Ethical aspects of obstetric care: expectations and experiences of patients in South East Nigeria

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Background: Medical ethics is not given due priority in obstetric care in many developing countries, and the extent to which patients value compliance with ethical precepts is largely unexplored.

Objective: To describe the expectations and experiences of obstetric patients in South East Nigeria with respect to how medical ethics principles were adhered to during their care.

Methods: This was a cross-sectional, questionnaire-based study involving parturient women followed in three tertiary hospitals in South East Nigeria.

Results: A total of 1,112 women were studied. The mean age of respondents was 29.7 ± 4.1 years. Approximately 98% had at least secondary education. Ninety-six percent considered ethical aspects of care as important. On the average, over 75% of patients expected their doctors to comply with the different principles of medical ethics and specifically, more than 76% of respondents expected their doctors to comply with ethical principles related to information and consent during their antenatal and delivery care. There was a statistically significant difference between the proportions of women who expected compliance of doctors with ethical principles and those who did not ($P < 0.001$). Multivariate analysis showed that increasing levels of skilled occupation (odds ratio [OR] 9.35, $P < 0.001$), and residence in urban areas (OR 2.41, $P < 0.001$) increased the likelihood of patients expecting to be informed about their medical conditions and their opinions being sought. Although the self-reported experiences of patients concerning adherence to ethical principles by doctors were encouraging, experiences fell short of expectations, as the level of expectation of patients was significantly higher than the level of observed compliance for all the principles of medical ethics.

Conclusion: The level of practice of medical ethics principles by doctors during obstetric care in South East Nigeria was encouraging but still fell short of the expectations of patients. It is recommended that curriculum-based training of doctors and medical students should be implemented, and hospital policy makers should do more to promote ethical aspects of care, by providing official written guidelines for adherence to medical ethical principles during obstetric care.

Keywords: medical ethics, obstetric care, principles

Introduction

Despite the existence of a code of medical ethics published by the regulatory authority for Medical Ethics in Nigeria (the Medical and Dental Council of Nigeria), there is practically no formal curriculum-based training for doctors and medical students on medical ethics.¹ Empirical observations suggest that the observance of ethical precepts by health workers is often a matter of individual attitude to work, rather than compliance with enacted rules. Communication between doctor and patient is

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still heavily driven by the doctor, and patient participation often depends entirely on prompting by the doctor. This attitude to medical ethics has festered unabated, mainly because of many other overarching factors related to the provision, access, and utilization of medical care in developing countries.²

First among these concerns is the unavailability of adequate manpower and resources for health care, resulting in many health facilities and communities being underserved.² Added to this, there are cultural inhibitions and widespread ignorance among the populace, especially on health issues, resulting in poor utilization of many rural health facilities, the inability of patients to assert their rights to free communication with their doctors,³ and the possibility of the misinterpretation (by patients and their relations) of western-style informed consent practices as evidence that the doctor “does not know what to do.”⁴ Besides these, there are also high population-to-doctor ratios, which result in work overload for doctors.

In the midst of these scenarios, it has become debatable whether it is worthwhile to promote western-style medical ethics in developing countries, where basic health care is still not available to many.² Consequently, medical ethics is evolving rather slowly in Nigeria, and even physicians are unsure of the direction it should take.⁵ For instance, approximately 73% of surgeons surveyed in a recent study in Nigeria agreed that informed consent “was alien to the African psyche.”⁵ There remains substantial doubt about whether western-style medical ethics practices are sustainable in Africa, given the cultural and socioeconomic differences between the two societies.^{2,4-7}

In relation to obstetrics practice, anecdotal evidence shows that many patients feel that they are not treated with respect and dignity in many public hospitals in Nigeria, reinforcing the existence of inadequate attention of health workers to the ethical aspects of care. The current high rate of patronage of unskilled providers for antenatal and delivery care in Nigeria appears to be fanned, at least in part, by a lack of trust in public hospitals. The prevalent high maternal mortality rates in Nigeria are blamed largely on the low rate of deliveries attended by skilled attendants.⁸ Promoting respectful and dignified treatment could therefore be useful in addressing the problem of poor utilization of skilled attendants in public hospitals.⁹

We found scant literature on the ethical aspects of obstetric care in Nigeria.¹⁰⁻¹³ In order to contribute to the debate on whether medical ethics should be emphasized in developing countries, we sought to explore patients’ perspectives on the

observance and practice of ethical precepts during obstetric care. The aims of this study were therefore to describe patients’ expectations and experiences of the ethical conduct of their physicians during obstetric care in three university teaching hospitals in South East Nigeria.

Methods

Study area/centers

South East Nigeria is made up of five states and has a combined population of about 20 million, based on the 2006 Nigeria national census.¹⁴ The area is served by ten tertiary teaching hospitals. The study took place at three of these centers in Enugu and Ebonyi states namely, the University of Nigeria Teaching Hospital Enugu; the Federal Medical Centre, Abakaliki, Ebonyi State; and the Enugu State University Teaching Hospital, Enugu. These hospitals cater to a combined population of about 5 million urban and rural dwellers.

Study population

The study population included parturient women who had antenatal care and/or delivery at the study hospitals during the study period. The obstetric clients in these hospitals are usually self-referred, pregnant women who desire to receive care under specialist obstetricians and/or in a facility with modern facilities for obstetric care, and women with complicated pregnancies who have been referred from surrounding lower-level health facilities. In all three hospitals, women who had normal deliveries were usually observed in the hospital for 48 hours before discharge, while those that had cesarean delivery were usually discharged on the fifth to seventh postoperative day.

Study period

The study covered the period from July 1, 2010 to June 30, 2011.

Study design

This was a cross-sectional, questionnaire-based study involving booked parturient women followed in three tertiary maternity hospitals in South East Nigeria.

Sampling technique

A convenience sample of the three teaching hospitals was selected from the eleven teaching hospitals in the South East geopolitical zone of Nigeria. Sampling of study participants was purposive and involved enrolment of consecutive consenting women who delivered during the study period.

Data collection

In each of the three selected hospitals, 500 consecutive consenting women who delivered during the study period were administered anonymized, semistructured, pretested questionnaires developed for the study. The questionnaires were self-administered when the woman was sufficiently literate to understand it or otherwise, were interviewer-administered. For literate patients, the questionnaire was administered in the English language, whereas for semiliterate women, the questionnaire was administered by the interviewer, in the Igbo language. The questions were based on their experiences in the “index” pregnancy. The questionnaire was organized in three parts, with the first two parts involving open-ended questions. The first part dwelt on obstetric and demographic data, while the second part explored what the women perceived to be ethical misconduct and their expectations regarding the practice of ethical principles by doctors; the third part contained closed-ended questions that elicited the experiences of patients concerning how their doctors observed specific aspects of the ethical principles of autonomy, justice, beneficence, and nonmaleficence.¹⁵ The questionnaire was designed to yield semiquantitative data, with participants’ responses recorded on binary (Yes/No) or Likert scales. For patients who had uncomplicated vaginal deliveries, the questionnaire was administered on the second postpartum day, whereas for those that had cesarean delivery, it was administered on the fifth postpartum day (Supplementary figure).

Data analysis

The statistical analysis was done using SPSS statistical software version 17.0 for Windows (SPSS Inc., Chicago, IL, USA), using descriptive and inferential statistics. We related the conduct that patients expected or experienced from doctors to medical ethics principles and then interpreted which ethical principle each behavior represented. The main outcome measures were the proportions of respondents who expected specified ethical behaviors by their doctors and the proportions of women who experienced or observed compliance with ethical principles. The frequencies of different responses were expressed as percentages. Tests of significance for the differences between categorical variables were done with the Chi-square test. Bivariate logistic regression was used to determine the predictability of the expectations of patients. Those who expected compliance were coded as “Yes” (1), while those who did not were coded as “No” (0). The results were reported as adjusted odds ratios and 95% confidence intervals. A P -value ≤ 0.05 was considered significant.

Ethical clearance

Ethical clearance for the study was obtained from the Research Ethics Committees of the three hospitals.

Results

A total of 1,500 questionnaires were distributed, out of which 1,420 were returned. Of these, 1,112 (74.1%) were fully completed, and these were used for analysis. A total of 320 of the 1,112 respondents were from University of Nigeria Teaching Hospital, 309 from the Federal Medical Centre Abakaliki, while 483 were from the Enugu State University Teaching Hospital.

Sociodemographic characteristics

The mean age of respondents was 29.7 ± 4.1 years. Approximately 98% had at least secondary education, with about 58% possessing a postsecondary certificate. Table 1 shows

Table 1 The demographic and obstetric characteristics of respondents

Characteristic	Frequency	Percentage
Age (years)		
10–20	16	1.4
21–30	696	62.6
31–40	390	35.1
41–50	10	0.9
Occupational group		
Unemployed/students	416	37.4
Low-skilled/crafts/traders	136	12.2
Civil servants (nonprofessional)	440	39.6
Middle-level professionals (nurses, laboratory scientists, etc)	80	7.2
Upper-level professionals	40	3.6
Educational status		
No formal education	16	1.4
Primary education	16	1.4
Secondary education	440	39.6
Tertiary or post-tertiary education	640	57.6
Religion		
Christian	1,104	99.3
Roman Catholic	680	61.2
Non-Catholic	432	38.8
Non-Christian	8	0.7
Tribe		
Igbo	1,064	95.7
Non-Igbo	48	4.3
Residence		
Urban	920	82.7
Rural	192	17.3
Parity		
Primipara	408	36.7
Multipara	656	59.0
Grand multipara	48	4.3
Route of delivery		
Vaginal	960	86.3
Abdominal	152	13.7

the demographic and obstetric characteristics of the respondents.

Expectations of obstetric patients and factors that predict expectations

Approximately 89% (990/1,112) of respondents considered free communication between doctors and patients as a very important aspect of care, and 80% (890/1,112) of respondents stated that the conduct of doctors and other health workers was an important consideration that informed their choice of where to receive maternity care. On a six-point scale, 66% (734/1,112) considered ethical aspects of care as very important, 20% (222/1,112) as moderately important, 10% (111/1,112) as important, and 4% (45/1,112) as unimportant; no woman considered respectful and dignified treatment as moderately unimportant or very unimportant.

Table 2 summarizes the distribution of respondents, based on the ethical practices they expected from doctors. Approximately 78% (867/1,112) expected to be fully informed about their conditions, while 76% (845/1,112) expected their opinions and consent to be sought for investigations and treatment that they were to undergo.

Table 3 summarizes the results of bivariate logistic regression to determine which patient characteristics

predicted the type of expectation of patients, with respect to autonomy-related conduct. Occupation, age, residence, and religious denomination were all predictors of patients who would expect information and consent for investigations and treatment plans. Increasing levels of skilled occupation and residence in urban areas increased the likelihood of patients expecting to be informed about their medical conditions and their opinions being sought. However, increasing age and being Roman Catholic decreased the likelihood. Educational level, parity, mode of delivery, and tribal group were not significant predictors of the likelihood of expecting to have information and having the patient's consent sought.

With respect to the expectation of justice-related conduct, being a low skilled worker, age, residence, and tribe were significant predictors of the expectations of the patient. Low-skilled occupation, urban residence, and being of the Igbo tribe increased the likelihood of a patient's expectation that the doctor give consideration for their ability to pay for investigations and treatment, while increasing age decreased the likelihood. Educational status, being a Catholic (or not), parity, and mode of delivery did not have a statistically significant ability to predict the expectation of women with respect to justice-related conduct.

Patients' experiences of medical ethics practices of their doctors

The distribution of patients based on their experiences with respect to the medical ethics practices of doctors is summarized in Table 4. Approximately 78.4% (872/1,112) of respondents reported experiencing at least one instance where the doctor's conduct could be interpreted as a failure to comply with medical ethics principles, in the course of their care in the index pregnancy.

Informed consent for cesarean section

One hundred and fifty-two women who had a cesarean section responded to questions about their experiences with the process of obtaining their consent for surgery. Of these, 124 had a primary cesarean section, while 28 had a repeat cesarean section. For 36 women (23.7%), the consent was signed by the woman's husband, and all of these cases were for emergency cesarean sections. Table 5 summarizes the content of the informed consent for cesarean section, as reported by patients.

Comparison of expectations with experiences

Table 6 summarizes the comparison of expectations with the experiences of patients, with respect to the medical ethics

Table 2 The comparison of the numbers of patients who expected compliance with ethical principles by their doctors

Ethical conduct	Number of patients (n = 1,112)	
	Those who expected (%)	Those who did not expect (%)
Provision of adequate privacy	912 (82.0)	200 (18.0)
Provision of information on diagnosis and the options of management available based on current evidence	872 (78.6)	240 (21.4)
Seeking patient's opinion and consent on options in the investigation or treatment to be undertaken	848 (76.3)	264 (23.7)
Regular and punctual attendance at clinics by doctors	1,109 (99.7)	3 (0.3)
Fairness in the order of attendance to patients ("first come, first seen," except for medical emergencies)	1,102 (99.1)	10 (0.9)
Consideration of the ability of patients to pay for drugs or services, by exploring options based on necessity, efficacy, and cost	996 (89.6)	116 (10.4)
Respecting patient's feelings, including religious beliefs of patients during clinical evaluation and when recommending management options	616 (55.4)	498 (44.6)

Table 3 Results of the binary logistic regression for predicting the expectation of patients, with respect to the compliance of doctors with ethical principles

Variable	Expectation of information and asking for opinion			Expectation of consideration of cost		
	Odds ratio	95% Confidence interval	P-value	Odds ratio	95% Confidence interval	P-value
Occupation						
Professionals	9.35	3.57–25.94	<0.001*	1.73	0.68–4.40	0.25
Midlevel professionals	5.39	1.83–15.91	<0.001*	2.14	0.79–5.78	0.13
Civil servants	3.01	1.91–9.16	0.05*	2.38	0.82–6.91	0.10
Low-skilled workers	3.43	1.15–10.23	0.03*	3.53	1.3–9.5	0.01*
Unemployed ^o						
Age	0.86	0.81–0.92	<0.001*	0.91	0.86–0.96	<0.001*
Residence						
Urban	2.41	1.56–3.72	<0.001*	1.49	1.02–2.15	0.04*
Rural ^o						
Christian denomination						
Catholic	0.32	0.24–0.43	<0.000*	1.23	0.94–1.63	0.13
Non-Catholic ^o						
Education						
Tertiary and above	0.00	0.00	1.00	0.00	0.00	1.00
Secondary	0.00	0.00	1.00	0.00	0.00	1.00
Primary	0.28	0.91–0.86	0.03*	0.29	0.19–1.15	1.13
No formal education ^o	0.98	0.70–1.35	0.88	0.14	0.93–1.69	2.17
Parity						
Multiparous	0.82	0.55–1.13	0.22	0.75	0.56–1.01	0.06
Nulliparous ^o						
Mode of delivery						
Vaginal	1.35	0.85–2.14	0.21	0.81	0.53–1.21	0.30
Cesarean ^o						
Tribal group						
Igbo	0.00	0.00	0.90	3.48	1.52–7.96	<0.001*
Non-Igbo ^o						

Notes: *Statistically significant P-value; ^oreference independent variable.

Table 4 Comparison of the experiences of women concerning medical ethics practices

Obstetrician conduct	Number of patients who experienced conduct (%) n = 1,112		P-value
	Yes	No	
Appropriate autonomy-related conduct			<0.001*
Adequate privacy	624 (56.1)	488 (43.9)	
Examination in the presence of a chaperone	504 (45.3)	608 (54.7)	
Explanation of diagnosis and treatment options	772 (69.4)	340 (30.6)	
Seeking opinion and consent of patients on options of investigation and treatment	656 (59.0)	356 (41.0)	
Beneficence-related conduct			<0.001*
Punctuality to antenatal clinic	389 (35.0)	723 (65.0)	
Regular attendance to antenatal clinic	612 (55.0)	500 (45.0)	
Caring attitude	1,036 (93.0)	76 (7.0)	
Justice-related conduct			<0.001*
Consideration of cost of investigations and drugs	663 (59.6)	449 (40.4)	
No favoritism in attending to patients (patients seen on a "first come, first seen" basis)	468 (42.1)	644 (57.9)	
Nonmaleficence-related conduct			<0.001*
Verbal abuse	48 (4.3)	1,064 (95.7)	
Verbal sexual overtures	32 (2.9)	1,080 (97.1)	
Demand for financial gratification	48 (4.3)	1,064 (95.7)	
Inappropriate touching	72 (6.5)	1,040 (93.5)	
Participation in strike actions	1,045 (94.0)	67 (6.0)	

Notes: The comparison was based on Chi-square test of significant difference. *Statistically significant P-value.

Table 5 Self-reported content of counseling for cesarean section

Content of counseling for informed consent	Number of women who had counseling	
	Emergency cesarean n = 100 (%)	Elective cesarean n = 52 (%)
Detailed explanation of the indication for cesarean section		
Yes	15 (15.0)	52
No	85 (85.0)	0
Detailed explanation of the short-term-maternal risks associated with cesarean delivery, such as anesthetic risks, primary hemorrhage, injury to bladder or ureters, infection, and DVT		
Yes	20 (20.0)	1
No	80 (80.0)	51
Detailed explanation of long-term maternal risks associated with cesarean section, such as higher risks for placenta previa and uterine rupture in subsequent pregnancies, higher need for subsequent cesarean section		
Yes	10 (10.0)	5
No	90 (90.0)	47
Explanation of the surgery itself, including the types of abdominal incision, duration of surgery, type of anesthesia		
Yes	0 (0.0)	3
No	100 (100.0)	49
Explanation of the process of recovery from surgery, such as pain, the initial restriction of movement and initial restriction of oral feeding		
Yes	4 (4.0)	0
No	96 (96.0)	45
Explanation of the costs of surgery		
Yes	3 (3.0)	15
No	97 (97.0)	27

Abbreviation: DVT, deep vein thrombosis.

practices of doctors. The expectations of patients differed significantly from their actual experiences with respect to privacy, the provision of information to patients, the solicitation of patients' opinions and consent, regular and punctual attendance to appointments, fairness in attending to patients in clinics (ie, on a "first come, first seen" basis), and consideration of cost when issuing prescriptions.

Rating of doctors' compliance with ethical principles

Table 7 summarizes patients' rating of the ethical principles practiced by doctors. Favorable rating of the ethical principles practiced by doctors ranged from 41.65% to 69.4%. The highest rating was for the provision of information to patients, while the lowest rating was that of fairness in the order of attending to patients. Approximately 41% felt that doctors were poor in obtaining their consent for interventions.

Discussion

The study shows that an overwhelming proportion of women considered free communication between doctors and patients to be important and that there were significantly greater proportions of respondents who valued and expected their

doctors to exhibit conduct in keeping with the cardinal principles of medical ethics¹³ than proportions who did not. This suggests a high level of expectations of ethical practice from doctors. Given the demographics of the studied population, it would therefore appear that among the urban patient population in this developing-country setting, many value the ethical aspects of care.

The remaining discussion of the findings of this study will address the principles of medical ethics enunciated by Beauchamp and Childress.¹⁵

Patient autonomy

The ethical principle of patient autonomy determines the appropriate attitude of doctors to foster patients' right to information, primacy in decision making, and confidentiality and privacy. The basic quality of primacy in making decisions is the basis for the requirement of informed consent.^{2,9,10} In this study, a high proportion of respondents (76%) expected doctors to explain diagnoses and options of management and to seek their opinions and consent during their care. This is less than the 97% found by Chung et al, in a study of a nonobstetric inpatients in the US but higher than the 23.9% found by Cetin et al, in a general patient population in a mili-

Table 6 Showing the comparison of expectations and the actual experiences of compliance with ethical principles by doctors

Ethical conduct	Number of patients		P-value
	Expected (n = 1,112)	Experienced (n = 1,112)	
Adequate privacy			<0.001*
Yes	912	624	
No	200	488	
Provide information on diagnosis and the options of management available based on current evidence			<0.001*
Yes	960	772	
No	152	340	
Seek patient's opinion and consent on the options for investigation or treatment to be undertaken			<0.001*
Yes	948	656	
No	164	456	
Regular and punctual attendance at clinics			<0.001*
Yes	1,109	612	
No	3	500	
Fairness in the order of attendance to patients ("first come, first seen," except for medical emergencies)			<0.001*
Yes	1,102	463	
No	10	649	
Consider the ability of patients to pay for drugs or services by exploring options, based on necessity, efficacy, and cost			<0.001*
Yes	996	636	
No	116	476	
Respect for patient's feelings, including religious beliefs of patients, during clinical evaluation and when recommending management options			<0.001*
Yes	616	460	
No	496	652	

Note: *Statistically significant P-value.

tary hospital in Turkey.^{16,17} The highly selective nature of the patient population in this study might explain this contrast, and it will remain to be seen whether similar findings can be obtainable in the general patient populations.

The study also showed that the proportion of patients who expected adequate information and respect for their opinions was significantly greater than the proportion who acknowledged experiencing these practices. This suggests a

gap between expectations and practice and could mean that although the level of ethical practices may be encouraging, doctors need to do more to satisfy the expectations of this patient population. In contrast to a recent survey that showed that surgeons in South West Nigeria considered informed consent to be "alien to African psyche,"⁵ the findings in this study show that urban women in the South East Nigeria value information and respect for their opinions. The differences in

Table 7 Rating of ethical practices of doctors

Ethical practice	Rating n = 1,112 (%)				
	Excellent	Very good	Good	Poor	Very poor
Privacy during interview and examination including use of chaperones	0 (0.0)	24 (2.2)	600 (54.0)	488 (43.8)	0 (0.0)
Asking your opinion on investigations and treatment before prescribing them	7 (0.6)	63 (5.7)	586 (52.7)	456 (41.0)	0 (0.0)
Explaining investigations and treatment to you in a way that you could understand them	10 (0.9)	56 (5.0)	706 (63.5)	335 (30.1)	5 (0.5)
Fairness in the order of attendance to patients ("first come, first seen," except for medical emergencies)	0 (0.0)	149 (13.4)	314 (28.2)	649 (58.4)	0 (0.0)
Asking if you can pay for chosen test or treatment and offering you alternatives in case you are not able to pay	0 (0.0)	11 (1.0)	625 (56.2)	473 (42.5)	3 (0.3)
Respect for patient's feelings, including religious beliefs of patients, during clinical evaluation and when recommending management options	30 (2.7)	156 (14.0)	274 (24.6)	612 (55.0)	40 (3.6)

the two studies may be due to the study populations (doctors versus pregnant women), but it may also suggest that doctors may need to begin to modify their attitude towards medical ethics in developing societies, like Nigeria.

With respect to the practice of informed consent before a cesarean section, this study found that although efforts were made to obtain consent for both emergency and elective cesarean section, the contents of counseling for such consent appeared to be scanty. In most cases, counseling involved a brief explanation of the indication for the surgery. A previous study of surgical patients in this center alluded to the possibility that scanty content of counseling for surgery might be due to the fear that patients could misinterpret a detailed explanation of risks as a sign that the doctor was incompetent, a throwback to the possibility that patients in this area could easily question the doctors' conduct, including competence. The scanty content of counseling for informed consent defeats the purpose of such counseling, which should be to provide sufficient information for the patient to make up her mind about the procedure. The findings from this study therefore demonstrate the need for the improvement of presurgical counseling during obstetric care in the study centers.

Nonmaleficence

In this study, the perception by patients that strike actions by doctors constituted ethical misconduct was rife. Similarly, patients perceived lateness to clinics and absence from clinics as ethical misconduct. Whether this conduct constitutes ethical or professional misconduct is debatable. However, the feelings of patients about strike actions need to be taken seriously in view of the need to sustain the patronage of skilled birth attendants by these women. This is necessary to avert recourse to unskilled attendants, which has adverse implications for maternal morbidity and mortality.¹¹ That many women go elsewhere to deliver after attending antenatal care in teaching hospitals has severally been attributed to dissatisfaction with health workers' conduct in these teaching centers. Other inappropriate conduct allegedly experienced by pregnant women included verbal abuse, sexual overtures, including inappropriate touching, as well as the demand for financial gratification. Although the proportion of women who experienced these practices ranged from 2%–7%, the fact that this inappropriate conduct existed at tertiary levels of care in this country suggests that more needs to be done to protect patients, and one way of doing this is through the enactment of and strict compliance with hospital policies mandating the use of female chaperones for every examination.

Justice

Justice with respect to obstetric care is related to fair choices regarding investigations and treatment, especially with respect to cost. It can also be related to fairness in attending to patients in clinics, such as seeing patients on a "first come, first seen" basis. The highest proportions of respondents that expected compliance with justice-related ethical principles were, however, found among those who expected doctors to consider cost, efficacy, and their ability to pay for investigations and treatment. This underlines the important place of health care financing in obstetric care in these centers. The ethics of health care financing in developing countries is made more pertinent by the fact that well-structured health insurance schemes either do not exist or are not well developed. Although the recently introduced national health insurance scheme in Nigeria covers antenatal care and normal deliveries, the proportion of the population covered by the insurance scheme is presently very limited.

Predicting patients' expectations

Although all patients should receive due consideration for the ethical aspects of care, irrespective of their levels of awareness, predicting the specific expectation of patients may assist in laying the appropriate emphases. The study showed that certain demographic features could predict the expectations of patients in this obstetric population. Higher-skilled occupation increased the likelihood of expecting detailed information and informed consent. This may be due to the greater economic and social empowerment of highly skilled workers compared with low-skilled ones. Similarly, residence in urban area also increased this likelihood, perhaps for reasons related to awareness and empowerment. Conversely, increasing age and being Roman Catholic decreased the likelihood that patients would expect their doctors to give them detailed information and also seek their opinions on their management. On its own, increasing level of education had no significant effect on the expectation of detailed information and patients' opinions. These findings are similar to the findings by Chung et al, in the US, that increasing age was a predictor of patients leaving medical decisions to the doctor but is contrary to their findings that university education predicted patients' desire to have more control over their medical decisions.¹⁶

Strengths and weaknesses of study

The major strengths of this study include the large sample size and the multicenter design, which broadened the spread

of respondents and may have enhanced the external validity of the findings. The major drawbacks were the hospital-based nature of the study and the use of semistructured questionnaires, both of which might have biased the responses of women, who might have wanted to please the interviewers with favorable responses. Evaluating the expectations of ethical conduct after delivery exposed the study to recall bias. Also, the fact that focus-group discussions were not done excluded a detailed evaluation of the feelings of patients. Finally, the choice of a highly specific patient population means that the findings cannot be generalized to the general patient population in this area.

Conclusion

We conclude that most obstetric patients in the urban centers studied valued the ethical aspects of care and that levels of expectations were high. The current levels of adherence to ethical principles by doctors are encouraging, although they fall short of the expectations of patients. There is a need, therefore, for obstetricians to do more to meet the ethical expectations of patients, in this study population. The findings of this study suggest that medical ethics could become an important aspect of obstetric care in Nigeria as literacy levels and female empowerment improve among the population. Undergraduate and postgraduate medical schools should therefore develop curriculum-based training on medical ethics for doctors and medical students. Hospital policy makers need to provide written and official guidelines for adherence to medical ethical principles during obstetric care, including a more elaborate process for obtaining informed consent for surgeries. We recommend a further study on a general patient population in this area, to determine the applicability of the findings in this study to the general patient population in this resource-constrained setting.

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Disclosure

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Supplementary figure

AN ASSESSMENT OF PATIENTS' VIEWS ON DOCTORS' COMPLIANCE WITH ETHICAL PRINCIPLES IN THE MANAGEMENT OF WOMEN UTILISING MATERNITY SERVICES IN TERTIARY HOSPITALS IN SOUTH EAST NIGERIA

QUESTIONNAIRE

SECTION A: BIODATA

- i. Age (years).....
- ii. Occupation
- iii. Educational level
- iv. Residence
- v. Religion (denomination)
- vi. Tribe
- vii. Number of previous deliveries
- viii. Mode of delivery in index pregnancy

SECTION B: GENERAL PERCEPTION OF DOCTORS' CONDUCT

- i. Was the conduct of doctors an important consideration in your choice of where to receive maternity care? Tick Yes or No
- ii. How do you rate the importance of respectful and dignified handling by doctors during your care in this pregnancy and delivery? Tick only one as appropriate: (a) very important, (b) moderately important, (c) important, (d) unimportant, (e) very unimportant
- iii. Do you consider free communication between women and doctors during maternity as an important aspect of your care during this pregnancy and delivery? Tick Yes or No

SECTION C: EXPECTATIONS OF ETHICAL CONDUCT

Which of these are conducts which you expect doctors to adhere to when looking after pregnant women? Tick Yes or No

- a. Asking for and respecting the opinion of the patient in every decision regarding her investigation and treatment YES NO
- b. Consideration and respect for the religious beliefs of the patient YES NO
- c. Consideration of the ability of the patient to pay in choosing investigations and treatment YES NO
- d. Strictly ensuring that no physical, emotional or psychological harm is done to the patient in the course of her care YES NO
- e. Ensuring that every aspect of her care is meant to do good to the patient YES NO
- f. Having romantic relationship with the patient YES NO
- g. Soliciting money or donations from the patient YES NO
- h. Your personal contribution to decisions on your investigations and treatments YES NO
- i. Being attended to on "first come, first seen" basis YES NO
- j. Being seen only when there is a female chaperone YES NO
- k. Respect for your emotional feelings in the course of your care YES NO
- l. Respect for your privacy including the confidentiality of your case records YES NO

SECTION D: EXPERIENCES OF ETHICAL CONDUCT/MISCONDUCT

1. List all types of ethical/moral misconduct that you have observed among your doctors during your care in this pregnancy and delivery
.....
2. Which of these have you experienced in the course of your care in this pregnancy? Tick Yes or No
 - a. Being attended to in the presence of too many people without respect for your privacy YES NO
 - b. Being examined alone by a doctor without the presence of a chaperone YES NO
 - c. Having investigation and treatment without asking for your opinion about them YES NO
 - d. Having investigation or treatment without having them explained to you YES NO
 - e. Not being talked to regarding what the doctor found out on your assessment each day of your visit YES NO
 - f. Demand for romantic or sexual relationship from your doctor YES NO

(Continued)

- g. Demand for monetary reward from your doctor before being treated or after treatment YES NO
 h. Being touched inappropriately by your doctor YES NO
 i. Verbal abuse from your doctor YES NO

SECTION D: INFORMED CONSENT FOR CESAREAN SECTION

(This section is for only those who had cesarean section.)

Which of the following did your doctor offer you before you had your operation? Tick Yes or No

Detailed explanation of indication for cesarean section

Yes

No

Detailed explanation of short term maternal risks associated with cesarean delivery such as anesthetic risks, primary hemorrhage, injury to bladder or ureters, infection, deep vein thrombosis

Yes

No

Detailed explanation of long term maternal risks associated with cesarean section such as higher risks for placenta previa and uterine rupture in subsequent pregnancies, higher need for subsequent cesarean section

Yes

No

Explanation of the surgery itself including the types of abdominal incision, duration of surgery, type of anesthesia

Yes

No

Explanation of the process of recovery from surgery such as pains, initial restriction of movement, initial restriction of oral feeding

Yes

No

Explanation of costs of surgery

Yes

No

SECTION E: RATING OF THE ETHICAL PRACTICES OF DOCTORS

How do you rate the implementation of the following ethical practices in this hospital in the course of your care in this pregnancy? Tick as appropriate

Ethical practice	RATING				
	Excellent	Very good	Good	Poor	Very poor
Privacy during interview and examination					
Physical examination in the presence of a chaperone each time					
Asking your opinion on investigations and treatment before prescribing them					
Explaining investigations and treatment to you in a way that you could understand them					
Explaining the findings of your examination and your diagnosis clearly to you					
Giving you counseling personally and obtaining your consent before an HIV test					
Asking if you can pay for chosen test or treatment and offering you alternatives in case you are not able to pay					
Explaining the benefits and drawbacks of different tests and treatments available					
Explaining the benefits as well as the dangers of any operation you had					

Figure S1 The study questionnaire.

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