

Variations in Factors Responsible for Pre-operative Anxiety among Black and White Surgical Patients: Considerations for Diversity Interventions

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Abstract:-

Introduction: Surgery is stressful and anxiety provoking. Different factors have been reported as causing anxiety prior to surgery. Studies have found that, fears of anaesthesia, death; surgical errors and concerns about the outcome of the surgery are responsible for preoperative anxiety. These factors were reported in studies conducted with white surgical patients. There is paucity of information about factors causing preoperative anxiety among black surgical patients.

Aim: The aim of this study was to explore the differences in the factors responsible for preoperative anxiety among black and white surgical patients and to describe the difference(s) if any with a view to recommending culture competent preoperative anxiety reduction interventions.

Method:

Participants: A convenience sampling approach was used to recruit a sample of thirty patients scheduled to undergo elective surgery at federal medical centre Nguru, Yobe state, Nigeria.

Data Collection: Interview method was used to collect data on factors responsible for preoperative anxiety among black surgical patients in Nigeria.

Data Analysis: Inductive content analysis was used to analyse interview data collected from black patients scheduled to undergo elective surgery in Nigeria.

Findings: This study found that in white surgical patients, anxiety is precipitated by fear of medication errors, concerns about the success of the surgery, hospital acquired infections and lack of control of the situation. Conversely, the manner in which black patients receive information about the need to have surgery, the information received from other sources, catastrophic negative thinking about surgery and the layout of the hospital ward are responsible for preoperative anxiety.

Conclusion: Cultural differences underpin factors responsible for preoperative anxiety among black and white surgical patients. This speaks to the need for cultural competence in clinicians dealing with preoperative anxiety in black surgical patients.

body systems resulting in heightened physiological arousal such as increased heart rate, irregular respiration and elevated blood pressure (Nabi et al., 2010). Patients awaiting surgical operation are affected by a high degree of anxiety medically referred to as preoperative anxiety (Sigdel, 2015). Preoperative anxiety is characterised by a heightened state of tension and fear, dread and nervousness disproportionate to the threat of surgery being confronted (J. Gilmartin, 2007; Jo Gilmartin & Wright, 2008). Low and moderate levels of preoperative anxiety is a normal and predictable response to the threat posed by surgical operation. However, it becomes a problem for both patients and the surgical team members when it interferes with the patients' ability to adjust and cope with the surgery.

Studies have shown that preoperative anxiety has physical and psychological effects on surgical patients. Physically, preoperative anxiety induces changes physiological parameters such as tachycardia, palpitation, involuntary tremors and increased blood pressure (Nabi et al., 2010). Preoperative anxiety also increases the experience of postoperative pain (Nigussie, Belachew, & Wolancho, 2014; Pritchard, 2009a; Vaughn, Wichowski, & Bosworth, 2007). Anxious surgical patients receive higher doses of anaesthetics, consume more postoperative analgesics and stay longer in the hospital (Matthias & Samarasekera, 2012). Broadbent, Petrie, Alley, and Booth (2003) reported that, preoperative anxiety affect the functions of the immune system. This can cause susceptibility to opportunistic postoperative infections, consequently delaying surgical wound healing and discharge from the hospital. In some patients, preoperative anxiety is accompanied by complaints of headaches and dizziness, (Bilberg, Nørgaard, Overgaard, & Roessler, 2012; Bradshaw, Hariharan, & Chen, 2016). Such symptoms can lead to despondent feeling, lack of energy and motivation which without intervention, can progress to a feeling of depression (Kavakci, Altuntas, Mūderris, & Kugu, 2012). A number of psychological reactions accompany preoperative anxiety. Anxious surgical patients experience restlessness, lack of attention and concentration, difficulty falling asleep or inability to maintain sleep for long time (Leung et al., 2015). Patients with psychological complaints experience episodes of intrusive thoughts about their illness; they think of the

I. INTRODUCTION

Anxiety is an inordinate, incapacitating feeling of tension and apprehension with no identifiable cause (American Psychiatric Association, 2013). Anxiety induce changes in the

likelihood of dying during or after the operation (Nigussie et al., 2014). In addition, some patients continue to have mental images of their physical appearance after the operation. (Sarwer & Crerand, 2004; Sarwer et al., 2010)

A number of factors have been reported as responsible for preoperative anxiety. Studies have reported that preoperative anxiety is caused by fear of anaesthesia, (Burkle et al., 2014; de Zwaan et al., 2011; Elmore, Priest, & Laskin, 2014; Fischer, 2011; Lee et al., 2016; Mavridou, Dimitriou, Manataki, Arnaoutoglou, & Papadopoulos, 2013; Mitchell, 2000, 2010, 2012) and fear of death (Kristy L. Rialon 2012; Nigussie et al., 2014). Other factors responsible for preoperative anxiety are fear of surgical errors, concern about the success of surgery as well as of loss of control and independence (Ali et al., 2014; Baker et al., 2004; Pritchard, 2009b). These factors were reported in studies conducted in western developed countries and on predominantly white surgical patients. Knowledge review conducted to ascertain the factors responsible for preoperative anxiety among black surgical patients found a paucity of information in the literature highlighting the factors responsible for preoperative anxiety among black surgical patients.

Aim of the study:

- The aim of the study was to explore the differences in the factors responsible for preoperative anxiety among black and white surgical patients.
- To describe the difference(s) if any with a view to developing culture specific preoperative anxiety reduction interventions.

II. METHODOLOGY

Recruitments of Participants

The study was conducted in a secondary care hospital in north eastern Nigeria. In this hospital elective surgeries were performed twice a week – on Tuesdays and Thursdays. Patients on the waiting list arrive at the hospital on Mondays and Wednesdays to consult with their surgeons and receive instructions about their planned surgery. Patients were introduced to the study at this stage with those consenting to participate recruited. Consent forms and information sheets containing details about the research were also provided with participants fully informed of their right to decline to participate or leave the study at any point in time. Ethical approval was received from the ethical committee of the University of Bradford and the hospital where the study was conducted via letters referenced-EthicsApplication-E543 and FMC/N/CL.SERV/355/VOL III/121 following the researchers' application for ethical clearance. A total of thirty (30) participants, seventeen male, and thirteen female were recruited to participate in the study. Age range 17 to 70 years, (mean age = 41.03 and standard deviation = 16.09). Eight out of the total number of the participants were single, nineteen were married while the remaining three participants were either divorced or separated. Fourteen of the recruited

participants were unemployed, fifteen were employed and the remaining one participant was retired. Their educational backgrounds varied. One participant was a student, two had primary education as their highest educational qualification, six had secondary education as highest qualification whilst nine participants were educated up to tertiary level. On the other hand, a significant number of the participants (12) had informal education (either adult education or Qur'anic education).

Procedure for data collection

Data was collected from all 30 participants through face-to-face interview. Each of the participants was informed at the point of signing their consent that they will be interviewed. The focus of the interview was to find out what was responsible for their preoperative anxiety. They were also informed that the interview will be recorded on an audio-recording device. The participants were asked what factors are responsible for their preoperative anxiety. Why were they afraid of what they fear?

III. FINDINGS

The audio recorded accounts of the participants were transcribed verbatim to enable the researchers make sense of them. Stuckey (2014) emphasised the importance of verbatim transcription of audio recorded data, maintaining that if for any reason verbatim transcription was not conducted, it can lead to researcher bias, memory can be lost or be selective, consequently affecting the final data analysis. Following transcription, inductive content analysis, inspired by the work of (Elo & Kyngäs, 2008), was used to analyse the data. Using this technique, the researchers read through the transcribed materials over and over such that categories and themes were derived as the researchers became familiar with the data. A requirement for effective content analysis is that data can be summarised into ideas that define the research phenomenon by generating groups, concepts, model and a conceptual map (Elo et al., 2014). The technique of inductive content analysis consists of listening to the transcribed data in order to understand the participants' responses to the question(s) (Elo et al., 2014; Elo & Kyngäs, 2008). Open coding system was used to define and categorise the responses on basis of their characteristics, dimensions and properties. Categories that were similar to one another were merged to form bigger categories that clearly explained the phenomenon under investigation. These bigger categories were finally reduced into major themes on the basis of the common words, concepts, and characteristics that best described their fundamental importance. Through this process, three major themes emerged from the categories as presented in the table below.

The table below presents the categories and themes derived from the analysis.

	Category	Theme
1	Fear of experiencing pain The operation itself The outcome of the surgery	The surgery as a source of anxiety
2	Information from clinicians Information from others Negative self-thoughts	Faulty information and thinking about surgery
3	The hospital The hospital staff Waiting for the operation	The hospital as a source of anxiety

Theme 1: Surgery as a source of anxiety

Fear of the operation consists of three categories- ‘fear of experiencing pain’, the ‘process of surgery’ and the ‘outcome of the surgery’. What follows is the description of these categories and quotes from the participants are added to justify the feelings or causes of preoperative anxiety from the patients’ perspectives.

(a) *Fear of experiencing pain*: Black surgical patients widely reported fear of pain as a factor responsible for their pre-operative anxiety. Despite the belief on the competencies of their surgeons and doctors, some patients have expressed intense fear of pain following their surgery:

“As a matter of fact I am afraid of the pain after the surgery...; I can’t stop thinking about the operation and the pain after the operation. I can’t stop thinking about what it will be like. I mean the pain, I am very anxious... (p 12)”

“My own surgery involves cutting into my stomach. So there may be real problems, there may be problems with the doctors (surgeons) making mistakes to cut some organs different from the ones they are interested in...” (P28).

“Surgery always comes with pain, so you see... because of this pain one must experience anxiety” (P16).

Some of the participants considered their pre-operative pain and used it to gauge the pain they may likely experience post-operatively.

“Imagine the pain, the pain I suffer now, how would it be if they cut into this lump? I have to be afraid of it; I know what I feel right now. I do not sleep, the pain is disturbing me. So I am afraid of everything” (P18).

Some participants’ fear of pain is related to specific events in the surgical process. Three participants revealed their fear of pain was related to anaesthetics. They seem to be misinformed about anaesthetics by other people, as can be seen from their accounts:

“There are things associated with the surgery that one has to think about. Imagine the injection that

makes you unconscious (referring to anaesthesia). That injection they said is very painful..., while they are trying to save your life, or relieve the pains of surgery, it can easily lead to death.... There are many reports of death following these type injections.” (p.21)

“If there is one aspect of the operation I worry about, it is the anaesthesia... when anaesthesia is administered, you will be somewhat like a dead person before you finally recover and regain your consciousness. Some people don’t recover from the anaesthesia, they die” (P13).

Participant 21 stated that: “...this injection (anaesthesia) I would prefer to be operated without having it administered to me. I have not had it before, but the information I got about it was horrible, so hate it. I don’t like it. Apart from this, actually there is nothing I can say I am afraid of”.

Pain is a personal experience, the exhibition of which is linked to sociocultural and psychological factors. These factors influence the form pain behaviour takes, the situation in which the pain occurs, the way it is interpreted and classified as normal or abnormal. Culturally our participants show sympathy to people in pain. Fear of pain is therefore displayed overtly by exhibiting attention seeking behaviours particularly in the presence of spouses. Clearly, there is culturally distinctive language for pain expression through which patients make others understand their pain. The participants’ culture values the exhibition of emotions and verbal expressions to indicate that one is experiencing pain. The patients’ behaviour is therefore constructed to attract such sympathy and social support from care givers.

(b) *The surgical operation*: the participants expressed a high anxiety about the surgery. The anxiety is triggered by the way they think their body is going to be cut into. Persistent thinking about the surgery makes them some participants very anxious.

“...I can’t stop thinking about the operation and the pain afterwards. I frequently think about the aftermath of the operation, when I am thinking about it, it used to be very difficult to do other things. The thought of the surgery takes much of my time such that I cannot do anything” (p.12).

“Yes... it is surgery, which means one is going to be operated on; naturally anybody going for operation must be afraid of the whole thing. They will cut your body so it is necessary to be afraid... (P 7)”

“Surgery is a frightening situation particularly if you don’t have a history undergoing surgery.” (p.14)

Participant 1 reported: “I could not sleep, I used to have occasional dreams during my brief sleep with

themes about illness, hospital and sometimes I see myself vividly in the surgical room.

Some participants' surgical anxiety made them think about the likelihood of death or dying following the operation. They live with the fear that the surgery may result in their eventual death. One participant explained that she sought the forgiveness of her husband and family members so that in the event of her death, she will be in peace in the life after this.

"... What about death? Death is something to fear. I must be afraid of it because the possibility of death following surgery is always there. That is why I asked my husband and my family members to forgive me before the surgery. They have to forgive so that even if I did not come out of the surgery I have been forgiven and therefore will have peace in the life after death"(P19).

"I keep thinking about the surgery as the time approaches, I try to control my thoughts but it is a reality I cannot change. I am very nervous; honestly, it is like I will die. (P1)."

It was found that our participants' fear of surgery and fear of death are culturally reinforced. Culture is a reflection of the belief in faith. Our participants have a strong culture of religiosity and therefore tend to attribute anything to God. Their religious belief requires them to believe in faith and destiny and to consider adversities as coming from God. Such belief influence patients and predispose them to experience high degree of anxiety particularly those patients who can challenge the belief that destiny has it for them to become ill or undergo surgery. Thinking about the operation and the possible death following the surgery will continue among such patients as they challenge their religious belief which forces them to accept and attribute their illness external cause.

(C) *The outcome of the surgery:* It is evident that Pre-operative anxiety in some participants is precipitated by their concern about the outcome of the surgery.

"...the outcome could be favourable or unfavourable; I mean it could be successful or unsuccessful. Many have had it either way. But I am praying that it will be easy for me, no complications, and pain and ...you know any problems that may arise have to be anticipated" (p20)

"...So because of my last experience, though the current operation is different I don't believe what they told me about the outcome. When I had the last surgery, I was assured I will be okay, but the way I suffered, hmm. Only God knows. It was very bad...no assurance can make me not to fear surgery anymore" (p11).

It was found that concerns over the possibility of some negative outcomes and possible complications have been reported by some participants as a cause pre-operative

anxiety. Such concerns results from culturally construed stereotypes surrounding medical services among participants from rural communities who believe in traditional medicine than formal hospital based treatments. They only turn to formal hospitals after exhausting all traditional medicines and other alternatives and found no promising result for cure.

Theme 2: Faulty information and thinking about surgery

Information received by patients is a significant contributing factor causing pre-operative anxiety among black surgical patients. Participants of this study have different sources of information about surgery. Some get information from hospital staff or directly from their doctors, anaesthetists, surgeons or nurses; while others get the information from relatives and friends who previously had surgery. Either positive and negative information about surgery or the process of surgery seems to be issues triggering pre-operative anxiety. Some patients needed to be told what they will undergo, while others felt such information is not necessary.

(a) *Information from the clinicians:* The hospital situations present special communication problems with patients. The hospital experience is stressful as different health practitioners interact with the patient. This added to the sense of strangeness and the anxiety related to being in the hospital for surgical operation amplifies the patients' problems. Clinicians-patient communication is essential aspect of therapeutic relationship that increases patients' satisfaction with treatment. However, when such communication is done with no consideration the cultural demands of the patients, anxiety will set in. Participants of this study reported receiving information about their surgery from the clinicians as the trigger for their anxiety.

"What baffles me the most and made anxious is the sudden information that I will have an operation. I came to the hospital to see a doctor because of a small swelling I discovered under my private part. The lump is not severely paining. It is just itching; the pain is not very severe. Then I was told suddenly that I will be operated. The way I was informed makes me very anxious because it is as though the lump can lead to my death" (P 7)

"...that information makes me so fearful because the doctor is the person treating you but is being sceptical of the outcome of the treatment; I think that is worth fearing".

"...Another thing that worries me is that the doctors don't want to tell you much about the operation. They don't want you to know what you will experience, keeping me in darkness means worrying about the whole process.... I think if I know more about the surgery my fear will be reduced, I will not be afraid of it..."

It was found that, anxiety among our participants is caused by the concerns over medical bills. There is loss of daily income

due to the period of hospitalisation among the participants that pay for their medical bills. The tradition of our participants is that, the family financial burden is shouldered by the head of the household. Most of our participants heads their families and therefore shoulder these responsibilities. Thus, when a family member is ill, the whole family will have to suffer as the little resources will be used to attend to their health needs. Consequently, the effect of reduced income as a result of payment of medical bills for the ill family member affects the patients and causes preoperative anxiety.

“...he (referring to the surgeon) did not even tell me the money I need to have for the operation. Suppose, if after the surgery, I run short of money to buy the drugs for post-operative care, what will I do? Such information is supposed to be given so that I can prepare and be ready for whatever challenges”

(b) *Information from others:* A number of participants attributed the causes of their pre-operative anxiety to the prior information they got from other people including family members and friends who have had prior surgery.

“My husband told me long before my surgery that anaesthesia is the commonest cause of death after surgery but it is something you cannot do without if you are having surgery (P12)”

“Another participant stated that “this is my first surgery but I can tell so many things about surgery because I have three family members who have had surgery in the last three or four years... (P28)”

“Why should I not be afraid? I asked people who have had surgery before; they told me their experiences, terrible experiences of course. So ‘from the person in front, you see the depth of a river’.... If I said I am not anxious, honestly I am lying. I am afraid...”

“I am very anxious because of the information I got about what goes on in this hospital and the fear of what would be the fate of my children, it is just impossible for me to stop thinking...”

(c) *Negative self-thoughts:* It was found that some patients’ anxiety was precipitated by the way they think about the surgery. Negative thinking about the surgical operation occurs when patients tend to think the worst about the surgery, or decrease their expectations of getting better by considering the most horrible possible situations to emerge post-operatively:

“I will not survive this illness. Illness that calls for surgical operation; I have been thinking about it all these days and I know I will not make it. I will not survive...my biggest worry is about with my kids” (p 18).

“When I was coming here [to the hospital] my daughter was crying, I don’t even want to have eye contact with her, when I looked at her again I felt

like crying too. I guess she (her daughter) thinks the way I think, that her mother is gone, she will die there in the hospital...the little girl stood there looking at the car until we drove off. So actually my fear is that if they operate on me, I may not survive (p3).”

The quality of the interaction between clinicians and patients matters. Good communication is related with improved adjustment to illness, better clinician and patient satisfaction and good quality of life. The information discussed in consultations form the basis of patients’ impression about the treatment. The tradition of our participants is one that does not encourage providing information about adversities at once. Thus, Provision of information about undergoing surgery has to reflect this culture. Patients want to be respected, regarded with dignity and be seen as people before being considered as patients.

Theme 3: the hospital as a source of anxiety

Though the hospital is a place where treatment is obtained and illnesses are cured, it remains a source of anxiety for some black surgical patients. The theme, hospital as a source of anxiety is made up of three categories: ‘the layout of the hospital ward, ‘the hospital staff’ and ‘waiting for the operation’. These categories are described below with quotations from the participants presented to justify them.

Because of the fear of hospital, a participant tried to conceal his illness for sometimes until it became unbearable. Even at this stage, he warned his children not to tell his eldest son who has the resources to cater for his medication for reason that the moment he heard about the father’s illness, his next action will be to take him to hospital. This participant expressed his fear of hospital by stating he dislikes anything having to do with hospital:

“As I am now, I don’t like anything having to do with hospital; that is why I warned my children not to tell their brother (his eldest son) about my illness. They told him last week and he left his business to come. The next day he said we are coming to the hospital. I have tried to resist but they (referring to his children and their mother) overcome me.... (P6)

“I have never been operated before. In fact I have never slept in the hospital all my life, if not because my children have insisted that we must come to the hospital, I prefer to use traditional medicines and I will be cured” (P 6)

It was found that patients expressed fear of the hospital by contextualising this fear to stating the approximate time she spent in the hospital all her life.

“I have never stayed in the hospital for more than four or five hours. So I don’t know what it is like staying in hospital not to talk about having surgical operation” (p 14)

"I am afraid because I am one person that doesn't like even visit patients in the hospital, and now I am the one brought to the hospital for surgical operation. It is indeed a terrible time in my life..." (P23).

"...So I don't know what it is like staying in the hospital not to talk about having a surgical operation. Surgery is a threatening situation. If you are going for surgery you must be anxious particularly if you don't have a history of staying in the hospital" (P14)

Participant 26 expressed her fear of the hospital by stating that based on the information she received, this hospital is just interested in operating on patients:

"...the doctors in this hospital always like to be doing operation. Why not think of alternative treatments. Since before I became sick, I was told that this hospital is just about surgery. All they know is operating on people; they don't explore other treatments" (p26).

"...from my childhood I naturally don't want to visit a doctor or go to hospital. I have strong fear of hospital. When I was young, I used to hide my sickness so that I will not be taken to the hospital. But you know parents; they understand and ask what is worrying me... Whenever I am crying as a child, my mother used to tell me 'stop crying or I will call the doctor to come and give you injection'. On hearing that, I shut up" (P 5).

"My fear is generally the fear of medical treatment, I hate taking medicine. Sometimes even the smell of some drugs makes me very uncomfortable or start vomiting" (P 24).

Because of Religious beliefs and practices restraining the exposure of body parts to people of the opposite sex even for medical reasons, some participants reported becoming anxious because of fear of being stripped naked by surgeons and clinicians of the opposite sex. Two female participants reported that what made them anxious is someone (referring to the surgeons and clinicians) not your... seeing you naked.

"Surgery... they sedate you and strip you naked so that they can play with your body anyhow without you knowing what they do. No, no I hate this"

"...Anytime the doctors see you they know they have operated on you and they remember how they see you..."

Our participants feel that, being a patient should not be a reason that their religious beliefs would not be practiced. The participants' religious culture does not allow exposing or seeing the private parts of the opposite sex even in the provision of and receiving health care. Thus, if a woman has to undergo medical treatment or surgery that requires seeing

her private part, it is not acceptable for her to be operated by a male surgeon, instead, a female surgeon is be asked to operate on her. However, in the event a female surgeon is not available, it would be allowed for a male surgeon to operate or treat the patient. Even in such circumstances, it is necessary to cover her body leaving only the affected area. The surgeon on the other hand is required to lower his gaze as much as possible."

(b) *The hospital staff:* Some surgical patients have expressed and attributed their pre-operative anxiety to the attitude and behaviours of some hospital staff. The manner in which some hospital staff interacted with them sends bad signals, which were interpreted negatively, and triggered preoperative anxiety.

"...Obviously the staffs make me anxious of the situation. One staff came in asking whether I was prepared for the surgery. Why this question? If I'm not prepared I won't come to the hospital. Really I found that quite disturbing (p19)".

"The way that nurse spoke with me shows that the surgery could be problematic, or could be a painful one... She had a lot of experience and she had seen many patients who have gone through what I am about to go through. That frightened me seriously (p29)".

"...I was afraid because the staffs don't seem to show any kind of sympathy. They don't care what you will go through. They speak to you as though you are not a patient going for surgery. I think as hospital staffs they need to be sympathetic of our situation, treat us and talk to us with empathy that will encourage and make us have confidence that we will be fine" (p1).

(c) *The ward layout:* Some of the research participants reported that their pre-operative anxiety was produced by the layout of hospital ward. Patients on the waiting list are admitted and kept in the same ward with patients who have had their operation. Seeing those operated on in pain triggers anxiety in patients waiting to be operated. One participant reported seeing a patient wheeled on to the ward just after the operation and that was what precipitated his anxiety.

Participant 24: "Well, I came in to the hospital with no fear, obviously no fear. But when I saw a patient brought to the ward from the operating room, I started thinking is this what I will soon experience? Am I going to be like this patient, looking like a dead person? The way I saw that patient brought to the ward instilled fear in my mind.... there is one over there that has been grunting in pain. This patient also made me fearful. So my coming to the hospital is what makes me anxious of the surgery. I became anxious here after seeing those that have been operated and the conditions they are in; I then

started thinking that I will also be that condition” (P24).

Participant 8 reported: “how can they keep me here, lying on this bed for almost 2 hours; next to patients whose illnesses are so severe. I think what I needed is not this, but just going to the operating room and get the operation done and then let me go back home. I don’t need to be kept where severely ill patients are. This is not a place for me” (P8).

Participant 7 stated: “...look at where they kept me; I can hear patients screaming in pain in the next room. Just now one patient was wheeled on the trolley, may be taken to the theatre for operation. The patient was gasping; she must be in terrible pains. Seeing that woman altered my emotions. I became terrified and anxious. I lost confidence...(P7)”

“Honestly they have to set aside a room for patients whose surgery is not complicated so that they will not be scared of their own surgery by seeing critically ill surgical patients suffering”.

IV. DISCUSSION

Generally, there are varieties of factors responsible for preoperative anxiety. Some of these factors are universal; others are unique, determined by the patients’ socio-cultural situations. Traumatic events, stress and hereditary traits are important factors that triggers preoperative anxiety in patients who have susceptibility to anxiety.

In our research, the interview data shows similarities as well as variations with regards to the factors responsible for preoperative anxiety among black and white surgical patients. The discussions below are presented in terms of these similarities and variations identified among black surgical patients in contrast to what has been reported in the literature as factors responsible for preoperative anxiety among white surgical patients.

The similar factors for preoperative anxiety among black and white surgical patients include fear of pain, anxiety related to surgery and uncertainty about the outcome of the surgery. These factors are grouped in our study under the overarching theme- surgery as a source of anxiety. Theunissen, Peters, Bruce, Gramke, and Marcus (2012) conducted a study on white patients and reported a relationship between preoperative anxiety and pain catastrophising among their patients. Similarly, (Mitchell, 2012) found that, 82.4% of participants were preoperatively anxious and their anxiety was attributed to fear of the surgery, fear of pain, fear of anaesthesia, and fear of the unknown following the surgery.

Similarly, anxiety related to hospital is another factor responsible for preoperative anxiety expressed by both black and white surgical patients. However significant variations exist about hospital anxiety among black and white surgical patients. The variations are centred on the focus of the

anxiety. For example, while white surgical patients see the hospital as a source of their preoperative anxiety, their hospital anxiety focuses on the fear of contracting germs or being infected by hospital acquired infections (May, 2014; Sweeney, 2015). Other fears are related to medication errors or what they call wrong site, wrong patient and wrong procedure type of surgical errors (Baker et al., 2004). On the other hand, black surgical patients’ anxiety related to hospital is attributed to the layout of the hospital ward and the way patients are admitted and kept the hospital ward. We found that in the hospital where this study was conducted, waiting patients are admitted and kept in the same ward with patients who have had their surgery. They see and hear these patients screaming and suffering in pains. This stress greatly affects their mental state regardless of the anxiety posed by the physical illness that warranted the surgery. Patients with non-urgent or non-emergency surgeries are kept waiting for long time in the ward. Because their surgery is non-emergency, the clinicians and surgeons do not care much to perform their surgery or give them the necessary preoperative information they need, a situation that makes them more anxious. Similarly, Patients with minimal anxiety become more anxious during the waiting period; the clinicians give them less priority in terms of care and attention. Such patients are left in the dark by their surgeons.

Previous studies have documented the effects of information and education in reducing their preoperative anxiety (Aasa, Hovbäck, & Berterö, 2013; O’Brien, McKeough, & Abbasi, 2013). However there is paucity of information about how informing patients about the need to have surgery is causing preoperative anxiety. The way patients are communicated information about having surgery greatly influence their way of thinking. Hansen E (2010) reported that surgical patients show focused attention and higher susceptibility to suggestion. Thus, negative information and unintentionally spoken words can easily be picked and can increase patients’ preoperative stress and anxiety. Because the verbal and non-verbal signs clinicians use conveys information, patients receive such things as facial expressions, gestures and other non-verbal cues from the clinicians and selectively process them. This greatly affect their feelings and thinking about the illness and the impending surgery. Therefore when clinicians use negative words or unintentionally communicate unwanted information to patients, the patients feel threatened, a situation that creates a range of psychological problems which interacts with the illness and other personal problems to cause feelings of apprehension and anxiety. Munafò and Stevenson (2003) found that, patients waiting for minor gynaecological surgery experienced higher preoperative anxiety as a result of exposure to physically threatening words instead of neutral words.

In our study, the participants reported that the manner in which they get information about their surgery affect the way they think about it and was a significant factor responsible for their preoperative anxiety. Also, some Participants who received negative information about surgery from family

members or friends who have had previous surgery cited such information as the source of their preoperative anxiety. Such information affects the patients' way of thinking as they think negatively about the procedure.

V. LIMITATIONS OF THE STUDY

This study was limited in some ways. The first one is related to the data collection. The interviews were conducted with black surgical patients in Nigeria. This was compared with what has been reported in the literature as factors responsible for preoperative anxiety by white surgical patients. There is need to conduct similar interview with white surgical patients asking the same question to collect primary data and find out the factors responsible for their preoperative anxiety than relying on secondary data published in previous studies. However, the findings from this study have, for the first time highlighted the similarities and differences in factors responsible for preoperative anxiety among black and white surgical patients. Secondly, the study used only 30 participants; therefore a larger sample size is needed to provide more accurate data representative of black surgical patients. Although the 30 participants used in the current study are sufficient to produce significant data, engaging a large number of participants would increase the quality of the study and confidence in making a generalisation of the findings. Third, the study is a single centre study. Therefore there is a need to replicate the study in more surgical centres using the same kind of patients, the same procedure for data collection and the same method of analysis. This will provide a good grounding for – generalising the findings of the study. Finally, there is a need to use other methods of data collection like the use of standardised instruments to collect quantitative data on factors responsible for preoperative anxiety among black and white surgical patients. Collecting only qualitative data from the participants limits the quality of the study as the researcher may be biased in the process of making sense of and interpreting qualitative data.

VI. CONCLUSION

The aim of this study was to explore the differences in the factors responsible for preoperative anxiety among black and white surgical population and to describe the difference(s) if any with a view to recommending culture competent preoperative anxiety reduction interventions. The findings revealed that while some factors responsible for preoperative anxiety are universal (fear of pain and death, the surgery, fear of anaesthesia) as expressed by both black and white surgical patients, other factors are also unique to both white and black surgical populations. For example, white surgical patients expressed fear of medication errors as a result of wrong site, wrong patient or wrong procedure, concerns about the success of the surgery, fear of hospital acquired infections and lack of control of the situation as what uniquely triggers their preoperative anxiety.. This raises concern about whether clinicians should consider different ways of communicating information about the need to have surgery to their patients.

Further study to find out the use of alternative ways of informing patients about surgery and what impact this has on patients' anxiety is needed. Other factors reported by our participants include the information they received about surgery from other sources, anxiety related to hospital brought about by the way the hospital ward is arranged and negative thinking about the outcome of the surgery.

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