



## RESEARCH ARTICLE

### ASSESSMENT OF THE SATISFACTION OF HOSPITALIZED PATIENTS AT THE UNIVERSITY HOSPITAL CENTER OF ORAN

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#### ABSTRACT

During the last years there has been a growing interest to care quality in developed countries and certain developing countries as well since patients have become active partners in medical care nowadays. The purpose of this work is to assess the satisfaction of the hospitalized patients at eleven (11) MCO departments of the University Hospital Center of ORAN (UHC). **Materials and Methods:** We have carried out a prospective study during 15 days of two samples (groups) of eleven (11) hospital depts. Picked at random during the periods of October-November 2017 and December-January 2018. A multidimensional anonymous questionnaire translated in Arabic and French was handed over to the participants by medical students from a different department. Solely leaving patients on the same survey day were included. The level of satisfaction has been assessed through thematic and overall scores by combining all satisfaction dimensions. **Results:** We have included 198 patients. The average age of patients ranged between 35.74 ±21.4 years and children <5 years represented 12.1% of cases. Fifty four percent of the patients had secondary level education and 8.6% university level education. The overall satisfaction score was 56.7%.it varied significantly according to the gender ( $p<0.03$ ) and admission sections ( $p<0.001$ ). Scores for reception and psychological support were respectively as follows: 69.3% and 67.2%. **Conclusion:** Satisfaction assessment is less frequent and not compulsory in our health facilities. The obtained satisfaction overall score which varied significantly depending on the admission section, can be improved if corrective measures are taken. The improvement of quality in hospitals depends on various aspects including satisfaction assessment of patients without neglecting caregivers.

#### INTRODUCTION

Recently there has been a real growing interest to the care quality in both developed and certain developing countries as well. According to the world health organization (WHO) «the assessment of care quality is a method which makes it possible for each single patient to have access to both diagnosis and therapeutically acts ensuring the best result in terms of health, in accordance with the current medical science state, to the best cost for the best result, to reduced iatrogenic risk and for his best satisfaction in terms of procedures, results and human contacts inside the care system». The assessment of care quality on a hospitalization should certainly, take into account the actors as well as the patients (Bovier, 2004; Pourin, 1999). Patient's satisfaction is part of the various indicators of the care quality. The assessment of this indicator involves the patient as a co-actor of this support, by giving him the possibility to express his thoughts on this matter. He can also be used by the health facilities to implement actions to best cater for patients expectations. The satisfaction concept of a subjective and multidimensional magnitude is subject to various definitions depending on authors. One of these definition is that patients satisfaction is the difference between the provided service and the perception of the service itself.

The patient judges the technical aspect of the treatment on the one side and expresses this thoughts on the reception, and the information he received, on doctor's availability and nurses, the treatment of his pain and the other symptoms (Salomon *et al.*, 1999). In the EU countries particularly in France, patient's satisfaction assessment has become a regulatory obligation in health facilities (Ministère de l'Emploi et de Solidarité, 1998 ; Service d'Évaluation Hospitalière, 1999) and since January 2015, the high health authority (HAS) manages the national assessment system related to satisfaction and experience of hospitalized patients e-Satis (Haute autorité de santé, 2019). In Maghreb countries such a Morocco and Tunisia, surveys have been carried out to generate an indicator on health facilities patients' satisfaction (Amazian Kamelia, 2013 ; Letaief, 2001). The purpose if this work is to access the satisfaction of health facilities patients within Oran University Hospital center (UHC ORAN).

#### MATERIALS AND METHODS

We have carried out a prospective study during 15 days of two (2) samples (groups) of eleven (11) hospital depts. Picked at random during the periods of October-November 2017 and December-January 2018. A multidimensional anonymous questionnaire translated in Arabic and French was handed over to the participants by medical students from a different department. Patients having refused to take part in the study have been dismissed. The questionnaire was elaborated taking into account the international and national studies and comprising two sections,

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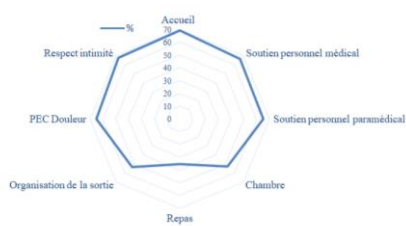
the first with a narrow answer concerning: reception conditions and accessibility (five (05) items), relational aspect with the caregivers (five (05) items), accommodation comfort (thirteen (13) items), the care provided for the pain and waiting time (six (06) items) and finally two (02) items on the overall appreciation. The last part comprised socio-demographic data (age, sex, place of birth, the level of education and health insurance membership). Solely leaving patients on the same survey day were included. The patients' agreement was systematically sought after having given all explanations as to the aim and sequence of the study. The time allotted to filling the questionnaire was 15 to 20 minutes. The satisfaction level was measured by the thematic and overall scores (scores / 100) by combining all dimensions related to satisfaction. For score calculation, the qualitative responses were transformed into quantitative variables and the questions that were left unresponded to have been dismissed. Data keyboarding and analysis were performed on statistical package for social sciences (SPSS) (version 17.0, IBM, Amonk, NY).

**RESULTS**

One hundred and eighty eight patients have participated in this study, 65 man and 133 woman (sex- ratio M/W = 0.5),the patients average age was 35.74 ± 21.4 years and 16-30 years representing 28%. The majority of the patients had secondary level of education (51.7%). The patients were all residents in the city of ORAN, 77.6% (table 01). The questionnaire has been filled by the patients up to 82.3% by a relative up to (12.1%) and by both up to (05.6%). The overall satisfaction score was 56.7 and varied significantly according to the admission section and gender. We noticed no difference in terms of age, class and level of education (Table 02). Accessibility includes access to the hospital and depts. The score is moderately satisfactory (48.2%). Reception conditions were considered and even excellent to admission office and depts70 % and 73.8 % respectively.

**Table 01: Sociodemographic characteristics of respondents**

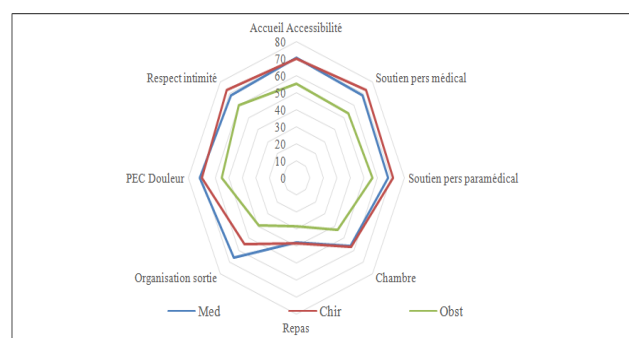
	Effectifs	%
Gender/sex		
- Men	65	32,8
- Woman	133	67,2
Age (years)		
- <15	34	17,2
- 16-40	92	46,5
- 41-64	53	26,8
- >=65	19	9,6
Level of education		
-Illeterate	27	15,1
-Primary, middle school	40	22,5
-Secondary	94	52,8
-University	17	09,6
Wilaya of résidence		
- Oran	154	77,8
- Others	44	22,2
Admission section		
- Médecine	65	32,8
- Surgery	66	33,3
- Obstetrics	67	33,8
Health care coverage		
-Yes	71	35,9
-No	106	53,5
-N/A	21	10,6



**Fig. 1: Thematic score of satisfaction (CHU Oran, 2017/2018)**

**Table 02. Répondants satisfaction scores (CHU ORAN, 2017/2018)**

	Average Score (ET)	P
Gender/Sex		
- Men	59,9 (16,0)	0,02
- Woman	54,6 (15,5)	
Age (years)		
- <15	60,9 (11,8)	0,1
- 16-40	53,9 (16,5)	
- 41-64	57,9 (15,8)	
- >=65	55,7 (15,8)	
Level of education		
-Illeterate	56,0 (14,5)	0,1
-Primary, middle school	56,2 (16,2)	
-Secondary	55,4 (15,4)	
-University	54,8 (20,3)	
Admission section		
- Médecine	59,5 (15,2)	0,001
- Surgery	61,4 (14,9)	
- Obstetrics	48,4 (14,3)	



**Fig. 2. Thematic score of satisfaction according to admission section (CHU Oran, 2017/2018)**

The interviewed patients were satisfied care giving personal (65.9).They were all available (always /often) doctors up to 77.3 % and paramedics up to 68.2 %. 76.7% said they received explanations about their state of health without asking questions and the quality of the answers provided were considered very good up to 60 %. Regarding respect for patients' privacy while being taken care of, the obtained score was 67.4 %. Regarding the accommodation comfort, the score was 52.2 %.regarding cleanliness was considered satisfactory up to 40 %, tranquillity up to 45.2% and comfortable up to 48.45%. Among patients having had meals provided by the facility (68%), the satisfaction score was 52.2% , in terms of quality, variety and meals temperature were considered average (45.5%,51% and 54%). One hundred eighty three patients interviewed (93.8%) have declared having had pains during their stay, the care given to pains was considered good up to 55.7% and excellent up to 12.0%. Sign-out arrangements, explanations have been provided concerning treatments prescribed on leaving the hospital were provided up to 68.2% of our patients. The quality was deemed very satisfactory up to 09% and satisfactory up to 59%.However 37.4% of patients declared they did not get the information related to activity resumption after they left, something regarding the information on the next appointment which was not communicated to them up to 30.2% of the interviewed patients. The information provided on the symptoms and the course of action to be taken should there be any possible complications were considered satisfactory up to 54.8%. The information quality score related to sign-out (treatment and complications) was up to 52.9%. Very significant differences have been noticed between the various admission section for the majority of the thematic scores except for the accommodation comfort and catering. However, we noticed that reception, listening to patients by the caregivers was better in the

surgery section, the pain was taken care of effectively and sign-out organisation in the medical section.

## DISCUSSION

The current patients satisfaction survey, is the first survey at the University Hospital Center of ORAN (CHU ORAN). The patients participation ratio is (100%), it shows the interest that patients give while being take care of in general. The questionnaire elaborated in both languages has been distributed by medical students not assigned to the concerned depts. This choice of investigators seemed to be the best option in the first instance. The patients included were on their sign-out day eventhough patients tend to express their satisfaction once they leave to their respective homes, since they depend less on their caregivers' services (Stevens *et al.*, 2006). The use of telecom means available could facilitate and improve the conditions to use the sign-out questionnaire in a near future. In France, ISATIS surveys (yearly phone surveys) and e-Satis surveys 48 hrs (online) should be taken into consideration (Direction générale de l'offre de soins, 2012; Haute autorité de santé, 2019). The satisfaction overall score observed is lower than those reported by other authors in Algeria (Chougrani, 2014) or those of neighbouring countries (Amazian Kamelia *et al.*, 2013; Iheb Bougmiza *et al.*, 2011; Relwendé Yameogo *et al.*, 2017) and in France (Haute Autorité de santé, 2018). The lowest ratio has been observed in the obstetrics section, which relates to the study conducted in Tunisia (Iheb Bougmiza *et al.*, 2011), this is probably due to the study period where the dept. has recorded an important ratio of occupancy. Outside gender which is linked to the obstetrics section, sociodemographic variables were not related to the satisfaction. This observation has been reported by Linghan Shan in CHINA in 2017 unlike other studies. Several items were considered satisfactory by the patients. This concerns the reception on admission and dept. caregiving personnel support, pain care and sign-out management. The results observed were more or less comparable to the other studies (Amazian Kamelia *et al.*, 2013; Boujemaa, 2019). The lowest score observed concerning both accommodation comfort and catering. It should be recommended that teaching Hospital (CHU) ensure catering for patients and this activity has not been outsourced. Besides the facility is a low-rise building. This implies the need to readjust departments' infrastructures.

The assessment of patients satisfaction against a health facility is reflected also by patients will to recommend this latter. Lastly, half of the patients investigated have declared recommending the facility to their relatives.

## Conclusion

Nowadays gathering the input of patients is essential to improve the quality of care inside health facilities. Even if the assessment of satisfaction is less frequent and not compulsory in our care facilities, it represents an important source of information to improve and guide decision makers and caregivers. The obtained overall satisfaction score which varied significantly depending on the admission section, can be improved if corrective measures are taken. The development of the quality approach in the hospital is based on several aspects including patients' satisfaction assessment without neglecting the caregivers as well. NO declared conflict of interest. Acknowledgement to 6<sup>th</sup> year medical students (2017-2019) who participated in the elaboration of this survey.

## REFERENCES

Agence Nationale d'Accréditation en Santé (ANAES), 1996. La satisfaction des patients lors de leur prise en charge dans les

établissements de santé, revue de la littérature médicale. Paris: ANDEM/Service Evaluation Hospitalière.

- Amazian Kamelia *et al.* « Enquête de satisfaction des patients atteints de cancer dans un hôpital universitaire au Maroc », Santé Publique, 2013/5 Vol. 25, p. 627-632.
- Boujemaa EL Marnissi *et all.* Evaluation of Cancer Patient Satisfaction: A Transversal Study in Radiotherapy Department, Hassan II University Hospital, Fez, Morocco. *Hindawi Advances in Public Health.*; Volume 2019, Article ID 6430608, 8 pages <https://doi.org/10.1155/2019/6430608>
- Bovier P, Haller D, Lefebvre D. 2004. Mesurer la qualité des soins en médecine de premier recours: difficultés et solutions: Médecine ambulatoire. *Med Hyg.*62:1833-6
- Chougrani. Les questionnaires de sortie et la place des usagers dans le projet qualité l'Établissement hospitalier universitaire d'Oran. RSP 2014
- Direction générale de l'offre de soins. Instruction DGOS/PF2 n° 2012-287 du 19 juillet 2012 portant sur la généralisation de l'indicateur de mesure de la satisfaction des patients hospitalisés au sein des établissements de santé, publics et privés, exerçant une activité de médecine-chirurgie ou obstétrique (MCO). Paris : Ministère des affaires sociales et de la santé ; 2012
- Haute Autorité de santé. Indicateurs de qualité et de sécurité des soins. Mesure de satisfaction et d'expérience des patients hospitalisés de plus de 48h dans un établissement de médecine-chirurgie- obstétrique. Rapport campagne nationale 2018
- Haute autorité de santé. guide méthodologique : dispositif national de mesure de la satisfaction et de l'expérience des patients : e-Satis. Développement ET validation du dispositif. Septembre 2019.
- Iheb Bougmiza *et al.* Evaluation de la satisfaction des patientes hospitalisées au service de gynécologie obstétrique de Sousse, Tunisie. *The Pan African Medical Journal* 2011; 8:44
- Letaief M, Bchir A, Bensalem K, Soltani M. S. Evaluation de la satisfaction des patients dans un hôpital universitaire en Tunisie. *J Econ Med.* 2001/11-12;19(7-8):527-32.
- Ministère de l'Emploi et de Solidarité. Secrétariat d'État à la Santé. Direction des hôpitaux. Évaluation de la satisfaction des patients : Document d'orientation à l'intention des établissements de santé. *Informations Hospitalières* 1998 ; 47 : 1-15.
- Pourin C, Barberger-gateau P, Michel P, Salamon R., 1999. La mesure de la satisfaction des patients hospitalisés, première partie : Aspects conceptuels et revue des travaux. *Journal d'Economie Médicale.*17:101-15
- Relwendé Yameogo *et al.* Evaluation of patients' satisfaction in the department of cardiology at the University Hospital Yalgado Ouedraogo. *The Pan African Medical Journal* 2017; 28:267 doi:10.11604/pamj .2017.28.267.13288
- Salomon L, Gasquet I, Mesbah M, Ravaud P. 1999. Construction of a scale measuring inpatients' opinion on quality of care. *In t J Qual Health Care.*, 11 : 507-1 6.
- Service d'Évaluation Hospitalière. Manuel d'accréditation des établissements de santé. ANAES Paris 1999 ; 1-118.
- Shan L, Li Y, Ding D, Wu Q, Liu C, Jiao M, *et al.* (2016) Patient Satisfaction with Hospital Inpatient Care: Effects of Trust, Medical Insurance and Perceived Quality of Care. *PLoS ONE* 11(10):e0164366. doi:10.1371/journal.pone.0164366
- Stevens, M., Reininga, I. H. F., Boss, N. A. D., van Horn, N. V., & van Horn, J. R. (2006). Patient satisfaction at and after discharge. Effect of a time lag. *Patient Education and Counseling*, 60(2), 241-245. DOI: 10.1016/j.pec.2005.01.011