Caesarean Delivery: Why The Aversion?

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Abstract

Objective: To examine the reason for aversion to caesarean section among pregnant Nigerian women receiving antenatal care at Obafemi Awolowo University Teaching Hospital, Ile-Ife, Nigeria and Havana Specialist Hospital, Lagos Nigeria.

Method: Structured questionnaires were administered to pregnant women receiving antenatal care in both hospitals. The response to questions on their knowledge, attitudes and reason for aversion to caesarean section and experience of patients who have had caesarean section were analyzed.

Result: The 6224 patients interviewed know what caesarean section is, however only 33.3% known reasons for performing caesarean section. While only 28.9% will accept caesarean section on doctor's advice, 71.1% will not accept caesarean delivery for any reason. 26.8% of the patients that have had previous caesarean section prefer to die while attempting vaginal delivery than to have a repeat caesarean section. Reasons for refusing caesarean section were essentially that of sense of reproductive failure after caesarean section (81.2%) and financial implication (66.5%). It also shows that education and social class has little or no effect on the aversion to caesarean section in our environment.

Conclusion: Meaningful attempt at solving the problem of caesarean aversion must go beyond the confines of hospital wards to the communities since it is deep-rooted in culture.

Keywords: Caesarean Section, Aversion, Reproductive Failure, Culture
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Introduction

Over half a million maternal deaths occur yearly worldwide and 99% of this occur in developing world[1]. The global plans to correct this situation have not achieved any improvement. [2,3,4] Some of the factors identified, apart from direct obstetric causes as barriers to achieving this objective include poverty, illiteracy, access difficulties, culture and aversion to caesarean section.[5,6]

Caesarean section is an important aspect of modern obstetric care and a major tool in the reduction of maternal and perinatal morbidity and mortality. Thus aversion to Caesarean section constitutes a very formidable obstacle to safe-motherhood. Since the social milieu is fundamentally important in any effort to address the scandalous maternal mortality figures in the developing world [2], we therefore investigated the reasons for aversion to caesarean section in our environment, aimed at utilizing such information to finding solution to the problem of caesarean aversion in our environment and elsewhere.

Subjects and Methods

Between June 1st 1997 and May 31st 2000 and July 1st 2000 and March 31st 2003 we conducted a survey on reasons for caesarean aversion among women who received obstetric care at the obstetric units of the Obafemi Awolowo University Teaching Hospital Ile-Ife, Nigeria (OAUTH) and Havana Specialist Hospital Lagos Nigeria (HSH) respectively.

OAUTH has two obstetrics unit located in Ile-Ife and Ilesha about 50km apart. Each has one booking clinic day per week. This is the point of entry for all pregnant women into the unit except unbooked patient admitted as emergency cases. From this clinic they are distributed to 4 antenatal clinics, two each in Ile-Ife and Ilesha. The clientele is drawn mostly from the lower socioeconomic strata of society.

HSH is an 80-bed multidisciplinary proprietary health facility in Nigeria foremost metropolitan city-Lagos. It offers obstetric services supervised by consultant staff. The clientele is drawn mostly from the upper socioeconomic strata of society. There are three antenatal clinic sessions per week.

A structured questionnaire, including closed and open ended questions already pretested, asked the women about their knowledge, attitudes and reason for aversion or otherwise of caesarean section. For women with previous caesarean section they were encouraged to catalogue their experience during and after the operation.

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In all, 6224 women were surveyed, 4668 at the OAUTH and 1556 at the HSH. The information obtained was coded and fed into an IBM compatible PC for analysis using the SPSS version 7.5 for the windows statistical package. Frequency and descriptive statistics were computed. Chi square test and Chi square test for trends were used as appropriate to test for significant association between caesarean aversion and different maternal demographic factors. P value less than 0.05 was taken as significant.

Results

The sociodemographic characteristics of the 6224 respondents are shown in table 1.

Table 1: SociodemographicCharacteristic of the Respondents

Characteristics	Number Of Respondent (%)
Age (years)	
<20	380 (6.1)
20 - 29	3355 (53.9)
30 -39	2458(39.5)
40	31(0.5)
Parity	
Po	231 (37.0)
P1 -5	3367 (54.1)
>P5	556 (8.9)
Educational Level Completed	
None	174 (2.8)
Primary	1135 (18.2)
Secondary	2307 (37.1)
Post Secondary	1581 (25.4)
Graduate	1027(16.5)
Social Class*	
I & II	1481(23.8)
III	1021(16.4)
IV & V	
Ethnic Groups	
Hausa	355(5.7)
Igbo	2290(36.8
Yourba	3243(52.1)
Southern Minority Groups	205(3.3)
Northern Minority Group	137(2.2)

* Olusanya 1985

Majority of the respondents were between the age group 20-29years (53.9%), and 63.0% were of multiparous. Fifty nine percent of the respondents were of low socio economic class and only 41.9% had more than secondary education. Two hundred and ninety five (4.7%) women have had a previous caesarean section, one hundred and fifty six (52.2%) women had one previous caesarean section while139 (47.1%) women had two or more. All the respondents have heard and know what caesarean section is about, however only 2074 (33.3%%) know the correct indications for caesarean section. Reasons for caesarean section according to the remaining 4150 (66.7%) women include; for profit making by health workers and hospitals (42.7%), acquisition of skill by junior doctors (29.3%), easy way out of a difficult problem (17.9%) and wickedness (3.2%). While 4478(71.9%) respondents will not accept caesarean section for any reason, only 1746(28.9%) respondents will accept to have a caesarean section following a doctor's advice.

Table 2 shows the relationship between patient's years of formal education and knowledge of indication for caesarean section. Using Chi test for trends for the analysis, revealed a very significant positive correlation between educational status and knowledge of indication for caesarean section (X^2 trend = 1620.45 ; p = 0.0000). While only 0.6% of the women without formal education know some indication, 76.3% of the graduate new the indications.

Table 2: Relationship Between Educational Attainment of The Respondent and Knowledge Of Indications for Caesarean Section.

Educational Status (number of year spend on school)	*Knowledge of indications for caesarean section (%)* Correct *n=2074*	Incorrect *n=4150*	*Odd Ratio*
None(< 6years)	14(0.6)	160(99.4)	1.00
Primary (611 years)	109(9.6)	1024(90.4)	1.22
Secondary(12 14years)	318(13.8)	1989(86.4)	1.83
Post secondary (>14<16years)	849(53.7)	732(46.3)	13.26
Graduate(=16years)	784(76.3)	243(23.7)	36.87

χ^2 (trend) = 1620.95; p < 0.00001

Further analysis (Table 3) on the relationship between years of formal education and attitude to caesarean section. It shows that educational status has little or no effect on attitude to caesarean section, as there were statistically no significant difference between the acceptors and non- acceptors educational status (X^2 = 5.13; p=0.274).

Table 3: Relationship Between Educational Attainment Of The Respondent And Attitude To Caesarean Section.

Educational Status (number of year spend on school)	*Attitude to caesarean section(%)* Will accept C/s	Will not accept c/s	Total
None(< 6years)	50(28.7)	120(71.3)	174(100.0)
Primary (6-11 years)	289(25.5)	849(74.5)	1135(100.0)
Secondary (12-14years)	671(29.1)	1742(70.9)	2307(100.0)
Post secondary (>14-<16years)	449(28.4)	1132(71.6)	1581(100.0)
Graduate (=16years)	287(27.9)	636(72.1)	1027(100.0)

χ^2 = 5.13; p = 0.274

Reasons for not accepting caesarean section as a delivery option include- reproductive failure in 81.2% (3596), financial implication in 66.5%(2945), postoperative pain in 19.9%(881), fear of operation in 16.7%(739), need for blood transfusion in 0.6%(27), prolonged hospital stay after caesarean section in 6.3%(279) and cause of fetal loss in 0.4%(18) of respondents. Twenty five women (92.6%) out of the 27 women who rejected caesarean delivery because of the need for blood transfusion are members of "Jehovah witness" whose sect forbids blood transfusion.

Sense of reproductive failure was the commonest reason for refusing caesarean section both by the educated and uneducated ($x^2 = 0.05$, $p = 0.8$). Though financial implication as a reason was commoner among the respondents in lower social class than respondents in the higher social class, it was not statically significant ($x^2 = 0.31$, $p = 0.57$). Fear of operation and postoperative pain as reasons for rejecting caesarean section though commoner among the educated class, the difference was not statically significant. While 1941(40.8%) of the educated refused caesarean because of fear operation, 43.1 %(709) of uneducated offered the same reason ($x^2 = 0.71$, $p = 0.39$). Postoperative pain was the reason in 25.2% of the educated as against 24.3% of uneducated ($x^2 = 0.19$, $p = 0.66$). Only prolonged hospital stay, as a reason was significantly commoner among the educated (41.6%) than the uneducated (23.6%): $x^2 = 51.2$, $p < 0.001$.

Analysis of the relationship between level of knowledge of indications of caesarean section and attitude to caesarean section showed that, while 30.6%(2074) of women who are knowledgeable of the indication for caesarean section will accept caesarean section as a delivery option, 69.4% (1209) of the women having incorrect knowledge will accept caesarean section. However this difference was not statistically significant ($X^2 = 2.6$; p value $= 0.104$)

Of the 295 women that had previous caesarean, only 49(16.6%) will accept caesarean section if indicated. Two hundred and forty six (83.4%) insisted on delivering vaginal irrespective of doctors' advice. Seventy-nine women (32.1%) will prefer to die rather than to have a repeat caesarean section.

Discussion

That Nigerian women have aversion to caesarean section, not only because of the associated maternal and fetal hazards but also because of the general belief among our women that abdominal delivery is a reproductive failure, [6,7,8] was confirmed in this study in which 81.2% (4428) of women who rejected caesarean section saw abdominal delivery as a reproductive failure. That this reason was given by both educated and uneducated alike points to the fact that it's deep rooted in the culture of the people. Therefore any meaningful attempt at solving this problem must go beyond the confines of maternity wards, since the social milieu has been shown to be fundamentally important in solving issues of maternal mortality in the developing countries[1,5].

According to the women who had previous caesarean section, their female counterparts see them as social misfits, "not woman enough". They are often objects of discussion, social ridicule and at any slightest opportunity are reminded that they are lazy and social misfit. The revelation in this study in which their were no correlation between education and acceptance of caesarean section support the view that caesarean aversion is deep rooted in culture and tradition of the people. Another patient who had a previous caesarean section recounted how her mate insulted her on cautioning her child on a wrong doing. She was giving a lesson in childcare. She was informed that because she did not experience the pangs of labour pains that it is not surprising that she did not know how to take care of children and her not appreciating children was not her fault but that of caesarean delivery. Because of this she had vowed to deliver through the vagina even at the cost of her life. She did, she laboured for hours in a mission house, and was referred to the hospital with ruptured uterus. She was lucky to survive; however she lost her uterus and her baby. She had a total of 6 pints of blood. The plight of women who deliver through caesarean section is made worse by their husbands and in laws, who see them as an economic drainpipe on the family income.

Though earlier studies did not identifying financial reason as a major reason for caesarean aversion, [6,7,8] cost of hospital care is a big issue in health care delivery in Nigeria [1,2,5,8]. Prolonged period of military rule have impoverished all to the extent that an average Nigerian struggles to feed the family and cannot afford to pay hospital bills. Therefore operative deliveries, which translate to higher hospital bills, are rejected, even at cost of ones life. It is not surprising that 66.6% of respondents gave financial implication as a reason for refusing caesarean section. This is more marked among the low socioeconomic group in which 89.2% identified financial implication as reason. It is important to note that in OAUTH in contrast with most similar institutions in the same geographic zone obstetric emergencies are accepted for treatment whether or not the patient could make an initial down payment; and to avoid the high admission bill, patients wait to present as emergency even when they were earlier planned for an elective procedure. Fear of operation and painful nature of caesarean delivery are other reasons for rejection of caesarean delivery; however these are of less significance and can easily be resolved with repeated assurance and counseling.

The study also shows the defective nature of antenatal care in hospitals in Nigeria; in that majority of the patient who have received antenatal care in previous delivery are not aware of indications and reasons for performing caesarean section. It also shows that patient

and relations are not counseled well before they are discharged from the hospital. Eighteen (0.4%) respondents will refuse caesarean section because they believed they lost their baby because of caesarean section. If patients had been counseled adequately they will be aware of the cause of fetal death, which is usually the consequence of prolonged labour in this category of patients.[9,8]

Public enlightenment must be intensified to educate the populace on the need and reason for caesarean section. This enlightment should be community based to have a more lasting effect. They should be made to know that caesarean section is an important measure to prevent maternal and perinatal morbidity and mortality; it does not necessarily confer any inferior status on the women. This will also allay the fear of operation. Antenatal care should be made to be more effective and informative. On the government part, maternity services should be made free and widely spread and accessible to every pregnant woman.

In conclusion, caesarean aversion is very common in our environment and is deep rooted in our culture. It is not influenced by educational status or social class. Any meaningful attempt at solving the problem must go beyond the confines of hospital wards.

References

1. World Health Organisation.Maternal mortality ratios and rates; a tabulation of available information. 3rd edition. Maternal health and safe motherhood program,WHO.1991.
2. Onwudiegwu U. The effects of a depressed economy on the utilization of maternal health services: the Nigerian experience. *Journal of Obstetrics and Gynecology* 1993; 13:311-314.
3. Onwudiegwu U. The effects of a depressed economy on the utilization of maternal health services. The Nigerian experience II. *Journal of Obstetrics and Gynecology* 1997;17:43-148.
4. Fasubaa OB, Ogunniyi SO, Ezechi OC. Maternal mortality in Obafemi Awolowo University Teaching Hospitals Complex, Ile Ife A comparism of maternal death in young and older women. *Nigeria Journal Medicine* 2000; 4: 147-151.
5. Ezechi OC, Fasubaa OB, Dare, FO. Socioeconomic barrier to safe motherhood among booked patients in rural Nigerian communities. *Journal of Obstetrics and Gynaecology.* 2000; 20 (1): 32-34.
6. Ezechi OC, Nwokoro CA, Kalu BKE, Njokanma OF, Okeke GCE. Caesarean morbidity and mortality in a private hospital in Lagos Nigeria. *Trop J Obstet Gynaecol* 2002;19(2): 97-100
7. Adeleye JA Primary elective caesarean section in Ibadan, Nigeria. International Surgery 1977 62: 97-99
8. Lawson JB. Caesarean section. In *Obstetrics and Gynaecology in the Tropics* edited by Lawson JB and Stewart DB. London. 1967 ;Pp. 184-186.
9. Onwudiegwu U, Makinde ON, Ezechi OC, Adeyemi A Decision Caesarean delivery interval in a Nigerian University Hospital: Implications for maternal morbidity and mortality. *Journal of Obstetrics and Gynaecology* 1999 ; 19: 30-33
10. Onifade A. Primary caesarean section in mulitpara. *Nigerian Medical Journal* 1971; 1: 30-33.
11. Aimakhu VE. (1974) Caesarean section and perinatal mortality in Ibadan, Nigeria. *Nigeria Medical Journal,* 4: 85-88.
12. Olusanya O, Okpere E, Ezimokhai M. The importance of social class in voluntary fertility control in a developing country. *West Afr J Med* 1985;4(4):205-212.