Original Article

What do obstetric patients consider as adequate disclosure during consent for anaesthesia for Caesarean section?

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Abstract

Background: The need to respect the values and preferences of the patient (autonomy) is one of the pillars of informed consent. The physician must disclose information and treatment options that will enable the patient to consent to medical or surgical intervention. This study investigated the adequacy and understanding of the information (disclosure) given to parturients for elective Caesarean section during the preoperative assessment.

Methods: The attending anaesthetist administered a structured questionnaire to all women scheduled for elective Caesarean section on arrival at the Labour Ward Theatre. The interviewer-administered questionnaire assessed the socio-demographic characteristics, information on the anaesthetic options for Caesarean section, probable complications, risk-benefit analysis, and their understanding of the information provided by the trainee anaesthetist at the preoperative review. All women scheduled for emergency or urgent Caesarean section were excluded from the interview by the attending anaesthetist.

Results: A high proportion of the women were multiparous and had tertiary education. The benefit of being awake and hear the first cry from the newborn during the caesarean section was most attractive to the parturients. A good percentage of the women had the various techniques of anaesthesia explained to their understanding and had the opportunity for questioning with satisfactory responses. The commonly discussed complications were hypotension, shivering, headache, and possible failed regional technique. Most of the women had sufficient information to meet the requirements for adequate disclosure in the informed consent process for anaesthesia.

Conclusion: Most of the women had sufficient information to meet the requirements for adequate disclosure in the process of informed consent for anaesthesia.

Keywords: Ethics, autonomy, disclosure, preoperative review, informed consent, caesarean section

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INTRODUCTION

Ethics is an integral part of clinical care[1] as the physician makes decisions to benefit the patient (beneficence), minimize harm (non-maleficence), and respect the values and preferences of the patient (autonomy).[2] Indeed, the principle of autonomy is the basis for informed consent and requires the physician to disclose medical information and treatment options that will enable the patient to consent to medical or surgical intervention. The patient should be told the truth regarding the diagnosis, prognosis, risks, and benefits of proposed treatments and should be independent in making choices based on this information.

Often, the anaesthetist requires consent to perform procedures that will facilitate another treatment or as a part of an interrelated process. Some practice guidelines[3,4] recommend professional courtesy to engage the patients with information on the planned treatment, the opportunity to ask questions, and the provision of honest responses. However, while the documentation of the interaction with the patient is advised, signing a separate formal consent form is not recommended.[4] There is an increasing trend in the annual rate of Caesarean section (CS) with 21.1% of women giving birth by CS, globally,[5] and anaesthesia services will be involved to a similar extent. Therefore, anaesthetist often faces ethical challenges in the delivery of anaesthesia for Caesarean section, especially when deciding what the patient would want to know to make an informed choice of anaesthetic technique.

The autonomy of the parturient to make informed decisions on the anaesthetic technique for caesarean section is dependent on the sufficiency of the information provided preoperatively. The information at the preoperative review should be balanced on the risk-benefit analysis. Some studies on risk disclosure have been on the views of practitioners rather than the patients.[6, 7] Material disclosure must be made known to the patient and an estimate of their understanding of the relevant information ascertained. Ekwere and Edomwonyi[8] assessed the adequacy of preoperative information provided to a population of parturients for Caesarean section in a cross-sectional study in a Nigerian teaching hospital. The results indicate that a small proportion of the parturients rated the information provided to be detailed and most of the women would have desired information on the possible complications of spinal anaesthesia for Caesarean section.[8] The information provided was limited to spinal anaesthesia for Caesarean section. It may have been expedient to evaluate, comprehensively, the information given to the parturients on the various anaesthetic techniques for surgical delivery. We believe that evaluating the information on the comprehensive anaesthetic techniques for the Caesarean section would provide further insights into the autonomy of patients to make informed decisions on anaesthesia for the delivery of their babies. Furthermore, such knowledge will assist in the development of strategies by anaesthetists for obtaining adequate informed consent for the anaesthetic management of obstetric patients. Therefore, this study investigated the adequacy and understanding of the information (disclosure) given to parturients for elective Caesarean section during the preoperative assessment.

MATERIALS AND METHODS

Pregnant women scheduled for elective Caesarean section were approached to participate in the study over 4 months following approval from the institutional Health Research Ethics Committee. All the pregnant women who were scheduled for elective caesarean section and met the eligibility criteria were consecutively recruited for the study. This comprised 89 pregnant women (total population). A structured interviewer-administered questionnaire was issued to the respondents. Routine pre-operative assessment of women scheduled for elective Caesarean section was conducted on the eve of the planned surgery. The preoperative review was based on departmental peer-reviewed protocol and was often led by a senior resident. A clinical history, physical examination, chart review, and a discussion on the peri-operative expectations including options of anaesthesia were discussed. The patients were encouraged to indicate and consent to any of the anaesthetic options. An order for premedication was made and further instructions were left with the nursing team. The next day, a detailed interview was conducted on the arrival of the patient at the reception of the Labour Ward Theatre. The interviewer-administered questionnaire assessed the socio-demographic characteristics, information on the

anaesthetic options for Caesarean section, probable complications, risk-benefit analysis, and their understanding of the information provided by the trainee anaesthetist at the pre-operative review. All women scheduled for emergency or urgent Caesarean section were excluded from the study by the anaesthetist. The data obtained were entered into the IBM Statistical Package for Social Sciences (IBM SPSS v.20) (IBM Corp., Armonk, NY, USA). After data cleaning, the data were expressed as frequencies and percentages, and continuous data was expressed as means with standard deviation.

Table 1: Sociodemographic characteristics

Features	Frequency	Percentage
Age	35.6 ± 4.4	NA
Nulliparity	6	6.7
Multiparity	79	88.8
Grand Multiparity	4	4.5
Educational status		
Primary	2	2.2
Secondary	17	19.1
Tertiary	70	78.7

Table 2: Preoperative discussion on the choice of technique of anaesthesia

Feature	Response (Percentage)	
	Yes (%)	No (%)
Informed of technique	87 (97.75)	2 (2.25)
Technique explained	83 (93.26)	6 (6.74)
Alternative technique offered	35 (39.33)	54 (60.67)
Benefits discussed	75(84.24)	14(15.73)
Stated alternatives of informed technique		N/A
• Spinal anaesthesia	80(92.0)	
• General Anaesthesia	5 (5.8)	
• Epidural Block	2 (2.2)	
• CSE	-	
• Local infiltration	-	

NA - Not Applicable; CSE – Combined Spinal Epidural

Table 3: Risk-benefit analysis

Feature	Response (Percentage)	
	Yes	No
Benefits*	75 (84.3)	14 (15.7)
• Being Awake	81(91%)	
• Hear baby cry	64(72%)	
• Early mobilization	14(15.7%)	
• Minimal drugs usage	10(11.2%)	
• Early feeding	8(9%)	
Consequences of Refusal of anaesthesia	71 (79.8)	18(20.2)

*** Multiple responses**

Table 4: Understanding of the discussion

Feature	Response (Percentage)	
	Yes	No
Agree to a technique of Anaesthesia	87 (97.75)	2 (2.25)
Agreed on good understanding	81 (91.0)	8 (9.0)
Opportunity to ask questions	76 (85.4)	13 (14.6)
Satisfactory answers	78 (87.6)	11 (12.4)
Unspoken questions	12(13.5)	77(86.5)
Discussed complications	42(47.2)	47(52.8)

RESULTS

Eighty-nine parturient scheduled for elective Caesarean section, over a period of four months were studied. The mean age of the parturient was 35.6+/-4.4 years. Most (88.76%) were multiparous and majority (78.65%) had a tertiary education. The socio-demographic characteristics are shown in Table 1.

Table 2 shows the preoperative discussion of the available options of anaesthetic techniques for Caesarean section. A high proportion of the

women [87(97.75%)] were informed of the techniques of anaesthesia while 83 (93.7%) of them had the technique of anaesthesia explained to their understanding. The stated techniques included general anaesthesia, spinal anaesthesia, epidural anaesthesia, combined spinal epidural, and local infiltration. Most of the women reported the alternative methods of anaesthesia discussed to include spinal anaesthesia [80 (92%)], general anaesthesia [5 (5.8%)], and epidural anaesthesia [2 (2.2%)] and none of the parturient were able to recall combined spinal epidural and local infiltration as alternatives options of anaesthesia for Caesarean section.
crying (64), and early mobilization (14). The patients' right to refuse anaesthesia for caesarean section and the associated consequences were discussed with most of the patients (79.8%).
Table 3 shows the risk-benefit analysis of the disclosure. Out of the 89 patients, 75 (84.3%) were informed of the benefits of the chosen anaesthetic technique while 14 (15.7%) were unable to recall any discussion on the benefits. The commonest benefits discussed included being awake during surgery (81), hear baby
Table 4 shows the parturient's understanding of the available techniques of anaesthesia. Almost all the patients [87(97.8%)] agreed to the preferred technique of anaesthesia while 81(91%) consented on a good understanding of the proposed technique of anaesthesia. The parturients [76(85.4%)] had the opportunity to ask questions that were satisfactorily answered except for one patient. A good proportion of the women [77(86.5%)] did not have additional questions except for a few of them [12 (13.5%)]. The risk of complications was discussed with 42(47.2%) of the patients while 47(52.8 %) claimed no complications of the techniques were discussed. The likely complications that patients were informed of are shown in Table 5. About 13 complications were discussed with the patients. The commonest complications discussed with the patients were hypotension, shivering, and headache. No patient reported urinary retention as a complication of the technique of anaesthesia. Death as a complication of anaesthesia was reported to have been discussed with two patients.

DISCUSSION

This prospective study evaluated the 89 parturient scheduled for Caesarean section to define the adequacy of preoperative information on disclosure. On arrival at the Labour Ward Theatre on the day of the Caesarean section, most of the women had sufficient information to meet the requirements for adequate disclosure in the process of informed consent for anaesthesia. Our results show that a high proportion of the women studied were multiparous and had tertiary education. The benefit of being awake and hear the first cry from the newborn during the caesarean section was most attractive to the parturient. A good proportion of the women had the various techniques of anaesthesia explained to their understanding and had the opportunity for questioning with satisfactory responses. However, a few women would have loved to ask other questions. About half of the women reported that the anaesthesia-related complications were not discussed at the pre-operative review session. Nevertheless, commonly discussed complications were hypotension, shivering, headache, and possible failed regional technique.

Disclosure is central to the process of informed consent in clinical practice. Every patient should be informed of the nature and extent of the planned treatment. Our results indicate that information on the techniques of anaesthesia was adequate and understood by the patient. Indeed, the information provided meets the needs of the patient and as required for informed consent. A previous study in Nigeria reports insufficient disclosure of information in surgical practice, in about 55% of the surgeons.[9] This observation by these authors is different from our results. First, the adequacy of disclosure to these parturients may be this robust because of the routine discussion of perioperative expectations in routine preoperative assessment to a proportion of highly educated women. Second, we interrogated the patients, unlike Ogundiran and Adebamowo[9] who sought the opinions of surgeons. Nevertheless, sufficient information should be given to the patients to enable an informed decision on the anaesthetic or surgical intervention.

The uptake of disclosure is related to the levels of education of the patient. Osime *et al*[10] indicated that the content of information disclosed during the process of obtaining consent is related to the level of education. The socio-demographic characteristics of a high proportion of multiparous women with tertiary education attest to the relationship between

information delivery and the level of education of the parturient. The reason for the association between the level of education and sufficient disclosure is unclear. It has been argued that the higher uptake of disclosure may be related to fear of litigation consequent upon any breach of the rights of the educated patients.[10, 11] It could be argued further that the high level of education among these parturient may enhance the uptake and recall of perioperative discussions, especially during the process of informed consent. The more educated patients are more actively involved in decision-making about their treatments.[12, 13] Poor recall of preoperative doctor-patient interactions has been shown to affect the perceived disclosure of information during consent for surgery.[14] Nevertheless, the level of education of the patient appears to alter the paternalistic tendencies of physicians, an attitude that is still common in Nigeria.[9]

The main components of informed consent include (i) competence to understand and decide, (ii) full disclosure, (iii) comprehension of the disclosure, (iv) acting voluntarily, and (v) consenting to the proposed treatment.[2] What constitutes acceptable disclosure varies from country to country, with the United States insisting on full disclosure. However, the patient must be informed of the nature and purpose of the intervention; the anaesthetic technique. The parturients in this study received adequate information on the various techniques of anaesthesia and enough explanation to their understanding of possible alternatives to the preferred method. It may be necessary for the anaesthetist to inquire about the patient's understanding of the discussion as about 4 patients (secondary level of education) did not understand even when recall of the conversation was acknowledged. The risk-benefit analysis and the consequences of the refusal of anaesthesia are components of adequate disclosure. In the risk-benefit analysis, the preponderance of parturients expecting to be awake and hear the newborn cry may be more related to the cultural mores. Some authors have argued for the inclusion of cultural narratives in disclosure practices.[15]

Opinions differ on the risks of anaesthesia that should be disclosed to the parturient. The complications of anaesthesia that are often discussed include those associated with the regional techniques and routine medications for anaesthesia. Spinal induced maternal hypotension, shivering and headache were the most discussed complications. This notwithstanding, complications or risks of material value are to be discussed with the patient. In a study, Dawes and Davison noted that 44% wanted to know the important potential complications, 38% were interested in knowing all complications, and the rest declined to know any complications (18%).[13] The close response rates for those wanting to know the important complications and patients who want to know all the complications may make it impossible for the anaesthetist to be guided by the principle of what a reasonable patient would want to know. Indeed, there appears to be no consensus on what significant risk to be made known to the patients.[16] However, the relevant risk for a procedure is events that have a 10% risk of temporary complication or a 0.5% incidence of permanent sequelae.[17, 18] A comprehensive list formed our discussion on complications irrespective of incidence. Nevertheless, opinions favour the discussion of complications from common to rare events that may be of interest to the patient.

The results of this study should be interpreted with caution. The discussions on the various components of disclosure are routine in preoperative review. The extent of documentation of these pieces of information was not determined. Since sufficient patient involvement is desired in the physician-patient relationship, no formal consent form is issued or signed for anaesthesia service. However, some practice guidelines require documentation of the disclosure in the patients' notes, which has not become routine in our practice. Notwithstanding, the observation of adequate disclosure of information during the informed consent process underscores the value of the discussion of perioperative expectations with parturients.

CONCLUSION

This interviewer-administered questionnaire evaluated the 89 parturient scheduled for Caesarean section to define the adequacy of preoperative information on disclosure. Our results indicate that most of the women had a tertiary level of education and sufficient information to meet the requirements for

adequate disclosure in the process of informed consent for anaesthesia. Furthermore, the extent of discussions on the complications of anaesthesia is marginal. Nevertheless, it appears that disclosure at the preoperative review is sufficient for the women scheduled for Caesarean section to make informed decisions on the anaesthetic option for the surgical delivery. The preoperative review must provide sufficient information on the perioperative expectations.

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Conflicts of interest
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