ISSN: 2635 - 2826

Journal of Clinical & Biomedical Research

SCIENTIFIC Research and Community

Research Article

Open Access

Prevention of Falls in Patients Cared for in the Out-Of-Hospital Emergencies of the Sierra de Cadiz Summary

Antonio Oñate Tenorio

Professor, Doctor of Social Sciences, University of Cádiz (UCA), Spain

ABSTRACT

Falls are the most common safety incident among patientes treated, with out-of-hospital patients being the most vulnerable too harm. The prevention of these generates great benefits and important economic savings.

Objetive: To know the incidence of fall in patients treated in out-of-hospital emergencies by professionals from the UGC Urgencias Sierra de Cádiz.

Methods: Descriptive, observational and cross-sectional study carried out in the month of May 2024. A random simple of 150 participants was selected who responded to an anonymous telephone questionnaire with voluntary participation of 9 semi-structures questions as a data collection tool.

Results: The average age of those surveyed is 62 years, with 41% men and 59% women. 97% acknowledged that there werw no physical barriers and 94% answered that the transfer was comfortable, 98% stated that there was good lighting. 100% did not suffer any injuries and 96% did not consider that werw at risk of falling. In 98% of cases, retraint measures and other measures werw used in 98% to prevent falls.

Discussion: The patients treated by the profesionals belonging to the Urgencias Sierra de Cádiz did not suffer injuries during their out-of-hospital healthcare, and measures werw taken to prevent them. It is important to identify risks in the out-of-hospital environment and prevent falls.

***Corresponding author:**
Antonio Oñate Tenorio, Professor, Doctor of Social Sciences, University of Cádiz (UCA), Spain.

Received: April 18, 2025; **Accepted:** April 26, 2025; **Published:** April 30, 2025

Keywords: Falls, Prevention, Patient Safety, Sierra de Cádiz, Out-Of-Hospital

Introduction

Since 2019, on September 17 of each year, "World Patient Safety Day" is celebrated around the world. About 1 in 10 patients are harmed while receiving health care, and each year more than 3 million people die as a result. Investing in preventing these damages can generate great economic savings and important benefits, observing that when patients are involved in the care they receive, the frequency of damages is reduced by 15% [1].

The high vulnerability of the out-of-hospital patient, due to their clinical situation, a complex, dynamic and unpredictable environment, increases the possibility of incidents that said patient may suffer [2].

The identification and evaluation of risks in out-of-hospital environments is a fundamental process in out-of-hospital emergencies to guarantee patient safety. In this sense, a key aspect is to consider the specific characteristics of the patients and all those conditions that may influence patient care. emergency, this care always supposes an added risk to the process by which it is treated, given that the risk of falls is within the group of adverse effects, endangering the safety of patients [3].

The World Health Organization (WHO) defines a fall as the consequence of any event that precipitates an individual to the ground against his or her will [4]. At this point, the question that arises is why is it important to prevent falls during the patient care process in out-of-hospital emergencies? For all these reasons, and given the scarcity of specific literature on the risk of patient falls in out-of-hospital urgent care, it has been considered significant to study the prevention of patient falls in out-of-hospital emergencies in the Sierra de Cádiz. And the objective of the study is to know the incidence of falls in patients treated in out-of-hospital emergencies by professionals from the Sierra de Cádiz Emergency Clinical Management Unit (UGC).

Material and Methods

A descriptive, observational and cross-sectional study is carried out.

The study is carried out in the province of Cádiz, specifically in the Sierra region, during the month of May 2024.

In relation to the total study population, it was limited to the year 2023. In this period of time, 4,978 people were served.

Inclusion and Exclusion Criteria

From said universe population, no user was discarded since no criterion or reason for inclusion or exclusion has been established and therefore no user has been discarded from the universe population, the choice being based on randomness.

Sample Size

Once the universe population was defined, it was decided to follow the instructions given by Fisher and Pineda where a random sample of 150 participants was selected, patients who were treated by mobile teams in out-of-hospital emergencies, where a sample of 3% or even less may be adequate [5,6]. for any type of analysis you wish to perform.

We have also been motivated by Gallego where the sample size is conditioned by the objectives of the study, which will determine its design, the variables to be considered and the proposed method [7].

To calculate the sample size we have used the EPIDAT@ software developed by the Epidemiology Service of the General Directorate of Public Health of the Consellería de Sanidade (Xunta de Galicia) with the support of the Pan American Health Organization (PAHO-WHO).) and the CES University of Colombia [8].

Preparation of the Questionnaire

An anonymous telephone questionnaire with voluntary participation of 9 semi-structured questions was carried out. They were previously informed of the purpose of the study and previously showed their agreement to participate.

The data that was collected studied the following variables detailed

- Age
- Sex
- Comfort in the Transfer
- Physical Accessibility and Barriers
- Suffering from Injury
- Lightning
- Risk of Falling
- Subjection
- Preventive Measures

The questionnaire consists of three well-differentiated parts based on the blocks of questions:

- On the one hand, it collects general and sociodemographic data: age, sex and person who answers the questionnaire, as well as the date on which it is carried out.
- On the other hand, it has 7 questions with closed answers with dichotomous answers.

Two open questions have also been incorporated into this questionnaire, which inquire into the most and least valued aspects of the care received by our unit, so that the person who answers the questionnaire can freely express their opinion and provide us with their opinion. perception.

This questionnaire was designed by the authors, in accordance with the models used by the Andalusian Health Service (SAS) and 061, it is not a validated questionnaire and a pilot study was not carried out. The inclusion criteria for the participants were being of legal age and minors were excluded.

Table 1 shows the questionnaire carried out on the degree of satisfaction of people treated urgently by the UGC Urgencias Sierra de Cádiz.

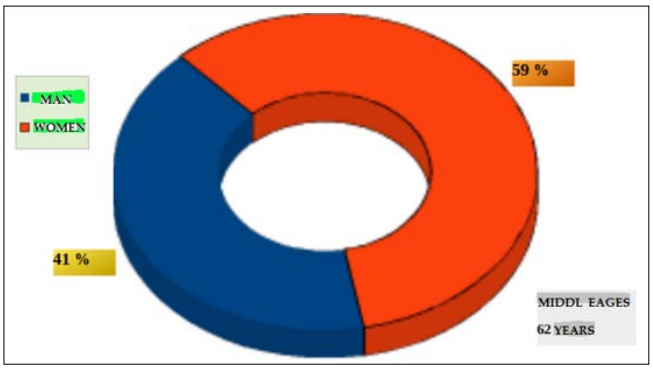
Table nº1: Questionnaire

Questionnaire: **Prevention Of Falls In Patients Attended In The Out-Of-Hospital Emergencies Of The Sierra De Cádiz** **This survey is completely anonymous, voluntary and confidential, please answer with complete sincerity.**		
AGE:	**SEX:**	**DATE:**
1. Was your transfer comfortable during the assistance?		
Yeah		
No		
2. Did you encounter physical barriers during it?		
Yeah		
No		
3. Did you suffer any injury during assistance?		
Yeah		
No		
4. Do you think you were at risk of falling during your care?		
Yeah		
No		
5. Were fall prevention measures taken during care?		
Yeah		
No		
6. Was the lighting adequate during the assistance?		
Yeah		
No		
7. Was restraint used as a fall prevention measure during care?		
Yeah		
No		
8. Could you highlight the best during the assistance?		
9. Could you highlight the worst during the assistance?		

Source: Own elaboration.

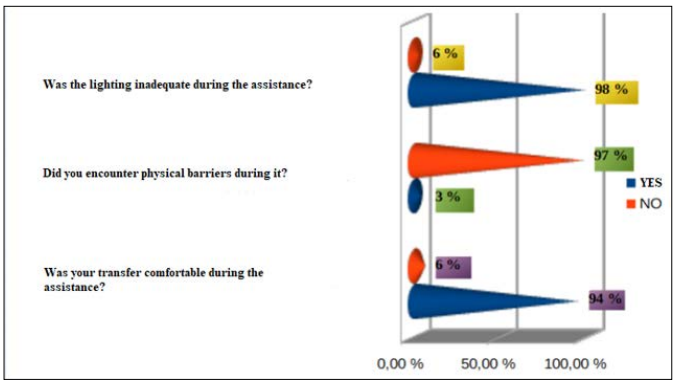
Results

The sociodemographic data can be seen in Figure 1, which details the gender distribution of the patients surveyed.



Source: Own elaboration.

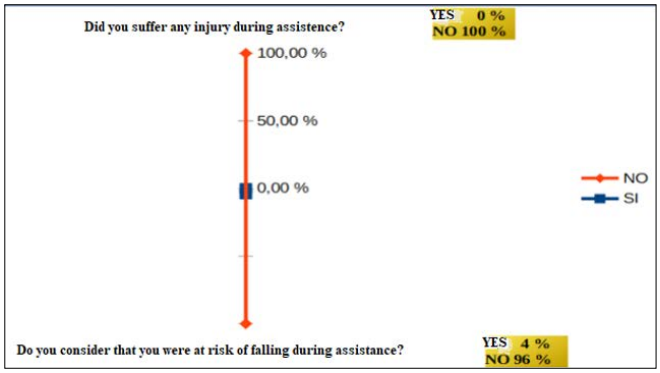
Three questions about the context were then asked, as reflected in Figure 2.



Source: Own elaboration.

Figure nº 2: Data Referring to the Context.

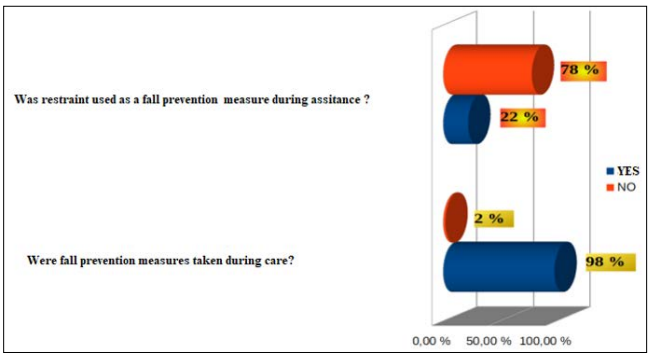
Figure 3 has considered two key questions about incidents and in our case falls.



Source: Own elaboration.

Figure nº 3: Data Regarding Falls

Figure 4 shows the results obtained on the measures adopted to prevent falls.



Source: Own elaboration.

Figure nº4: Data Referring to the Measures Adopted to Prevent

As for the open questions, the best thing about the assistance would be the kindness, involvement and attentiveness of the professionals and the worst would be the long transportation time.

Discussion

Although a multivariate analysis showed that loss of functionality and transfer to the hospital by out-of-hospital emergency teams were the predictors with the greatest association with the diagnosis of risk of falls, the patients treated by the UGC Urgencias Sierra de Cádiz have not suffered the same [9].

Add that falls are the most common safety incident among the patients treated, reaching 32% of incidents related to patient safety4. And between 5% and 10% of falls, although they do not lead to the death of the patient, do cause serious injuries [10].

It is recommended as a first step to achieve safe clinical practice, promoting and developing knowledge and culture of patient safety among professionals in an organization, in addition to setting strategy number 8 of the Health System Quality Plan as an objective [11,12].

All of this leads us to affirm that the patient's perception of safety is conditioned by multiple factors, among which we must highlight Incidents Related to Patient Safety (IRSP), which include patient falls and which worsen. their perception, and overall satisfaction with care, which improve it [12].

We also have to point out that patients have a greater feeling of security when they are assisted and transported by emergency teams, composed of doctors, emergency health technicians and nurses, compared to teams composed of emergency health technicians and/or nurses [13].

Highlight and emphasize that Péculo-Carrasco et al. They emphasize the importance of communication between professionals while the patient is present on their stretcher, as an element that generates security and tranquility [14].

The patients treated by the professionals belonging to the UGC Urgencias Sierra de Cádiz did not suffer injuries during their out-of-hospital healthcare, and measures were taken to prevent them. It is important to identify risks in the out-of-hospital environment and prevent falls.

References

1. World Health Organization (WHO) Access/Message Center: Patient Safety https://www.who.int/es/news-room/fact-sheets/detail/patient-safety#:~:text=Desde%202019%2C%20el%2017%20de,para%20avanzar%20en%20esta%20esfera.
2. Sánchez A, Sánchez D (2021) Patient safety culture in health emergencies. Nure Research Dialnet.
3. Fernández MTM (2024) Emergency preparedness and response in out-of-hospital nursing: strategies for effective care delivery https://palmitobooks.com/wp-content/uploads/2024/05/preeeepupae-1.pdf.
4. (2024) Who int Falls Switzerland: WHO https://www.who.int/mediacentre/factsheets/fs344/es.
5. Fisher A, Laing J, Stoecked J (1983) Manual for the design of operational research in family planning.
6. Pineda B, De Alvarado EL, De Canales F (1994) Research methodology, manual for the development of health personnel, Second edition. Pan American Health Organization.
7. Gallego CF (2004) Sample size calculation. Midwives profession 5: 5-13.
8. EPIDAT@ Version 4.2 (2016) software developed by the Epidemiology Service of the General Directorate of Public Health of the Consellería de Sanidade (Xunta de Galicia).
9. Coca Boronat E, Díaz Pérez MA, Lupiáñez Pérez I, Pérez Ardanaz B, Fuentes Ruíz JA, et al. (2020) Prevalence of nursing diagnoses in chronic patients in out-of-hospital

emergencies: improving understanding of complexity. Emergencies 32: 211-212

10. Maillane H, Becerra G (2014) Processes for the prevention and reduction of the frequency of falls https://www.minsalud.gov.co/sites/rid/Lists/BibliotecaDigital/RIDE/DE/CA/prevenir-y-reducir-la-frecuencia-de-caidas.pdf.
11. Cano-del Pozo MI, Obón-Azuara B, Valderrama-Rodríguez M, Revilla-López C, Brosed-Yuste C, et al. (2014) Out-of-hospital emergencies in the face of safety culture. Journal of Healthcare Quality 29: 263-269.
12. (2014) Ministry of Health, Social Policy and Equality. Quality Plan for the National Health System. Madrid: Ministry of Health, Social Policy and Equality, 2010 http://www.msssi.gob.es/organizacion/sns/planCalidadSNS/pdf/pncalidad/PlanCalidad2010.pdf.
13. Juan-Antonio Péculo-Carrasco, Hugo-José Rodríguez-Ruiz, Antonio Puerta-Córdoba, José-Manuel de la Fuente-Rodríguez, Mónica Rodríguez-Bouza, et al. (2023) Factors related to patients' perception of feeling safe in out-of-hospital emergencies: multicenter cross-sectional study. Emergencies 35: 447-455.
14. Péculo-Carrasco JA, de Sola H, Casal-Sánchez MM, Rodríguez-Bouza M, Sánchez-Almagro CP, et al. (2020) Feeling safe or unsafe in prehospital emergency care: A qualitative study of the experiences of patients, carers and healthcare professionals. J Clin Nurs 29: 4720-4732.