

# **Knowledge and Attitude of Nurses on the Practice of Surgical Conscience in Surgical Management of Patients at University College Hospital, Ibadan.**

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## **Abstract**

Surgical conscience is an in-built discipline of consistent awareness and practice of surgical rules in an individual. Increased cost of treatment, prolonged hospital stay coupled with patients' agony has increased their awareness of their legal rights. This study aimed at assessing nurses' knowledge and attitude on the practice of surgical conscience in University College Hospital, Ibadan. This descriptive study consists of 159 nurses (randomly selected) who are working in the purposely selected surgical units. A self-developed 33 item questionnaire was designed to capture the socio-demographic data and the objectives of the study. Descriptive and inferential statistics were used to analyze the data at alpha 5%. Majority (79.2%) of respondents were females. Almost (96%) all respondents have good knowledge of surgical conscience. 47.8% saw it as a guiding principle. There is a significant relationship between nurses knowledge and practice of infection control ( $0.00 < 0.05$ ), there was also a significant relationship between their years of experience and attitudes towards surgical conscience ( $0.00 < 0.05$ ) but there was no significant relationship between barriers and surgical conscience practices ( $0.22 > 0.05$ ). There may be need to explore systemic issues, the practice of surgical conscience should also be encouraged and personnel should demonstrate excellent practice towards the use of all available resources to ensure patient safety.

**Keywords:** Knowledge, Attitude, Practice, Nurses, Surgical patient, Surgical conscience.

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## 1 Introduction

Reports from IOM (Institute of Medicine) drew attention to patient safety issues and with more stringent economic measures in healthcare, greater efforts are required to reduce the burden of surgical patients through practice of surgical conscience. Surgical conscience is an in-built discipline of consistent awareness and practice of surgical rules in an individual, even in the absence of external monitoring of such individual [1]. It is the foundation upon which the skills and techniques employed by the surgical personnel are built. The “knowledge” and “application” of the principles of sterile technique by all theatre staff and others caring for surgical patients is the hallmark of the doctrine of surgical conscience, and indifference to this doctrine is a precursor to surgical infractions [2].

The advent of surgery, no doubt, has brought succor to man’s quest for improved health status. Many illnesses that hitherto proved incurable or recurrent have been tackled by the timely emergence of surgical practice. Acting on personal surgical conscience involves knowledge, self-awareness, intelligence, and the courage to make ethical and moral decisions that benefits the patients [3]. In her view, surgical conscience is evidenced by consistently exhibiting ethical behaviour, promoting patient safety, and doing the right thing even when no external monitors are present. Surgical conscience was described as an awareness that develops from a knowledge base of the importance of strict adherence to principles of aseptic techniques. She concluded that optimal patient care requires an inherent surgical conscience, self-discipline, and the application of principles of sterile and aseptic techniques, which are all inseparable related. The concept of a surgical conscience may simply be stated as a surgical Golden Rule: *do unto the patients as you would have others do unto you*. The caregiver should consider each patient as himself or herself or as a loved one. Once an individual develops a surgical conscience, it remains inherent thereafter [4].

It is appalling to discover that despite the expertise of operating suites workers and those caring for surgical patients in the study setting, complications such as prolonged wound healing, breakdown and blood borne infections still occur, which results in patients spending more money and time in the hospitals. The question to ask is ‘what account for these complications despite the level of training in such hospitals?’ Is it due to absence of surgical conscience?

The study was therefore designed to assess nurses’ knowledge and practice of surgical conscience.

The following research questions were raised;

1. Do nurses working with surgical patients know about surgical conscience and sources of infections in the hospital?
2. What is the attitude of nurses caring for surgical patients towards decontamination and disinfection of surgical instruments and other reusable items?

3. Do nurses apply the principles of aseptic and sterile techniques in everyday surgical practice?
4. What is the effect of environmental preparation on the outcome of care in surgical patients?
5. What are the limitations/barriers to effective practice of the doctrine of surgical conscience in the management of surgical patient?

## 2 Preliminary Notes

### Definition 2.1

**Knowledge:** Person's conversance with a particular subject.

**Attitude:** A way of eliciting a behavior

**Practice:** The act of doing something on a regular basis.

**Nurses:** These are all registered nurses working in the surgical units, that is, nurses working in various operating theatres, male and female surgical wards, surgical outpatient clinic, intensive care unit, etc.

**Surgical patient:** An individual who is under the care of nurses before, during and after surgery or who is being managed with surgical related conditions.

**Surgical conscience:** This is the inner man, developed to guide the actions of surgical personnel to do the right thing even if no one is present and to feel guilty if one is wrong.

**Surgical units:** Areas where surgical patients can be found e.g. operating theatres, surgical wards, surgical out-patient departments. etc.

## 3 Main Results

### 3.1 Findings

From the table 2 below, 85(53.5%) respondents have heard about surgical conscience before while 74(46.5%) of the respondents have not heard about it. Of those who have heard about surgical conscience before, 44.7% heard about it in the classroom, 30.5% read about it in textbooks. Among those who have heard about surgical conscience, majority of the respondents (58, 67.4%) understood it to be the police of the mind, 23.3% respondents understood it to be the act of maintaining aseptic technique.

Table 3 shows that the respondents agreed to the identified sources of infection as being valid sources. For the nurses, it is 94.2%, for the patients, it is 98.1%, for the instruments, it is 99.4%, for the surgeon, it is 94.9%, for the patients' environment, it is 98.1% and for the other health care workers, it is 96.0%.

Table 4 below shows that there are varying attitude towards the practice of surgical conscience among the respondents. While 99.2% believe it will benefit patients, 47.8% saw it as a guiding principle.

From the table 5 below, 152(95.6%) respondents said that adequate environmental preparation when carrying out a sterile procedure is highly essential while 3(1.9%) respondents said adequate environmental preparation is not highly essential when carrying out a sterile procedure. 4(2.5%) respondents are not sure whether it is essential or not. Conduct of surgical conscience and its promotion can be achieved by providing an environment of safety for the surgical team and the patients [3]. The principles of aseptic technique as adequate preparation of the setting including decontamination of the working surface or tray to be used with detergent and water or detergent wipes and then dry, removal of hand and wrist jewelry, performance of hand hygiene in accordance with Hand Hygiene Policy, assembling of all appropriate packaged sterile items for the procedure, and checking if packaging is intact and expiry date has not been exceeded. All these will prevent complications and reduce the risk of staying extra days in managing complications [5].

From the results below, it is obvious that adequate preparation is essential when carrying out a sterile procedure as identified by 152(96.5%) respondents. The table 6 below shows that 49(30.8%) respondents said that insufficiency of materials to work with is a barrier to shortage of staff, 30(18.9%) said it is time factor, 28(17.6%) said the barrier is working with difficult surgeons/doctors while 15(9.4%) respondents said that unconducive working environment is the barrier to an effective application of surgical conscience. A good communication skill is very important in assisting the development of surgical conscience. A team member should not be criticized for any error, that person should be given for admitting the error and should be helped to correct the violation [4]. The external forces and powers that control health care practices today may interfere with personal surgical conscience and make it very difficult to uphold [3].

### **3.2 Hypotheses Testing**

**Hypothesis one:** There will be no significant relationship between nurses' knowledge and practice of infection control in the hospital. The result from table 7 shows that  $r = 0.259$ , degrees of freedom (df) = 156 and  $p = 0.000$ . Since  $p = 0.000 < 0.005$  it implies that there is a significant relationship between nurses' knowledge and practice of infection control in the hospital.

**Decision:** The null hypothesis is rejected and therefore concludes that there is significant relationship between nurses' knowledge and practice of infection control in the hospital.

**Hypothesis two:** There will be no significant relationship between nurses' year of experience and their attitude towards decontamination and disinfection of surgical instruments.

The result from table 8 shows that  $r = 0.28$ , degree of freedom (df) is 158 and  $p = 0.000$ . Since  $p = 0.00 < 0.05$

**Decision:** The null hypothesis is rejected. It is therefore suggests that there is significant relationship between nurses' years of experience and their attitude towards decontamination and disinfection of surgical instruments.

**Hypothesis three:** There will be no relationship between the barriers to the practice

of doctrine of surgical conscience and the infection control practices.

The result from table 9 shows that  $r=0.09$ , degree of freedom (df) = 158 and  $p=0.22$ .

**Decision:** Since  $p=0.22 > 0.05$  it implies that the null hypothesis holds and the researcher conclude that there is no significant relationship between the barriers to the practice of doctrine of surgical conscience and the infection control practices in the care of surgical patients.

### 3.3 Discussion

The result of the revealed that 83(52.9%) of the respondents have heard about surgical conscience and 61.4% of them defined it as a police of the mind. About 63.7% still mistaken it to be synonymous with aseptic technique. [3] The art of surgery is expanding in geometric proportion, this call for a necessity for theatre workers and other personnel to gain commensurate knowledge in this field especially in the area of surgical conscience.

In spite of high level of knowledge of surgical conscience, the attitude and practice is still poor among nurses working in the surgical units as only 39.9% indicated that it is discussed daily in their unit. As identified, surgical conscience still guides surgical care today to some extent and it is not easy to practice due to time factor, lack of knowledge, insufficient equipment, and that it is tasking. Also, it is easy to develop surgical conscience through self-discipline and improved knowledge. Most practitioners would refuse to admit committing errors because they are highly ranked officers. [6]A break in technique compromises patient care and possibly threatens the patient’s life. If a personnel recognizes a break in technique, he/she must admit the break and take corrective action. [7] Surgical conscience should prompt practitioners to admit committing an error if need be, and to correct the situation. [8] If all principles of asepsis are practiced effectively, recovery of patients will be quick and risk of complications will be minimal. [9] If surgical conscience is well practiced, surgical complications will be prevented and patients will not have the course to stay extra days on the hospital beds managing complications.

## 4 Labels of figures and tables

Table 1: Socio- Demographic Characteristics of Respondents

Variables	N	Percentage
<b>Age(In Years)</b>		
16-25	16	10.1
26-35	74	46.5
36-45	52	32.7
46 and Above	17	10.7
<b>Total</b>	<b>159</b>	<b>100</b>
Sex		

Male	33	20.8
Female	126	79.2
Total	159	100
<b>Wards/units</b>		
South East 1	14	8.8
East 1	12	7.5
ICU	25	15.7
West 2	11	6.9
Burn Unit	3	1.9
South West 1	14	8.8
A&E Theatre	7	4.4
West 1	24	15.1
LW Theatre	26	16.4
O&G Theatre	5	3.1
Main Theatre	18	11.3
Total	159	100
<b>Religion</b>		
Christianity	118	74.2
Islam	41	25.8
Total	159	100
<b>Educational Qualifications</b>		
RN	7	4.4
RN; RM	83	52.2
RPON	40	25.1
BNSc (Degree)	17	10.7
Others	12	7.5
Total	159	100
<b>Years of Experience</b>		
1-5	45	28.3
6-10	54	34.0
11-15	39	24.5
16-20	7	4.4
21-25	8	5.0
≥ 26	6	3.8
Total	159	100

Table 2: Nurses' knowledge of surgical conscience

<b>Have you heard about surgical conscience?</b>	<b>N</b>	<b>%</b>
Yes	85	53.5
No	74	46.5
Total	159	100
<b>Source of information</b>	<b>N</b>	<b>%</b>
Journals	9	10.5
Scientific conference	3	3.5
Textbook	26	30.5
Internet	9	10.5
Classroom	38	44.7
Total	85	100
<b>Definition of surgical conscience</b>	<b>No</b>	<b>%</b>
The act of maintaining aseptic technique	20	23.3
Police of the mind	58	67.4
Hand washing and gloving	1	1.2
Sterilization of instrument	7	8.1
Total	86	100

Table 3: Nurses' knowledge of surgical conscience as measured by perceived sources of infections in the hospital

<b>Sources of infection</b>	<b>N</b>	<b>Percentage of cases</b>
The nurse	146	92.4%
The patient	155	98.1%
Instrument/equipment	153	98.6%
The surgeon	148	93.7%
Patients' environment	154	97.5%
Other health care workers	145	91.8%

Table 4: Nurses' Attitude towards practice of surgical conscience

<b>Attitude towards practice of surgical conscience</b>	<b>N</b>	<b>%</b>
It is still guiding surgical care today	76	47.8%
It is a rule in their units	79	50.3%
It is easy to develop	89	63.6%
It prompts personnel to admit committing error	98	63.2%
Patient will benefit from it	147	99.2%

Table 5: Nurses' attitude towards environmental preparation when carrying out surgical procedures

<b>Adequate preparation is essential when carrying out a sterile procedure</b>	<b>N</b>	<b>Percentage</b>
Yes	152	95.6
No	3	1.9
Not sure	4	2.5
Total	159	100

Table 6: Barriers to effective practice of the doctrine of surgical conscience in surgical management of patients

<b>Barriers to effective application of surgical conscience</b>	<b>N</b>	<b>Percentage</b>
Time factor	30	18.9
Insufficient material	49	30.8
Shortage of staff	37	23.3
Working with difficult surgeons	28	17.6
Unconducive environment	15	9.4
Total	159	100

Table 7: Correlation table showing the relationship between nurses' knowledge and practice of infection control in the hospital.

<b>Nurses</b>	<b>N</b>	<b>Df</b>	<b>X bar</b>	<b>SD</b>	<b>R</b>	<b>P</b>	<b>Remark</b>
Knowledge	157	156	2.19	1.24	0.259	0.000	Significant
Practice	157		1.17	0.44			

Table 8: Correlation table showing the relationship between nurses' years of experience and their attitude towards decontamination and disinfection of surgical instruments.

<b>Nurses</b>	<b>N</b>	<b>df</b>	<b>X bar</b>	<b>SD</b>	<b>R</b>	<b>p</b>	<b>Remark</b>
Years of experience	157	156	10.19	1.24	0.280	0.00	Significant
Attitude to decontamination and disinfection	157		2.13	1.77			



Table 9: Correlation table showing the relationship between the barriers to the practice of doctrine of surgical conscience and the infection control practices

Nurses'	N	Df	X bar	SD	R	p	Remark
Barriers	159	158	0.22	0.44	0.09	0.22	Not significant
Infection control practices	159		1.09	0.29			

## 5 Conclusion

The caregiver should consider each patient as himself or herself or as a loved one. Once an individual develops a surgical conscience, it remains inherent thereafter. Conscience is the inner voice which warns us that someone may be looking. It is however important to mention that surgical conscience does not involve having someone else notice an infraction. A nurse knows that long, false or painted fingernails can be potential source of danger to a patient. The theatre nurse knows that a cap should cover all the hair on the head and facial hair, the nurse knows that wearing dangling or bogus earrings is wrong, as it may fall into patient's wound. Having the awareness and taking the appropriate actions to protect the patient will lead to practice that is internally directed by intellect and desire to do no harm.

From the study, most nurses have the knowledge but few of them practice surgical conscience in their day-to-day nursing care of surgical patients, and there is a wide gap between knowledge and attitude (practice) of surgical conscience especially in the aspect of maintaining aseptic technique in all invasive procedures and protecting surgical patients from harm as much as possible.

There are some barriers to the practice of surgical conscience such as, unconducive working environment, insufficient materials to work with, working with difficult surgeons and time factor. Also the factors that can make a practitioner refuse to admit committing errors, such as high rank of the officer, too simple error and so on.

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