

Original Article

Beliefs, Perceptions, and Views of Pregnant Women about Cesarean Section and Reproductive Decision-making in a Specialist Health Facility in Enugu, Southeast Nigeria

IV Ezeome, JO Ezugworie, PC Udealor

Department of Obstetrics and Gynaecology, University of Nigeria Teaching Hospital, Enugu, Nigeria

ABSTRACT

Context: Through the process of socialization, women and men are conditioned to behave and play different roles in society. While the African culture “rewards” women who have vaginal birth despite the cost to their health, the burden of reproductive decision-making is placed on the menfolk. However, these seem to be changing.

Aims: Our aim was to assess the beliefs and perceptions of pregnant women about cesarean section (CS), including their views regarding decision-making on the mode of delivery, in Enugu, Southeast Nigeria. **Settings and Design:** A cross-sectional descriptive study. **Subjects and Methods:** A structured questionnaire was administered to 200 pregnant women, following an oral informed consent. **Statistical Analysis Used:** Statistical Package for the Social Sciences version 17 with descriptive statistics of frequencies and percentages. **Results:** All the respondents believe that CS is done for the safety of the mother/baby. Thirteen percent reject the procedure for themselves no matter the circumstance. Joint decision-making was the view of two-thirds of the women. Majority of them will accept CS if their husbands consent. Younger women were of the view that husbands decide on the delivery mode ($P = 0.019$). **Conclusions:** Culture remains an impediment to CS uptake. Most women preferred joint decision-making on the mode of delivery.

KEYWORDS: Cesarean section, decision-making, mode of delivery

Date of Acceptance:

14-Jan-2018

INTRODUCTION

Cesarean section (CS) may be used to describe the delivery of a fetus through a surgical incision on the anterior uterine wall.^[1] Due to the progress in medicine, the procedure has become safer^[2] over the years, with many developed nations having rates well over the WHO recommendation of 15%. Globally, the CS rate is estimated at 15%, with an average rate of 3.5% in Africa. Burkina Faso, Mali, and Nigeria all show CS rates below 2%. More developed regions, including Europe, Northern America, Japan, Australia, and New Zealand, have an average of 21.1%.^[3] Despite the above figures, there has been a rising trend in CS within Nigeria, a developing nation in West Africa, with rates from 9.4% in the 1970s and 34.6% currently,^[4] mainly from unbooked emergency cases.^[5] Women in developing countries, however, remain averse to CS,^[6-9]

notwithstanding its ability to save life. Studies among other cultures show a preference for CS because they view it as being safer,^[10-12] as well as due to obstetrician bias.^[11]

In most African communities including Nigeria, the decision to seek care, including the type of care, is culturally in the hands of the man.^[13] Nigeria's current maternal mortality ratio of 630/100,000 live births is indicative that critical aspects of the health-care delivery continue to fail women.^[14] Women's autonomy in health-care decision-making is extremely important for better maternal and child health outcomes.^[15]

Address for correspondence:

Dr. IV Ezeome,
Department of Obstetrics and Gynaecology, University of Nigeria
Teaching Hospital, Enugu, Nigeria.
E-mail: ezeomeij@gmail.com

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

How to cite this article: Ezeome IV, Ezugworie JO, Udealor PC. Beliefs, perceptions, and views of pregnant women about cesarean section and reproductive decision-making in a specialist health facility in Enugu, Southeast Nigeria. *Niger J Clin Pract* 2018;21:423-8.

Access this article online	
Quick Response Code:	Website: www.njcponline.com
	DOI: 10.4103/njcp.njcp_413_16

Although some studies have looked at problems of decision-making in using health services for family planning^[16] and maternity care,^[15,17] to the best of our knowledge, no such study assessing women's views on who should make these decisions has been done in this environment. This study sought to assess why pregnant women prefer a certain mode of delivery, their perception of CS, and their views on who should decide on the mode of delivery, in a specialist hospital in Enugu, Nigeria.

This study is significant as its findings will help to foster attitudinal change toward common misconceptions about CS. Policymakers in the health ministry will also find it useful in its effort to develop reproductive health interventions to improve women's health.

SUBJECTS AND METHODS

Ethical clearance for the study was obtained from the University of Nigeria Teaching Hospital Research Ethics Committee, Enugu. This is a descriptive cross-sectional study of the beliefs and attitude of pregnant women about and towards CS respectively, including views on who decides mode of delivery. A structured questionnaire was administered to 200 women who attended antenatal care in a specialist hospital, in Enugu from November 1 to 30, 2014. Using a sample of convenience, all women who consented to the study were selected. The required sample size was obtained using the formula $n = z^2 pq/d^2$, where z is the standard deviation set at 1.96, P is the prevalence (rate of 13.4% for women who rejected CS in a previous study in Abakaliki,^[6] South East Nigeria), q is 1.0, and P and d are margin of error tolerable (5%). This gave a sample size of 178.3. A sample size of 200 was thus deemed appropriate.

An informed oral consent was obtained by any of the authors at the end of an antenatal consultation. The questionnaire was either self or interviewer administered depending on the respondent's educational level. Data collected included information on age, parity, educational status, history of difficulty in conception before present pregnancy, preferred route of delivery in index pregnancy and the reason for their choice, perception of CS as a mode of delivery, and personal response to CS as a mode of delivery if offered as an alternative to vaginal delivery (VD). In addition, their willingness to accept CS if their husbands consent, despite their own aversion, was also sought. Information on their views about who is most appropriate to sign the consent form for procedures on the woman was also obtained. The beliefs of the respondents were assessed using their responses on the preferred route of delivery, reasons for their choice, and their personal response to CS, while their perceptions of CS were assessed

by their views on the reason why cesarean delivery is offered to patients.

The data were analyzed using the Statistical Package for Social Sciences version 17 (SPSS Inc., Chicago, IL, USA). The results were expressed in descriptive statistics of frequency and percentage. $P < 0.05$ was used to determine if there was any significant association between the sociodemographic data and the expressed views.

RESULTS

Fifty-one percent of the respondents were 21- to 30-year-olds. Only 1% of the respondents were >40 years of age. The rest were 31–40 years of age. More than half (112) had tertiary education. Ninety (45%) were in their first pregnancy. About 166 83% of the respondents did not have any history of difficulty in conception before the index pregnancy [Table 1].

All the respondents perceive that CS is done by the obstetrician for the safety of the mother and/or child. However, 184 (92%) will prefer the vaginal route of delivery. Of these, 134 (67%) believe it makes them more of a woman. Only 4% (8) of the respondents will opt for cesarean delivery because of previous bad experience

Table 1: Basic demographic data of respondents

	Number of respondents (%)
Parity	
First pregnancy	90 (45)
One or more living children	110 (55)
Educational status	
Less than tertiary education (nonformal, primary, or secondary)	88 (44)
Tertiary education	112 (56)
Previous history of infertility	
Yes	34 (17)
No	166 (83)

Table 2: Preferred delivery routes and reasons for preference of vaginal delivery

	Number of respondents (%)
Preferred delivery route	
Vaginal	184 (92)
Cesarean section	8 (4)
Any route	8 (4)
Total	200 (100)
Reasons for vaginal delivery as a preferred route	
Makes me more of a woman	134 (67)
It is our culture	36 (18)
Respect by the community	10 (5)
Avoidance of a scar	4 (2)
Total	184 (92)

with VD and fear of uterine prolapse. It is interesting to note that all those who opted for CS had tertiary education. Another 4% will accept any route of delivery offered provided it brings about a safe delivery [Table 2].

Table 3: Response to cesarean section by all respondents and those with previous history of infertility before present pregnancy

	Number of respondents (%)
Response to cesarean section	
Readily accept it	134 (67)
Accept it reluctantly	40 (20)
Reject it no matter the circumstance	24 (12)
Reject it and change my doctor	2 (1)
Total	200 (100)
Response to CS by women with previous history of infertility	
Readily accept it	18 (9)
Accept it reluctantly	10 (5)
Reject it no matter the circumstance	6 (3)
Total	34 (17)

CS=Cesarean section

Table 4: Response to signing of consent for surgical intervention on the woman

	Number of respondents (%)
Who should sign the consent for surgery on the woman?	
Man	180 (90)
Woman	12 (6)
Any of the two	8 (4)
Total	200 (100)

Twenty-six (13%) of the respondents will reject the procedure despite its necessity to save life. Among the 34 clients (17%) with a previous history of infertility before the index pregnancy, 6 (3%) will reject it no matter the circumstance [Table 3].

Joint decision-making by the couple was the view of two-thirds of our respondents, while 164 (82%) of them will agree to a cesarean delivery if their husbands consent despite their own personal disapproval because he is the head of the family and they believe he wants the best for both mother and baby. About a tenth of the women in the study, however, are of the view that women should take the decision solely on her own [Figure 1].

Twelve (6%) of the respondents think the client undergoing the intervention should sign the consent form, while 8 (4%) are of the view that either of the couple could sign [Table 4].

Thirty (29%) of those of 21–30 years of age were of the view that their husbands decide on the mode of delivery compared with 14 (14.58%) of 31- to 40-year-olds. This was statistically significant ($P = 0.019$). Fourteen (15.90%) women with less than tertiary education and 8 (7.10%) women with tertiary education were of the view that the decision on the mode of delivery be made by the wife alone. This was, however, not statistically significant ($P = 0.082$) [Table 5].

We found that 4 (11.76%) women with a history of infertility before index pregnancy and 18 (10.84%) women without infertility were of the view that the wife should decide on the mode of delivery. This was not statistically significant ($P = 0.885$) [Table 6].

Table 5: Relationship of age and level of education with response to “who should decide on mode of delivery?”

	Wife (W), n (%)	Husband (H), n (%)	Both, n (%)	God, n (%)	Doctor, n (%)	Total
Age (years)						
21-30	6 (5.88)	30 (29.41)	60 (58.82)	4 (3.92)	2 (1.96)	102
31-40	16 (16.66)	14 (14.58)	56 (58.33)	8 (8.33)	2 (2.08)	96
>40			2 (100)			
<i>P</i>	0.028	0.019	0.933	0.316	0.656	
Education						
Less than tertiary	14 (15.90)	32 (36.36)	42 (47.72)	-	-	88
Tertiary	8 (7.10)	12 (10.71)	76 (67.85)	12 (10.71)	4 (3.57)	112
<i>P</i>	0.082	0.00003	0.006			

Table 6: Relationship of fertility status before index pregnancy with response to “Who should decide on mode of delivery?”

Fertility status	Wife (W), n (%)	Husband (H), n (%)	Both, n (%)	God	Doctor	Total
Infertile	4 (11.76)	14 (41.18)	16 (47.05)	-	-	34
Fertile	18 (10.84)	30 (18.07)	102 (61.45)	12 (7.23)	4 (2.41)	166
<i>P</i>	0.885	0.006	0.173			

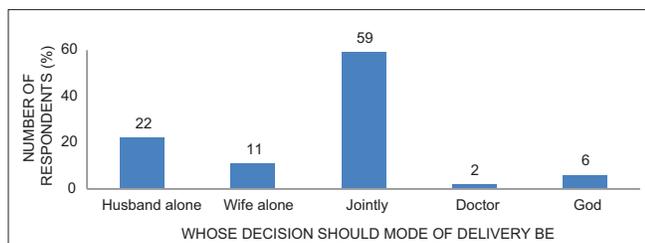


Figure 1: Bar chart showing the views of pregnant women regarding decision-making on mode of delivery

DISCUSSION

Women in developing countries view CS as not only abnormal but also a significant subtraction from womanhood.^[18] Our findings in this study on the preference for VD are consistent with studies done in different parts of Nigeria.^[6-8] In a study in Ghana^[9] involving 317 women, 93.3% of the respondents preferred VD. The story is no different in other parts of sub-Saharan Africa,^[19] and even in some parts of the developing world. A study involving 290 pregnant women in Australia showed a 93.5% preference for VD.^[20]

Majority of our respondents believe that VD makes them more womanly and is the culturally acceptable mode of delivery. A “real woman”^[21] has to bear the pains of labor no matter how long it lasts and subsequently delivers a healthy baby vaginally. This explains why women in most sub-Saharan African countries including Nigeria will accept CS only reluctantly even in the face of obvious clinical indications.^[22] Other reasons for preferring vaginal birth were to gain respect from their community and to avoid a uterine scar. In Nigeria, like most developing countries in Africa, a lot of importance is laid on having a male child. Women continue to have babies until they are able to have at least a male child, and preferably two. Therefore, a scar is seen as a limiting factor to one’s reproductive career.^[13]

A few respondents will prefer cesarean delivery because of previous bad experience with VD and complications of labor. This is consistent with 3.5% found in the Ghana study.^[15] Even though in many parts of the developed world, CS on request by pregnant women is on the rise,^[23] in the developing world, few elect to have CS on account of nonmedical reasons. In a study on CS on request,^[21] the prevalence of CS on request was 4.4%, and the reasons were mostly due to previous infertility and advanced maternal age. However, most of them would prefer a VD in subsequent pregnancies. In the present study, few women (34) had infertility before the index pregnancy. Despite this, it is interesting that 6 of them will reject it no matter the circumstance, while 10 will accept it reluctantly if needed to save their lives or that

of their babies. This is probably because vaginal birth is the culturally acceptable mode of delivery, despite their difficulty in conception.

All the respondents perceive that CS is a safe means of delivering a baby when vaginal birth is not possible. This is in contrast to the study of 400 women at Ilesha Nigeria where 37.5% believe it is due to the devil’s work, marital infidelity, and out of doctor’s self-interest.^[24] 174 (87%) of the respondents will accept CS if needed to save their lives and that of their babies, though one-quarter of these will do so with reluctance. They will accept CS because they perceive it is for their safety and that of their babies. Studies in Southwestern Nigeria also found acceptability of CS if indicated to be as high as 85%^[8] and 90.5% in Kumasi Ghana.^[9] However, 26 (13%) of our women are unwilling to accept it for themselves even if needed to save their lives and that of their babies. This is in agreement with the findings in Benin, Midwestern Nigeria,^[2] where 12.1% of the respondents will not accept CS under any circumstance. This result is significant because despite their agreement as to the safety of cesarean delivery, their perspective when they are personally involved is determined by what is acceptable in their community. In a similar study at Abakaliki,^[6] 6 (23.1%) of the 26 women who had CS in the past did not have good reception at home from their relations. These negative cultural beliefs in developing countries have led to gross underutilization of the procedure compared to the large burden of obstetric morbidity requiring resolution by cesarean section.^[25]

Education has been seen as a way to empower the woman to take decisions that will benefit her. Despite the fact that more than half of our respondents had tertiary education, their cultural beliefs and need to be accepted in their community were overriding concerns. Our finding is consistent with the study in Southwestern Nigeria,^[8] where the educational level of the woman or her husband had no influence on the acceptability of the procedure. It is to be noted that the 4% of our respondents who opted for CS had tertiary education.

Some studies of developing nations, especially in West Africa, emphasize the necessity for women to seek spousal or family member’s permission before being able to seek obstetric care.^[26] Majority of our respondents are of the view that the decision on the mode of delivery be made jointly. Gender roles have been seen to be changing for more equality for young women and men.^[27] Many researchers have argued that joint decision-making between husbands and wives may yield better reproductive health outcomes than either the wife or husband making the decision alone.^[28] Our finding could also be due to the fact that more than half of our

respondents had tertiary education. However, majority of our respondents will agree to a CS birth if their husbands consent, despite their own disapproval. This is because they believe he is the head of the family and will want the best for both mother and baby. This goes to confirm the age-old belief in many developing countries that women and children belong to the husband.^[15] This forces the women into a state of dependency on the men, rendering the women powerless to exercise their freewill in matters of reproductive decision-making. However, women with tertiary education were less likely to accept CS if they disapprove, despite their husbands' consent. They may also be more likely to accept CS if they approve, despite their husbands' disapproval. Education has been seen as an empowering tool that gives the woman confidence to take personal decisions.^[17,29] However, "classroom" education *per se* is not enough because despite knowing what will benefit them, they are many times unable to take decisions because of sociocultural traditions, which keep them subjugated and under the control of the male folk.^[30] Education should include expunging negative cultural perceptions that hamper women's health.

Majority of our respondents are of the view that the consent form be signed by the man, irrespective of the level of education, parity, age, or history of infertility. This is the acceptable mode of behavior in the African continent where the man owns the woman,^[15] and signing the consent form shows that he consents to the procedure. Even where the woman is educated and could sign for herself, there is an implicit support by the service providers for the man to sign.^[15] This is because of the prevailing belief system, of which the providers form part. It is seen as an affront on the part of the woman if she signs since the role has been given to the man by the culture to which they both belong.^[13]

In our study, the younger women were more likely of the view that the husband decides on the mode of delivery. This may be because the man is usually much older as is common in Africa. This puts her in a position of dependency. The older women were more in support of the wife taking the decision alone probably because the age difference with the man may be less and dependency on the man is also limited. This is supported by evidence from Pakistan.^[31] In studies among Nepalese and Chinese women,^[15,17] multiparous women were mostly of the view that a joint decision be made, perhaps because having living children give the required confidence needed to play a significant part in decision-making in the family.

The limitation of our study lies in the fact that we used a sample of convenience involving all pregnant women who consented to the study and were drawn from a single health facility in an urban setting. Despite this, the

women were from different socioeconomic classes and educational levels since most of the clients in the health facility used health insurance. However, more extensive studies involving both urban and rural dwellers are needed to further confirm our findings.

Knowing the cultural milieu in which these women live, health workers should organize outreach programs in both rural and urban communities to educate them on the negative sociocultural norms that affect women's health. It is important that reproductive health programs targeting men be designed to help them take decisions which impact positively on their families.^[32] Empowerment should be incorporated into the school curricula^[33] as early as primary school so that women are able to differentiate between the cultural roles that are important for family and societal stability, and that which keep them dependent, preventing self-actualization, and thus inimical to their physical and mental health. Nonformal education classes should be organized for those who are unable to go to school. Women should be supported by society to challenge traditional norms which affect their health negatively.

Conclusions

Many negative cultural beliefs hamper the health of women and their babies, and by extension, societal health. Empowering women to take decisions that will be to the best of their interest is the key. Men as important decision-makers in family life should be targeted by reproductive health programs. While the effort of the science and health-care professions is important in improving women's health,^[25] long overdue societal action is equally important to eradicate these perceptions that keep women subjugated from birth.

Acknowledgment

We wish to thank Dr. Nwankwo Ogochukwu T for his helpful suggestions during the data analysis of this article.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

REFERENCES

1. Depp R. Caesarean Delivery. In: Gabbe SG, Niebyl JR, Simpson JL, editors. *Obstetrics: Normal and Problem Pregnancies*. 4th ed. Philadelphia: Churchill Livingstone Press; 2002. p. 539-606.
2. Ezechi OC, Nwokoro CA, Kalu BK, Njokanma FO, Okeke GC. Caesarean morbidity and mortality in a private hospital in Lagos Nigeria. *Trop J Obstet Gynaecol* 2002;19:97-100.
3. Betrán AP, Meriáldi M, Lauer JA, Bing-Shun W, Thomas J, Van Look P, *et al.* Rates of caesarean section: Analysis of global,

- regional and national estimates. *Paediatr Perinat Epidemiol* 2007;21:98-113.
4. Ibekwe PC. Rising trends in caesarean section rates: An issue of major concern in Nigeria. *Niger J Med* 2004;13:180-1.
 5. Geidam AD, Audu BM, Kawuwa BM, Obed JY. Rising trend and indications of caesarean section at the university of Maiduguri Teaching Hospital, Nigeria. *Ann Afr Med* 2009;8:127-32.
 6. Sunday-Adeoye I, Kalu CA. Pregnant Nigerian women's view of caesarean section. *Niger J Clin Pract* 2011;14:276-9.
 7. Aziken M, Omo-Aghoja L, Okonofua F. Perceptions and attitudes of pregnant women towards caesarean section in urban Nigeria. *Acta Obstet Gynecol Scand* 2007;86:42-7.
 8. Awoyinka BS, Ayinde OA, Omigbodun AO. Acceptability of caesarean delivery to antenatal patients in a tertiary health facility in South-West Nigeria. *J Obstet Gynaecol* 2006;26:208-10.
 9. Adageba RA, Danso KA, Adasu-Donkor A, Ankobea-Kokroe F. Awareness and perception of and attitudes towards caesarean delivery among antenatal. *Ghana Med J* 2008;42:137-40.
 10. Finger C. Caesarean section rates skyrocket in Brazil. Many women are opting for caesareans in the belief that it is a practical solution. *Lancet* 2003;362:628.
 11. Latifnejad Roudsari R, Zakerihamidi M, Merghati Khoei E. Socio-cultural beliefs, values and traditions regarding women's preferred mode of birth in the North of Iran. *Int J Community Based Nurs Midwifery* 2015;3:165-76.
 12. Domingues RM, Dias MA, Nakamura-Pereira M, Torres JA, d'Orsi E, Pereira AP, *et al.* Process of decision-making regarding the mode of birth in Brazil: From the initial preference of women to the final mode of birth. *Cad Saude Publica* 2014;30 Suppl 1:S1-16.
 13. Deyo NS. Cultural Traditions and Reproductive Health of Somali Refugees and Immigrants. Master's Thesis, University of San Francisco; 2012.
 14. Ndep AO. Informed community participation is essential to reducing maternal mortality in Nigeria. *Int J Health Psychol Res* 2014;2:26-33.
 15. Acharya DR, Bell JS, Simkhada P, Van Teijingen ER, Regni PR. Women's autonomy in house-hold decision-making: A demographic study of Nepal. *Reprod Health* 2010;7:15.
 16. Geleta D, Birhanu Z, Kaufman M, Temesgen B. Gender norms and family planning decision-making among married men and women, rural Ethiopia: A qualitative study. *Sci J Public Health* 2015;3:242-50.
 17. Jin H. A study of rural women's decision-making power on reproduction and fertility. *Chin J Popul Sci* 1995;7:241-57.
 18. Jeremiah I, Nonye-Enyidah E, Fiebai P. Attitudes of antenatal patients at a tertiary hospital in Southern Nigeria towards caesarean section. *J Public Health Epidemiol* 2011;3:617-21.
 19. Al-Nuaim LA. Views of women towards cesarean section. *Saudi Med J* 2004;25:707-10.
 20. Gamble JA, Creedy DK. Women's preference for a cesarean section: Incidence and associated factors. *Birth* 2001;28:101-10.
 21. Chigbu CO, Ezeome IV, Iloabachie GC. Caesarean section on request in a developing country. *Int J Gynaecol Obstet* 2007;96:54-6.
 22. Kwawukume EY. Caesarean Section in developing Countries. *Bailliere's Best Pract Res Clin Obstet Gynaecol* 2001;15:165-78.
 23. Orfali K. Beyond numbers: The multiple cultural meanings of rising cesarean rates worldwide. *Am J Bioeth* 2012;12:54-6.
 24. Orji EO, Ogunniyi SO, Onwudiegwu U. Beliefs and perception of pregnant women at Ilesha about caesarean section. *Trop J Obstet Gynecol* 2008;20:141-3.
 25. Okonofua F. Optimising caesarean-section rates in West Africa. *Lancet* 2001;358:1289.
 26. Harrison KA. Maternal mortality in Nigeria: The real issues. *Afr J Reprod Health* 1997;1:7-13.
 27. Oladeji D. Gender roles and norms factors influencing reproductive behaviour among couples in Ibadan. *Anthropologist* 2008;10:133-8.
 28. Story WT, Burgard SA. Couples' reports of household decision-making and the utilization of maternal health services in Bangladesh. *Soc Sci Med* 2012;75:2403-11.
 29. Somé DT, Sombié I, Meda N. How decision for seeking maternal care is made – A qualitative study in two rural medical districts of Burkina Faso. *Reprod Health* 2013;10:8.
 30. Fathalla MF. The Impact of Reproductive Subordination on Women's Health Family Planning Services. *The American University Law Review* 1995;44:1179-89.
 31. Hou X, Ma N. Empowering Women: The Effect of Women's Decision-Making Power on Reproductive Health Services Uptake – Evidence from Pakistan. *The World Bank South Asia Region, Human Development Unit Policy Research Working Paper*; 2011. p. 5543.
 32. Mbizvo MT, Bassett MT. Reproductive health and AIDS prevention in Sub-Saharan Africa: The case for increased male participation. *Health Policy Plan* 1996;11:84-92.
 33. Speizer IS, Magnani RJ, Colvin CE. The effectiveness of adolescent reproductive health interventions in developing countries: A review of the evidence. *J Adolesc Health* 2003;33:324-48.