



# Patient Safety Culture: Perception of Emergency Nurses <sup>†</sup>

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**Abstract:** Patient safety culture is fundamental to the quality of health systems and crucial in adverse contexts, characterised by high workloads and time pressure. This is a cross-sectional study. The results have shown that emergency service nurses considered 10 dimensions of safety culture as weak and a total of 12 dimensions needed improvement. Therefore, it is essential to implement strategies to improve a culture of patient safety, such as raising the team's awareness about this and the importance of notification. Managers should be involved in patient safety problem-related contexts.

**Keywords:** patient safety; nursing; organizational culture; emergency department

## 1. Introduction

The organisation's patient safety culture determines its commitment to the search for safe practices and environments [1]. It is considered crucial and strategic to ensure quality standards, it has been successively included in both national and international safety plans [2,3].

The emergency service is known for challenging circumstances of unpredictable workload, requiring quick and intensive intervention, as part of lifesaving. That creates a hostile environment, which leads to adverse events [4,5].

The COVID-19 pandemic has enhanced these characteristics by increasing the workload, human and material resources needs and lack of process management as adequate assistance flows. Those became a challenge for the health systems, to maintain care and ensure quality and safety [6,7].

Studies have shown that in this specific context, nurses indicate management support, risk managers' feedback and lack of training to deal with errors as significant factors in promoting patient safety [7,8].

There are many strategies to improve patient safety, but it is important to analyse the problem from a systemic perspective which requires a shift in strategy toward the organisational safety culture [6–8]. Thus, it was considered relevant to analyse the perception of emergency nurses about patient safety culture.

## 2. Materials and Methods

The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) [9] tool was used to report this study. This is a quantitative and descriptive cross-sectional study.

The context corresponds to a medical-surgical emergency service from a hospital in northern Portugal, which serves an extensive geographical area with a population of approximately 507,117 inhabitants. Data collection was carried out between June 6th and 30th of 2021.

A non-probabilistic sampling technique was used for convenience. The final sample was composed of 56 nurses who developed their care activity in the emergency service.



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All nurses were included, regardless of their employment bond. Nurses on extended leaves, integration periods, or with less than six months of experience in the organisation were excluded.

The study variables were sociodemographic and professional characteristics (gender, age, academic and professional qualifications, length of experience in the service) and the patient safety culture.

The data collection instrument was a self-completed questionnaire consisting of two parts. Part I included the sociodemographic and professional characteristics of the participants, and Part II included the Portuguese version of the Hospital Survey on Patient Safety Culture [10]. The Hospital Survey on Patient Safety Culture is a questionnaire consisting of 42 items to be classified on a Likert-type graduated scale from 'strongly disagree' to 'strongly agree' and from 'never' to 'always'. Those 42 items are grouped into 12 safety culture dimensions and the analysis is performed by calculating the percentage of positive responses in each dimension. For each dimension of the safety culture: if the percentage of positive responses is greater than 75.0%, the dimension is considered a strength; if it is less than 50.0%, it is considered a weakness, if between 50.0% and 75.0% is a neutral dimension [11].

The statistical software Statistical Package for Social Sciences (SPSS) 26.0 was used to organise and analyse the data. Simple descriptive statistical methods were used (absolute and relative frequencies). The authors' indications for data quality analysis were also followed [11].

### 3. Results

#### 3.1. Participants' Sociodemographic and Professional Description

This study's sample consisted of 56 nurses whose sociodemographic and professional characteristics are shown in Table 1.

**Table 1.** Sociodemographic and professional characterisation of the participants.

Sociodemographic and Professional Characterisation	n (%)
Gender	
female	35 (62.5)
male	21 (37.5)
Age (years)	
<30 years old	19 (33.9)
30–34 years old	14 (25.0)
35–39 years old	13 (23.2)
40–44 years old	8 (14.3)
>45 years old	2 (3.6)
Education	
bachelor's degree	54 (96.4)
master's degree	2 (3.6)
Professional Title	
nurse	43 (76.8)
specialist nurse	13 (23.2)
Nursing specialisation	
medical-surgical	9 (16.1)
medical-surgical in critical care	2 (3.6)
rehabilitation	1 (1.8)
community and public health	1 (1.8)
Time of professional practice in the service	
6–11 months	12 (21.8)
1–2 years	14 (25.5)
3–7 years	17 (30.9)
8–12 years	4 (7.3)
13–20 years	7 (12.7)
>21 years	1 (1.8)

### 3.2. Patient Safety Culture

Regarding patient safety culture, according to the nurses' perception, the dimensions: 'Manager expectations and actions promoting patient safety', 'Feedback and communication about error', 'Handoffs and transitions', 'Communication openness', 'Teamwork across units', 'Nonpunitive response to errors', 'Overall perceptions of patient safety', 'Management support for patient safety' and 'Frequency of events reported' are weaknesses, with a percentage of positive responses lower than 50.0%. Two neutral areas were found: 'Teamwork within units' and 'Organizational learning—continuous improvement' (Table 2). None of the dimensions was considered strong.

**Table 2.** Percentages of positive responses on patient safety culture.

Dimensions (Patient Safety Culture)	%
Teamwork within units	67.8 *
Organizational learning—continuous improvement	60.7 *
Manager expectations and actions promoting patient safety	47.0 **
Feedback and communication about error	43.5 **
Handoffs and transitions	36.8 **
Communication openness	34.0 **
Teamwork across units	29.1 **
Nonpunitive response to errors	25.6 **
Overall perceptions of patient safety	23.7 **
Management support for patient safety	19.7 **
Staffing	13.0 **
Frequency of events reported	12.5 **

\* neutral areas; \*\* weak areas.

Nurses from the emergency service considered acceptable the patient safety level at their workplace (60.0%). Regarding the reporting of incidents, they refer to the culture of underreporting, in which the majority performed 1 to 2 (43.6%) or none (27.3%), in the last 12 months.

## 4. Discussion

Regarding patient safety culture, 10 dimensions are considered fragile, requiring urgent and priority intervention. The culture of reporting incidents and staffing are among the priorities scored, both of which are fundamental to ensuring the quality and safety of care. The culture of underreporting events jeopardises the work carried out by risk management [12] and can skew safety indicators and it is a current problem identified in other studies [7,13].

Other priority intervention areas are feedback and communication about the error, as well as transition moments that are considered critical, such as information sharing. This should follow recommended methodologies [14]. The support and closeness of the management in this issue demonstrates involvement and concern and outlines the path of the institution in the search for safe practices and environments.

'Teamwork within units' and 'Organizational learning—continuous improvement' are neutral areas that should be improved. The results confirm those found in similar studies: the safety culture needs urgent improvement [7,13].

## 5. Conclusions

Nurses perceive several constraints to a robust patient safety culture. These should be analysed by institutional managers to find strategies that define the path towards an effective patient safety culture and improvement in quality of care.

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