

Patient Satisfaction Survey at a Tunisian Multipurpose Primary Health Care Center

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Abstract

Introduction: Patient satisfaction is a key indicator for evaluating the effectiveness of healthcare services and guiding their improvement. It reflects the overall patient experience and plays a central role in accreditation processes, thereby enhancing the quality and accessibility of primary care. The absence of a structured evaluation of patient satisfaction limits the understanding of the strengths and weaknesses of this center. Therefore, measuring and analyzing patient satisfaction allows identification of areas for improvement and ensures optimal care tailored to patients' expectations.

Objectives: To assess the level of patient satisfaction at the Kairouan Multipurpose Health Center in 2024 in order to identify strengths and areas for improvement in the quality of care and services provided.

Materials and Methods: This was a descriptive cross-sectional study conducted on a random sample of patients attending the Kairouan Multipurpose Health Center (CSP) in 2024. A structured questionnaire, pre-tested on a pilot sample, was used to evaluate socio-demographic profiles, service quality (administrative, technical, logistical, relational), and satisfaction using a 4-point Likert scale.

Results: The study included 102 patients aged 18 to 90 years (mean age: 57 ± 15 years). The majority had secondary (36.3%) or primary (31.4%) education levels, were homemakers (54.9%), married (82.4%), and covered by national Health Insurance Fund (CNAM) social insurance (59.8%). 54% attended for curative care. 83% were satisfied with respect for priorities, while 9.8% reported favoritism. 28.4% waited more than one hour, considered reasonable by 55.9% of respondents. Medication availability was considered important by 86.7%, as were opening hours and medical competence. Overall patient satisfaction with care quality was relatively high, with 72% reporting being satisfied or very satisfied, including satisfaction with medical competence (85%), hygiene (70%), and effectiveness of care (80%). The results highlight the priority given to medication availability, perceived as essential, but also identified as the main source of dissatisfaction.

Conclusion: The findings indicate that the majority of patients (72%) reported a high level of satisfaction (very satisfied: 32%; satisfied: 40%), while 28% reported relative dissatisfaction (somewhat dissatisfied or not satisfied at all). However, compared to 2022, dissatisfaction rates increased for certain determinants, necessitating intervention by the management team to ensure accreditation.

Keywords: Satisfaction, patients, primary care, quality of care, Kairouan, Tunisia

Introduction:

The Tunisian healthcare system relies on accessible and universal primary care, provided by the polyvalent centers of basic health groups. These structures offer preventive, promotive, and curative services at the

local level. In the face of increasing patient expectations and quality requirements, continuous improvement of services has become essential. Patient satisfaction is a key indicator of the effectiveness and adequacy of care. Satisfaction surveys help identify the strengths and weaknesses of the center and guide decisions to optimize organization and service quality. Within the framework of accreditation, this approach becomes strategic to ensure safety and quality of care. This study aims to evaluate the satisfaction of users of the polyvalent center using a rigorous methodology. The results will help enhance patient experience and guide continuous improvement efforts by healthcare teams.

Materials and methods:

This cross-sectional descriptive study was conducted at the Kairouan Primary Health Care Center (CSP) from September 9 to 20, 2024, as part of the national project “ESSAHA AZIZA,” which aims to improve the quality of care and accredit primary health care facilities. The study included patients over 18 years old who attended the CSP during the study period, excluding those whose health condition prevented participation or who declined to give consent. Data were collected using a structured questionnaire developed after a literature review and pretested for clarity. The questionnaire comprised three sections: sociodemographic characteristics, assessment of the importance and patients’ experience regarding service quality, and 14 items covering four dimensions (administrative, technical, logistical, and relational). Responses were rated on a four-point Likert scale, allowing evaluation of both perceived importance and satisfaction level. Data were analyzed using SPSS version 20, applying descriptive statistics and grouping responses to facilitate interpretation, with results presented in a radar chart. The study adhered to the ethical principles of biomedical research, including informed consent, anonymity, and confidentiality of collected data.

Results:

A total of 102 patients were included in the study. Participants were aged between 18 and 90 years, with a mean age of 57 ± 15 years. The study population was mainly characterized by a secondary (36.3%) or primary (31.4%) education level, while 25.5% had a university education. Professionally, more than half were housewives (54.9%), followed by retirees (18.7%) and employees (13.7%). The majority were married (82.4%) and benefited from CNAM social coverage (59.8%), while 29.4% were classified as indigent. Table 1 summarizes the sociodemographic characteristics of the study population.

Table 1: Sociodemographic characteristics of participants (N = 102)

VARIABLE	FREQUENCY (N)	PERCENTAGE (%)
EDUCATION LEVEL		
UNIVERSITY	26	25.5
SECONDARY	37	36.3
PRIMARY	32	31.4
NO FORMAL EDUCATION	7	6.9
OCCUPATION		
EMPLOYEE	14	13.7
SELF-EMPLOYED	9	8.8
HOUSEWIFE	56	54.9

RETIRED	19	18.7
OTHER	3	3.0
MARITAL STATUS		
MARRIED	84	82.4
WIDOWED	10	9.8
SINGLE	6	5.9
DIVORCED	2	2.0
SOCIAL COVERAGE		
CNAM (NATIONAL HEALTH INSURANCE FUND)	61	59.8
INDIGENT – TYPE 1	13	12.7
INDIGENT – TYPE 2	17	16.7
OTHER*	7	6.9
NOT SPECIFIED	4	3.9

Among the respondents, 5 (4.9%) were visiting the center for the first time. Most participants (54%) attended the center for curative consultations (Table 2).

Table 2 : Distribution of the study population according to number of visits and type of service received (N = 102)

VARIABLE	FREQUENCY (N)	PERCENTAGE (%)
NUMBER OF VISITS		
1	5	5.0
2	14	13.7
3	15	14.7
≥ 4	68	66.6
TYPE OF SERVICE RECEIVED		
CURATIVE CONSULTATION	55	53.9
DENTAL CARE	2	2.0
NURSING CARE	4	3.9
PERINATAL / FAMILY PLANNING CONSULTATION	8	7.8
LABORATORY SERVICES	29	28.4
MEDICATION DISPENSING	2	2.0
VACCINATION	2	2.0
TOTAL	102	100

Most respondents (83%) reported that the priority order was respected, while 9.8% attributed non-compliance to favoritism. Waiting time before receiving care exceeded one hour in 28.4% of cases. Regarding this waiting period, 6% considered it excessive, 55.9% reasonable, and 17.6% perfect. The duration of care delivery was judged sufficient by 44% of participants (Table 3).

Table 3: Evaluation of compliance with priority order and patients’ perception of waiting time (N = 102)

Variable	Frequency (n)	Percentage (%)
Compliance with priority order		
Always	64	62.7
Often	21	20.6
Rarely	14	13.7
Never	3	2.9
Waiting time		
< 1 hour	30	29.4
1 hour	43	42.2
2 hours	25	24.5
≥ 3 hours	4	3.9
Perception of waiting time		
Excessive	6	5.9
Long	20	19.6
Reasonable	57	55.9
Perfect	18	17.6
Perception of service duration		
More than sufficient	45	44.1
Reasonable	42	41.2
Limited	15	14.7

Overall, 48% of participants rated the quality of care as “very important,” and 33.3% as “important” (Figure 1).

Figure 2 shows patients’ perceptions of the importance of various aspects of care quality. The most highly prioritized elements were the availability of medications, opening hours, physician availability, and medical competence, all rated as “very important” by more than 50% of respondents. Conversely, the availability of informational signage and financial or material aspects of care were considered less critical, with only 36% and 24% of patients rating them as “very important,” respectively.

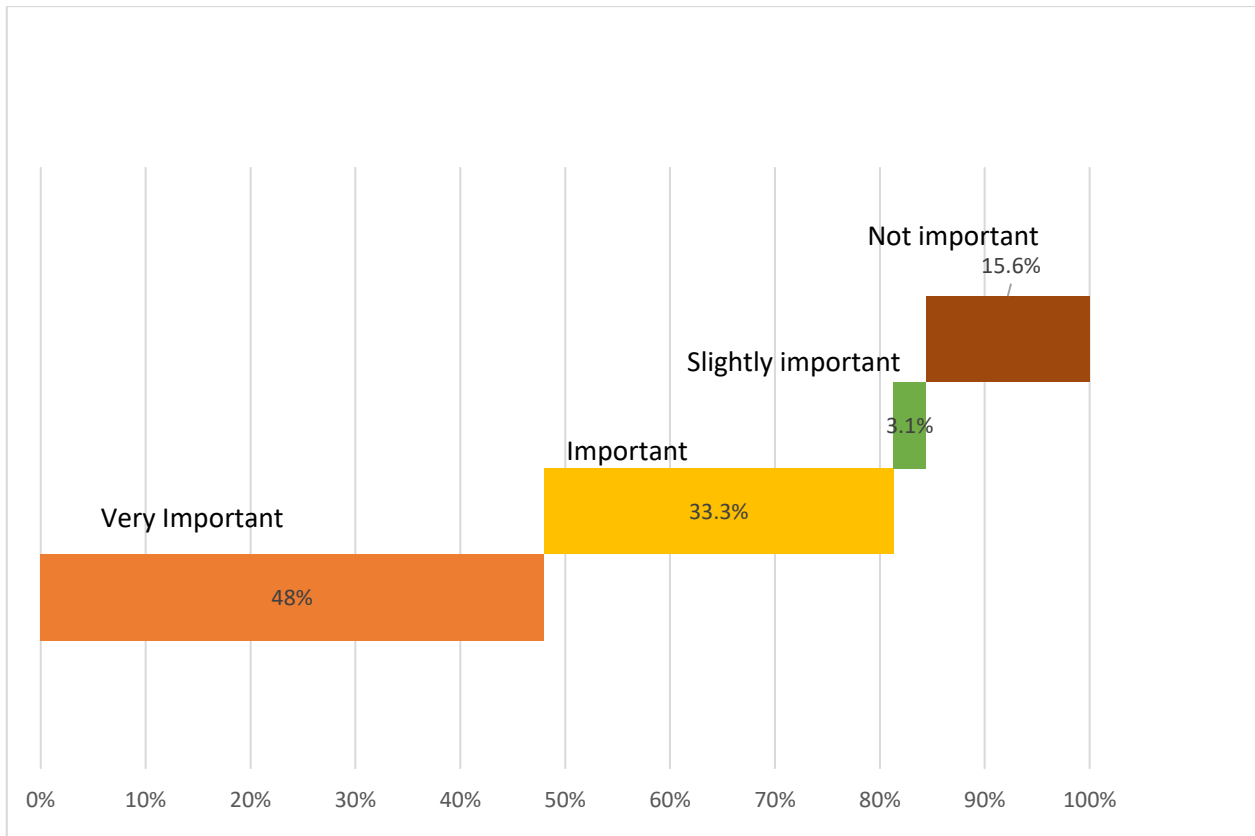


Figure 1: Importance of overall quality according to participants (N=96)

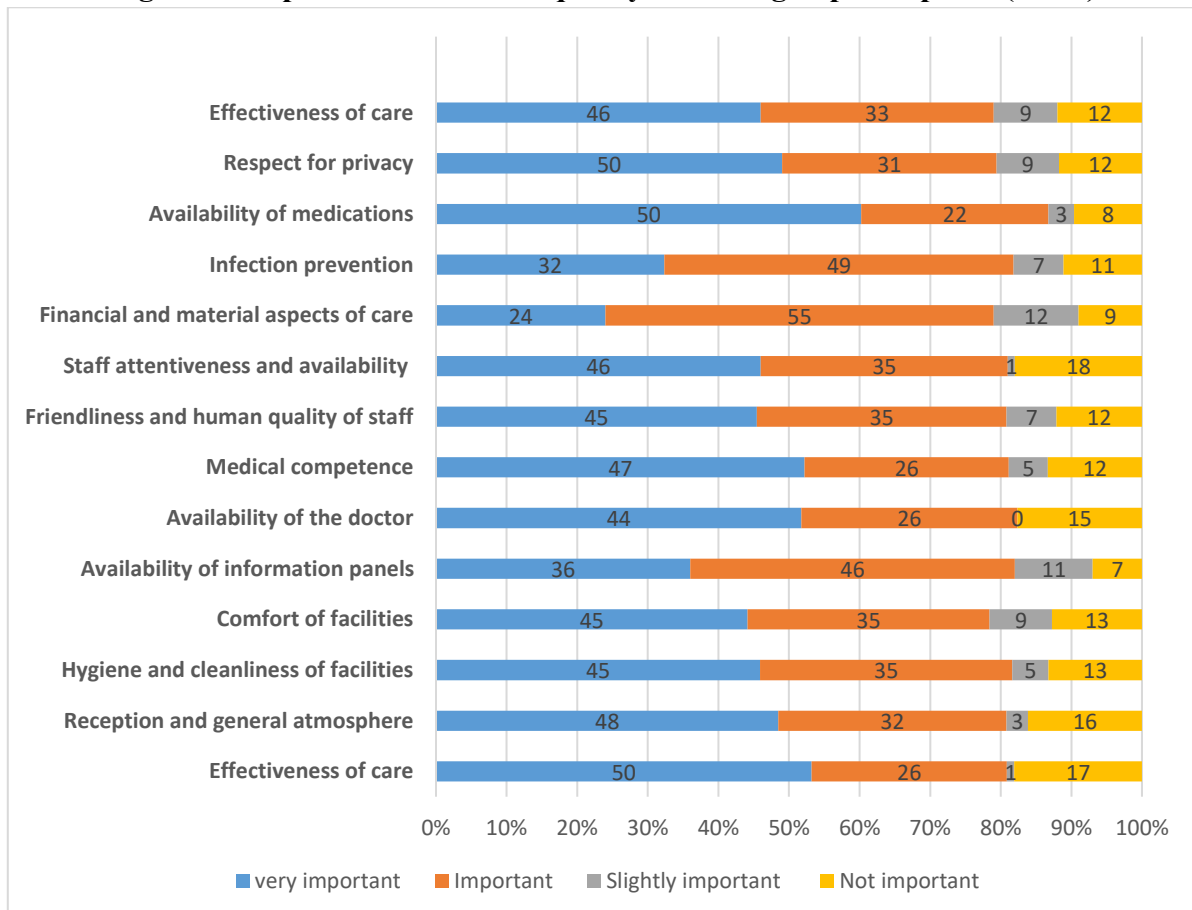


Figure 2: Level of importance perceived by participants according to the satisfaction items

The results of the study on the overall patient satisfaction regarding the quality of care received show that the majority of patients (72%) reported a high level of satisfaction (very satisfied (32%) or satisfied (40%)), while 28% reported some level of dissatisfaction (somewhat dissatisfied or not at all satisfied). Figure 3 presents patient satisfaction levels for different aspects of care quality. Most items show a predominance of overall satisfaction (very satisfied and satisfied). Regarding the effectiveness of care, about 80% of patients reported being very satisfied or satisfied, while fewer than 10% were somewhat or not at all satisfied. For medical competence, nearly 85% of patients were very satisfied or satisfied, confirming a positive perception of this aspect. Concerning the availability of medications, nearly 40% of patients expressed low or total dissatisfaction. Regarding hygiene and cleanliness of the facilities, approximately 70% of respondents were very satisfied or satisfied, although one-third of patients reported dissatisfaction. Finally, financial and material aspects of care recorded a high rate of dissatisfaction, with over 35% of responses indicating low or total dissatisfaction.

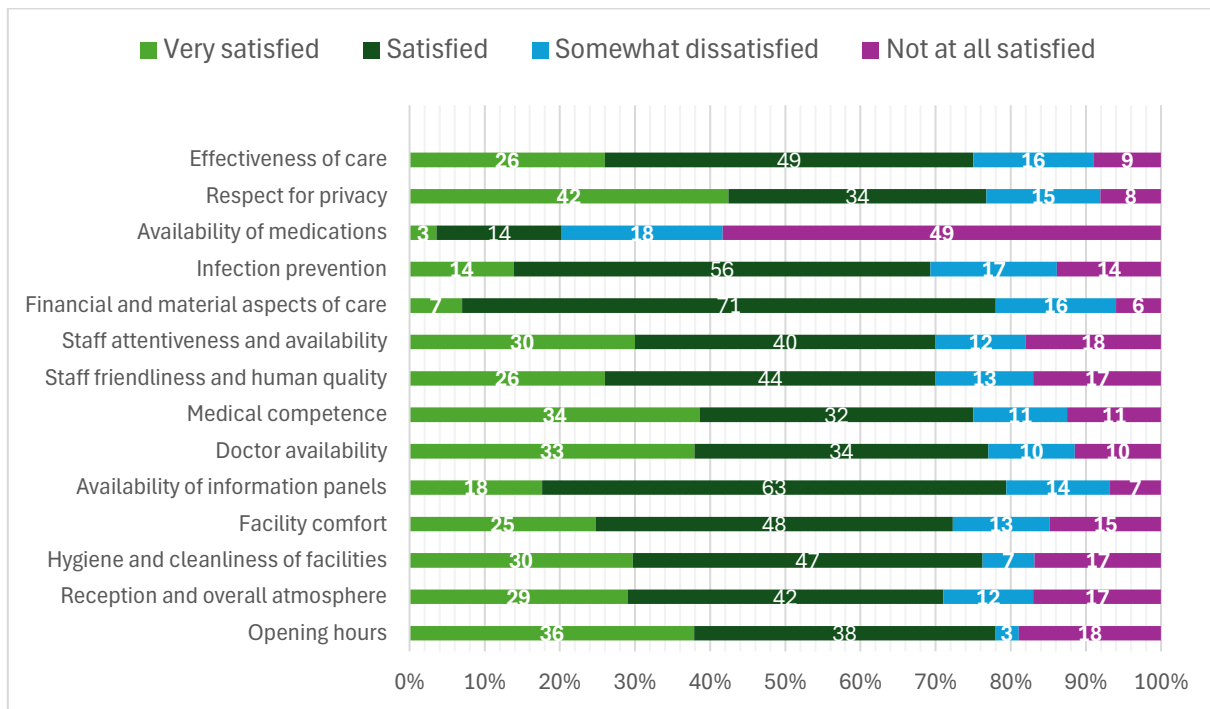


Figure 3: Distribution of patient satisfaction levels regarding the quality-of-care items

The highest patient satisfaction, equal to or above 75%, was observed for several aspects, including the availability of information panels (79.4%), opening hours (78%), the financial and material aspects of care (78%), the availability of physicians (77%), respect for privacy (76.8%), hygiene and cleanliness of the facilities (76.2%), medical competence (75%), and effectiveness of care (75%). Table 4 presents the levels of importance (very important and/or important) and satisfaction rates (very satisfied and/or satisfied) for the different aspects of quality of care examined.

Table 4: Levels of Importance and Experienced Satisfaction of Different Aspects of Quality of Care

ITEM	IMPORTANCE	EXPERIENCED
	Total	n
OPENING HOURS	94	76

RECEPTION AND GENERAL ATMOSPHERE	99	80
HYGIENE AND CLEANLINESS OF THE FACILITIES	98	80
COMFORT OF THE FACILITIES	102	80
AVAILABILITY OF INFORMATION PANELS	100	82
AVAILABILITY OF THE PHYSICIAN	85	70
MEDICAL COMPETENCE	90	73
FRIENDLINESS AND HUMAN QUALITY OF STAFF	99	80
STAFF ATTENTIVENESS AND AVAILABILITY	100	81
FINANCIAL AND MATERIAL ASPECTS OF CARE	100	79
INFECTION PREVENTION	99	81
AVAILABILITY OF MEDICATIONS	83	72
RESPECT FOR PRIVACY	102	81
EFFECTIVENESS OF CARE	100	79
OVERALL QUALITY	96	78

a: Number of participants who responded “very important” and/or “important”

b: Number of participants who responded “very satisfied” and/or “satisfied”

The radar chart in Figure 4 shows that the availability of medications was perceived as the most crucial element among the quality-of-care criteria, with an importance rate of 86.7%. The unavailability of medications was also the main cause of patient dissatisfaction, resulting in a satisfaction rate of only 20.2%.

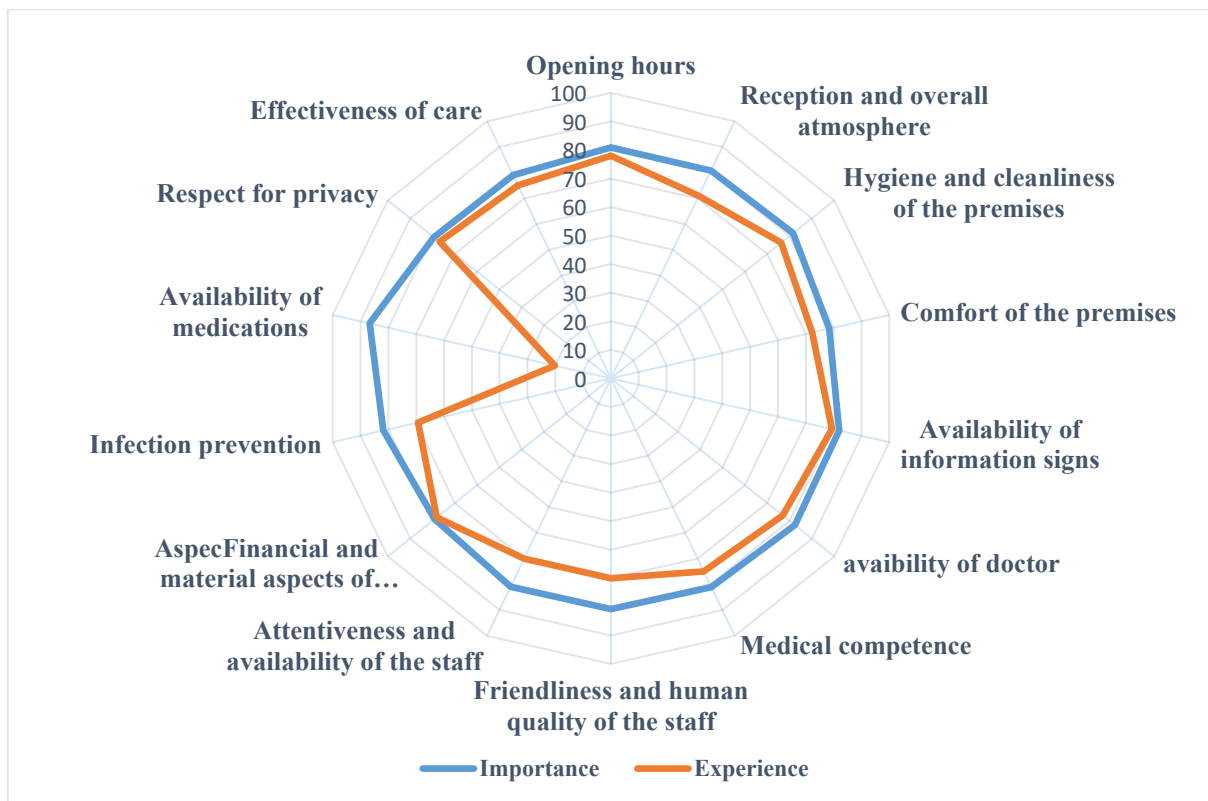


Figure 4: Radar chart of the importance and satisfaction rates of care quality items as perceived by the study participants

Discussion:

The results of our study reveal a predominantly older, married population, with primary or secondary education levels (67.7%) and a notable proportion of homemakers (54.9%). These findings are consistent with several studies conducted in similar contexts in Africa and other developing countries. A study conducted in primary health centers in Tunisia by Ben Romdhane et al. (1) also reported a predominance of homemakers and retirees among users, reflecting the central role of these groups in utilizing frontline healthcare services. Moreover, the predominance of CNAM social coverage in this population (59.8%) aligns with Tunisian policies aimed at expanding access to healthcare.

These characteristics reflect a trend observed in other studies conducted in similar settings, where homemakers and retirees represent a significant proportion of primary healthcare beneficiaries due to their availability and more frequent healthcare needs (2, 3).

The majority of patients consulted for curative care (54%), an expected result in primary care centers, where preventive consultations remain often underutilized, as highlighted by Meessen et al. (4). Respect for the priority order (83%) is a positive indicator of healthcare organization, though the 9.8% perception of favoritism may reflect recurring issues in health systems where transparency is a challenge (1).

Perceptions of waiting times are generally reasonable for 55.9% of patients, although 28.4% had to wait more than an hour. These results are similar to those reported by Diarra et al. (5) in a study on waiting times in African health centers, where infrastructure overload and lack of medical staff were often responsible for prolonged delays. However, the positive perception of service duration (44% "amply sufficient") suggests that, despite constraints, staff manage to provide adequate interaction time.

Overall patient satisfaction with the quality of care is relatively high, with 72% of patients reporting being satisfied or very satisfied. This result is comparable to studies conducted in similar contexts, such as those by Abdallah et al. (6), which found satisfaction levels exceeding 70% in well-organized primary care centers. These findings are consistent with studies conducted in North Africa and Gulf countries, where overall satisfaction rates range between 65% and 80% in public health services (1, 6). However, high dissatisfaction rates related to medication availability (40%) and financial and material aspects (35%) highlight persistent challenges. These results align with WHO findings (7), which identify resource availability as a key determinant of patient satisfaction.

However, adherence to waiting times and service duration remain areas for improvement. Waiting times exceeding one hour, reported by 28.4% of participants, are considered excessive by a minority (6%) but could negatively affect perceptions of care if not optimized. These results are in line with Meessen et al. (4), who emphasize that waiting time is a critical factor influencing patient satisfaction in low-resource health systems.

Comparative analysis shows that medication availability stands out as the most critical element for patients, with a high importance rate (86.7%). However, the associated satisfaction rate is extremely low (20.2%), reflecting a mismatch between supply and patient expectations. These results are consistent with previous studies highlighting medication availability as a key determinant of patient satisfaction in low- and middle-income countries (5, 7).

In contrast, aspects such as facility hygiene, medical competence, and respect for patient privacy recorded relatively high satisfaction rates (>75%), confirming their importance in the positive perception of care. These dimensions are also widely recognized in the literature as pillars of care quality (4). Financial and material aspects generated notable dissatisfaction (35%). Although the perceived importance of these dimensions is relatively lower compared to other criteria, their improvement could reduce perceived

disparities and enhance overall care accessibility. A study conducted in Tunisia by Ben Romdhane et al. (1) also highlighted the impact of financial constraints on patient satisfaction, especially among the most vulnerable populations.

This survey reveals overall high satisfaction among primary care users, although it highlights crucial areas for improvement, such as medication availability and management of material resources. Our study demonstrates consistency with general trends observed in healthcare services in resource-limited countries, where organizational factors (such as waiting times), resource availability (medications and staff), and the caregiver-patient relationship play a central role in overall satisfaction (7). Nevertheless, the low availability of medications is a particularly concerning issue, requiring priority interventions to meet patient expectations.

In the Tunisian context and with a view to accrediting health centers, it is crucial to adopt specific measures aligned with national healthcare quality standards. To improve patient satisfaction in our health center, the following actions are recommended:

Improve medication availability

- Increase the budget and rationalize usage.

Strengthen quality management and patient safety

- Establish a Quality Management System (QMS): Appoint a quality officer responsible for overseeing continuous improvement actions.
- Standardize clinical and administrative practices according to Ministry of Health recommendations and accreditation standards.
- Implement an adverse event reporting system to identify and resolve patient safety issues.

Enhance patient reception and orientation

- Train reception staff in communication, conflict management, and patient satisfaction.
- Simplify administrative procedures and reduce delays through an efficient information system (appointment management and electronic medical records).

Optimize the patient pathway

- Provide clearly visible signage to guide patients, in both Arabic and French.

Reinforce infection prevention and control

- Implement an infection prevention plan, including hand sanitizer dispensers and promotion of hand hygiene.
- Ensure regular maintenance of medical equipment.
- Comply with environmental standards for biomedical waste disposal.

Strengthen human resource management

- Develop continuous training programs.
- Motivate staff.
- Recruit and train according to the center's needs.

Staff well-being

- Ensure optimal working conditions, as staff satisfaction directly impacts patient satisfaction.
- Provide opportunities for continuous professional development.
- Recognize and reward staff efforts.

Integrate digital tools

- Implement an Electronic Patient Record (EPR).
- Set up reminders for appointments and vaccinations.

Ensure compliance with accreditation standards

- Conduct regular self-assessments to ensure adherence to accreditation criteria.
- Engage specialized consultants for accreditation preparation.
- Monitor performance indicators such as patient satisfaction.

Enhance patient satisfaction

- Install suggestion boxes and conduct regular surveys.
- Provide information on patient rights and available services.
- Adapt services to the specific needs of the local population (screening campaigns, awareness programs).

Collaborate with the community

- Involve local associations.
- Promote awareness on topics such as hypertension, diabetes, and vaccinations.

Continuous monitoring and improvement

- Establish a quality committee with representatives from medical, paramedical, and administrative staff to track progress.
- Identify short-, medium-, and long-term improvement areas.
- Communicate achievements to motivate staff and strengthen patient trust.

Conclusion

The patient satisfaction survey at the multipurpose primary health center is part of a strategic approach to integrate accreditation as a lever for continuous quality improvement. In the Tunisian healthcare system, where accreditation is becoming a key standard to ensure services meet national and international requirements, this study provides valuable insights into patient experiences.

Patient satisfaction is a fundamental performance indicator for measuring the effectiveness of healthcare facilities and their ability to meet the specific needs of populations.

The recommendations from this study help identify priority areas for improvement, such as patient reception, service availability, communication between patients and healthcare providers, infrastructure, and especially medication availability.

Finally, integrating patient satisfaction into accreditation programs strengthens the credibility of the Tunisian healthcare system while promoting equity and patient trust. Through this approach, the health

system can evolve towards patient-centered practices, thereby improving overall care quality and achieving international standards.

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