



The Fetomaternal Outcome in Women that Had Caesarean Section in Northern Cross River State Nigeria.

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ABSTRACT

Background: Caesarean section (CS) though a safe procedure could be associated with untoward outcome for both the mother and baby. This necessitated the evaluation of caesarean sections for their fetomaternal outcome in women delivered at a secondary health facility in northern Cross River state.

Aim: The aim of the study was to determine the fetal and maternal outcome in women that had caesarean section at our centre of study.

Method: This was a retrospective study of 430 out of the 1402 women that were delivered by Caesarean section over a 24 month period.

Result: The mean gestational age at delivery was 38.63 +/- 1.34 weeks. The mean APGAR score for the babies was 7.74 +/- 5.20 while the mean birth weight was 3.12 +/- 0.60 kg. Most of the women studied were of the age group of 26-30 years and the caesarean section rate was 30.7%.

Conclusion: There was good fetomaternal outcome from the study and a low CS associated perinatal mortality was noted.

INTRODUCTION

Caesarean section is a lifesaving procedure for the baby, mother or both in the face of valid obstetric indications. (1)

The indications for caesarean section can be absolute or relative. The absolute indications include obstructed labour, major ante partum haemorrhage, malpresentation like oblique lie, transverse lie and brow presentation as well as uterine rupture. (2) The relative

indications are fetal compromise, previous caesarean section, failure to progress in labour, breech presentation and pre/eclampsia. (2-8)

The rate of caesarean section varies in range, from 10.4% to 27.6% across Nigeria. (4-8) Rates from 31.60% to 38.16% have been noted in other parts of the globe. (1, 9)

Caesarean deliveries can be complicated in the mother by post partum haemorrhage, disseminated intravascular coagulopathy, damage to surrounding structures like bladder, ureter and small intestines. Others are wound dehiscence, endometritis, Asherman's syndrome and secondary infertility. The baby may have lacerations to the scalp or face, shoulder dislocation, fracture to the clavicle or humerus and meconium aspiration. (2)

Caesarean section has been associated with more fetal and maternal morbidities and mortality compared with vaginal deliveries in spite of the increasing safety of anaesthesia and surgical techniques with caesarean deliveries. (10)

There is the need for us to evaluate the fetomaternal outcome in the caesarean deliveries conducted in this secondary health facility since most of the studies on caesarean section in Nigeria are from tertiary hospitals.

Aim

To determine the fetomaternal outcome among the women that had caesarean section at the Catholic Maternity Hospital, Ogoja, Cross River State Nigeria.

METHODOLOGY

The study is a retrospective one that reviewed the cases of 430 women that were surgically delivered at the Catholic Maternity Hospital, Ogoja in Northern Cross River state between 1st January 2016 and 31st December 2017.

The data was retrieved from their case files, birth register, theatre records and post natal ward records. The information obtained were age, parity, booking status, gestational age at delivery, birth weight, APGAR score as well as fetal and maternal morbidity and mortality.

The data analysis was done with the IBM's Statistical Package for Social Sciences (SPSS) version 23.0 for windows. The data was presented as absolute numbers, means, standard deviation and frequency tables.

RESULTS

The age group of 26-30 years constituted the highest group of the women studied at 35.7%. Most of them were multiparous (73.2%) and majority of the caesarean sections performed were of the emergency type (82.3%). A greater part of them were booked

(62.9%). The study showed that 86.2% of the babies had good APGAR score; 87.8% had normal birth weight while 12.2% had low birth weight. Still birth was noted in 10.1% of the babies delivered.

The values obtained from the sociodemographic characteristics and fetomaternal outcome are as shown in table 1 below.

Table 1: The sociodemographic characteristics and fetomaternal outcome

	Frequency	Percent
Age group		
<=25	140	33.2
26 – 30	155	35.7
31 – 35	86	19.8
36 – 40	40	9.2
41 – 45	9	2.1
Parity		
1	116	26.7
2	90	20.7
3	85	19.6
4 or more	140	32.9
Type of C/S		
Emergency	353	82.3
Elective	77	17.7
GA at delivery		
Preterm	17	3.9
Term	413	96.1
Booking		
Booked	269	62.9
Unbooked	161	37.1
APGAR score		
Poor	60	13.8
Good	370	86.2
Birth weight		
Low	53	12.2
Normal	377	87.8
Sex of the baby		
Male	232	54.4
Female	198	45.6
Still birth		
Yes	40	10.1
No	390	89.9

Table 2 shows the indications for caesarean section among the women that had still birth. Forty still births were recorded constituting 10.1% of the babies delivered. Most of them occurred in those with obstructed labour and fetal distress (30% each) while the least occurred in those with cord prolapse and retained second twin (2.5% each) as shown below.

Table 2: Indication for CS in patients that had still birth and the percentage.

Indication for CS	Frequency of still birth	Percentage
Obstructed labour	12	30
Congenital malformation	2	5
Uterine rupture	5	12.5
Retained second twin	1	2.5
Antepartum haemorrhage	4	10
Fetal distress	12	30
Malpresentation	3	7.5
Cord prolapse	1	2.5
Total	40	100

The mean age of the women delivered surgically was 28.56 +/- 5.57 years and their mean gestational age at delivery was 38.63 +/- 1.34 weeks. The mean APGAR score of the babies was 7.74 +/- 5.20 while their mean birth weight was 3.12 +/- 0.6 kg. These were captured in table 3 below.

Table 3: The mean and range of the fetomaternal parameters

	N	Minimum	Maximum	Mean	Std. Deviation
Age	430	18.00	45.00	28.56	5.57
Parity	430	1.00	10.00	2.98	1.85
GA at delivery	430	31.00	42.00	38.63	1.34
APGAR	430	0.00	98.00	7.74	5.20
Birth Weight	430	1.20	4.90	3.12	0.60

DISCUSSION

The caesarean section rate of 30.7% was noted from this study among the 430 women that had caesarean section out of 1402 women that delivered within the two year study period. Most of the patients studied were booked (62.9%) unlike in previous studies on caesarean section that showed a preponderance of unbooked patients. (3,11,12,13) They were however more emergency cases (82.3%) despite their booking status thus showing that they might have been avoiding caesarean section even while booked for elective cases. This is consistent with the strong aversion for caesarean section by women in our culture. (14) The high emergency cases noted were comparable to some other related studies. (3,11,12,13)

Among the babies delivered; 86.2% had good APGAR score of 7 and above, 87.8% had normal birth weight of 2.5kg and above while 12.2% had low birth weight. Still birth was recorded in 10.1% of the babies delivered. Other studies showed good fetomaternal outcome. (15,16)

Out of the 40 cases that had still birth, only 30% were booked while the greater part of them were unbooked (70%). Two of the babies were congenitally malformed with anencephaly and hydrocephalus. Maternal mortality was recorded in one of the women sectioned due to abruptio placentae that was complicated by disseminated intravascular coagulopathy.

The perinatal mortality rate associated with caesarean section among the women studied was 28.4/1000. This was less than 63.8/1000 noted by Ikeako et al but higher than 12.9/1000 recorded by Efetie et al.(16,17) The caesarean maternal mortality we noted was 71.32/100,000 which was far below 400/100,000 seen at Awka and 1180/100,000 found in a related study in Calabar, Nigeria.(16,18)

CONCLUSION

This caesarean section study with a rate of 30.7% had good fetomaternal outcome. There was a low CS associated perinatal mortality.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

ETHICAL CONSIDERATION

This was obtained from the Institution's review board.

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