



Patient safety culture in Tunisian maternity care: Analytic study

La culture de la sécurité des patients dans les maternités tunisiennes : Étude analytique

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ABSTRACT

Background: Given the potential risks involved in childbirth, patient safety is of utmost importance in maternity care. The aim was to compare the level of patient safety culture between physicians and paramedics in public maternity care structures in Sousse, Tunisia.

Methods: A observational descriptive and cross-sectional study was conducted among health professionals working in all public health maternities of Sousse, Tunisia. A valid Hospital Survey On Patient Safety Culture (HSOPSC) questionnaire was used to gather data, and a score was calculated for each dimension by taking the average of the positive response proportions per item.

Results: The global response rate was 86.4%. Paramedics had a higher response rate compared to physicians (90.6% versus 62.1%). The overall scores for the ten dimensions of patient safety culture showed significantly higher scores for physicians compared to paramedics for the dimensions of «Expectations and actions of superiors regarding care safety» and «healthcare professional-patient relationship and safety culture» (88.43% versus 63.73%; $p=0.027$ and 75.38% versus 65.73%; $p=0.041$ respectively). Conversely, a significant difference was found in favor of paramedics compared to physicians regarding the dimension of «Management support for care safety» (37.3% versus 13%; $p=0.019$).

Conclusion: Significant differences in patient safety culture scores among healthcare professionals. It suggest that efforts should be made to improve management support for care safety for physicians, while paramedics could benefit from increased attention to expectations and actions of superiors regarding care safety and healthcare professional-patient relationship.

Key words: Patient safety; Safety culture; physicians; paramedics; maternity hospitals; Tunisia.

RÉSUMÉ

Introduction: Compte tenu des risques potentiels liés à l'accouchement, la sécurité des patients est d'une importance capitale dans les soins de maternité. L'objectif était de comparer le niveau de culture de sécurité des patients entre les médecins et le personnel paramédical dans les structures publiques de soins maternels à Sousse, en Tunisie.

Méthodes: Une étude observationnelle descriptive et transversale a été menée auprès des professionnels de santé travaillant dans toutes les maternités publiques de Sousse, en Tunisie. Un questionnaire valide de l'enquête hospitalière sur la culture de sécurité des patients (HSOPSC) a été utilisé pour recueillir des données, et un score a été calculé pour chaque dimension en prenant la moyenne des proportions de réponses positives par item.

Résultats: Le taux de réponse global était de 86,4 %. Les paramédicaux ont un taux de réponse plus élevé que les médecins (90,6% contre 62,1%). Les scores globaux pour les dix dimensions de la culture de sécurité des patients ont montré des scores significativement plus élevés pour les médecins que pour les paramédicaux pour les dimensions «attentes et actions des supérieurs en matière de sécurité des soins» et «relation professionnel de santé-patient et culture de sécurité» (88,43% contre 63,73% ; $p=0,027$ et 75,38% contre 65,73% ; $p=0,041$ respectivement). A l'inverse, une différence significative a été trouvée en faveur des paramédicaux par rapport aux médecins en ce qui concerne la dimension «Soutien de la direction pour la sécurité des soins» (37,3% contre 13% ; $p=0,019$).

Conclusion: Il existe des différences significatives dans les scores de culture de sécurité des patients entre les professionnels de la santé. Cela suggère que des efforts devraient être faits pour améliorer le soutien de la direction à la sécurité des soins pour les médecins, tandis que les paramédicaux pourraient bénéficier d'une attention accrue aux attentes et aux actions des supérieurs concernant la sécurité des soins et la relation professionnel-patient.

Mots clés: Sécurité des patients ; culture de la sécurité ; médecins ; personnel paramédical ; maternités ; Tunisie.

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INTRODUCTION

Notions of risk and safety culture have emerged. Dramatic events have highlighted the importance of human error and led to new legislation and increased efforts to improve the safety of practices in various sectors of activity [1]. The healthcare sector, like any other sector of activity, is subject to a multitude of risks. However, the unique nature of medical activity places care safety at the center of risk management systems. Awareness of patient safety issues serves as a starting point for a series of strategies to improve care safety, such as implementing a safety culture. A safety culture is a multi-dimensional concept that requires significant system-wide efforts, particularly at the organizational level, as well as in education and research. It involves creating an environment in which safety is a shared value achieved through leadership that promotes open communication, values learning, embraces a non-punitive approach to error, and ensures fairness [2]. In high-income countries, up to 1 in 10 patients experience preventable adverse events during care, accounting for nearly 50% of all adverse events. In low- and middle-income countries, the rate of preventable adverse events is approximately 8%, of which 83% could have been prevented [3]. In Tunisia, a study conducted at Sahloul University Hospital revealed the incidence of adverse events was 12.4%. The incidence density of adverse events was 1.8 events per 100 days of hospitalization [4]. In addition to its crucial ethical, individual, family, and societal roles, the maternity sector has a crucial role in reducing maternal and child morbidity and mortality through the adoption of a safety culture. Maternal and child mortality indicators are among the general health indicators of the healthcare system, but they are specifically perinatal indicators adopted worldwide. To develop a patient safety culture in the maternity sector, it is essential to assess the current situation related to this concept. The objective of our study was to compare the level of patient safety culture between physicians and paramedics in public maternity care facilities in Sousse, Tunisia.

METHODS

Study site

The governorate of Sousse is located in the center-east of Tunisia including five maternities. We included all five maternities in our study; central maternity of Farhat Hached University Hospital of Sousse and four peripheral maternities (M'saken, Kalaa Kebira, Enfidha, and Bouficha).

Study type and population

This is an observational descriptive and cross-sectional study conducted among all healthcare professionals (physicians and paramedics (nurses, midwives, and senior technicians) from January 15, to March 15, 2019. Study population included university hospital physicians, public health and in-training physicians (gynecology residents), as well as senior health technicians, midwives, and public health nurses. Medical interns, medical secretaries, administrative paramedical staff, health professionals from other departments in the same institution, workers, and security guards were not included.

Data collection

Data were collected using a self-administered validated Hospital Survey On Patient Safety Culture (HSOPSC) questionnaire [5] and translated into French [6]. This

version explored 10 dimensions of care safety culture: 1) Global perception of security, 2) Frequency and reporting of adverse events, 3) Expectations and actions of superiors regarding care safety, 4) Teamwork in the department, 5) Teamwork between departments within the establishment, 6) Human resources, 7) Freedom of expression and non-punitive response to error, 8) Management support for safe care, 9) Healthcare professional-patient relationship and safety culture, and 10) Learning organization and continuous improvement. Each dimension was composed of several items. The questionnaire consisted of 67 questions, including 5 questions regarding the participants' socio-demographic characteristics, one item on the degree of information about safety culture on a four-point scale (responses «not at all informed» and «poorly informed» were considered uninformed, and responses «well informed» and «very well informed» were considered informed), 55 items making up the dimensions of safety culture (Likert scale: strongly disagree, disagree, somewhat agree, strongly agree), five items providing information on the origin of safety culture according to the respondents, and one item on the perception of outcomes related to the level of patient safety in the department (ranging from «excellent» to «poor»).

Statistical analysis

Data entry and analysis were performed using the SPSS 20.0 software. Qualitative variables were presented as absolute and relative frequencies, and quantitative variables were summarized as means plus or minus their standard deviations. The percentages were compared using Pearson's chi-square test. The mean was compared using Student's T-Test. Positive and negative responses for each item, as well as the overall score for each dimension, were compared between physicians and paramedics. A p-value <0.05 was considered statistically significant. Regarding the safety culture, responses that were considered negative were «strongly disagree» and «disagree» while those considered positive were «somewhat agree» and «strongly agree». In order to collect scores consistently on the dimensions of safety culture, we reversed Likert scale scores for negatively worded questions [6]. For each safety culture dimension, a score was calculated as the average of the proportions of positive responses per item indicating a developed safety culture. The dimension was considered developed if its score was 75% or more and in need of improvement if its score was 50% or less [6].

Ethical considerations

This study was conducted in accordance with the ethical principles of the Declaration of Helsinki and was approved by the Ethical Committee of Farhat Hached University Hospital (Institutional review board code: 00008931). The confidentiality of the participants' personal information was maintained throughout the study, and all data were analyzed and reported in an aggregated form to ensure anonymity.

RESULTS

Characteristics of the study population

All healthcare professionals (N=251): 37 physicians and 214 paramedics (nurses, midwives, and senior technicians) were included. Of the 251 healthcare professionals included in the study, 217 responded to the questionnaire, resulting in a global response rate of 86.4%. The study population consisted of 23 doctors and 194 paramedics,

with a mean age of 39.8±8 years. The majority of respondents were female (88.9%), and 23% had a professional experience less than 5 years. Paramedics had a higher response rate than physicians (90.6% vs. 62.1%). There was a significant difference in age and gender between physicians and paramedics, with physicians being younger (34.3 vs. 42.2 years) and having a lower proportion of females (60.9% vs. 92.3%). In addition, the results showed that physicians had significantly more professional experience of less than 5 years compared to paramedics (73.9% vs. 17.0%).

Degree and sources of information on safety culture

Only 29.5% of respondents perceived that they were well informed about safety culture in their workplace. When comparing the two subcategories, physicians were relatively more informed about safety culture than paramedics, although the difference was not statistically significant (p=0.556). The primary source of information about safety culture was professional experience, as reported by 78.3% of participants. This was also the primary source of information for both subcategories, with no significant difference between them (p=0.289).

Analysis of the level of care safety culture according to professional categories

The overall scores for the dimension «Overall perception of safety» were higher among paramedics, but the difference was not significant (39.1% vs 45.88%; p=0.539) (Figure 1). and their respective items (Table 1).

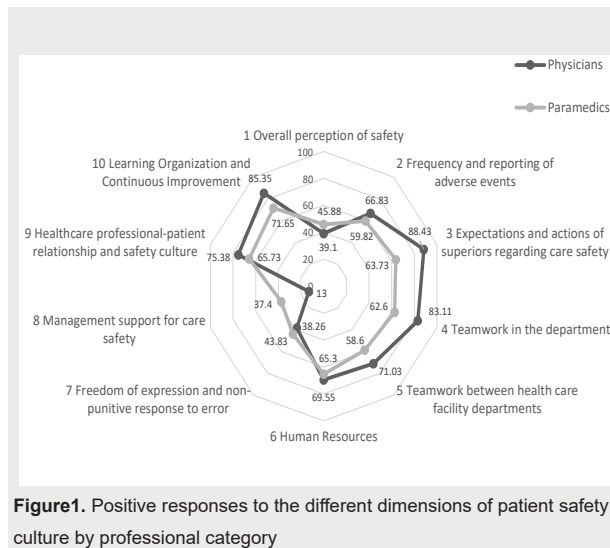


Figure1. Positive responses to the different dimensions of patient safety culture by professional category

Table 1. Comparison of average response rate for “Overall perception of safety” and “Frequency and reporting of adverse events” dimension between physicians and paramedics

| Items | Categories | Positive response(%) | p |
|---|------------|----------------------|--------------|
| I. Overall perception of safety | | | |
| 1-We are taking action to improve health care safety | Physicians | 56.5 | 0.193 |
| | Paramedics | 42.3 | |
| 2-It is only by chance that there have not been more serious errors in the department up to now | Physicians | 21.7 | 0.064 |
| | Paramedics | 41.8 | |
| 3-We work in a crisis mode to do so many things too quickly | Physicians | 69.6 | 0.364 |
| | Paramedics | 59.8 | |
| 4- Safety of care is never neglected in favor of greater efficiency | Physicians | 52.2 | 0.293 |
| | Paramedics | 40.7 | |
| 5- Our functioning and procedures are efficacious in preventing the occurrence of errors | Physicians | 21.7 | 0.064 |
| | Paramedics | 41.8 | |
| 6- The competent physician does not make mistakes that can be harmful to the patient | Physicians | 8.7 | 0.009 |
| | Paramedics | 35.6 | |
| 7- We have care safety problems in this department | Physicians | 21.7 | 0.102 |
| | Paramedics | 39.2 | |
| 8- Trauma at birth and complications at birth are frequent situations | Physicians | 82.6 | 0.801 |
| | Paramedics | 80.4 | |
| 9- When there is an antenatal death or a complication in the delivery room, it seems like this event could have been avoided. | Physicians | 21.7 | 0.900 |
| | Paramedics | 20.6 | |
| II. Frequency and reporting of adverse events | | | |
| 10-an error is made, but is detected and corrected before it affects the patient | Physicians | 60.9 | 0.591 |
| | Paramedics | 66.5 | |
| 11-an error is made, but does not potentially affect the patient | Physicians | 82.6 | 0.061 |
| | Paramedics | 62.9 | |
| 12-an error is made and could harm the patient but ultimately has no effect | Physicians | 87.0 | 0.589 |
| | Paramedics | 82.5 | |
| 13-An error that has consequences for the patient | Physicians | 87.0 | 0.629 |
| | Paramedics | 83.0 | |
| 14-When an event is reported, it is the person who should be pointed out, not the problem | Physicians | 34.8 | 0.358 |
| | Paramedics | 44.8 | |
| 15-Medical errors are more common during hospital care than outpatient care | Physicians | 34.8 | 0.408 |
| | Paramedics | 43.8 | |
| 16-Analysis of the causes of an adverse event is important | Physicians | 95.7 | 0.214 |
| | Paramedics | 86.6 | |
| 17-Adverse event analysis involves all staff (workers, senior technicians, nurses, physicians) | Physicians | 95.7 | 0.150 |
| | Paramedics | 84.5 | |

However, in the third dimension, «Expectations and actions of superiors regarding care safety,» a significant difference was found in favor of physicians (88.43% versus 63.73%; p=0.027) (Figure 1). There were two dimensions with significant differences: «My immediate superior expresses satisfaction when a task is carried out in compliance with care safety regulations» (87% versus 62.4%; p=0.019) and «My immediate supervisor overlooks recurring care safety issues» (95.7% versus 64.9%; p=0.003) (Table II). The dimension «Teamwork in the department» did

not reach statistical significance (83.11% versus 62.6%; p=0.06) (Figure 1). However, three individual items within this dimension were found to be significant: «When there is a large workload that needs to be completed quickly, we combine our efforts as a team» (87% versus 62.4%; p=0.019), «In the department, everyone treats each other with respect» (87% versus 62.4%; p=0.030), and «The most experienced personnel will be available on the first call, if the situation requires their presence» in favor of paramedics (63.4% versus 95.7%; p=0.002) (Table 2).

Table 2. Comparison of average response rate for “Expectations and actions of superiors regarding care safety”, “Teamwork in the department” and “Teamwork between health care facility departments” dimension between physicians and paramedics

| Items | categories | Positive response(%) | p |
|--|------------|----------------------|--------------|
| III. Expectations and actions of superiors regarding care safety | | | |
| 18-My immediate superior expresses satisfaction when a work is carried out in respect of the rules of care safety | Physicians | 87.0 | 0.019 |
| | Paramedics | 62.4 | |
| 19-My immediate supervisor truly considers staff suggestions for improving care safety | Physicians | 82.6 | 0.074 |
| | Paramedics | 63.9 | |
| 20-My immediate supervisor neglects recurring care safety problems | Physicians | 95.7 | 0.003 |
| | Paramedics | 64.9 | |
| IV. Teamwork in the department | | | |
| 21-Caregivers support each other in the department | Physicians | 82.6 | 0.758 |
| | Paramedics | 79.9 | |
| 22-When there is a large workload that needs to be done quickly, we combine our efforts as a team | Physicians | 87.0 | 0.019 |
| | Paramedics | 62.4 | |
| 23-In the department, everyone treats each other with respect | Physicians | 87.0 | 0.030 |
| | Paramedics | 64.4 | |
| 24-All the personnel can work beyond the working hours for the benefit of the patient | Physicians | 56.5 | 0.064 |
| | Paramedics | 36.6 | |
| 25-Important information about patient care are often lost when changing teams | Physicians | 69.6 | 0.961 |
| | Paramedics | 69.1 | |
| 26- The most experienced personnel will be available on the first call, if the situation requires its presence | Physicians | 95.7 | 0.002 |
| | Paramedics | 63.4 | |
| V. Teamwork between health care facility departments | | | |
| 27-There is good cooperation between departments if health care requires coordination between departments | Physicians | 65.2 | 0.064 |
| | Paramedics | 44.8 | |
| 28-Important information about patient care are often lost when a patient is transferred from one department to another | Physicians | 82.6 | 0.164 |
| | Paramedics | 68.6 | |
| 29-When a patient is transferred from one department to another, all the results of imaging or biological tests that were done here are provided | Physicians | 95.7 | 0.001 |
| | Paramedics | 61.3 | |
| 30- It is often unpleasant to work with the personnel of other departments in the facility | Physicians | 60.9 | 0.927 |
| | Paramedics | 61.9 | |
| 31-In our department, it seems like we are working more than the other departments | Physicians | 34.8 | 0.154 |
| | Paramedics | 50.5 | |
| 32-The departments of the facility do not coordinate well with each other | Physicians | 87.0 | 0.030 |
| | Paramedics | 64.4 | |

The overall score for the dimension «Healthcare professional-patient relationship and safety culture» was significantly higher among physicians compared to paramedics (75.38% versus 65.73%; $p=0.041$) (Figure 1). Specifically, physicians were more likely than paramedics

to believe that patients should be informed of any errors committed and the potential consequences, with 60.9% of physicians versus 34.5% of paramedics agreeing with this statement ($p=0.014$) (Table 3).

Table 3. Comparison of average response rate for “Human Resources”, “Freedom of expression and non-punitive response to error”, “Management support for care safety” and “Healthcare professional-patient relationship and safety culture” dimension between physicians and paramedics

| Items | Categories | Positive response(%) | p |
|---|------------|----------------------|--------------|
| VI. Human Resources | | | |
| 33-We have enough personnel to handle the workload | Physicians | 39.1 | 0.509 |
| | Paramedics | 46.4 | |
| 34-Excessive work hours can impact patient safety | Physicians | 100.0 | 0.038 |
| | Paramedics | 84.0 | |
| VII. Freedom of expression and non-punitive response to error | | | |
| 35- The personnel express opinions freely if they see something about health care that may have negative consequences on patients | Physicians | 78.3 | 0.012 |
| | Paramedics | 50.5 | |
| 36-In the departments, we discuss ways to prevent errors from occurring | Physicians | 17.4 | 0.019 |
| | Paramedics | 42.8 | |
| 37-The personnel feel free from doubting the decisions or actions of their superiors | Physicians | 8.7 | 0.017 |
| | Paramedics | 33.0 | |
| 38-Staff are afraid to ask questions when something doesn't seem right | Physicians | 21.7 | 0.015 |
| | Paramedics | 48.5 | |
| 39-We are informed of errors that occur in our department | Physicians | 65.2 | 0.058 |
| | Paramedics | 44.3 | |
| VIII. Management support for care safety | | | |
| 40- The institution's directors create a work climate that promotes patient safety | Physicians | 13.0 | 0.015 |
| | Paramedics | 38.7 | |
| 41- The actions carried out by the institution's directors show that the care safety is one of the top priorities | Physicians | 13.0 | 0.027 |
| | Paramedics | 36.1 | |
| IX. Healthcare professional-patient relationship and safety culture | | | |
| 42-Adverse events can affect the confidence between doctor and patient | Physicians | 87.0 | 0.589 |
| | Paramedics | 82.5 | |
| 43-The patient must be informed of the fault as soon as it is committed and of the consequences that may follow | Physicians | 60.9 | 0.014 |
| | Paramedics | 34.5 | |
| 44-The patient has a role to play in improving safety | Physicians | 100.0 | 0.029 |
| | Paramedics | 82.5 | |
| 45- There is always a degree of uncertainty in the diagnostic process and management, which increases the risk of error | Physicians | 73.9 | 0.844 |
| | Paramedics | 75.8 | |
| 46-Improving safety obligatorily leads to an increase in the cost of care | Physicians | 43.5 | 0.288 |
| | Paramedics | 55.2 | |
| 47-Traditional medical practices can be an obstacle to improving the care safety. | Physicians | 87.0 | 0.030 |
| | Paramedics | 64.4 | |

Regarding the dimension «Learning organization and continuous improvement», only one item, «Errors in our department have led to positive changes, such as the

implementation of new procedures,» was significant in favor of physicians (59.3% versus 82.6%; $p=0.029$) (Table 4).

Table 4. Comparison of average response rate for “Learning Organization and Continuous Improvement” dimension between physicians and paramedics

| Items | Categories | Positive response(%) | p |
|---|------------|----------------------|--------------|
| 48-We receive feedback on the actions taken following the reporting of an event | Physicians | 69.6 | 0.084 |
| | Paramedics | 50.5 | |
| 49-Periodic meetings and staff often focus on the safety of care and its impact on patients | Physicians | 60.9 | 0.065 |
| | Paramedics | 40.7 | |
| 50-Errors in our department have led to positive changes: implementation of procedures | Physicians | 82.6 | 0.029 |
| | Paramedics | 59.3 | |
| 51-The implementation of a process to evaluate the degree of patient satisfaction at discharge from the maternity ward can improve the care safety | Physicians | 95.7 | 0.095 |
| | Paramedics | 82.0 | |
| 52-The practice of simulation exercises (conduct to adopt in case of delivery hemorrhage, conduct to adopt in case of shoulder dystocia, etc.) contributes to improving the quality of care | Physicians | 91.3 | 0.418 |
| | Paramedics | 85.1 | |
| 53-After implementing actions to improve the care safety, we evaluate their effectiveness | Physicians | 91.3 | 0.358 |
| | Paramedics | 84.0 | |
| 54-Standardization of care: care protocol can improve patient safety | Physicians | 95.7 | 0.164 |
| | Paramedics | 85.1 | |
| 55-Learning how to improve patient safety is obligatory during academic training | Physicians | 95.7 | 0.214 |
| | Paramedics | 86.6 | |

DISCUSSION

Our study found that physicians had significantly higher overall scores than paramedics in the dimensions of «Expectations and actions of superiors regarding care safety» and «Healthcare professional-patient relationship and safety culture» while paramedics scored significantly higher in the dimension of «Management support for care safety.» The overall response rate was 86.4%, with paramedics having a higher response rate than physicians (90.6% versus 62.1%). The overall response rate was 90.5% at the University Hospital Farhat Hached with a higher response rate among paramedical than physicians (100% versus 74.1%) [7]. These high response rates reflect the interest in safety culture. Assessing safety culture is the first step towards providing better patient care services in every healthcare facility and provides an opportunity to study the organizational conditions that negatively impact patients and lead to adverse events [8]. Our study found that physicians had significantly higher overall scores than paramedics in the dimensions of «Expectations and actions of superiors regarding care safety» and «Healthcare professional-patient relationship and safety culture». In contrast, the dimension of «Management support for care safety» showed a significant difference in favor of paramedics compared to physicians. These results align with studies conducted in Egypt, which also found statistically significant differences in safety culture between physicians and paramedics [9,10]. Regarding the dimension «Expectations and actions of superiors regarding care safety», the overall score was significantly higher among physicians than among paramedics (88.43% versus 63.73%; $p=0.027$). Our results are consistent with a study conducted at Farhat Hached University Hospital, which showed that the second most developed dimension among physicians was related to «expectations and actions of supervisors concerning care safety,» with a score of 82.3% [11]. A study carried out in Kairouan reported that the score of the dimension «Supervisor/Manager expectations and actions promoting patient safety» was 50.7% among nursing staff and 43.4% among physicians ($p=0.393$) [12]. Another study conducted at Ain Shams University Hospitals showed that the percentages of positive responses to the dimension «Supervisor/manager expectations and actions promoting safety» were 44.3%, 42.4%, and 60.1% respectively for physicians, nurses, and paramedics [13]. Our participants' expectations of their supervisors' behaviors revealed that

those who did not respond well to this dimension were more likely to be department heads than supervisors of the paramedics. Therefore, it is essential to develop non-blaming communication and teamwork in care units to address the possible disconnect between the decision-makers and subordinates' execution functions [14, 15]. It is important to work towards creating a relational pact that guarantees the recognition of the superior's authority while not neglecting the subordinate's value [16]. Numerous studies have emphasized that managers are primarily responsible for enforcing behavioral expectations to maintain mutual satisfaction in patient safety culture among nurses [17]. The overall score of the «Healthcare professional-patient relationship and safety culture» dimension was also significantly higher among physicians than among paramedics (75.38% versus 65.73%; $p=0.041$). Similarly, a study conducted among physicians at Farhat Hached Hospital showed that the score of this dimension was 69.7% [11]. Another study performed at Farhat Hached University Hospital among all healthcare professional categories found a higher percentage of positive responses for the healthcare professional-patient relationship dimension among physicians than paramedics (69.7% versus 53.4%; $p=0.01$) [18]. Our study also showed that paramedics were less convinced about the importance of the relationship between healthcare professionals and patients in improving patient safety than physicians. This could be a barrier to future implementation of patient safety improvement programs [18]. Given that the patient is the final beneficiary of the healthcare system, the integration of this safety culture role remains essential [14]. Indeed, patients have become attentive and critical observers, allowing them to participate in preventing possible errors and being the last barrier to stop accidents from occurring. Thus, they must have a central position in their safety and be recognized as full partners in the care process [19]. Four basic strategies have been proposed to involve patients in their safety, including providing feedback from past patients to inform future patients, identifying patients' preferences about their care and the healthcare system, collecting feedback from patients' experiences of their stay in services, and involving patients in decision-making processes about the healthcare system [20]. In our study, two items within the «Management support for care safety» dimension showed significant differences, favoring paramedics over physicians (38.7% versus 13.01%; $p=0.015$ and 36.1% versus 13%; $p=0.027$, respectively). Similarly, a study conducted at Farhat Hached University Hospital in Tunisia, revealed negative perceptions by

regarding the roles of facility managers. Specifically, the «Management support for care safety» dimension had the most negatively perceived score (13.9%) [11]. Another study conducted in Kairouan over three months in 2015 showed that the score for the «Management support for patient safety» dimension was 33.4% for nursing staff and 20.4% for physicians ($p=0.062$) [12]. A study at Ain Shams University Hospitals found that the percentages of positive responses to the «Hospital management support for patient safety» dimension were 21.1%, 27.4%, and 44.6% for physicians, nurses, and paramedics, respectively [13]. Therefore, more efforts must be made to improve care safety and involve caregivers in decisions made in this field at the institutional level [16]. The low scores found in our study highlight the failure of risk management in the surveyed public institutions. This is a failure of the management process where «leadership» is not handling the situation as it should. A strong safety culture is associated with committed leadership that supports and encourages teamwork within units, sufficient staff to manage workload, appropriate communication mechanisms, a developed reporting system, and a blame-free environment [21]. Additionally, our low scores may be related to the absence of a national program with strategic goals and precise objectives for improving care safety, which would commit healthcare institutions to prioritize this issue [11]. The strength of this study lies in the fact that it is one of the few studies conducted on patient safety in the Tunisian health system. To the best of our knowledge, no previous study has been carried out among health professionals working in maternity wards in public health facilities in Tunisia. This study allowed gynecology and obstetrics health professionals to address the issue of patient safety, which was previously poorly understood. Additionally, we were able to increase the awareness of these professionals about patient safety by familiarizing them with its different components. One limitation of this study was the possibility of reporting bias. Since a self-administered questionnaire was used, the responses reported may have some degree of nonconformity with the actual reality due to mistrust or reluctance for various reasons. Other limitations of this study include constraints encountered during data collection, such as the geographic distribution of maternity wards in different districts of the city of Sousse, the lack of availability of health professionals due to their high workload in maternity wards, and field constraints such as the difficulty of finding a suitable place to complete the questionnaire in privacy.

CONCLUSION

The overall response rate for the dimensions of safety culture was higher among paramedics than physicians. Therefore, a quality improvement approach should be implemented in gynecology-obstetrics departments with participatory management and strong leadership involvement. This approach will enable the establishment of a safety culture of care that involves all stakeholders, including physicians, paramedics, managers, politicians, and patients themselves. Further multicenter studies in other healthcare structures should be conducted to compare the level of patient safety culture between physicians and paramedics on a larger scale.

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