



Assessment of The Free Caesarean at The University Clinic of Gynecology and Obstetrics of Cnhu Cotonou in Benin

KEYWORDS

Cesarean, Free, Africa.

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ABSTRACT

OBJECTIVE: To evaluate the practice of free caesarean CHNU in Cotonou.

PATIENTS AND METHODS: Retrospective and descriptive documentary study referred to a five months period that included all women who had caesareans received free during the study period. The parameters studied were sociodemographic, clinical, financial and scalable. The data were collected, entered and analyzed by Excel software and Epi Info version 3.5.1 2008.

RESULTS: 716 caesarean sections were performed on a total of 1612 delivery, or 44%. The average age was 27 years (extremes: 16-43 years). More than half were married (71%) with primary profession trade (27.1%). 57% of women in labor was educated. Dystocia and cesarean history were the main cesarean section related to the mother of indications 67.3%) and over half (65.4%) of women in labor caesareans had followed their pregnancies out of CUGO. The majority of spouses (78%) had incomes below the real cost of cesarean section. Most of the practitioners suggested the inclusion of spinal anesthesia kit (33.3%), the increase of staff (20%) and the number of operating tables (13.3%). Conclusion: The results of this first experience on the free caesarean are very encouraging in terms of numbers (516 caesarean sections), low morbidity and mortality rates, and availability ensured without physically out of stock; although much remains to be done on increasing the rate of free, number of staff and the availability of spinal anesthesia kit. We urge the authorities to support benefit structures to improve and sustain this activity.

Introduction

The Caesarean section is a surgical procedure to remove a fetus from the uterus by hysterotomy Whenever vaginal delivery poses to the mother and fetus at risk. [1] This is a codified and stereotyped speech, non-application of good practice and bad scientific knowledge can lead to complications. That can Jeopardize the maternal-fetal prognosis. 500,000 women die in pregnancy or childbirth in developing countries. The reduction of maternal mortality for countries thesis Represents a serious challenge for development. In Benin, for 100,000 living births There Are 397 21 maternal and neonatal Deaths Deaths per 1000 live births, Deaths due to various causes: obstetric, Drug, financial (a factor of three delays). [3,5] In CUJO, the real cost of cesarean section ranges from 147,000 CFA francs (360 US dollars) and 200,000 CFA francs (410 US dollars), Taking into account the surgical procedure, care and hospitalization five days without complication. The Departmental Hospital Centre of Zou, the cost varies entre 59.140 Rather CFA francs (143 US dollars) and 100.225 CFA francs (222 US dollars), while in the Hospital of Abomey area, it varies entre 61,400 CFA francs (\$ 127 US) and 75,000 CFA francs (155 US dollars). To right this situation the Beninese government HAD Introduced the free caesarean, Taking into account: intra sanitary transportation area, preoperative assessment, medication and medical supplies and a 100,000 CFA francs subsidy (210 US dollars).

Out of 40 Public Hospitals, 30 HAD beens Whose CUGO selected. We INTEND to conduite this study avocation to deliver the experience of the free caesarean operation at CUGO to propose solutions That can help to consolidate the gains.

Patients and Methods

Cotonou is the economic capital and largest city with

679,012 inhabitants Benin during the 20132 census; it houses many government and diplomatic services.



Cotonou

Figure 1 Republic of Benin card

1. Study Framework

The CUGO our study was to frame the University Clinic of Gynecology and Obstetrics (CUGO) of the National Hospital and University of Cotonou (CNHU) who had achieved total deliveries in 2551 to 2008. The first birth is CUGO Reference to Benin. It provides medical and surgical care, training and research. 2. Method of study type and duration: This was a retrospective descriptive study documentary and referred to the period from 1 April to 31 August 2009 (5 months). Population: It consisted of women who benefited during this period the free caesarean, their spouses and practitioners. Data collection: Data were collected from the survey forms to: Block registers, obstetric records, records of statistics CUGO, interrogation of the

spouses, interrogation practitioners Cesarean section. Variables studied were: Age, Gender, occupation, educational level, marital status, input mode, time acts, indications of cesarean section, Apgar, Suites immediate postoperative, expenses of the couple. Data processing: The data were collected, entered and analyzed Excel and Epi Info 2007 version software.

Results

1. Frequency: Of the 1612 deliveries made CUGO, 714 were caesarean operations is 44.2%.

2. Age: The average age was 27 years (extremes: 16-43 years).

3. Marital status: Married represented 71% and 24.6% single.

4. Occupation: The shopping (27.1%), followed by employees (17.4%) and housewives (16.7%) were the main occupations encountered.

5. Education level: Distribution of women in labor caesareans by level of education

It is clear from this figure that the majority (57%) of women in labor was educated.

6. Obstetric history

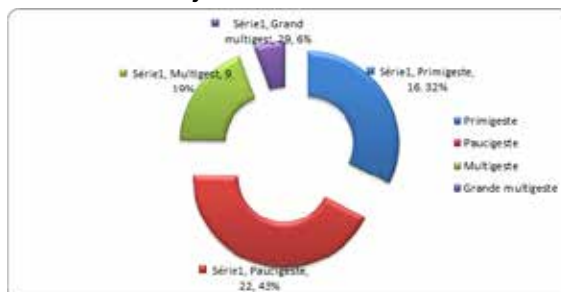


Figure 2: Distribution of women in labor caesareans according to gesticity

More than half of women in labor were primigravidae paucigestes and 75.2%.

Nulliparous women are most numerous. Primiparous represent 29.5% of the sample. Multiparous represent 6%.

7. Caesarean section Background: Of the 516 cases, 134 or 25% had at least a history of cesareans.

8. Place Prenatal Consultations: More than half (65.4%) of women in labor caesareans had followed their pregnancies out of CUGO.

9. Caesarean section Indications

Table I: General indications of caesarean sections

Indications of caesareans	Number	Percentage (%)
Related to the mother	295	57,2
Related to the fetus	232	44,9
Relating to annexes	73	14,1

The main indications were related to the mother (57.2%).

10. Information related to the mother

Table II: Distribution of women in labor caesareans according to indications related to the mother.

Tableau II : Répartition des parturientes césarisées selon les indications liées à la mère

Indications de césarienne liée à la mère	Effectif	Pourcentage (%)
Mechanical dystocia	65	22,0
Dynamic dystocia	25	08,5
Utérus cicatriciel	134	45,4
Scarred uterus pre-beaking	17	05,8
Pré-éclampsia	35	11,9
Eclampsia	32	10,8
Disease pregnancy	11	03,7

Dystocia and cesarean history were the main indications for cesarean mother.

11. Indications related fetus: The cesarean indication related to the most common fetal fetus was suffering.

12. Indications related annexes: The cesarean indication related to the most common appendices is premature rupture of membranes (35.6%), followed by placenta previa (32.9) and amniotic infections (20.5%).

13. Admission Mode parturients: Most caesareans parturients (65.1%) were discharged from health centers to CUGO, followed by direct admissions (28.1%) and only 6% were hospitalized.

14. Maternal Mortality: In our study, there were 8 of 714 maternal deaths caesarean 1.1%.

15. Fetal Prognosis

Table III: Distribution of parturients according to the Apgar score of their newborns

Apgar Score	Number	Percentage (%)
Apgar score at the 1st minute		
≤3	18	03,5
4 – 6	92	17,8
≥7	406	78,7
Apgar score at the 5th minute		
≤3	12	02,3
4 – 6	20	03,9
≥7	484	93,8
Total	516	100,0

6 neonates had a score between 0 and 3 had not recovered to the 5th minute. In 92 neonates depressed (score 4-7) for the first minute, only 20 remained depressed at the 5th minute. Furthermore, all infants with a score ≥ 7 have evolved later.

15. Duration hospitalization: the average length of hospital stay was 5 days (Extremes: 3 to 11 days).

16. Occupation of husband

We could meet in this study period 50 spouses during the month of August 2009

Distribution husband's occupation
Traders 10 20.0

Artisans 13 26.0
Pupils / Students 3 06.0
Frames / 20 40.0 Officials
Unemployed 4 08.0
Total 50 100.0

The majority of spouses had an average socioeconomic level

17. Income of the spouse and the actual cost of cesarean section: Joint Revenue and actual cost of cesarean section

- Yes 11 (22 %)
- No 39 (78 %)
- Total 50 (100%)

The majority of spouses (78%) had incomes below the real cost of cesarean section.

18. Expenditure on the 1st day of the cesarean operation: Expenditure during the cesarean section (FCFA) Number Percentage (%): The majority of spouses (77.3%) had spent an average of 60,000 CFA francs (124 US dollars).

19. Perception of husbands on the free cesarean section:

Suggestions Number Percentage (%):

- Good 6 (12%)
- Increase free rate 42 (84%)
- Cover the postoperative immediate care 1 (02%)
- Free analysis 1 (02%)
- Total 50 100.0

Only 12% of couples were satisfied with the free cesarean and 84% of husbands would like the free rate is increased.

20. Practitioners

We were able to interview some thirty practitioners.

Difficulties Number Percentage (%)

- Workload increased 3 (10%)
- Unavailability of surgical gowns and shirts 2 (06.7%)
- Unavailability of spinal anesthesia kit 13 (42.2%)
- Unavailability of one of the two blocks 3 (10.0%)
- Inadequate fillers for some cesarean 3 (10.0%)
- Notion beds sometimes insufficient to SI 2 (06.7%)
- No particular difficulty 2 (06.7%)
- Postoperative management is difficult with consequent suppuration 2 (06.7%)

35.5% of the practitioners in our sample felt that they often lacked the spinal anesthesia kit.

Table IV: Distribution of the suggestions made by practitioners

Suggestions	Number	Percentage (%)
At least 2 CES4 guard by	2	6,6
Increase the number of beds	4	13,3
Increase the number of staff	6	20,0
Free health care after cesarean 1 st	2	6,6
Anesthetic drugs include	2	6,6
Include spinal anesthesia kit	10	33,3
Expect lots of gowns and drapes	2	6,6
Review the composition of Caesarean kit	2	6,6
Total	30	100,0

Most of the practitioners suggested the inclusion of spinal anesthesia kit (33.3%), the increase of staff (20%) and the number of operating tables (13.3%).

Discussion

1. Frequency of cesarean

During the study period, we compiled 714 total cesarean births from 1612 is a frequency of 44.2%. Previous work of different authors show that the frequency of caesarean operation varies according to time and place:

- **ANOMA A. [9]** 30.8% at the University Hospital of Ccody in Ivory Coast in Abidjan; **MUBIALA A. [7]** 6% to university clinics in Kinshasa; **C. RACINET MEDDOUN M [4]** 17.5% in France and **DOUANDJI FOMEKONG [8]** reported the CUGO in 2002, a rate of 32.4%. This high rate is due to the influx observed in CUGO since the introduction of the free caesarean.

2. Characteristics of césarisée parturient who received Cesarean section

- Age: The average age was 27 years in our study.

MBANZUMUTIMA K [5] had found 29years to CUGO of Cotonou in 1997 CNHU. Older women in labor for more than 40 years accounted for 2.5%. This result is similar to that found by Maurice de Souza in 2008 at the CUGO

- Parity: Primiparous represented in our study 32.4% against 20.8% found by **MBANZUMUTIMA** CNHU in Cotonou **[5]** and 54.2% by Maurice de Souza in 2008 as in 2008. paucipares CUGO accounted for 42, 8% of our study comparable to that **MAURICE DE SOUZA** who found 42.5% found in CUGO in 2008 **[3]**. These results are higher than TOKANNOU who found 21% at the Maternity Lagoon of Cotonou. The proportions involving two values are almost equal to those of Souza and higher than TOKANNOU. **[12]**

Large multiparous represented 5.6% in our study, which is 0.83% higher than found by **MAURICE DE SOUZA** in 2008 at the CUGO and less than 12.7% Mvuezolo in Kinshasa. **[13]**

- Duration of hospitalization: In our study 93.6% of caesareans had an average hospital stay of five days. This is not far from the length found by **MBANZUMUTIMA** (7 days). **[5]**

- Time management: The majority of our caesareans (45.7%) were operated with an average delay of 50 minutes after the decision. This period seems normal to emergencies and sometimes an influx in the operating room.

- Torque Expenditures: Government provides grants Caesarean kit and 100,000 FCFA grant. To perform a Caesarean section the patient pays for drugs and certain analyzes valued at 60,000 FCFA. During five days for category 3, the complement cesarised pays 47,000 FCFA. The total cost for this category is estimated at 147.000 FCFA. 107.000 FCFA is the total expenditure incurred. In Mali the total expenditure amounted to FCFA 119.000.

- Maternal mortality and cesarean: We identified 8 cases of maternal deaths of 714 caesareans during our study period was 1.1%.

In 2008 from April 1st to August 31st there were 4 maternal deaths per 387 cesarean after cesarean or 1%. The 1997 study by **SEPOU** and collaborators in the Central revealed 2% of maternal deaths. **[18]** The death rate in our series was lower than that found by **SEPOU**. The explana-

tion of these deaths would fall purely technical parameters and less those linked to the management of late since almost free of the act.

- **Apgar Score:** It is clear from our study that neonatal prognosis was good from the start because the majority (93.8%) had presented a score greater than or equal to 7 at the 5th minute of life. This is encouraging, especially in emergency situations or lack of resources is often responsible for management of late involving the fetal-maternal prognosis.

- **Husband Satisfaction:** In this study, 12% of respondents were satisfied totally spouses and 84% would increase the free rate of cesarean section because it is saving especially for the poor.

- **Suggestion practitioners:** 20% would increase the number of staff, 30% advocate include spinal kit and 13% increase in number of bed These suggestions find their seats as they take into account both technical and managerial considerations for improving the free care being given the growth in demand in the days / months.

Conclusion

The free caesarean is a reality of the CUGO CHNU Cotonou, since our preliminary results are very encouraging in terms of numbers (516 caesarean sections), low morbidity and mortality rates, and availability ensured without physical disruption stock; although much remains to be done on increasing the rate of free, number of staff and the availability of spinal anesthesia kit. This first experiment was a success and we urge the authorities to support the structures of advantage for the sustainability of this activity.

DECLARATION

Conflicts of interest: All authors of this work, declare openly that there is no conflict of interest and admits that this work does not violate any ethical rule.

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