

**Analysis of user satisfaction with primary healthcare services in
Morocco: the case of diabetic patients in the town of Tiznit**

**Analyse de la satisfaction des usagers des services de soins
de santé primaires au Maroc : cas des patients diabétiques au
niveau de la ville de Tiznit**

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Abstract

This study deals with a fundamental aspect of the quality of health services: the satisfaction of primary care users. To this end, an analysis of the quality of the healthcare supply and the satisfaction of diabetic patients in Morocco was carried out.

This is a confirmatory descriptive quantitative study carried out in urban health centers in Tiznit. The aim was to identify the factors influencing user satisfaction with primary healthcare for diabetic patients. To this end, a self-administered questionnaire was designed to collect the data. The sample selected was $n = 60$. The data were processed and analyzed using JAMOVI software.

The study's results reveal a significant association between age and level of satisfaction ($p = 0.03$). There was also a significant association between satisfaction and healthcare facilities. Regarding accessibility to healthcare facilities, the results reveal a significant correlation with satisfaction ($P=0.009$). It is essential to consider these factors in the care approach to increase the satisfaction level of diabetic patients and improve the quality of the services offered.

Keywords: Diabetes, Healthcare services, Healthcare supply, Quality, Satisfaction,

Résumé

Cette étude traite un aspect fondamental de la qualité des services de santé, à savoir la satisfaction des usagers des soins de santé primaire. A cet égard, une analyse de la qualité de l'offre de soins et de la satisfaction des patients diabétique au Maroc a été conduite.

Il s'agit d'une étude quantitative descriptive confirmatoire menée au niveau des centres de santé urbains de la ville de Tiznit. L'objectif est d'identifier les facteurs qui influencent la satisfaction des usagers des soins de santé primaire destinés aux patients diabétiques. Pour ce faire, un questionnaire auto-administré a été conçu et utilisé pour recueillir les données. L'échantillon sélectionné était $n = 60$ diabétiques. Le traitement et l'analyse des données ont été effectués à l'aide du logiciel JAMOVI.

Les résultats de l'étude révèlent une association significative entre l'âge et le niveau de satisfaction ($p = 0,03$). En outre, l'association entre la satisfaction et les structures de soins s'est avérée significative. En ce qui concerne l'accessibilité à l'établissement de santé, les résultats révèlent une corrélation significative avec la satisfaction ($P=0,009$). Il est essentiel de prendre en compte ces facteurs dans l'approche soignante afin d'accroître le niveau de satisfaction des patients diabétiques et d'améliorer la qualité des prestations offertes.

Mots clés : Diabète, Offre de soins, Qualité, Satisfaction, Prestations de santé

Introduction

Diabetes is a public health problem marked by its significant and growing prevalence. It affects a significant proportion of the population and is a global health problem (Hassoune et al. 2013). Worldwide, the prevalence of diabetes is around 422 million. The number of adults living with diabetes in 2014, compared with 108 million in 1980. This global prevalence of diabetes (age-standardized) has almost doubled since 1980, rising from 4.7% to 8.5% of the adult population. These figures reflect the increase in associated risk factors such as overweight and obesity. Over the past decade, the prevalence of diabetes has increased more rapidly in low- and middle-income countries than in high-income countries (World Health Organization, 2016). Thus, caring for people with diabetes requires sufficient human and logistical resources to satisfy these people better. Exploring this satisfaction is of the utmost importance to improve the quality of care offered to patients suffering from diabetes.

In Morocco, according to the national Stepwise survey conducted in 2018 among adults on common risk factors for non-communicable diseases, the Minister of Health and Social Protection states that 2.7 million people have diabetes, 49% of whom are unaware of their condition, and that 2.2 million have pre-diabetes (Ministry of Health and Social Protection, 2019).

Medical management of patients is based on professional recommendations drawn up on the basis of scientific evidence and expert opinion. In addition to the treatment received by the patient, how care is delivered is important to consider. The quality of services will determine the gap between actual practice and patient expectations. Patient satisfaction is currently widely regarded as an indicator of the quality of care. Particularly in the case of chronic illnesses, it helps to build patient loyalty and improve compliance with treatment (Chihaoui et al. 2022).

At present, patient satisfaction is a sign that patient values and expectations are being met. Measuring satisfaction is, therefore, an important tool for research, administration, and planning (Bamba, 2021).

In other words, patient satisfaction is a component of the evaluation of the quality of care. Measuring patient satisfaction is part of an overall context in which the role of the user in the organisation of the healthcare system is on the rise, and quality approaches are playing an increasingly important role. The service provided to the customer, and therefore how it is assessed, is of central importance.

Patients are now active partners in the care they receive, and their satisfaction is seen as an indicator of the quality of care. Gathering their point of view is necessary to assess the quality of a healthcare system in the same way as the technical considerations that healthcare professionals can provide.

The quality of this new relationship between carer and cared-for, and the satisfaction expressed by patients, must be assessed to bring about continuous improvement. There are many ways of measuring satisfaction: complaints, discharge questionnaires, and specific or general surveys carried out at the initiative of healthcare establishments. Although it is included in regulatory texts almost everywhere in the world, patient satisfaction is an element that is still too often neglected by practitioners. Measuring patient satisfaction makes it possible to describe care from the patient's point of view, identify problems, and, where necessary, find solutions.

In this sense, the evaluation of care services and the benefits offered to patients must take into account patient satisfaction with the care received. This variable can be measured in different ways, for example: admission, care received, care provided by nurses, care provided by doctors, and other staff (Nguyen Thi et al. 2002).

According to the work carried out on evaluating the satisfaction of diabetic patients, the concept of satisfaction is multidimensional and many factors (socio-demographic, health, care structure characteristics, etc.) are associated with this phenomenon.

With this in mind, this study aims to analyse the quality of care and health services for diabetic patients by providing answers to the following research question: What factors influence the satisfaction of diabetic patients using primary health care services in Morocco?

The study is divided into three sections. The first section presents the methodological tools used and the field research conducted. The third and final section is devoted to a discussion of the main findings.

1. Research methodology

This is a quantitative descriptive study, that aims to analyse the quality of the supply and services for diabetic patients about their care in the town of Tiznit.

The study was based on a non-probability sampling method. The sample selected was $n = 60$ diabetics from the two health centers in the town of Tiznit during the data collection period, which lasted 4 months (from 22/01/2023 to 26/05/2023).

We included patients aged 18 and over, known to be diabetic, who were followed up periodically at the two urban health centers in the town of Tiznit. However, we excluded from the study sample: diabetics under the age of 18 (we were not aware of their condition and they were under the appropriate age) and pregnant women, as this is a problem that is only monitored during pregnancy.

The study data were collected using a semi-directive questionnaire sent to diabetic patients living in the town of Tienit. The data were processed and analysed using JAMOVI software.

During the survey, we paid particular attention to ensuring that the ethical principles of scientific research were respected. Before each interview, the interviewers introduced themselves and explained the objectives of the research. They ensured that the interviewee was available, willing to take part in the study, and prepared to be recorded. Informed consent was obtained for all interviews. The anonymity of our interviewees was also respected.

2. Results

2.1. Descriptive statistics

Table N°1 : Socio-demographic & economic characteristics of participants

Characteristics		Number	Rate of participation
Age	[30-50[13	21,7%
	[50-70[40	66,7%
	[70-90]	7	11,7%
Gender	Woman	40	66,7%
	Men	20	33,3%
Level of education	Illiterate	43	71,7%
	Primary	13	21,7%
	Secondary	3	5%
	Higher	1	1,7%
Professional situation	Active	21	35%
	Unemployment	2	3,3%

	Retired	4	6,7%
	No activity	99	55%
Area of residence	Urban	44	73,3%
	Rural	16	26,7%
Health insurance	Without insurance	25	41,7%
	AMO-Tadamoun	16	26,7%
	CNOPS	2	3,3%
	CNSS	17	28,3%

Source: Authors

According to the results of the study (Table 1), 71.7% of patient respondents are illiterate, 21.7% have primary education and 5% have secondary education. Finally, 1.7% of participants had a higher level of education.

In terms of professional status, the population not in work was the most frequently questioned category, with a participation rate of 55%, followed by the population in work (35%).

As for health insurance coverage, 41.7% of patients are not insured, 26.7% are covered by the AMO-Tadamoun, 28.3% of the population are affiliated with the CNSS, and 3.3% of the population are members of the CNOPS.

Concerning the distribution of respondents by level of education, the results of the study show that illiterate patients and those with a primary level of education make up the majority of the sample, with frequencies of 71.7% and 21.7%, respectively.

In terms of the distribution of respondents by age, the highest proportion was recorded among patients in the [50-70] age group, with a rate of 78.6%, followed by the [70-90] age group, with a rate of 14.3%.

2.2. Inferential statistics

Table N°2: Factors influencing the level of satisfaction of diabetic patients

Variables		Level of satisfaction		P-value
		Low satisfaction n (%)	Strong satisfaction n (%)	
Age	[30-50[11(34,4%)	2(7,1%)	0,038
	[50-70[18(56,3%)	22(78,6%)	
	[70-90]	3(9,4%)	4(14,3%)	
Gender	Women	21(65,6%)	19(67,9%)	0,03
	Men	11(34,3%)	9(32,1%)	
Area of residence	Urban	24(75%)	20(71,4%)	0,755
	Rural	8(25%)	8(28,6%)	
Professional situation	Active	12(37,5%)	9(32,1%)	0,979
	Unemployment	1(3,1%)	1(3,6%)	
	Retired	2(6,3%)	2(7,1%)	
	No activity	17(53,1%)	16(57,1%)	
Level of education	Illiterate	21(65,6%)	22(78,6%)	0,215
	Primary	8(25%)	5(17,9%)	
	Secondary	3(9,4%)	0(0%)	
	Higher	0(0%)	1(3,6%)	

Family status	Married	30(93,8%)	25(89,3%)	0,770
	Divorced	1(3,1%)	2(7,1%)	
	Widowed	1(3,1%)	1(3,6%)	
Health insurance	Without insurance	13(40,6%)	12(42,9%)	0,464
	AMO-Tadamoun	11(34,4%)	5(17,9%)	
	CNOPS	1(3,1%)	1(3,6%)	
	CNSS	7(21,9%)	10(35,7%)	
Accessibility	Bad	(3,1%)	(0%)	0,009
	Low	(3,1%)	(7,1%)	
	Medium	(68,8%)	(28,6%)	
	Good	(25%)	(64,3%)	

Source : Authors

According to the results of the study (Table 2), there was a significant association between patient satisfaction and age ($p=0.038$). There was also a significant association between the study's dependent variable and gender ($p=0.03$). Similarly, accessibility to healthcare services significantly influenced the satisfaction level of the users surveyed ($p =0.009$). However, the association was insignificant between the dependent variable and the rest of the explanatory variables included in the research model ($p > 0.05$).

3. Discussion

This section is reserved for discussion of the results with the literature review and the research model.

According to the results of the study, there is a significant association between age and the level of satisfaction ($p =0.038$). Kelstrup et al (1993) confirmed that the age of individuals influences the satisfaction rate, the older patient has a higher satisfaction rate. Bachisse (2012) verified

this hypothesis and deduced that age has a positive and significant influence on patient satisfaction.

For the gender factor, the results of the study show that female participants are the most satisfied (67.9%) compared to male participants (32.1% %) with a significant p-value equal to 0.03. This result is confirmed by several authors. This result is confirmed by several authors. Bachisse (2012) showed in his study that men and women reported different levels of satisfaction with healthcare services.

The place of residence also appears to be an important factor in patient satisfaction. The results of the study show that the urban population reported a high level of satisfaction (71.4%). On the other hand, Nguyen et al (2002) found that patients living in rural areas were more satisfied than those living in suburban or urban areas.

The results of our study show that the non-working population and the working population are more satisfied with the care received at the health center, with satisfaction rates of 57.1% and 32.1% respectively, followed by the retired population with a rate of 7.1%, and the unemployed population with a rate of 3.6%. Bachisse (2012) showed that patients' profession had a significant impact on patient satisfaction.

The results of the study show that illiterate patients with primary education have a high level of satisfaction. The results show that there is no significant association between the level of education and the level of satisfaction of diabetic patients ($p = 0.21$). This contradicts the literature review. The results of some studies show that there is a significant relationship between the level of education and the level of satisfaction (Nguyen et al., 2002).

The accessibility of the healthcare establishment seems to be an important factor in patient satisfaction. The results of the study show good satisfaction among the population, with a rate of (64.3%). According to the results of the study, there is a significant association between the level of satisfaction and the accessibility of the healthcare facility ($P=0.009$). This result is consistent with the findings of several previous studies, including Adamou et al (2017).

In short, a range of factors are associated with the satisfaction of diabetic patients, which explains the quality of the services provided to this category of healthcare clients.

Conclusion

Patient satisfaction is one of the keys to assessing the quality of healthcare. Measuring patient satisfaction is part of an overall context in which the role of users in the organization of the



healthcare system is becoming increasingly important, and quality improvement initiatives are playing a growing role. Customer service and customer satisfaction play a central role in healthcare systems.

This study aims to assess the satisfaction of patients using urban health centers in the town of Tiznit.

The results of the study show that the dependent variable is correlated with several factors, in particular the patient's age, gender, and accessibility to health facilities.

Like all research, this study has limitations, including the size of the sample and the conceptual framework used. To overcome these limitations, future research should be envisaged to deepen the study and analysis of the phenomenon.

In summary, the evaluation of services provided to the client and their appreciation hold a central place in healthcare systems.

BIBLIOGRAPHIE

- Adamou, H., Amadou Magagi, I., Habou, O., Halidou, M., Karimou, S., Sani, R., & Abarchi, H. (2017). *Satisfaction des patients, élément important dans la globalité des soins* - CAS. Google Docs. https://drive.google.com/file/d/17X-x8VIVOUi2bK2LV00hm-68eKBd-BLA/view?usp=embed_facebook
- Bachisse, I. (2012). *Mesure de satisfaction des usagers de l'unité des soins palliatifs/traitement de la douleur/urgences à l'institut national d'oncologie de Rabat.*
- Bamba, O. (2021). *Évaluation de la satisfaction des clientes à la CPN au CSCom U de Banconi.* Bibliothèque numérique de santé du Mali. <https://www.bibliosante.ml/handle/123456789/4368>
- Chihaoui, M., Oueslati, I., Yazidi, M., Mahjoubi, S., Rezgani, I., Chaker, F., & Mrabet, A. (2022). Satisfaction des patients diabétiques sur la qualité des services de santé ambulatoires. *La Tunisie Médicale*, 100(2), 161-166.
- Hassoune, S., Badri, S., Nani, S., Belhadi, L., Maarouf, A., & Najafi, F. (2013). Evaluation of the care for diabetes patients by general practitioners in the province of Khouribga, Morocco. *Eastern Mediterranean Health Journal*, 19(01), 52-58. <https://doi.org/10.26719/2013.19.1.52>
- Kelstrup, A., Lund, K., Lauritsen, B., & Bech, P. (1993). Satisfaction with care reported by psychiatric inpatients: Relationship to diagnosis and medical treatment. *Acta Psychiatrica Scandinavica*, 87(6), 374-379. <https://doi.org/10.1111/j.1600-0447.1993.tb03390.x>
- Nguyen Thi, P. L., Lê, T. G., Empereur, F., & Briançon, S. (2002). Satisfaction des patients hospitalisés à Hô Chi Minh-Ville, Viet Nam. *Santé Publique*, 14(4), 345-360. <https://doi.org/10.3917/spub.024.0345>
- Organisation mondiale de la Santé. (2016). *Rapport mondial sur le diabète.* <https://apps.who.int/iris/handle/10665/254648>
- Organisation mondiale de la Santé. *Rapport mondial sur la qualité de soins* <https://www.who.int/fr/health-topics/quality-of-care>