

Satisfaction of Patients Treated in Physical Medicine and Rehabilitation Department in CNHU-HKM of Cotonou

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Abstract

Satisfaction of patients is an important dimension of the hospital management and the evaluation of the quality of care and services offered to patients. **Objective:** To estimate the degree of satisfaction of patients admitted in Physical Medicine and Rehabilitation Department in the National Hospital and University Center (CNHU-HKM) in Cotonou. **Method:** Cross-sectional study with descriptive and analytical aim. It was led from June 15th to October 15th 2013, on 158 patients or guides of children or not communicating patients having ambulatory care in the Department of Physical Medicine and Rehabilitation and who agree to participate to the study. The level of global satisfaction of the subjects was estimated with a digital scale from 0 to 10. It was secondarily transformed into a discreet qualitative variable. **Result:** Rate of participation was 63.2%. Patients had deficiencies of rheumatological origine (41.1%), neurological (27.2%), traumatological (24.1%). Their pathologies were evolving since 1 month to 10 years. It was about their first attendance of the Rehabilitation Department of CNHU-HKM in 72.2%. Patients' degree of satisfaction was good for the deadline of expectation, reception (80%), cleanliness of the building, respect of patients' intimacy. Global satisfaction of patients was good in 72%. It was influenced by the deadline of evolution of the pathologies. **Discussion-Conclusion:** The level of satisfaction of patients admitted in the Rehabilitation Department in CNHU-HKM was acceptable. However, they are parameters that remain to be improved.

Keywords

Satisfaction, Hospital Care, Rehabilitation, Cotonou

1. Introduction

Patient satisfaction is an important aspect of hospital management and evaluation of the quality of care and services provided to patients. The concept of assessing patient satisfaction emerged about 1970 in United States, then in England and Northern Europe. Later, the World Health Organization (WHO) included it in the definition of quality of care assessment. Its evaluation enables health care system regulators to be accountable, to increase patients' power of choice and to improve quality of care provided. It also enables patients to describe their point of view on the course of their treatment. Those information will serve to identify different problems that patients have when be treated; and so, solutions will be brought [1]. If patient satisfaction evaluation is almost systematic or even mandatory in developed countries [2] [3], this is not yet the case in our context. In Benin, for example, very few hospital satisfaction surveys were conducted. Born with the reference hospital in Benin in 1962, but with numerous modifications, Physical medicine and Rehabilitation Department (PMRD) of the Hubert K. Maga National Hospital and University Center (CNHU-HKM) take care of patients of all ages and who have different deficiencies and limitations of activities. What satisfaction do these patients have from that department?

2. Patients and Method of Study

2.1. Type of Study and Patients

It is a cross-sectional study aimed to be descriptive and analytical, covering four months, from June 15th to October 15th 2013.

2.2. Study Population and Sampling

Population of this study was made of all patients admitted to the Physical Medicine and Rehabilitation Department of the CNHU-HKM in Cotonou during the study period.

Sampling was conducted taking into account the inclusion and non inclusion criteria listed below.

Inclusion Criteria:

- being a patient or accompanying parent of children or adult patients with impaired comprehension,
- admitted to the PMRD during the study period,
- having performed ambulatory care in the PMRD,
- agreeing by himself to participate to the study.

Exclusion Criteria:

Were excluded from the study, patients:

- having completed less than five re-education sessions,
- hospitalized in another CNHU-HKM department during functional rehabilitation sessions.

Two hundred and fifty (250) patients were enrolled, taking into account these criteria.

2.3. Settings

We have studied a dependent variable and some independent variables. Independent variables were socio-professional category, level of education, existence of social cover, area of patient pathology. For the dependent variable, it was represented by the overall patient satisfaction of the CNHU-HKM Physical Medicine and Rehabilitation Department in Cotonou. For this purpose, on a scale of 0 to 10, patients gave their appreciation of different parameters of the department (rooms, reception, care...). It was after the evaluation of each of these parameters that the assessment of the patient's overall satisfaction with the department was made, using the same scale from 0 to 10. From score given by the patient, his level satisfaction was categorized in "No Satisfaction", "Less Satisfaction", "Good Satisfaction" and "Very Good Satisfaction", depending on whether the score was 0 - 4, 4 - 6, 6 - 8, or 8 - 10, respectively.

Data collection was based on a standardized questionnaire. A direct interview with each patient, before or after a rehabilitation session, was organized. For patients meeting the conditions required to participate to the study, a copy of the questionnaire was provided to them for filling at home, alone or with parents help interpretation. To respect patient anonymity, questionnaire returning was obtained through the secretariat, in a box.

Participation rate was 63.2%: one hundred and fifty-eight (158) returns of questionnaires.

2.4. Data Analysis

Data were entered in Excel version 2007 and their analysis was done using EPI INFO version 3.5.1 software. Frequencies of the different variables were calculated. During the study of factors associated with overall patient satisfaction, a clustering of satisfaction levels was done. For that, the modalities "Less satisfaction" and "No satisfaction" were called "not satisfied" and those "Good satisfaction" and "Very good satisfaction" constituted the group of "satisfied". The statistical analyzes of the tables were done using the chi-square statistical tests and the reduced-deviation tests. Significance threshold was set at 5%.

3. Results

3.1. Patients Characteristics

Patients were 87 women (55.1%) and 71 men (44.9%). Their age ranged from 2 to 74 years, with an average of 42.3 ± 18.3 years. It was the first attendance for 77.2% of patients compared with 22.8% who have already attended the Physical Medicine and Rehabilitation department of CNHU-HKM at least once. **Table 1** presents other characteristics of the patients. It shows that patients were from various socio-professional classes with in top official workers (25.9%) and traders (20.3%). They were schooled with a level of at least secondary one for 77.8%. Patients presented various pathologies. The latter were predominantly about rheumatological (41.1%), neurological (27.2%) and traumatological ones (24.1%).

Table 1. Distribution of patients according to their socio-demographic and clinical characteristics.

	Numbers	Percentages (%)
Age		
Low than 25 years	43	27.2
25 to 45 years	36	22.8
45 to 65 years	62	39.2
More than 65 years	11	10.8
Sex		
Male	71	44.9
Female	87	55.1
Previous Department attendance		
Yes	122	77.2
No	36	22.8
Socio-professional classes		
Official workers	41	25.9
Traders/sellers	32	20.3
Learners	24	15.2
Workers	21	13.3
Retirees	16	10.1
Households	16	10.1
Others	8	5.1
Education levels		
None (Unschooling)	21	13.3
Primary	14	8.9
Secondary	52	32.9
University	71	44.9
Types of pathologies		
Rheumatology	65	41.1
Neurology	43	27.2
Traumatology	38	24.1
Uro-gynecology	9	5.7
Pneumology	3	1.9
Social medical cover		
Total at 100%	49	31.0
Partial at 90%	14	8.9
Partial at 80%	66	41.8
None	29	18.3

Those pathologies were evolving between 1 month and 10 years with an average delay of evolution of 8.50 ± 18.55 months.

3.2. Patient Satisfaction

The mean wait times estimated by patients were 8.2 ± 5.43 days for medical examination; 9.45 ± 15.32 days for the beginning of rehabilitation sessions and 13.54 ± 13.85 minutes for the start of each physiotherapy session. **Figure 1** and **Figure 2** present results of patient's appreciation of various parameters in order

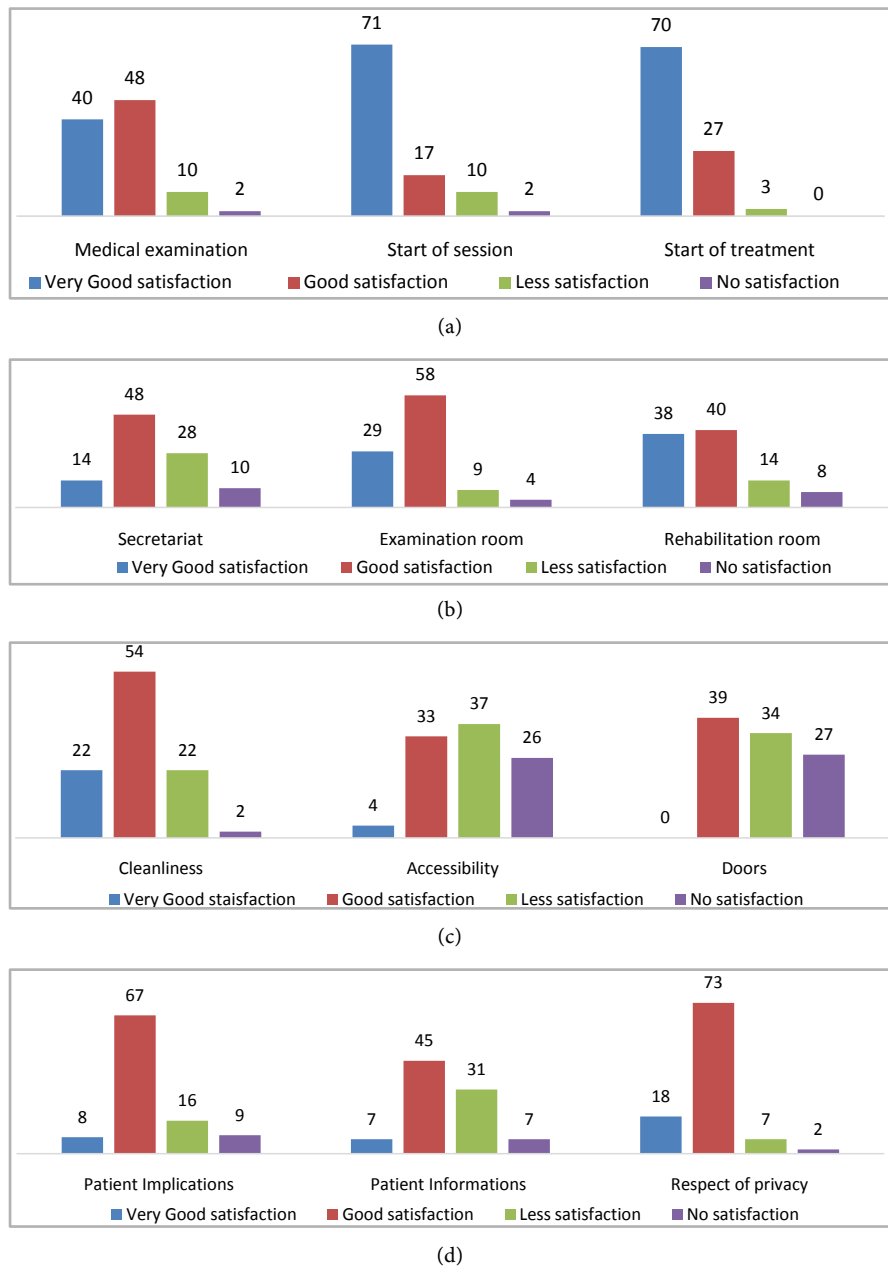


Figure 1. Distribution of patients according to their level of satisfaction for different parameters (sectory satisfaction). (a) Timeout; (b) Patient reception; (c) Service rooms; (d) Diagnostic and therapeutic procedures.

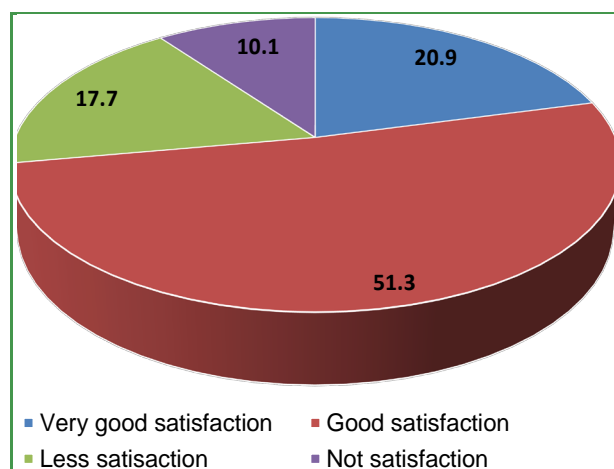


Figure 2. Distribution of patients according to their overall assessment of PMRD satisfaction.

to assess their degree of satisfaction and their overall satisfaction. In general, patients' level satisfaction was at least good (62% to 97%). Unsatisfaction was showed specially about information of patient (52%) and accessibilities in the department (37%). The study of factors associated with the overall patient's satisfaction is presented in **Table 2**. Only evolving time of pathologies is linked with patient's satisfaction ($p = 0.01$).

4. Discussion

Patients in the study consisted of 44.9% of men versus 55.1% of women, with a sex ratio of 0.82. These data are comparable to the distribution of the Benin population in general, that is 52% of women against 48% of men. Attendance of men and women at the Physical Medicine and Rehabilitation Department of the CNHU-HKM in Cotonou is thus proportional to the distribution of the population of Benin, by sex. From the review of the literature, studies done on patient satisfaction in physical medicine reported varying results. While authors have noted a male predominance [4] [5] [6] [7], others have instead found a female predominance [8] [9].

Patients' age in the sample was 2 to 74 years with an average of 42.3 ± 18.26 years. This demonstrates that in the Physical Medicine and Rehabilitation Department of the CNHU-HKM of Cotonou, patients of all ages from infants to elderly are received. This finding was confirmed by other studies carried out in different rehabilitation centers [4] [5] [7] [8] [9] [10] [11].

Regarding their level of education, patients of the study were enrolled in almost all cases, the out-of-school children being mainly children of less than the age of schooling. Almost four out of five patients had at least secondary level. This result can't be superimposed on the distribution of the Beninese population according to the level of schooling, the rate of literacy according to UNESCO being 43.1% [12]. In Ivory Coast, Alloh *et al.* [7] reported similar results, with 84% of patients in their series having at least secondary level. This large disproportion

Table 2. Factors associated with overall patient satisfaction.

	Not satisfied	Satisfied	Statistical test
Sex			
Men	20	51	$X^2 = 0.00;$ $p = 0.98$
Women	24	63	
Previous department attendance			
Yes	11	25	$X^2 = 0.17;$ $p = 0.68$
No	33	89	
Education level			
Unschooling	5	16	$X^2 = 0.42;$ $p = 0.94$
Primary	4	10	
Secondary	16	36	
University	19	52	
Social medical cover			
Total	17	32	$X^2 = 4.08;$ $p = 0.13$
Partial	23	57	
None	4	25	
Types of pathologies			
Rheumatology	16	49	$X^2 = 2.68;$ $p = 0.44$
Neurology	16	27	
Traumatology	9	30	
Others	3	9	
Evolving time of the pathology			
Mean \pm standard deviation	4.39 \pm 6.71	9.03 \pm 14.12	$U_a = 2.79;$ $p = 0.01$

between the overall enrollment rate and the proportion of patients attending rehabilitation centers in our regions could be explained by the fact that more educated patients are, more informed they are about the availability of different types of treatment of pathologies, therefore physiotherapy.

Figure 1 shows that patients were particularly satisfied with waiting times, their reception in the counseling room and respect for their privacy (89% to 97%). About practicability of doors, cleanliness of rooms, reception in the office of secretary and in the rehabilitation room, proportion of patients satisfied were less (62% - 80%). The disappointment was particularly obtained about accessibilities in the department as well as information of patients (37% to 50%). These points of dissatisfaction could be related to socio-economic and cultural difficulties. Indeed, while it is well known that environment has a significant place in the definition of disability, financial and technological resources in our countries do not sufficiently allow for this issue of accessibility for people with reduced mobility, to services and public places. As for the non-information of patients, it

could be justified by the fact that the caregivers do not try to come down to a physical and socio-linguistic level enabling them to really communicate with their patients. This is a particular situation to be deplored given the large part of the communication in the care of patient. According to Casserley *et al.*, in Ireland [11], information being processed was given to patients in 94% of the cases.

The overall satisfaction level of patients was good in three out of four patients. This result is comparable to that reported by several authors, both in Africa and developed countries [4] [5] [6] [7] [8] [10] [11]. This overall satisfaction rate of patients in our study was not influenced by any of the socio-demographic or clinical factors studied. These are encouraging results which suggest that the staff is benevolent, occupied by a good professional conscience. But it's noticed that patients whose pathologies were involved since a long time were more satisfied than the else.

5. Conclusion

In the Physical Medicine and Rehabilitation Department of CNHU-HKM of Cotonou, patients of all ages, various socio-professional categories were taken care of. Overall, they were satisfied with the wait times, the welcome and the care received. But about accessibility to the service and communication with patients, an important part of them are not satisfied. Instead of the limited resources of our African states and the language barriers, it would be interesting for these patients' complaints to be taken into account in order to reduce their disability status, which is the main goal of rehabilitation medicine.

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Conflicts of Interest

Authors declared they have no conflict of interest.

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