

Patients' perception and knowledge of anaesthesia and anaesthetists – a questionnaire survey

^a Eyelade OR, MBBS, MSc, FWACS

^b Akinyemi JO, BTech, MSc

^c Adewole IF, MBBS, FMCOG, FWACS

^a Lecturer/Consultant anaesthetist, University College Hospital, Ibadan, Nigeria

^b Department of Epidemiology, Medical Statistics and Environmental Health, College of Medicine, University of Ibadan, Nigeria

^c Department of Obstetrics and Gynaecology, College of Medicine, University of Ibadan, Nigeria

Correspondence to: Dr Olayinka R Eyelade, e-mail: oeyelade@comui.edu.ng

Keywords: patients' perception; anaesthetists' role; knowledge; survey

Abstract

Background: Most surgical patients do not recognise the role played by anaesthetists in the perioperative period because of poor public knowledge of anaesthesia as a medical discipline. This study was conducted to determine patients' knowledge of anaesthesia and of the qualifications and role of anaesthetists in patient care.

Methods: A cross-sectional questionnaire survey of 229 consecutive adult patients aged 18 years and above, scheduled for elective surgery at the University College Hospital, Ibadan, Nigeria, was conducted over a three-month period.

Results: Of the 229 patients studied, 90 (39.3%) were males and 139 (60.7%) were females. Ninety-nine (43.2%) had a history of previous anaesthesia and surgery, while 130 (56.8%) had no previous experience of anaesthesia. One-third (33 of 99) of patients who had past experience of anaesthesia knew that anaesthesia is administered by qualified anaesthetists. Among 130 patients without a history of previous anaesthetics, 63 (48.5%) had no idea of what the role of the anaesthetist was, 31 (23.8%) listed putting patients to sleep, monitoring vital signs and offering pain relief, and 25 (19.2%) knew that anaesthetists should administer anaesthetics. Patients who had tertiary education (44.1%) had a significantly higher knowledge of the anaesthetist's role than those with only secondary (33.2%) or primary education (15.7%, $p < 0.05$).

Conclusion: Patients have poor knowledge of anaesthesia and the role of anaesthetists in the care of surgical patients. This knowledge deficit should be addressed and made part of the general preoperative care to enable patients to cope better with a view to improving the outcome of surgical procedures.

© Peer reviewed. (Submitted: 2010-04-27, Accepted: 2010-07-28)

S Afr J Anaesthesiol Analg 2010;16(4):28-31

Introduction

Anaesthetists are poorly recognised in Nigeria, as is the case in many parts of the world. Many studies have demonstrated poor public knowledge of anaesthesia and the role of anaesthetists in developing^{1,2} and developed countries,^{3,4} despite their increasing involvement in resuscitation, intensive care, and acute and chronic pain management.

From the authors' experience, i.e. at our hospital, most patients scheduled for elective surgery do not know what to expect and often have limited knowledge of anaesthesia. Providing reliable information to patients may help to reduce patient anxiety and improve perioperative care.

Patients have not been surveyed on their perception of anaesthesia and the role of anaesthetists at our hospital, which is a teaching hospital with 10 consultant anaesthetists. Therefore, the aim of the survey was to study patients' knowledge of anaesthesia, the qualifications of anaesthetists, and the role of anaesthetists in patient care. A comparison was made between the level of education and knowledge relating to anaesthesia, as well as between patients who had had previous anaesthetic experience and those who had not.

Materials and methods

Following approval by our institutional health research ethics committee, a cross-sectional questionnaire

survey was conducted in 229 consenting adult patients aged 18 years and above scheduled for elective surgery at the University College Hospital, Ibadan, Nigeria between June and August 2008. Patients who refused to participate or were unable to participate in a consenting process (unconscious or critically ill patients) were excluded.

The questionnaire was drafted in English and was self-administered by patients sufficiently proficient in English. For non-English speaking patients the questionnaire was administered in the local Yoruba language by a trained interviewer proficient in that language.

The questionnaire consisted of a general, part with questions on demography for all participants, and three other sections containing multiple choice questions with options covering discrete facts and sometimes requiring a "Yes", "No" or "Don't know" response. The first section consisted of a set of questions aimed at assessing perceptions and knowledge of anaesthesia, the role of anaesthetists and surgeons in patient care, and recall of who the anaesthetist or surgeon was in patients who had previous experience of anaesthesia and surgery. The second section was a set of questions aimed at assessing the knowledge of anaesthesia and the qualifications and role of anaesthetists in patients who had no previous experience of anaesthesia and had not undergone any surgery in the past. The third section was a set of questions directed at all participants, which assessed the knowledge of the proposed surgical procedure, technique and choice of anaesthesia (regional or general) to be used, possible complications of anaesthesia, as well as the desire to meet the anaesthetist and to receive more information on anaesthesia.

Two hundred and thirty-seven questionnaires were fielded to patients in the wards on the day before surgery (for hospitalised patients), and on the morning of surgery (before transfer to operating theatres) in patients for day-case surgeries. Eight questionnaires were rejected because of incomplete information, while 229 questionnaires were entered and cleaned using Epi Info 2000. SPSS 12.0 was used for analysis. The chi-square test was used to determine associations between knowledge, perception of anaesthesia and other variables.

Results

Two hundred and twenty-nine (229) patients participated in the three-month study. Ninety (39.3%) were males and 139 (60.7%) were females (Table I). The

mean age of the subjects was 41.1 (SD = 15.9) years. The majority (44.1%) of them had tertiary education, while about one-third (33.3%) had secondary education, as shown in Table I. Ninety-nine patients (43.2%) had undergone operations in the past. One hundred and thirty-six (59.4%) were inpatients, while 93 (40.6%) were day cases.

Table I: Socio-demographic characteristics (N=229)

Variable	Frequency	Percentage
Gender		
Male	90	39.3
Female	139	60.7
Religion		
Christian	161	70.3
Islam	68	29.7
Level of education		
No formal education	16	7.0
Primary	36	15.7
Secondary	76	33.2
Tertiary	101	44.1
Past history of anaesthesia		
Yes	99	43.2
No	130	56.8

Past history

Of the 229 patients who completed the questionnaire survey, 99 (43.2%) had been anaesthetised previously. Of these 99 patients, 48.5% had general anaesthesia, 16.2% had regional or local anaesthesia, while 25.3% could not remember the type of anaesthesia administered. Thirty-five patients (35%) of this cohort knew that anaesthesia was administered by anaesthetists. Patients who had tertiary education (62.9%) have a significantly higher knowledge of the anaesthetist's role than those with secondary (22.9%) or primary education (14.2%, $p < 0.05$) as shown in Table II. Gender and religion did not influence patients' knowledge of the role of anaesthetists.

Patient knowledge of the role of the anaesthetist

When asked who should administer anaesthesia, only 25 (19.2%) of patients without a history of previous anaesthetics (130) knew that anaesthetists should administer anaesthetics, whereas the majority (80.8%) did not know. Half (50%) of this cohort knew that the anaesthetist is a qualified doctor, while those with tertiary education (69%) had the highest proportion ($p < 0.05$). When asked what the role of the anaesthetist was, 63 of 130 patients (48.5%) had no idea, while 31 of 130 patients (23.8%) listed putting patients to sleep, monitoring vital signs and offering pain relief. Twenty-

Table II: Socio-demographic characteristics and perception of the role of the anaesthetist

Variable	Who administered anaesthesia?			χ^2	p-value
	Others	Anaesthetist	Don't know		
Sex					
Male	5 (14.3)	12 (31.4)	21 (54.3)	0.826	0.662
Female	10 (16.1)	23 (39.3)	28 (44.6)		
Level of education					
No formal education	1 (25.0)	1 (25.0)	3 (50.0)	16.496	0.011
Primary	2 (12.5)	4 (18.8)	11 (68.7)		
Secondary	4 (12.9)	8 (22.6)	20 (64.5)		
Tertiary	8 (20.0)	22 (55.0)	10 (25.0)		
Religion					
Christian	12 (17.7)	26 (40.3)	29 (41.9)	3.243	0.198
Islam	3 (10.3)	9 (27.6)	20 (62.1)		

three (17.7%) patients mentioned putting patients to sleep only, while six (4.6%) mentioned offering pain relief and monitoring vital parameters.

Patient knowledge of anaesthesia and desire to know more

Seventy-eight patients (34.1%) reported that an anaesthetist had visited them before the operation. Of the 151 who said they had not been visited, 100 (66.2%) wanted to know who would be anaesthetising them. Of the 229 patients surveyed, 91.3% knew the type of surgery they were going to have, while 67.6% had knowledge of the anaesthetic techniques to be used. The knowledge of types of anaesthesia ranged from general anaesthesia (27.5%) to spinal anaesthesia (17.0%), epidural (4.8%) and local infiltration (18.3%).

One hundred and seventy-nine (78.2%) patients said they would agree with the type of anaesthesia suggested to them by the anaesthetist, while 155 (67.7%) reported their desire to have some information about anaesthesia before the day of surgery.

Eighty-one (35.4%) patients had some knowledge about the complications of anaesthesia, the worst listed was death or not waking up (34.5%), while the majority (64.6%) did not know any.

Discussion

This survey revealed poor patient knowledge of anaesthesia, qualifications and the role of anaesthetists in the management of surgical patients, despite the fact that physician anaesthetists have been administering anaesthetics at the institution in Ibadan since 1967.⁵ Fifty per cent (50%) of our patients recognised the anaesthetist as a qualified

doctor with the highest proportion being among patients who had tertiary education. This proportion is low when compared to surveys from developed nations such as the United Kingdom⁶, which reported 78%, Hong Kong⁷ with 70%, while a developing nation such as Singapore¹ reported 56.8%. The reason for this poor knowledge of anaesthesia among patients may be connected to the fact

that anaesthetists are often busy in the operating theatre with few and limited opportunities to interact with their patients.⁵

Of the 99 patients who have had surgical operations and anaesthesia at different hospitals, only 35.4% (35) remembered having seen an anaesthetist before the operation, while 90.9% remembered the surgeon fairly well. This finding is a reflection of the human resource situation because anaesthetists are in short supply in Nigeria, as is the case in other West African countries.⁸ Many surgeries are performed under local or ketamine anaesthesia administered by the surgeon, often working alone or with a nurse. In another instance, when asked who should administer anaesthesia, only 25 (19.2%) patients without a history of previous anaesthetics knew that anaesthetists should administer anaesthetics, while the majority (80.8%) did not know. Therefore, there is a need for anaesthetists to improve on preoperative visits and interact more with the patients so as to leave a lasting impression on their patients. Forums such as focus group discussions on various aspects of anaesthesia should be part of information given in the preoperative period. As shown in this survey, 66.2% of the patients wanted to know their anaesthetist, while 67.7% required more information about anaesthesia in the preoperative period. Providing sufficient information may help dispel the myths and misconceptions surrounding anaesthesia and surgery in our country.

In our institution and elsewhere in Nigeria, a survey on the choice of medical specialities by medical interns⁹ and undergraduate medical students¹⁰ revealed a poor rating for anaesthesia as speciality, because it is perceived as "behind the scene" with a low societal appreciation of the

role of anaesthetists. This survey corroborated findings from other studies^{1,11} that patients still have inadequate knowledge of anaesthesia and the role of anaesthetists. In this survey, 48.5% of patients lacking previous exposure to anaesthesia had no idea of the role of the anaesthetist, while 31 (23.8%) listed putting patients to sleep, monitoring vital signs and offering pain relief.

The limitation of this study was that the survey was conducted to determine the anaesthetist's role as perceived by surgical patients. The role of anaesthetists in resuscitation, intensive care and acute and chronic pain management remains undetermined, and further studies are required to evaluate patients' knowledge in this regard.

Conclusions

In conclusion, this study identified deficiencies in patients' knowledge of anaesthesia and the role of anaesthetists. We wish to suggest that the knowledge gap of patients should be filled through the use of combined approaches that include the provision of information leaflets on anaesthesia and focus group discussions in the surgical clinics or wards on what to expect before, during and after surgical operations. This would improve the standard of care of surgical patients and possibly enhance the outcome of surgical procedures.

References

1. Chew STH, Tan T, Tan SS, Ip-Yam PC. A Survey of Patients' knowledge of anaesthesia and perioperative care. *Singapore Med J*. 1998;39(9):399–402.
2. Khan F, Hassan S, Zaidi A. Patient's view of the anaesthetist in a developing country. *J Pak Med Assoc*. 1999;49(1):4–7.
3. Swinhoe CK, Groves ER. Patients' knowledge of anaesthetic practice and the role of anaesthetists. *Anaesthesia* 1994;49(2):165–66.
4. Jathar D, Shinde VS, Patel RD, Naik LD. A study of patients' perception about the knowledge of anaesthesia and anaesthesiologist. *Indian J Anaesth* 2002;46(1):26–30.
5. Famewo, CE. For some must watch while some must sleep. University of Ibadan Inaugural lecture series. University of Ibadan Publishing House, Ibadan, Nigeria; 1993.
6. Hume MA, Kennedy B, Asbury AJ. Patient knowledge of anaesthesia and peri-operative care. *Anaesthesia* 1994;49:715–18.
7. Irwin MG, Fung SKY, Tivey S. Patients' knowledge of and attitudes towards anaesthesia and anaesthetists in Hong Kong. *Hong Kong Med J* 1998;4(1):16–22.
8. Soyannwo OA, Elegbe EO. Anaesthetic manpower development in West Africa. *Afr J Med Med Sci* 1999;28:163–65.
9. Ohaeri JU, Akinyinka OO, Asuzu MC. Beliefs and attitudes of Interns at Ibadan General Hospitals concerning ten medical specialities. *Afr J Med Med Sci* 1994;23:341–46.
10. Adudu OP, Isa IJ. Attitude of medical undergraduate to clinical rotation in anaesthesia in a Nigerian Medical School. *Afr J Anaesth Intensive Care* 2006;7:1–3.
11. Hariharan S, Merritt-Charles L, Chen D. Patient perception of the role of anaesthesiologists: a perspective from the Caribbean. *J Clin Anaesth* 2006;18(7):504–9.