events. Another study showed that the largest (41.3%) and vasoactive drug use (34.5%), and the adverse events that occurred were attributed to clinical changes in the patients.

The quality of care is defined as the maximum benefit range and the lowest possible risk to the patient with the lowest cost, focusing on the triad of management indicators that involves structure, process, and result.<sup>2,10</sup>

One of the indicators of patient transportation quality is training and adequate capacitation of the transportation team.<sup>5.7</sup> However the literature shows that these workers have not received the appropriate qualification when they are admitted to performing this function<sup>6,11</sup>, besides not having available guidelines and on incidents, under the watchful eye of security. Such training enables safe and quality patient care.

Therefore, it is important to note the importance of studies that seek to know the incidents that occurred with patients in the in-hospital environment during transportation, given that such workers are constantly related to various incidents and there is a shortage of literature involving work activity and the risks involved. <sup>5,6</sup> With this concern, we awaken to the need to carry out this research.

### **OBJECTIVE**

• To analyze the incidents that occurred during the in-hospital transportation of patients from the perspective of the handlers/stretchers-bearers.

#### **METHOD**

a quantitative, exploratory, descriptive study, carried out from August 2013 to July 2014, in a teaching hospital in the Center-West of Brazil. The population was composed of 16 stretchers-bearers, 10 of them were the sample of this study because they were present at the time of data collection. The data were collected through a form previously analyzed regarding the content, format, and coherence with the objective, by experts in the subject and pilot test. The instrument consisted of personal professional identification data and information on the subject of patient safety.

The subjects' approach occurred through locations and time previously scheduled with

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each participant. They were informed about the objectives of the study and the participation would be voluntary, as well as the maintenance of confidentiality. The agreement was signed with the Informed Consent Form (TCLE), followed by the application of the data collection instrument. Each interview received a code to preserve the identification of participants and averaged 30 minutes in length, totaling 300 minutes.

Data were submitted to appropriate coding and entered into a database using the Microsoft Excel® program, and then the results were interpreted and analyzed by simple descriptive statistics.

The study is linked to the project: "Analysis of occurrences of adverse events in a Sentinel Network hospital in the Central-West region", approved by the Research Ethics Committee of the Hospital das Clínicas of the Federal University of Goiás (Protocol 064/2008).

#### **RESULTS**

Among the sampled participants, most of them had an average age between 23 and 60 years old, predominating at 34 and 45 years old. Regarding the gender, all were male, 10% (1) had completed higher education, 80% (8) complete secondary education and 10% (1) incomplete secondary education.

Regarding the way the worker entered the institution, it was done through the Foundation of Support to the Hospital das Clínicas of the Federal University of Goiás (FUNDACH/HC/UFG). As for the workload, it was verified that all worked on a scale of 12 x 36 hours, every other day. The duration of the participants in the institution ranged from seven months to 22 years, with a majority of 70% (7) reporting time longer than one year.

Regarding the opportunities to participate in training courses, 60% (6) of them stated that they had participated and 40% (4) denied such participation, nevertheless they reported receiving guidance from other colleagues, according to some reports below:

Transportation and adequate equipment; a way to "take" the patient; advice on first aid; be aware of the patient's clinical condition, especially hypertensive patients. (A1)

Patient care in general, how to handle hospital equipment and devices (serum, oxygen), be nice to the patient. (A2)

About Personal Protective Equipment (PPE); do not argue with the patient; do not disclose information about the patient's clinical condition (surgery, examination), have patience. (A3)

How to transfer the patient from the bed to the chair; from the bed to the stretcher; how to handle oxygen cylinder (O2); PPE; Perspective of handlers/stretchers-bearers...

contact and aerosol precautions, how to treat patients and caregivers. (A4)

Care of O2-dependent patients; be careful of those who are in a precaution by contact; patient care in general, treat well, be patient. (A5)

Care of the equipment, care when transferring the patient. (A7)

Carry the patient slowly, greet him and calm him. (A8)

The handlers/stretchers bearers were questioned about their satisfaction with the job they performed and it was found that 90% (9) are satisfied with what they do for the opportunity to help people; 10% (1) do not like to work in this function because of the lack of social status that it gives them, for example, low wages, pressure at work and high stress levels; 20% (2) believe that they tend to attend social services and justified: "because of the opportunity to work with people, and to be helping" (A5).

Regarding the patient safety, it was pertinent to verify the understanding of these workers on the subject and it was verified that 70% (7) reported that patient safety meant having equipment, such as stretchers and wheelchairs, in accordance with safety standards and in good condition; 10% (1) answered that patient safety is synonymous with responsibility; to 10% (1) to have attention with the patient, since this could alter the clinical picture, besides making patient guidelines on transportation, such as walking slowly during transportation; 10% (1) mentioned that it is the adoption of measures capable of not causing harm to the patient; 10% (1) stated that it is the patient's proper positioning, checking all the devices he is using, for example, the  $O_2$  bullet in sufficient quantity of the gas and dispose of the necessary items for transportation; 10% (1) mentioned patience to deal with the patient and the companion, since conflicts generated during transportation can result in damages to the patient's health, besides seeing him as a person and calling him by name and not by the bed number.

Participants were asked what incidents meant for them, equipment communication, identification and reporting of the patient's clinical status, the role of workers in care, infection control measures, and safety. It was also requested that they suggestions for prevention incidents in intra-hospital transportation. To better understand the answers, they were synthesized and grouped in a logical sequence. The patient's reports on variables in the context of patient safety are shown in Table 1.

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Table 1. Reports of the surveyors about the variables investigated in the context of patient safety. Goiânia (GO), Brazil (2014)

Variables	Yes	No	Sometim es
	%	%	- %
Concept of incident	70	30	-
Occurrence of incident during transportation	100	-	-
Damage resulting from the incident	30	70	-
Damage and consequences for the patient	40	50	10
Communication to the health team responsible for the patient			
about incidents occurred	100	-	-
Equipment suitability	10	90	-
Total	350%	240%	10%

### **DISCUSSION**

The findings of this study about the qualification of the professionals involved showed that 40% (4) of the manual workers do not have the training course for the function, which corroborates with other studies in the literature. <sup>5,8</sup>

A study indicates that in the intra-hospital transportation, most of the Brazilian hospitals admit a worker to the stretcher bearer service without being properly qualified. In addition, they are not prepared to recognize situations that indicate a risk to the patient, so the quality of transportation and patient safety may be compromised. Other studies alert that a determining factor in the quality of care during transportation is training and the efficiency of the transportation team. 5,8

Analyzing the responses of the participants of this study, which they considered as the most important factors for the quality of care, two fragilities emerged in the context of patient safety and can contribute to the occurrence of incidents: communication errors that are reported by all and the precariousness of the equipment.

Communication is a reciprocal process, a force that interferes dynamic relationships, facilitating and promoting the development and maturation of people, and influencing behaviors. Patients receive care from different workers in different locations, which makes effective communication between those involved in the work process essential. Consistent information is critical to the adoption of safety-enhancing measures, especially to assessing the benefits, costs, and impact of their adoption of new health technologies. 2,4,7,13-4

A favorable factor is shown regarding the identification of the patient by the stretchers bearers, they were unanimous in affirming that they call the patients by name, which is in agreement with the recommendations. The correct identification of the patient, an indispensable practice to guarantee the safety of the patient in any healthcare environment,

fails at this stage can have serious consequences for the patient and his family. 4,14-5 To ensure that the patient is correctly identified, all workers/caregivers must actively participate in this process, from admission to transfer or receipt of patients from another unit or institution, before beginning the care of any invasive treatment or procedure. 4,14-5

Regarding the equipment used in the institution, a concern arises, since these must be reliable and with periodic maintenance.<sup>4,7</sup> It is of fundamental importance to evaluate the individual need of the equipment to transport each patient to avoid their absence or failure during transport of patients.<sup>3,7</sup>

The incidents mentioned in this study do not differ from those described in the literature such as those discussed by the Regional Nursing Council of São Paulo, which are described in ten steps considered essential for patient safety. These include incidents that may occur in health services, such as catheter disconnections, drainage, access venous and arterial), oxygen catheter, falls, infusion interruption, and patient identification error. <sup>3-4,7,9</sup>

It is noticed that the incidents and/or damages occurred in this study and the profile of the victims corroborate with those estimated by the World Health Organization (WHO). According to this estimate, these damages occur in tens of thousands of people every year in different countries. In Europe, studies on the quality of hospital care have shown that one in ten patients in hospitals in this continent suffers from preventable damage and adverse events during patient care.<sup>2,16</sup>

In Brazil, there are now more than 200 healthcare facilities, in which patients are exposed to health technologies and interventions. In this way, they are exposed to adverse events, for example, errors and incidents. Despite advances, much remains to be done to disseminate the culture of patient safety and thus to bridge existing barriers.<sup>2,6</sup>

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Regarding the measures adopted for patient safety, the suggestions of the professionals subject to this research are in agreement with the international actions and goals of WHO adopted by the National Agency of Sanitary Surveillance (ANVISA), among which the knowledge of nature the development of prevention tools that promote research and approach to identify sources and causes of risks.<sup>2</sup>

Currently, the patient safety movement is close to "rethinking the care processes" to anticipate the identification of the occurrence and errors that may cause harm to the patient during the delivery of the assistance, in the context of the organization and functioning in health services.<sup>2,6,16</sup>

### CONCLUSION

The incidents reported by the planters, arising from the patient's transportation in the in-hospital environment, are in disagreement with the guidelines since they place workers and patients in a situation of vulnerability to these incidents.

The evidence leveraged in this study elucidates the need to elaborate a protocol national and international guided guidelines, in the context of the prevention of incidents in the perspective of patient and worker safety. Also, this protocol should be built in line with the patient safety goals outlined by the World Health Organization, including continuing education actions, seeking the qualification of workers for the

It was verified the scarcity of published studies on the role of the stretcher bearer in the development of this research, considered a limitation for the construction study.

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Submission: 2017/06/02 Accepted: 2017/11/30 Publishing: 2018/02/01

Corresponding Address
Gabriela Camargo Tobias

Universidade Federal de Goiás/UFG

Rua 235, s/n Setor Universitário

CEP: 74605-050 - Goiânia (GO), Brazil