Satisfaction of patients received in emergencies in the department of obstetrics and gynecology at the Yalgado Ouedraogo teaching hospital: comparative study before and after the introduction of free care

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ABSTRACT

Background: The quality of care perceived by the users of health care services is an important indicator of the quality of care. The aim of this study was to assess the satisfaction of patients received in obstetric and gynecological emergencies department of Yalgado Ouedraogo Teaching Hospital before and after the introduction of free care.

Methods: This was a cross-sectional investigation. Data collection was carried out from February to July 2016, covering the last three months before the start of free care and the first three months of implementation of this free policy in Burkina Faso.

Results: A total of 620 patients formed the sample. The reception (p=0.0001), the waiting period (p=0.0001), respect for treatment schedules (p=0.0001), respect for intimacy (p=0.0001), communication between providers and patients (p=0.007), the comfort of the delivery room (p=0.003) and the comfort of the ward room (p=0.002) were more favorably appreciated by patients before the free treatment than during that period. Overall patient satisfaction was better before the effectiveness of free care (p=0.003).

Conclusions: The realization of free care process was followed by a lower patient’s satisfaction reflecting an alteration in the quality of health care services. A situational analysis of this free health care process is necessary in order to make corrective measures. Also adequate preventive measures should be adopted before any implementation to a larger scale of this free policy.

Keywords: Emergencies, Free care, Gynecology, Obstetrics, Ouagadougou, Satisfaction

INTRODUCTION

Patient satisfaction is an important indicator of health care quality.1-3 The quality assessment should then, beyond the technical aspect, take into account the quality perceived by health care users.3-5 However, users satisfaction and its quantification are difficult to identify. The essential characteristic of satisfaction is the fact that it is not a quantitative factor but it belongs to the behavior’s field including its emotional dimension.6,7 The problem of patient’s satisfaction is more critical when they are admitted in an emergency context. Indeed, the numerous expectations of the patients and the urgency of the medical procedures can sometimes be antagonistic. In Burkina Faso, there were significant changes in health care facilities, since the notification in March 2016 of free health care for women and children under five years old. The attendance of health facilities increased
considerably while the capacity of the infrastructures did not change. The quality of users’ reception as well as the time to offer first aid can be altered in these conditions, which could affect their satisfaction on the care received. The aim of this work was to assess the level of patient’s satisfaction about the quality of emergency care after implementation of the free care policy in the department of Obstetrics and Gynecology in Yalgado Ouédraogo teaching hospital, compared to the pre-free situation.

METHODS

This was a cross-sectional, descriptive and analytical survey. The study was approved by the Institutional Ethics Committee. Data were over a 6-months period from 1st February 2016 to 31st July 2016. The first three months concerned the period before the beginning of the free care program which took place from 1st April 2016. The data collection was prospective.

The estimation of the sample size was made on the basis of the proportion’s formula

\[
\frac{2^2pq}{(ME)^2}
\]

with \( p = 87.7\% \) corresponding to the proportion of beneficiaries satisfied with the offer of health care in the maternity wards of Ouagadougou city according to an earlier study.\(^9\) A minimum sample size of 180 individuals per study period (before and during gratuity) was thus obtained, considering a non-response rate of 10%. The study included 310 patients before the implementation of free health care and 310 other patients after the beginning of this policy, for a total of 620. The study population was composed of patients who were admitted in emergency and hospitalized for at least 24 hours. The inclusion criteria were as follows: to have been admitted urgently in the Department of Obstetrics and Gynecology during the study period; have been hospitalized for at least 24 hours; have agreed to participate in the study. Were excluded patients whose clinical condition did not allow performing an interview.

The investigator was a medical student in thesis year and trained for this purpose. Interviews were conducted directly with hospitalized patients when they were discharge home and after completion of all necessary procedure. For each item, the interviewees were asked to respond to an ordinal scale of Likert in 4 points: very satisfied, mildly satisfied, poorly satisfied and not satisfied. Secondly, the modalities were grouped, the first two (satisfied and rather satisfied) corresponding to the patients satisfied and the last two (somewhat satisfied and not satisfied) to those not satisfied.\(^9\) The Chi-2 test was used for data analysis with an error risk of 0.05 and a confidence interval of 95%. The survey was conducted after the participants’ consent. The purpose of the study was first of all clearly explained to them. The refusal to participate in the study did not involve any modification or sanction to the patient’s management. Confidentiality and anonymity of the data were ensured.

RESULTS

Frequency of emergencies

From February to July 2016, 5102 patients were admitted in emergency. The highest admission frequency was recorded in the month of June (Table 1).

| Period       | Month       | Number | Percentage |
|--------------|-------------|--------|------------|
| Before the free care | February   | 703    | 13.8       |
|               | March       | 664    | 13.0       |
|               | April       | 797    | 15.6       |
|               | Subtotal 1  | 2164   | 42.4       |
| During the free care | May       | 976    | 19.2       |
|               | June        | 1059   | 20.7       |
|               | July        | 903    | 17.7       |
|               | Subtotal 2  | 2938   | 57.6       |
| Total         |             | 5102   | 100        |

Patient’s characteristics

The average age was 29.53±2 years, ranging from 14 to 46 years. The distribution of patients by socio-professional category was almost similar in both periods. Illiterate women accounted for 32.9% before the beginning of the free health care program, and 36.2% thereafter (Table 2).

| Characteristics | Before the free care n | % | During the free care n | % |
|-----------------|------------------------|---|------------------------|---|
| Socio professional category | 16 | 5.2 | 10 | 3.3 |
| Private agent | 35 | 11.3 | 42 | 13.5 |
| Public service agent | 51 | 16.5 | 55 | 17.7 |
| Student | 61 | 19.7 | 48 | 15.5 |
| Shopping | 147 | 47.3 | 155 | 50.0 |
| Housewife | 102 | 33.9 | 112 | 36.2 |
| Koranic school | 11 | 3.5 | 08 | 2.8 |
| Primary | 82 | 26.5 | 64 | 20.6 |
| Upper secondary | 115 | 37.1 | 126 | 40.6 |

The patients were from the city of Ouagadougou in 190 cases (61.3%) before the gratuity and in 185 cases (59.7%) during the free period process.
**Patient satisfaction**

The welcoming, the waiting time, the respect of treatment’s time, the respect of the intimacy, the communication between providers and patients and the comfort of the facilities were more favorably appreciated by the patients before the free health care process than during that period. The overall satisfaction of the patients was better before the effectiveness of the gratuity (Table 3).

| Table 3: Comparative analysis of patient satisfaction before and during free care (n=620). |
|---------------------------------------------------------------|
| **Area of satisfaction** | **Satisfaction Before the free care** | **During the free care** | **P** |
|-------------------------|-----------------|-----------------|------|
|                         | **n** | **%** | **n** | **%** |      |
| Quality of the reception| 160  | 51.6 | 108  | 34.8 | 0.0001|
| Waiting time            | 64   | 20.6 | 54   | 17.4 | 0.0001|
| Availability of staff in day | 276 | 89   | 227  | 73.2 | 0.124 |
| Availability of staff at night | 260 | 83.8 | 248  | 80   | 0.326 |
| Care schedule           | 197  | 82.1 | 147  | 63.4 | 0.0001|
| Intimacy                | 234  | 75.5 | 203  | 65.5 | 0.0001|
| Communication           | 208  | 67.1 | 182  | 58.7 | 0.007 |
| Comfort of the delivery room | 271 | 87.4 | 265  | 85.5 | 0.003 |
| Comfort of the hospital room | 230 | 74.2 | 200  | 64.5 | 0.002 |
| Quality of meals        | 141  | 61.6 | 145  | 63.9 | 0.652 |
| Overall satisfaction    | 233  | 75.2 | 207  | 66.8 | 0.003 |

**DISCUSSION**

**Methodological considerations**

The profile of the investigator (medical student) may have influenced the patient's responses about their level of satisfaction, probably due to fear of reprisal or courtesy. However, the aim of conducting the interviews at the end of the hospital stay was to minimize this influence. There was no distinction done between old and new emergency users. Also the patients admitted for obstetrics emergencies were not distinguished from those admitted for gynecological emergencies whereas free health care was only for obstetric care. In fact, patients who had a financial barrier preventing them to attend health care services would be more likely to have a better satisfaction of health care services. In another hand, patients admitted for gynecological emergencies during the free period (but not taken into account by this free of charge) and in this context of high influx patients could not have noticed any benefits of this new situation.

**Admissions frequency**

The period of free of charge was marked by a higher attendance of the emergencies in the unit of Obstetrics and Gyneco. The majority of the authors agree that there is an increase in the attendance of health care facilities after the beginning of a charge free policy of health care costs. The charge free process in the health care field promotes a better access to health care and leads to positive changes. As a result, it reduces the first delay that is the decision making by the patient to go to a health care facility. This is how Ke et al. observed an overall increase of 50% in consultations in Yopougon Teaching Hospital Centre after the beginning of universal health insurance in Côte d’Ivoire. For Cheng et al in Taiwan, this proportion was more than doubled, after the beginning of universal health insurance, from 21% to 48%.

**Patient satisfaction**

The waiting period was found to be unsatisfactory by 79.4% of patients before the period of health carefree of charge compared to 82.6% after that period (p=0.0001). The massive of emergencies’ flow without increasing staff number or reinforcing the infrastructures capacity inevitably leads to a longer waiting time for patients. The high attendance has also accelerated the impairment of equipment, causing frequent breakdowns in the operating room as well as in the ward, impacting on the effectiveness of health care and the appreciation of the beneficiaries of care. It should also be noted the organizational difficulties encountered at the beginning of the charge free health care, causing long queues at the cashier unit, the pharmacy and the laboratory, due to the insufficient number of paying or collection points. All this contributes to lengthen the waiting time. Waiting time is a very important dissatisfaction factor. However, for some authors, patient satisfaction does not seem to depend on the actual duration of the waiting time, as long as the health care meets the patient's expectations.
waiting time as soon as they arrive in the emergency unit, becomes important because it could help to avoid misunderstanding.\textsuperscript{17}

The communication was found to be more satisfactory before the charge free health care period than during that process (p = 0.007). This could be in relation with the workload caused by the very high attendance in the department during the charge free period. These results are close to those found by Zongo, which were 64.7%, and significantly higher than those found by Bougmiza et al. in Tunis, which found a satisfaction rate of 44.1%.\textsuperscript{5,17} Also, the patients’ low level of education and their ignorance about their rights do not encourage continuous interaction with providers, often leading the patients to give up on their right to be informed, and then receive only the health care without daring to ask any question. At time of discharge, the overall satisfaction rate was significantly greater before the implementation of the charge free measures than during (p=0.003).

The conditions of accommodation which deteriorated due to the overload charge of work in the department, the lack of staff and equipment leading to long waiting time and the poor quality communication between patients and health care providers are the different factors contributing to this dissatisfaction of health care beneficiaries. However, our satisfaction rate before the free of charge period (75.2%) was substantially the one found in the literature.\textsuperscript{17-19} Dissatisfaction reflects a lack of quality and is a real problem when it is expressed by more than 10% of users.\textsuperscript{20}

\textbf{CONCLUSION}

The implementation of the charge free measures was followed by a massive influx of patients without a preliminary preparation in terms of human resources and material and infrastructures capacity improvement. The logical consequence is a reduction of health care beneficiaries’ satisfaction, reflecting an alteration in the services’ quality. For a real coverage of the charge free health care objectives for pregnant women and children, amid term situational analysis of the charge free process is necessary. This will allow shortcomings’ corrective measures to the shortcomings to be taken. Also, lessons should be learnt for adoption of adequate preventive measures before any extension of this charge free policy to all or other fringes of the population.

\textbf{ACKNOWLEDGMENTS}

Authors would like to thank the Director General of the Yalgado Ouedraogo Teaching Hospital of Ouagadougou for having authorized the realization of the study; the staff of the Teaching hospital for his contribution during the data collection; the patients for having accepted to submit to the questionnaire ATTIRON ZONGO J for translating the document into English.

\textbf{Funding:} No funding sources

\textbf{Conflict of interest:} None declared

\textbf{Ethical approval:} The study was approved by the Institutional Ethics Committee

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Cite this article as: Zamané H, Kiemtoré S, Kain PD, Ouédraogo LZ, Thiéba BB. Satisfaction of patients received in emergencies in the department of obstetrics and gynecology at the Yalgado Ouedraogo teaching hospital: comparative study before and after the introduction of free care. Int J Reprod Contracept Obstet Gynecol 2019;8:3259-63.