

Evaluation of the Performance of a Primary Care Hospital's Emergency Department in Tunisia

*¹MENSI Nidhal, MD, ²MAGHRAOUI Hamida

¹Emergency Department at La Rabta Teaching Hospital - Tunis – Tunisia

²Associate Professor of Emergency Medicine, Emergency Department at La Rabta Teaching Hospital –
Tunis – Tunisia

*Corresponding Author

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ABSTRACT

Background: Performance is a complex and multidimensional concept that fundamentally refers to the achievement of continuous improvement in health. Its application to the context of emergency departments allows us to assess how well these services are able to respond effectively to patients' needs and those they serve. The aim of this study was to evaluate the performance of an emergency department at a primary care hospital in Tunisia.

Methods: We conducted our study at the Emergency Department of Kesra District Hospital. We used the EGIPSS model to evaluate the department's performance. We collected qualitative data through questionnaires and interviews with key actors from the hospital and emergency department, and we extracted quantitative data from annual reports.

Results: In terms of adaptation to the environment, several shortcomings were identified, such as centralized resource acquisition systems limiting the ability to meet needs and the absence of feedback mechanisms requiring formal administrative and clinical coordination processes. In regard to values and culture, human resource management is not well developed with a lack of continuous training programs and no clear statement of values for the emergency department and the hospital. As for production, incentives to improve efficiency and quality are lacking, and quality management within the emergency department and the hospital in general do not exist due to the absence of a quality management system.

Conclusion: The performance of the emergency department at the primary care hospital level is still deficient and may require setting up systems and processes for improving quality.

Keywords: performance - emergency department – EGIPSS

INTRODUCTION

Healthcare systems encompass various resources, organizations, financing mechanisms, and management strategies that work together to deliver better healthcare services to populations¹. According to the World Health Organization (WHO), these systems involve multiple stakeholders with direct or indirect relationships to the healthcare field, including governments, hospitals, social security organizations, and more².

Hospitals play a crucial role within healthcare systems as key locations where healthcare policies are implemented. They provide high-quality specialist care³ with attention to evidence-based practices and advances in technology and pharmaceuticals, contributing significantly to population health⁴.

However, hospital operations face significant challenges due to their resource-intensive nature⁴. As such, the concept of "Hospital Performance" has emerged, focusing on process effectiveness, efficiency, productivity,

quality, and equal access to services⁵.

Performance is a complex, multi-dimensional concept that varies depending on stakeholders in the healthcare system. For health authorities, it's about controlling hospital expenses and optimizing resources; for hospital managers, it's about risk assessment and strategic management of care quality; for healthcare providers, it's the professional achievements and skill development; and for patients, it's rapid access to high-quality health services⁶.

Hospital Performance is closely tied to individual departments performance, particularly the Emergency Department. As a critical entry point into healthcare systems, Emergency Departments operate continuously, providing routine care, state-of-the-art interventions, research opportunities, and learning hubs for healthcare providers and academics.

However, this dual function creates conflicting demands from various stakeholders, leading to overcrowding^{7,8}, increased waiting times and delayed patient care⁹. Identifying bottlenecks in emergency department operating processes can help reduce costs and improve quality of care^{10,11} by optimizing triage, reducing wait times, and allocating resources effectively¹².

The aim of this study is to evaluate the performance of a primary care hospital's Emergency Department in Tunisia, with the goal of identifying areas for improvement and enhancing overall healthcare services.

METHODS

Concept of Performance

In the context of healthcare sector, the concept of "Performance" is a complex, multi-dimensional concept that encompasses not only efficiency and productivity but also value creation^{13,14} through collaboration and coordination among different stakeholders, organizations and providers within a healthcare system for the benefit of a wider community^{15,16}. It acknowledges the evolving nature of healthcare needs, driven by demographic and epidemiological changes, which require new care strategies and actions to address emerging health challenges.

As such, in this context, this definition calls upon hospitals and health organizations within a given healthcare system to integrate their activities with other organizations and providers¹⁷ while including elements of community care and public health as well as social functions¹⁸, with the ultimate goal being the achievement of better patients' health status and quality of life while containing costs and providing continuous care through the coordinated and collaborative efforts of the different professionals¹⁹.

Tunisian healthcare system

Tunisia's healthcare system is based on the Bismarckian social security model, financed mainly by social insurance based on compulsory contributions paid by employers and/or employees, resulting in a range of private and public healthcare providers.

Tunisia's healthcare provision is thus ensured by a system combining public, parapublic and private structures: the public sector includes establishments directly reporting to the Ministry of Health, divided into three levels (primary care centers and district hospitals as the first level providing general medical care, regional hospitals as the second level providing specialized care at the regional level, and teaching hospitals and specialized institutions as the third level providing specialized care at the national level); the parapublic sector includes health structures and establishments attached to other ministries; and the private sector includes ambulatory medical and paramedical practices and private clinics.

However, performance analysis and evaluation are not yet considered routine activities in healthcare facilities in Tunisia, where managers are generally content with patient satisfaction studies, and only a few studies focused on performance but in a rather narrow scope like hospitalization including turnover and length of stay²⁰ or hospital activities such as CT scans²¹.

EGIPSS Performance model

To analyze the performance of the emergency department at Kesra District Hospital, we chose to use the EGIPSS model (Évaluation Globale et Intégrée de la Performance des Systèmes de Santé, Global and Integrated Evaluation of Organizational Performance) (Figure 1). It represents a comprehensive, robust, and flexible conceptual framework based on Parsons theory of social action²² stipulating that to survive and grow, any organization should simultaneously perform four main functions: (1) adaption to the environment, (2) value maintenance, (3) production, and (4) goal attainment²³.

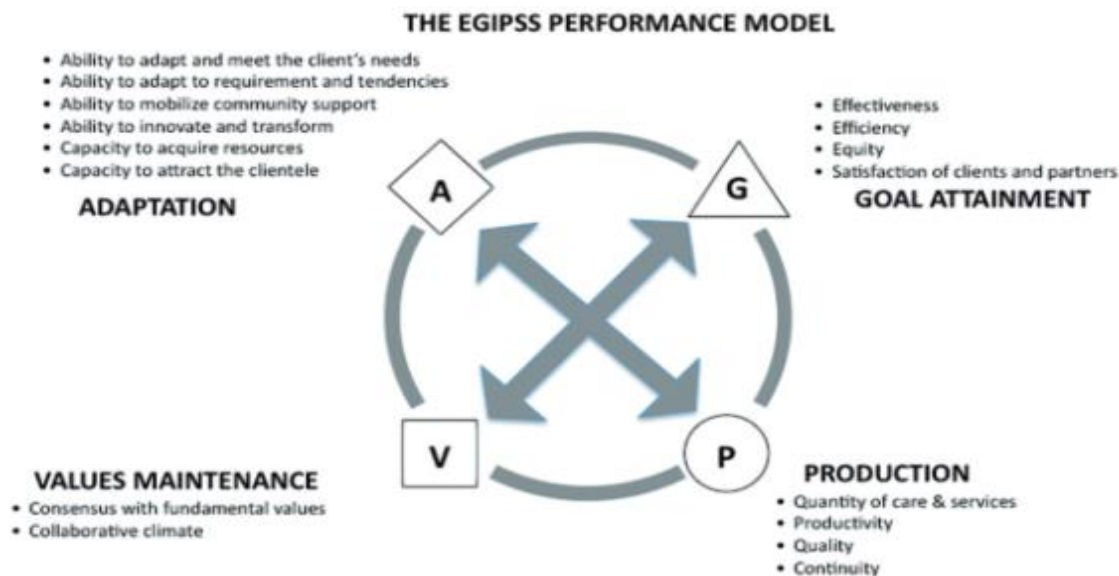


Figure 1: The EGIPSS performance model. Source: Adapted from Lamontagne, Swaine, and Lavoie²³

According to Champagne et al.⁵, the adaptation to the environment domain includes six dimensions and is defined as an organization's ability to acquire the necessary resources for maintaining and developing its activities, and to transform itself in response to technological, demographic, political, and social changes in its environment.

The goal attainment domain includes four dimensions related to the organization's ability to achieve its fundamental objectives by making optimal use of available resources in order to satisfy its clients.

The production domain includes four dimensions and is defined as an organization's ability to produce services in sufficient quantity and quality.

The values maintenance domain includes two dimensions related to the organization's ability to maintain a shared system of values and promote employee well-being at work.

Data collection

During the study period, we collected two types of data from multiple sources.

Given the size of our hospital, and subsequently the relatively small size of our Emergency Department, we opted for an exhaustive approach to data collection without sampling. Qualitative data were therefore collected with a two-part self-administered questionnaire that was distributed to all the department's healthcare providers, with the exception of those on long-term leave at the time of study, which netted 18 participants. The first part of the questionnaire assessed their overall satisfaction with working conditions in the department which consisted of 20 questions on a Likert scale ranging from 1 (very dissatisfied) to 6 (very satisfied) incorporating the following key elements: Personal satisfaction with the accomplished work, Workload within the department, Professional assistance and support from colleagues and supervisors, Employment and career prospects, and Opportunities for continuing education and support provided by the hospital. The second part of the

questionnaire assessed their perception of the hospital operations in general, consisting of 10 questions on a Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree) in line with the following values: Equity, Efficiency, Effectiveness, Safety and Patient Care.

We also conducted interviews with hospital administrators using open-ended questions to describe their perception of the current situation and the general functioning of the hospital and its departments, covering the various dimensions of the EGIPSS model.

Quantitative data were, then, extracted from annual reports provided by the hospital which included budgetary information, resource allocation, and statistics on the operations of the emergency department.

Statistical Analysis

The statistical analysis of the collected data was performed using R version "4.4.0" through the graphical interface RStudio version "2024.04.2".

For the questionnaire, we calculated a mean with standard deviation (SD) for each item on the Likert scale to summarize the responses from all of our participants. To facilitate interpretation of the results, we categorized the means into three levels: low (<3), average (3-4), and high (>4).

Conflict of Interest

We declare having no conflict of interest.

RESULTS

Adaptation to the environment

Resource acquisition

Being part of a district hospital, the emergency department is not autonomous in acquiring its financial, material and human resources. At the hospital level, the overall budget has seen an increase of 20.9% between 2017 and 2022, rising from 550,000 TND in 2017 to 665,000 TND in 2022. Regarding human resources, their acquisition is still centralized in Tunisia. Currently, the emergency department has around 41 employees, 26 of whom are medical and paramedical personnel directly involved in providing care. According to our interviews, while the available material and technological resources are sufficient, human and financial resources are not always sufficient to meet the required needs.

Attraction capacity

A key performance indicator for a hospital department is its ability to maintain a presence by attracting new patients. Which, in the context of an emergency department, depends on the quality of care it provides and the non-technical skills of the staff working there. However, even though there are no quantitative indicators to measure the attraction capacity of a hospital or its departments, this can be inferred from data on over-utilization in certain sectors. According to the interviews, the perceived frequentation of the hospital and its various services is rated as average to good.

Adaptation to population needs

Another aspect of a hospital department's performance is its ability to adapt its services and offerings to meet the needs of the population it serves. The surveyed employees were also in agreement on this point (4.67 ± 1.41). Furthermore, according to the interviews, there are mechanisms in place at the hospital level to collect information about the target population, including those served by the emergency department. However, it does not appear that these processes are formalized or that services are adjusted on the basis of population-based planning.

Systemic integration

Being part of a primary care hospital, the emergency department works in collaboration with other hospitals within the Tunisian healthcare system. The number of transfers to emergency departments in 2nd or 3rd line hospitals was 490 in 2016 (7.7% of visits), 723 in 2017 (7.2% of visits) and 550 in 2022 (6% of visits) (Figure 2). However, feedback on diagnosis and care received once the patient has been transferred remains a major shortcoming in the day-to-day running of the emergency department. Nevertheless, employees agreed that the emergency department, and by extension the hospital, operates in an integrated way with the other components of the system (4.22 ± 1.73).

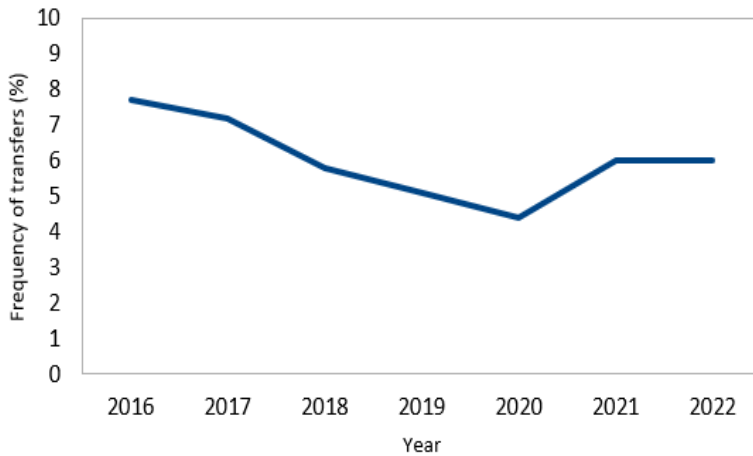


Figure 2: Trends in the frequency of transfers from the hospital to upper-level hospitals

Innovation capacity

For a system to perform well, it must be able to innovate and transform itself in response to changes in the environment in which it exists. According to the employees surveyed, individuals have a moderately high capacity for change (3.56 ± 1.42). However, there was a lack of innovation and/or transformation experience within the hospital and its various departments, including the emergency department.

Value maintenance

Organizational climate

Eighteen employees in the emergency department completed an anonymous questionnaire to assess their satisfaction with working conditions (Table 1).

Table 1: Employees satisfaction with working conditions in the emergency department

Dimension	Mean (\pm SD)
Personal satisfaction	4,06 \pm 1,39
Workload	3,81 \pm 1,35
Professional support	3,58 \pm 1,29
Employment and prospects	3,28 \pm 1,61
Continuing education	2,44 \pm 1,28

Emergency department employees were satisfied with their contributions to patient care and service ($3.89 \pm$

1.13), and with the level of care provided (4.00 ± 1.24). They felt a good sense of accomplishment in carrying out their tasks (4.06 ± 1.47). In addition, they were satisfied with their workload (4.11 ± 1.32) and the time spent on different tasks. On the other hand, employees were moderately satisfied with the level of support and assistance they received from their supervisors (3.61 ± 1.14), and slightly more satisfied with the level of support and assistance they received from their colleagues (4.22 ± 1.26). They also expressed a good sense of belonging to a supportive work team (4.17 ± 1.5). With regard to their professional prospects, employees were moderately satisfied with their current hierarchical position within the hospital and emergency department (3.72 ± 1.36), while they were less satisfied with their chances of career advancement (3.44 ± 1.72) and rather dissatisfied with their job security and remuneration, compared to their workload (2.67 ± 1.61). As for continuing education, employees expressed dissatisfaction with the opportunities offered to access continuing professional development programs (2.61 ± 1.29), as well as with the support offered by the hospital to attend these programs when available (2.28 ± 1.27), both in terms of funding and scheduling flexibility. Moreover, there were no formal tools or mechanisms in place to take into account the opinions of the various employee categories on the operation and difficulties encountered in the emergency department. In this respect, hospital management relies on the unions and the various hospital committees to plan and make decisions. This particular point was a source of dissatisfaction for emergency department employees (3.11 ± 1.28). It should be noted that during the interviews, although decisions were made, it was difficult to observe concrete actions to improve the work environment. Changes were either non-existent, or hampered by slow implementation. It should also be noted that there were no formal employee performance appraisal mechanisms in place the emergency department.

Shared values

A shared value system enables different team members to cooperate in responding effectively, quickly and in a coordinated way to emergency situations. Unfortunately, there was no such values statement communicated to all employees in the hospital. However, employees within the emergency department have developed their own standards inspired by the fundamental criteria of the quality of care (Table 2).

Table 2: Quality of care values according to emergency department employees

Values	Mean (\pm SD)
Equity	$3,28 \pm 1,49$
Efficiency	$3,56 \pm 1,30$
Effectiveness	$3,91 \pm 1,48$
Safety	$3,56 \pm 1,46$
At the service of patients	$4,61 \pm 1,39$

Employees were very much in agreement that the emergency department, and the hospital in general, are at the service of the public and that care is provided first and foremost to patients, even if they did not all agree that the services were provided equitably. In addition, they moderately agreed that the hospital and its services are organized to avoid harm to patients and staff (3.56 ± 1.46). They also agreed that the care provided was efficient and of very high quality, taking into account the available resources.

Production

Quantity of services

To analyze production quantities, we have chosen to adopt an evolutionary approach, examining quantifiable data between 2016 and 2022. In 2022, the number of visits to the emergency department amounted to 9140 visits. This represents an increase of 42.9% on the number of consultations in 2016, and a decrease of 8.8% on 2017 (Figure 3).

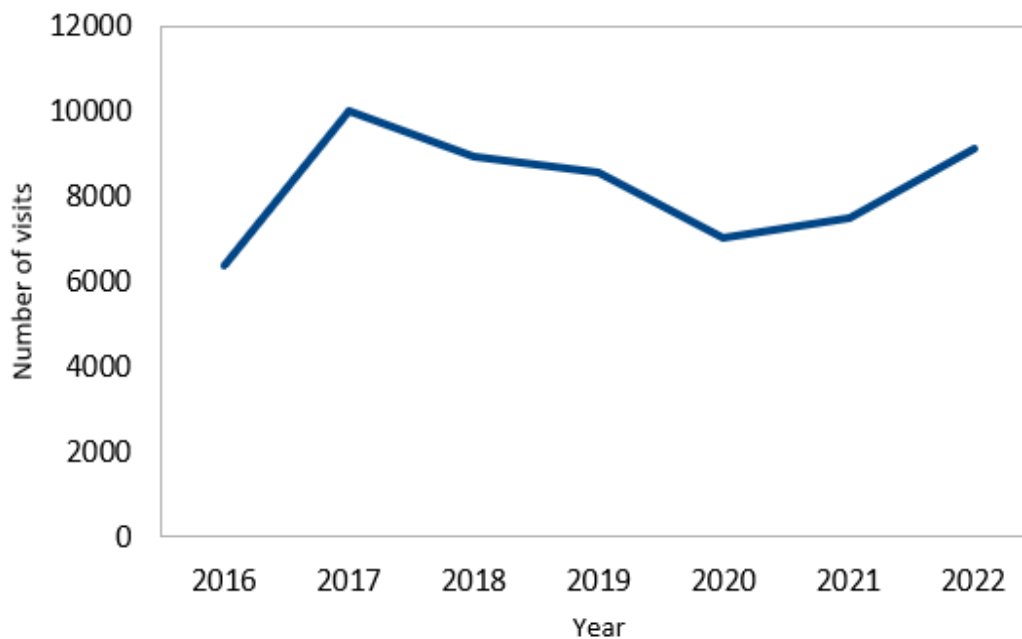


Figure 3: Trend in the number of emergency department visits

We also noted that the number of visits fell sharply between 2019 and 2021, from 8572 in 2019 to 7500 in 2021, reaching 7059 visits in 2020.

Productivity

Another element of the emergency department's performance is its productivity, i.e. the optimization of production with regard to available resources. As the hospital has no inpatient departments, this productivity can only be assessed through a few indicators, such as the staffing ratio and the level of resource consumption. When it comes to staffing ratio, it was around 36% in 2022. As for the emergency department's consumption of drugs and accessories, it amounted to approximately 30,145 TND in 2022, which accounts for 10.86% of the hospital's total pharmacy budget. This consumption represents a 16% increase on 2017, when it stood at around 25,981 DT, or 12.66% of the total pharmacy budget.

Quality

Technical quality is generally assessed using indicators that measure either the compliance of care delivered with protocols and care processes, or the outcome of care delivered, such as mortality or morbidity rates, or re-consultation rates for certain pathologies. Unfortunately, the available data do not allow us to compile the information needed to fully assess this quality. In fact, during 2022, only two cases of death were reported during the provision of care by the nursing teams in the emergency department; and the interviews indicated that the hospital has not put in place any procedures to implement a quality management system, despite the good perception of the general quality of services. As for the non-technical quality, it is generally assessed through several indicators such as the accessibility of the care received by patients, the humanism with which they were treated, the continuity of care and logistical aspects such as waiting conditions. Employees' perception of the humanization of hospital care is average (3.56 ± 1.46).

Goal attainment

The goal attainment domain refers to the emergency department's ability to achieve the objectives it has set itself in terms of the quality, safety, effectiveness and efficiency of the care provided. However, interviews with hospital staff indicated that there were currently no processes in place at the hospital to measure the efficiency and effectiveness of the interventions being carried out in its various departments. In addition, the absence of an inpatient department within the hospital has made it difficult to assess the health outcomes attributable to the services rendered in the emergency department.

DISCUSSION

Adaptation to the environment

In Tunisia, district hospitals are not totally autonomous in terms of their budgeting, as, in addition to their own revenues, they are subsidized by the state budget. As far as human resources are concerned, while there do not seem to be any shortcomings for university hospitals, downstream hospitals suffer from staff shortages. Indeed, our district hospital, and by extension the emergency department, is understaffed. This was reported during interviews with hospital officials, who indicated that the human resources currently available at the hospital are not sufficient to meet needs. This shortage has been observed not only nationally, but also worldwide^{24,25}, and the centralized character of personnel recruitment in Tunisia is an obstacle felt by all hospitals, diminishing the quality of care and productivity.

In terms of systemic integration, our hospital works in collaboration with the Siliana regional hospital and 3rd-line hospitals in Greater Tunis. The main aspect of this collaboration is the transfer of patients from our hospital to other higher-level hospitals, mainly carried out in order to gain access to specialist skills in these hospitals^{26,27}, particularly for trauma patients who often require surgical intervention²⁷. However, there is currently no system in place to provide feedback to district hospital doctors on the diagnosis, treatment and evolution of transferred patients; although such feedback would have been much appreciated by doctors at emergency department level²⁸, as it represents an often-lost teaching and learning opportunity that could both improve the care given to new patients and strengthen ties between healthcare facilities²⁹.

Another aspect of emergency department performance is its ability to adapt to changes in the population it serves, i.e. demographic changes such as ageing³⁰, epidemiological changes and variations in the distribution of diseases³¹⁻³³, and challenges posed by epidemics and health crises³⁴. However, not all developments are synonymous with progress: efforts to change must be carefully analyzed to ensure that they add value for patients. Furthermore, according to our interviews, there are no formalized operational mechanisms in place in our hospital to collect information on the community it serves, which represents a negative point for the emergency department. Indeed, alongside their curative medical mission, emergency departments can introduce preventive medicine activities, issuing recommendations for prevention, screening and psychosocial support in relation, for example, to diabetes and hypertension screening, HIV screening, anti-smoking and anti-alcohol campaigns³⁵. In addition, emergency departments are playing an increasingly important role in the screening and referral of the population's social demands, requiring the introduction of new technologies designed to facilitate these processes³⁶.

Finally, with regard to innovative capacity, we did not observe any experience of innovation and/or transformation within the hospital or its various departments. According to the interviews, even if there is a willingness to change, this is met with resistance on the part of employees. Yet there is evidence of the growing effectiveness of implementing innovative tools in reducing waiting times and improving the patient experience in emergency departments, by relieving pain and anxiety during the visit, or reinforcing follow-up care after discharge³⁷.

Values maintenance

Regarding organizational climate, emergency department employees were satisfied with their contribution to care and their workload, and experienced a good sense of personal accomplishment. This has a positive effect on quality of care, as satisfied caregivers are more likely to contribute positively to the patient journey³⁸ and improve patient's satisfaction³⁹. However, it should be noted that our emergency department, and by extension the hospital, has no formal mechanisms for collecting data on the opinions of different categories of employees and assessing their performance. On the other hand, employees expressed a good sense of belonging to a supportive work team, and were satisfied with the level of assistance obtained from their colleagues somewhat more than that obtained from their supervisors; given that healthcare professionals benefit from the presence of social colleagues, good workplace communication and the appreciation of their superiors, and are therefore less likely to leave their jobs than those faced with nagging colleagues, unfair behavior and numerous social conflicts in the workplace⁴⁰. However, employees expressed dissatisfaction with the opportunities offered to access

continuing professional development programs, and with the support offered by the hospital to attend these programs. This represents a negative point not only for the hospital, but also for the employees, since continuing professional development develops the knowledge of healthcare professionals⁴¹ and has a positive influence on their skills and significantly increases their competencies in patient management⁴².

In terms of shared values, there was no clear communication on the values that the hospital should stand for, such as health promotion, quality, safety, humanism, equity, public service and ethics. This is the case in the majority of hospitals in Tunisia where, although employees admit that hospitals are fair and moderately organized to avoid professional errors, there has been no consensus on the values these hospitals should uphold⁴³. Yet having a set of shared values and principles within a healthcare facility provides an effective way of establishing management priorities that both focus on ensuring high standards of practice in staff skills and competencies, promoting teamwork and shared ideals and goals, sustaining ethical relationships with patients and achieving higher levels of patient satisfaction; all of which can have a positive impact on the effectiveness of care⁴⁴.

Production

According to the results of our study, the production volume of services and care in the emergency department has seen significant variations between 2017 and 2022. Indeed, the number of visits fell sharply between 2019 and 2021, from 8572 in 2019 to 7500 in 2021, reaching 7059 visits in 2020. This drop in the number of visits can be attributed mainly to the COVID-19 pandemic that hit the world between 2020 and 2022^{45,46}.

With regard to productivity, given that our hospital has no inpatient departments, productivity in the emergency department can be assessed through a number of indicators, such as the staffing ratio and the level of resource consumption. The staffing level in our department was 36% in 2022. However, in the absence of a national average or an average specifically relevant to district hospitals, it is difficult to make a judgment on this rate. As for resource consumption in the emergency department, this increased by 16% between 2017 and 2022, in parallel with the fall in the number of emergency visits over the same period. This could be the result of a number of factors, such as the rising cost of acquiring resources⁴⁷, the demographic transition and aging of the population⁴⁸, the increasing severity of a number of chronic illnesses⁴⁹, or the assessment of patient severity by the medical staff⁵⁰.

As far as quality is concerned, the absence of any direct indicator of quality limits the assessment of technical quality performance in the emergency department. The most widely used methods of measuring quality are mortality rates and systematic reviews of emergency department deaths, post-discharge consultation returns and patient complaints⁵¹⁻⁵³. However, these information were not collected in our emergency department, as the hospital does not have an inpatient department. Yet these metrics have been criticized as being ineffective in identifying medical errors and adverse events^{54,55}. In addition, the number of returns to the emergency department cannot be considered a valid indicator of quality of care, since it depends on the severity of the patient's condition or discharge destination⁵⁶. Moreover, the interviews indicate that the hospital has not put in place procedures to implement a quality approach. Its implementation within the hospital and/or the emergency department would have helped to identify weak points in the department's operation, which would contribute to improved patient care⁵⁷. Furthermore, other areas for quality improvement are related to the environment and operation of the emergency department, such as the general ambience of the department and access to food⁵⁸.

Goal attainment

The efficiency and effectiveness of a service is usually measured by indicators such as mortality and/or morbidity rates in the target populations. But the absence of inpatient departments within the hospital made it difficult to assess health outcomes attributable to services rendered in the emergency department.

Similarly, the interviews indicated that the hospital does not currently have processes in place to measure either the efficiency or effectiveness of interventions. Implementing such measures in the emergency department would have had a beneficial effect on the department's operations. Indeed, adequate prediction of needs and optimal management of resources contribute to a better planning and allocation of available resources⁵⁹, and are essential

for reducing waiting times and avoiding overcrowding⁶⁰, which plays an important role in ensuring better quality of care⁶¹.

In addition, correctly diagnosing and treating patients are key indicators of emergency department performance⁶². This ensures that patients receive the most appropriate medical care, an essential element in improving recovery rates and reducing the likelihood of complications, which in turn has a significant impact on patient safety and satisfaction, a key indicator for assessing the quality of care and overall effectiveness of healthcare services⁶³.

Ongoing monitoring and analysis of these indicators is essential for the continuous improvement of quality of care in emergency departments⁶³.

RECOMMENDATIONS

With the intention of implementing performance improvement measures in our emergency department, the main constraint was the absence of benchmark studies conducted at the national level to assess the performance of hospital structures. However, a report written by the World Bank in 2008 focused on the performance of public health facilities in Tunisia⁶⁴, including a district hospital similar to ours, and the results found in our study were similar to those in this report.

Thus, in light of the findings of our study, improving performance in the emergency department requires a combination of several actions and activities that contribute to optimizing the department's operating processes.

With regard to the healthcare workers, the main pillar of improvement lies in providing more opportunities for continuous professional development, including training in the latest medical advances and leadership skills, in order to improve staff's technical skills and foster a sense of growth and accomplishment⁶⁵. In addition, improved human resource management and the adoption of standardized treatment guides and protocols could serve to optimize resources at the emergency department level and enhance the efficiency and quality of patient care⁶⁶. As for cooperation with other facilities, the main area for improvement lies in the implementation of standardized feedback mechanisms and procedures between hospitals of different levels, which can have an impact on patient care at the peripheral level and thus improve patient satisfaction. Finally, we need to focus on promoting a culture of continuous improvement and innovation within the emergency department, by working on the implementation of a quality management system within the department and the wider hospital, thus helping to identify and implement new cost-effective strategies on a regular basis.

CONCLUSION

Performance is a complex, multi-dimensional concept that ultimately aims to ensure continuous improvement in health. In this context, emergency departments, which are the backbone of healthcare organization and often the first point of contact between the patient and the healthcare system, must be able to respond effectively to the needs of patients and the population they serve.

The aim of this study is therefore to evaluate the performance of the emergency department of a primary care hospital in Tunisia.

We conducted our study in the emergency department of the Kesra District Hospital in the governorate of Siliana. To assess the department's performance, we used the EGIPSS model (Évaluation Globale et Intégrée de la Performance des Systèmes de Santé, Global and Integrated Evaluation of Organizational Performance), which represents a comprehensive, robust and flexible conceptual framework that can be applied at any level of analysis (systems, organizations, departments, etc.). We collected qualitative data through questionnaires and interviews with key players in the hospital and emergency department, and extracted quantitative data from annual reports.

In regard to adaptation to the environment, a number of shortcomings have been identified. Current processes for acquiring material and human resources are still centralized, limiting the possibility of quickly balancing resources with needs. In addition, the integration of the emergency department into the healthcare system is still

lacking, requiring better collaboration and the establishment of formal mechanisms for administrative and clinical coordination between healthcare professionals.

When it comes to values and culture, the management of human resources is not particularly well established. In particular, there are few opportunities to access continuing professional development programs, which is a major source of dissatisfaction among nursing staff. Similarly, we noted little emphasis on the development of a strong organizational culture and the absence of a clear statement of hospital values such as humanism, excellence, equity, efficiency and public service.

Regarding production, incentives to improve process efficiency and quality are lacking, and quality management within the emergency department and the hospital in general is non-existent. In addition, managers remain unsure of the importance of engaging in continuous quality assessment and improvement processes. Furthermore, although its measurement remains less than optimal, productivity in the emergency department appears to be a cause for concern.

In view of these results, improving performance in the emergency department requires a combination of several initiatives, such as setting up systems for comprehensive collection of social, health and economic data, providing opportunities for continuing professional development, strengthening feedback mechanisms, improving resource management and implementing a quality management system within the department and the hospital while initiating a certification and accreditation process.

In addition, this study instigates some recommendations for both the fields of research and of health management. There is a need to conduct broader performance analysis and evaluation studies at hospital level, in other district hospitals and in higher-level hospitals. This will provide a framework to guide the development of performance measurement tools directly related to healthcare management, which will help develop a sense of accountability in the area of healthcare services and help deliver improvement in patient health and safety, as well as creating better working conditions for all healthcare providers.

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