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ATTITUDE OF NIGERIAN SURGEONS TO INTRAOPERATIVE DEATHS

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ABSTRACT

Objectives: To assess the attitude of Nigerian surgeons to intra operative deaths.

Method: A scenario based questionnaire on the subject was distributed to 100 participants at a National meeting of surgeons in Benin City in 2004.

Results: Sixty-three questionnaires were returned (Response rate of 63%). One questionnaire was disregarded having been completed by a histopathologist. Respondents included 50 consultant surgeons, 2 consultant anaesthetists, 8 senior registrars and 2 registrars from surgery. 21 (33.9%) respondents opined that the rest of the list be cancelled following an intra operative death while 41 (66.1%) felt the list should continue. Of the 62 respondents 31 (50%) had experienced death of a patient on elective list. Forty four (71%) respondents felt that the surgeons and anaesthetists involved in the intra operative death of a patient would benefit from psychotherapy.

Conclusion: This study revealed that surgeons of varied subspecialty interests would want the rest of the elective list to continue following the intra operative death of a patient but that some form of psychotherapy is given to the surgeons and anaesthetists involved.

Key Words: Nigerian surgeons, attitude, intra operative death. *(Accepted 23 December 2008)*

INTRODUCTION

Death on the operating table during an elective list is one of the most harrowing experiences a surgeon or anaesthetist might encounter in his practice. This is a mercifully rare occurrence but one that can have considerable psychological and professional consequences for all members of the health team.[1]What should the theatre team do following such an unfortunate incident? Should the rest of the list continue? Or should the list be postponed until another day? Several works have been done on this subject elsewhere [1-4] and an inquiry by Sheriff Albert Sheenan into an incident that involved the death of a patient having elective surgery recommended that a surgeon should not operate for a period of 24 hours after such an event because "the surgeon is … not in the frame of mind to continue to operate that day".[5] However no study on this subject to the best of our knowledge has been conducted among Nigerian surgeons. It is important to document the attitude of surgeons to such an unexpected event because understanding the attitude of these care providers would facilitate the development of management strategies in response to unexpected deaths during a surgical list.The purpose of this study was to evaluate the attitude and opinion amongst Nigerian surgeons on intra operative death (IOD) and steps to take following such an incident.

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MATERIALS AND METHODS

A scenario based questionnaire survey (completed anonymously) was conducted at a national meeting of surgeons in Benin City in July 2004. All qualified surgeons (Fellows) as well as residents in surgery who are associate fellows were included in the study.There were no exclusion criteria. Questions asked included the following: specialty, institution and number of years of practice in the relevant specialty as well as consultant or resident status. Some questions sought to get the opinion of the respondent regarding the frame of mind of the anaesthetist and surgeon following intra operative death (IOD) of a patient on an elective list and whether the rest of the list should be cancelled or not. Other questions included whether the respondent had ever experienced IOD of a patient on an elective list, the decision that was taken following the incident and whether or not he felt psychotherapy would be of benefit to the surgeon and anaesthetist involved in IOD. Data is presented as frequency and percentages.

RESULTS

Out of 100 questionnaires distributed 63 were returned. (Response rate 63%). One questionnaire was completed by a histopathologist. This was disregarded and not included in the data analysis.Respondents included 50 consultant surgeons, 2 consultant anaesthetists, 8 senior registrars and 2 registrars from surgery. Forty one

(66.1%) came from University Teaching Hospitals, 6 (9.7%) from Federal Medical Centres while 9 (14.5%), and 6 (9.7%) came from State General Hospitals and Private Hospitals respectively.

The distribution of respondents according to specialty is shown in table 1. Fifteen (24.2%) had been in practice for less than 5 years, 15 (24.2%) for between 5 and 10 years while 32 (51.6%) had been in practice for more than 10 years.Fourteen (22.6%) respondents felt the anaesthetist was in the right frame of mind to continue the list while 48 (77.4%) felt otherwise. Twenty-eight (45.2%) respondents felt the surgeon was in the right frame of mind to continue the list while 41 (54.8%) felt otherwise. Twenty one (33.9%) respondents thought that the rest of the list should be cancelled while 41 (66.1%) felt the list should continue. Thirty-three (53.2%) suggested that the department of anaesthesiology should provide another anaesthetist to complete the list while 29 (46.8%) felt this was unnecessary. Of the 62 respondents 31 (50%) had experienced death on elective list. Forty four (71%) respondents felt that the surgeons and anaesthetists involved in the intra operative death of a patient would benefit from psychotherapy.

Table 1: **Distribution of Respondents According to Specialty.**

Specialty	Number of Respondents
General Surgery	26 (41.9%)
Urology	7 (11.3%)
Obstetrics and Gynaecology	9 (14.5%)
Orthopaedics and Trauma	3 (4.8%)
Paediatric Surgery	4 (6.5%)
Otorhinolaryngology	3 (4.8%)
Ophthalmology	5 (8.1%)
Oral and Maxillofacial Surgery	1 (1.6%)
Cardiothoracic Surgery	2 (3.2%)
Anaesthesiology	2 (3.2%)
Total	**62 (99.9%)**

Table 2: **Decisions Taken Following Intra Operative Death.**

Decision	Number of Respondents
Rest of list cancelled	17 (54.8%)
Rest of list continued by same team	9 (29.0%)
Last case on the list	1 (3.2%)
Another surgeon and anaesthetist continued	1(3.2%)
Only case on the list	1 (3.2%)
A break then list continued	1(3.2%)
Major cases cancelled, minor continued	1(3.2%)
Total	**31(99.8%)**

DISCUSSION

The intra operative death of anaesthesized patient occurs with an estimated prevalence of 1-30:100000.[6] In 2002 the National Confidential Enquiry into Perioperative Death (NCEPOD) reported 21,991 deaths in the United Kingdom (Scotland excluded) for the previous year. Of these 11% were intra operative and 15% were unexpected.[7] No local figures are available on IODs. However it is probable that surgeons and anaesthetists would witness an IOD in their career.[1, 2] In Jones series[2] 53% of surgeons acknowledged having witnessed IOD. 50% of our respondents have similarly experienced IOD in their practice.

The unexpected death of a patient has profound emotional effects on not just the surgeon and anaesthetist but also on other members of the medical and nursing staff as well as relatives concerned. It has been suggested that following such an incident the surgeon should take a break for 24 hours.[5]The reason adduced for this was that the surgeon was not in the right frame of mind to continue to operate that day.[5] There are no national guidelines on this subject at the moment but the views and experiences of our respondents may be largely representative. They came from a wide range of specialties , had varied levels of hospital practice and well experienced with more than 50% of them having been in practice in their chosen specialty for more than 10 years. Twenty eight (45.2%) of our respondents felt that the surgeon was in the right frame of mind to continue to operate that day while only 14 (22.6%) felt the anaesthetist was in the right frame of mind to continue the list. It is interesting to note that it has been suggested that surgeons are able to cope with situations that might be thought of as stressful to others.[8] Among the 16 surgeons who had experienced IOD in the Jones series,[2] 13 (81%) performed further operations that day and felt their competence had not deteriorated. In our study, in only 11 (35.5%) of cases did the list continue by the same team after the intra operative death of a patient. The causes of IOD are multi factorial and often summative. In general terms they can be classified as: anaesthetic factors e.g human error and equipment failure; patient factors e.g age and pre operative condition; surgical factors e.g surgeon's skills and experience as well as availability of relevant instruments and equipment. The effects of IOD on each member of the theatre team would be shaped by various factors including biological constitution, peer support or criticism, professional expectations, institutional demands, threat of legal action, and the level of medical seniority (consultants being more affected than resident doctors or registrars) as well as nature of the operation (expected or unexpected death?). Should the list be cancelled for the day or the whole theatre team changed?Given

that most surgeons and anaesthetists' performance will not be altered by most IODs and the resource implications of employing secondary health teams it seems more likely that cancelling lists may carry a greater risk of patient harm than allowing theatre staff to continue to operate. Goldstone et al[3] found that mortality is not increased in operations performed in the immediate aftermath of an IOD. If the same team continues to operate can it then be considered a risk free venture? In the absence of formal guidelines the best approach to take after a death occurs is a pragmatic one[1], involving departmental risk management strategies and consideration of the prevailing circumstances in the index case. This may involve replacing certain members of the theatre team.

There appears to be a consensus of opinion on the need for psychotherapy after an IOD. Forty four (71%) of our respondents felt that some form of psychotherapy would be beneficial to the surgeon and anaesthetist involved in IOD. Critical Incident Stress Debriefing and similar therapy has previously been advocated following emotional trauma[9] though its long term efficacy in stress reduction is variable.[10]

There are currently no universal guidelines on IOD. Developing guidelines on IOD is limited by various factors: focus on training in anaesthesia is concerned with the avoidance of disasters rather than the management of their aftermath; poor research in IOD; and circumstances surrounding IOD could vary widely. However, with public interest in doctors' decisions, guidelines about working after an IOD may serve to protect doctors as well as patients.[3]

In conclusion this study revealed that surgeons with varied subspecialty interest would want the rest of the list to continue but that some form of psychotherapy be given to the health care providers involved in intra operative deaths. There is need for the development of guidelines to deal with this rare but unfortunate event.

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