# Surgical Care Delivery at University Teaching Hospital of Kigali: "A Patient Satisfaction Survey"

F. Ntirenganya<sup>1\*</sup>, EN. Mirimo<sup>2</sup>, DS. Mugenzi<sup>1</sup>, M. Nyundo<sup>1</sup>, G. Ntakiyiruta<sup>1</sup>

#### **ABSTRACT**

Background: Patient satisfaction is an important quality assurance measure in the delivery of health care.

**Objectives**: The objectives were to assess current patient's degree of satisfaction, to document the main reasons for non-satisfaction and identify potential areas for improvement in surgical care delivered at CHUK.

**Methods**: We conducted a prospective cross sectional survey on patients attending a tertiary surgical unit in Rwanda. For 6 weeks, 10 to 20 patients were randomly included in the study after an informed consent. A pre-established questionnaire was filled and descriptive statistics used to analyze the data using SPSS 16.02 and Excel computer programs.

**Results**: 80 patients have been recruited and accepted to be part of the study. The overall satisfaction was 94%. 93.8% have been well oriented.78.8% well received. 90% judged the consultation time enough. 96.87% reported having been respected during consultation. 84.37% of those who underwent surgery reported having received a postoperative fitness check appointment. Asked to mark their surgeon after consultation or on discharge, the patients gave an average note of 9.5 over 10. However 52.5% waited for more than 3hours before seeing a doctor in OPD clinic. For those who underwent surgery, only 58.53% were told indications for surgery, and no patient (0%) was told eventual complications. 41.46% were not given appointment for elective surgery, 62.5% patients were not satisfied by information received on their disease and its management. 96.87% patients were not included in the treatment plan decision making.

**Conclusion**: The overall patients 'satisfaction attending CHUK surgical facilities was 94%. Clinical and nonclinical factors including waiting time, patient-care provider interactions, patient-centered care concept, and management of Rendez-vous have been identified as areas to be improved

**Keywords:** Surgical care - Patient satisfaction - Survey.

#### **RESUME**

Contexte: Dans la prestation des soins de santé, la satisfaction des patients est une mesure importante d'assurance qualité.

**Objectifs**: Les objectifs étaient d'évaluer le degré de satisfaction des patients , de documenter les principales raisons de la non-satisfaction et d'identifier les domaines potentiels à améliorer dans la délivrance des soins chirurgicaux livré au CHUK.

**Méthodes**: Nous avons mené une enquête transversale prospective sur chez les patients reçus dans une unité de chirurgie tertiaire au Rwanda. Pendant 6 semaines, au hasard, 10 à 20 patients ont été inclus chaque semaine dans l'étude, après un consentement éclairé. Un questionnaire préétabli a été rempli, l'analyse statistique faite en utilisant les logiciels SPSS 16.02 et Excel.

**Résultats**: 80 patients ont été recrutés et ont accepté de faire partie de l'étude. La satisfaction globale était de 94%. 93,8% ont été bien orientés.78.8% bien reçu. 90% jugent assez le temps de consultation. 96,87% ont déclaré avoir été respecté lors de la consultation. 84,37% de ceux qui ont été opéré, ont déclaré avoir reçu un plan de suivie postopératoire. Les patients ont donné une note moyenne de 9,5 sur 10 aux chirurgiens. Cependant 52,5% affirment avoir attendu plus de trois heures avant de voir un médecin en la consultation externe. Pour ceux qui ont subi une intervention chirurgicale, seulement 58,53% était au courant de l'indication de la chirurgie, et aucun patient (0%) ne se rappelait des éventuelles complications. 41,46% avec une pathologie chirurgicale confirmée, n'ont pas eu de date pour chirurgie programmée. 62,5% des patients n' ont pas été satisfaits par l'information reçue sur leur maladie ainsi que sur sa gestion. 96,87% des patients affirment ne pas avoir été inclus dans la prise de décisions thérapeutique.

**Conclusion**: La satisfaction globale des patients reçus au service de chirurgie du CHUK était de 94%. Les facteurs cliniques et non cliniques y compris le temps d'attente en consultation, les interactions et communication entre prestataires de soins et patients, le concept de soins centrés sur le patient, et la gestion des Rendez-vous ont été identifiés comme des domaines à améliorer.

Mots-clés: : Soins chirurgicaux - satisfaction des patients - enquête

#### **INTRODUCTION**

A Patient Satisfaction is an attitude according to which desired health care and quality have been achieved. Satisfaction is achieved when the patient/client's perception of the quality of care and services that he receives in a healthcare setting has been positive, satisfying, and meets his/her expectations. [1]

One of the significant trends in the development of modern healthcare is the involvement of

Patient /clients in the management of their care and treatment. This is recognized in current

Health strategies both in Rwanda and in other jurisdictions. [2,11]To support this development, it is important to acknowledge that the experiences of patients/clients on health care vary considerably. Some may have an

\* Correspondence to: NTIRENGANYA Faustin, MD P.O Box 655 Kigali Department of surgery University Teaching Hospital of Kigali E-mail: fostino21@yahoo.fr Phone: + 250788732667 occasional intervention as in outpatients clinics while others have a more permanent and long-term relationship with a service provider depending on the nature and extent of their need, as seen in surgical in-patients. [3] Patient centered health care is a new concept in our health services. However, it is entirely desirable and proper that the views of patient/clients should be taken into consideration when planning to improve health services in general and surgical care delivery in particular.

This study is designed to provide both a helpful and supportive overview of the patient satisfaction for service provided in the surgical department of university teaching Hospital of Kigali.

#### **METHODS**

The aim of this study was to improve surgical care delivered at CHUK. The specific objectives were to evaluate the

<sup>&</sup>lt;sup>1</sup> Department of surgery, Kigali University Teaching Hospital, University of Rwanda

<sup>&</sup>lt;sup>2</sup> Kigali University Teaching Hospital, University of Rwanda

patients' satisfaction after surgical care, to document the main reasons for non-satisfaction and to identify areas where improvement is needed.

It was a prospective cross-sectional study conducted in the department of surgery of University teaching hospital of Kigali (CHUK).

CHUK is a 500 beds tertiary public referral hospital located in center of Kigali city and receives patients transferred from district hospitals, private clinics and emergency cases. The surgical department of this hospital has 120 beds with orthopedics and trauma, general surgery, urology neurosurgery and plastic surgery as main specialized units.

This study covered 5 working days and 1 week-end, during a period of 6 weeks ranging from 4th August to 7th September 2012. For 6 weeks, on different days of the week, 10 to 20 patients were randomly included in the study after an informed consent. In the first week, patients were surveyed on Monday, while it was on Tuesday in the second week, the third on Wednesday etc, so that we have the full coverage of all working days and one weekend.

The sample size was calculated using the Fischer's formula. The study included 80 patients. 44 received as outpatients and 36 as inpatients. Patients were randomly recruited from OPD and surgical wards. In outpatients, 15 patients were interviewed in general surgery, 15 in orthopedics, 8 in urology and 6 in neurosurgery. The patients were selected randomly before consultation based on the list of patients booked on that day. The interview was administered at the end of the consultation. As far as in-patients are concerned, they were randomly selected a day before discharge and evenly distributed in all surgical subspecialties. Every week, only 20% of the questionnaires had to be administered, and the next week on a various day, in order to avoid bias. Were excluded from the study:

- 1. All patients from whom an informed verbal consent was not obtained
- 2. All patients with Glascow coma scale less than 15/15.
- 3. Patients less than 18 years of age.

Data was collected using a predefined questionnaire and analysis performed using SPSS 16.02 and EXCEL computer programs.

The research proposal was submitted to CHUK research and ethical committee for approval. The confidentiality was ensured to all participants by anonymizing the questionnaires. The ethical committee judged unnecessary to obtain written informed consent, as there was no action intended, and recommended to obtain verbal consent.

### **RESULTS**

80 patients have been included in the study:44 (55%) were outpatients and 36(45%) were inpatients. 54(67.5%) males and 26(32.5%) females. The mean age was 38.63, ranging from 18 to 82 years old.

The overall patient's satisfaction was 94% from very satisfied to moderately satisfied. Most of the Patients knew CHUK as it was not their first visit in 65 patients (81.20%). However, 15 (18.8%) patients were in CHUK

for their first time. 75(93.8%) respondents got where to ask for information. 63(78.8%) patients were well received ,10 (12.5%) were moderately received and 7(8.8%) were badly received. 15 respondents (18.80%) entered the surgical department through Accident and Emergency, 58 (72.50%) from Outpatient Departments and 7 (8.80%) from elsewhere in the hospital.

92.5% of patients saw the doctor they wanted in OPD. 90% reported having been well received and given enough time to express themselves by the consulting surgeon. 80.32% of respondents were satisfied by answers and explanations received. 41(51.2%) of patients in OPD clinic were found to have a pathology needing an operation. Among them 58.53% were told the indication for surgery. Very few of them received explanations about the procedure, complications, prognosis and postoperative follow up plan. The majority of patients (52.5 %) had to wait more than 3h before consultation. 62.49% of patients who underwent surgery received a preoperative visit by the operating surgeon. In postoperative period, 70 % of patients received feedback on operative findings and procedure done. 62.5% had a clear postoperative follow up plan at discharge.

Asked to mark their surgeons, 34% of respondents gave 10 points out of 10 to the surgeon who consulted or operated them, 26% gave 9 points, 23% gave 8points , 9% gave 7points , 4% gave 6 points ,2% gave 4 points ,1% gave 3points ,1% gave 0 points. The average was 9.5.

#### **DISCUSSION**

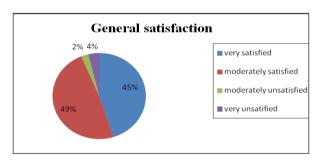


Figure 1: Level of satisfaction

The overall satisfaction was 94% with 45% of respondents and 49% being very and moderately satisfied respectively. However, 6% of patients were not satisfied at all.; this result is similar to 93.4% overall satisfaction as "excellent" or "very good" in Survey done by Han-Ren et al of Short-term Patient Satisfaction after Surgery[4] .It is also comparable to 96.8% overall level of satisfaction in a survey done by Myles PS et al, after anaesthesia and surgery [5] and to the result obtained in three Health Districts of the Eastern Cape survey done by Phaswana-Mafuya et al in South Africa showing that more than 90% indicated that, they were pleased with the way they were treated in the facility, they will come back next time and they would tell their friends to come to the facility if they fell sick[6] .

Similarly 91.3%, in Kouga patient satisfaction survey done by Sharon Munyaka et al in South Africa, of the respondents will use the facility again, they will tell their family and friends about the clinic and the majority agrees that they are treated each time they come to the facility. Most categories were satisfactory [7]. But this result is higher than 83% of satisfaction got in Amanu Kano Teaching Hospital survey done by Z Iliasu et al in Nigeria

[8] because they considered the quality of services rendered in the whole hospital, while we emphasized on Surgery.

#### **Customer care**

Most of the Patients knew CHUK: 65 patients (81.20%) because it was not the first time to be treated there . 75(93.8%) got where to ask information but 5(6.2%) others did not get information because they have not seen a specific customer care desk or persons in charge to guide them. 63(78.8%)patients were well received by health workers,10 (12.5%) were moderately well received this makes 91.3% and for the remaining 7(8.8%) were badly received. These figures are in the same range as 86% of satisfaction by customer care and relationship between patients and other health workers in Amanu Kano Teaching Hospital survey done by Iliasu Z. et al.[8]

Table1: General knowledge and Customer Care

		Frequence	%
Did you know KUTH?	Yes	65	81.20%
	No	15	18.80%
Did you get somewhere to ask information?	Yes	75	93.80%
	No	5	6.20%
How have you been received?	Well	63	78.80%
	Somehow well	10	12.50%
	Bad	7	8.80%
Where have you been received?	Emergency	15	18.80%
	Outpatient	58	72.50%
	Elsewhere	7	8.80%
Who received you?	Nurse from		
	reception	56	70.00%
	Another nurse	18	22.50%
	Surgeon	1	1.20%
	Medical student	0	0.00%
	Another	5	6.20%
	Total	80	100.00%

## **OPD Clinic appreciation**

Table 2: OPD Clinic appreciation

			% within	
		Frequence	responders	%in the total sample
Did you meet the	Yes	74	92.50%	92.50%
doctor you wanted?	No	6	7.50%	7.50%
Doctor's	Very well	72	90.00%	90.00%
reception	Somehow good	7	8.80%	8.80%
	Bad	1	1.20%	1.20%
Consultation time	Yes,enough Yes,somehow	72	90.00%	90.00%
	enough No	4	5.00%	5.00%
		4	5.00%	5.00%
Did you tell your wishes and	Yes No	61	76.20%	76.20%
guestions to the		17	21.20%	21.20%
doctor?	nothing to ask	2	2.50%	2.50%
Was you satisfied by the responses?	Not applicable	19		23.80%
responses:	Yes, very happy	49	80.32%	61.20%
	Yes,a bit	7	11.47%	8.80%
	No	5	8.19%	6.20%
Did you have a disease to be operated?	Yes	41	51.20%	51.20%
	No	28	35.00%	35.00%
	Don't know	11	13.80%	13.80%
Did he tell you indication for Surgery?	Not applicable		13.00 /0	
	Yes,enough	39	F0 F00/	48.80%
	Yes,a bit	24	58.53%	30.00%
	No.	4	9.75%	5.00%
Did be tell		13	31.70%	16.20%
Did he tell you complications of	Not applicable	39		48.80%
surgery?	Yes,enough	0	0.00%	0.00%
	Yes,a bit	0	0.00%	0.00%
	No	41	100%	51.20%
Did he gave you	Not applicable	39		48.80%
rendez-vous for	Yes,no precise	39		48.80%
Operation?	time	2	4.87%	2.50%
	Yes,<2w	16	39%	20.00%
	Yes,>2w	6	14.63%	7.50%
	No	17	41.46%	21.20%
Have you been	Not applicable		4070	
operated?	Yes	39		48.80%
	No	32	78.04%	40.00%
D		9	21.95%	11.20%
Do you know Doctor who operated you?	Not applicable	48		60.00%
	Yes	23	71.87%	28.80%
	No	9	28.12%	11.20%
Is he the same	Not applicable	9	20.1270	11.2070
as who consulted	• • •	57	71.20%	71.20%
you?	Yes	10	43.47%	12.50%

	No	12	52.17%	15.00%
	don't know	1	4.34%	1.20%
How many consultations?	Not applicable	48		60.00%
	None	1	3.12%	1.20%
	1 time	6	18.75%	7.50%
	2 times	5	15.62%	6.20%
	3 times	7	21.87%	8.80%
	4-6 times	4	12.50%	5.00%
	>6 times	8	25%	10.00%
	don't know	1	3.12%	1.20%
Information	Not applicable	48		60.00%
about operation	Yes,enough	9	28.12%	11.20%
	Yes,a bit	3	9.37%	3.80%
	No	20	62.50%	25.009
Helped in	Not applicable		02.0070	
preparation of operation	Yes,enough	48	07.500/	60.009
operation	Yes,a bit	12	37.50%	15.009
	No.	1	3.12%	1.209
Different	Not applicable	19	59.37%	23.809
managements	Yes	48		60.009
for your Disease	No.	1	3.12%	1.209
Oh-if	Not applicable	31	96.87%	38.809
Choice of your management	Not applicable	48		60.009
	Yes	0	0.00%	0.009
	No	32	100%	40.009
Indications for operation	Not applicable	48		60.009
operation	No	11	34.37%	13.809
	a bit	4	12.50%	5.00%
	tried	3	9.37%	3.809
	enough	14	43.75%	17.50%
Contraindications	Not applicable	**	10.1070	
for surgery	No	48	00.000/	60.009
	a bit	29	90.62%	36.209
	tried	0	0.00%	0.009
	enough	1	3.12%	1.209
Listened by the	Not applicable	2	6.25%	2.50%
doctor in office		48		60.009
	Yes,enough	18	56.25%	22.50%
	Yes,a bit	1	3.12%	1.209
	No	11	34.37%	13.809
	I couldn't talk	2	6.25%	2.509
Duration of consultation	Not applicable	48		60.00%
	Yes,enough	18	56.25%	22.50%

	Vec e hit			
	Yes,a bit	3	9.37%	3.80%
	No	11	34.37%	13.80%
Encouraged to ask questions	Not applicable	48		60.00%
	Yes,enough	2	6.25%	2.50%
	Yes,a bit	1	3.12%	1.20%
	No	29	90.62%	36.20%
Respect during consultation	Not applicable	48		60.00%
consultation	Yes,enough	31	96.87%	38.80%
	Yes,a bit	1	3.12%	1.20%
	No	0	0.00%	0.00%
Imaging used to explain the disease	Not applicable	48		60.00%
	Yes	8	25%	10.00%
	No	24	75%	30.00%
Helped by those imaging	Not applicable	72		90.00%
	Yes,enough	8	100%	10.00%
	Yes,a bit	0	0.00%	0.00%
	No	0	0.00%	0.00%
	Total	80	100.00%	100.00%

74 (92.5%) patients met the Doctor they wished and 6 (7.5%) patients did not. During consultation 72(90%) were very well received by their consulting Doctor. It is comparable to 90% of satisfaction seen in Amanu Kano Teaching Hospital survey done by Z Iliasu et al. [8] In our survey, 72(90%) considered having been given enough time in consultation office. Most of time, patients are many and it is fairly understandable that some patients (10%) had not enough time as they wished. This is the tendency found in another study done on Patient Expectation and Satisfaction Survey by W. Qidwai et al , at a teaching hospital in Karachi, Pakistan. They measured consultation time and the average spent time was 13.89 minutes instead of the expected consultation time of 16.37 minutes with the doctor. [9]

The waiting time is long for more than half of respondents. As 52.5% waited for more than 3h. This seems to be a general tendency in many public hospitals in developping countries as found in a survey done by Sharon Munyaka et al at KOUGA Hospital in South Africa(26) and in Karachi teaching hospital by W. Oidwai et al[9] . In this last survey, the average of waiting time was 45.55 minutes against an expected average of 12.69 minutes. It is a challenge and an area to improve. Differently 70% were satisfied by waiting time in Amanu Kano Teaching Hospital survey done by Z Iliasu et al[8] and 80% agreed about reasonable waiting time before being examined in survey done by Phaswana-Mafuya et al in Eastern Cape of South Africa.[10]Contrary to 90.8% of satisfaction by explanation of the surgical condition they had in the survey done by Han-Ren et al of Shortterm Patient Satisfaction after Surgery[4], in this survey only 58.53% judged enough the explanations about their conditions as 13.8% were not even told if they will need an operation or not. For those planned for surgery, 31.7% were not told indication and no one (%) explained about possible post op complications. This represents a huge care deficit. Measures have to be put in place to overcome it.

Table 3. Inpatients Services appreciation

Not applicable Yes, 1 visit Yes, >1 visit Don't know No Not applicable Yes, enough	48 11 9 6 6 6	responders 34.37% 28.12% 18.75%	60.00% 13.80% 11.20%
Yes,1 visit Yes,>1 visit Don't know No Not applicable	11 9 6 6	28.12% 18.75%	13.80% 11.20%
Yes,>1 visit Don't know No Not applicable	9 6	28.12% 18.75%	11.20%
Don't know No Not applicable	6	18.75%	
No Not applicable	6		
Not applicable	-		7.50%
		18.75%	7.50%
Yes,enough	57		71.20%
	18	78.26%	22.50%
Yes,somehow	3	13.04%	3.80%
No	2	8.70%	2.50%
Not applicable	48		60.00%
Yes	7	21.87%	8.80%
No	23	71.87%	28.80%
don't know	2	6.25%	2.50%
Not applicable	48		60.00%
Yes,enough	18	56.25%	22.50%
Yes,a bit	9	28.12%	11.20%
No	5	15.62%	6.20%
Not applicable	48		60.00%
Yes		62 50%	25.00%
No	12		15.00%
Not applicable	60		75.00%
Yes,enough		70.00%	17.50%
Yes,a bit			7.50%
No	-		0.00%
Not applicable	-	076	75.00%
Yes,enough		EE0/	13.80%
Yes,a bit			3.80%
No			7.50%
Not applicable	-	30%	7.507
Yes,enough		E0/	
	-		1.20%
No	_		0.00%
		95%	23.80%
* *		===/	75.00%
			18.80%
No.			3.80%
	_		2.50% 100%
	Yes No don't know Not applicable Yes,enough Yes,a bit No Not applicable Yes,enough	No         2           Not applicable         48           Yes         7           No         23           don't know         2           Not applicable         48           Yes, a bit         9           No         5           Not applicable         48           Yes         20           No         12           Not applicable         60           Yes, enough         14           Yes, abit         6           No         6           No tapplicable         60           Yes, abit         3           No         19           No tapplicable         60           Yes, abit         0           No         19           No tapplicable         60           Yes, abit         0           No         19           Not applicable         60           Yes, abit         0           No         19           Not applicable         60           Yes, abit         0           No         15           Yes, abit         0           No         15<	No         2         8.70%           Not applicable         48         7         21.87%           Yes         7         21.87%         71.87%         48         71.87%         48         71.87%         40         6.25%         Not applicable         48         48         72.50%         7

As stated in Preoperative Assessment testing clinic done by David Hepner et al: preoperative visits have a significant impact on patient satisfaction, with information and communication being the most positive component versus the total amount of time spent most negative component[12]; in our survey,11(34.37%) operated were visited once by the surgeon who will operate them,6(18.75%) were not visited and 6 remaining did not know about visits. Many of them,18(78.26%) were helped by those visits,3(13.04%) somehow helped. As it is proved in survey done by Leandro Yoshinobu et al[13], information about surgery reduced anxiety in the pre-operative period. However, it had an opposite effect in 2(8.7%) as the patients' wishes were not cared for.

After discharge,12(37.5%) had no follow up plan. As recommended by Ghosh S et al in UK[14] patients should have clear discharge plan and could even go home with a hospital contact to call if any concern.

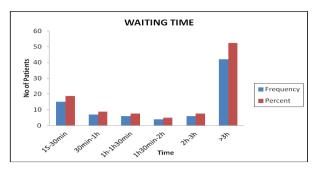


Figure 2: Waiting time before consultation

#### **CONCLUSION**

Overall, the study showed a high level of patients' satisfaction. The majority of patients who attended the Surgical Department in CHUK will come back again for treatment and tell their friends to do so. However, there are clinical and non clinical aspects identified as needing improvements. These include waiting time, information pathways, customer care, patients implication in decision making, postoperative follow up and appointments.

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