

**Nurses' Perception of Pain Assessment of Hospitalized Patients in Tertiary
Institutions in Ebonyi State**

By

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Certification

I, Ogwa Edith Ifeyinwa (PG/MSc/06/45663) certify that this work is mine except as specified in the acknowledgement and references. Neither the abstract nor the original work contained therein has been submitted to this University or any other Institution for the award of M.Sc in Nursing

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Dedication

This dissertation is dedicated to my beloved husband, Dr Chris Eze Ogwa.

Acknowledgement

I am immensely indebted to God Almighty, who made it possible for me to start and accomplish this work. My deep appreciation goes to my supervisor, Dr. Anarado N., for her patience, motherly role, advice and for spending her scarce time to read this work and make necessary corrections. I equally recognize and acknowledge the efforts of the lecturers in Nursing Department. I am also grateful to my beloved sister and friend Mrs. Opara H, who helped in numerous ways. My appreciation also goes to my beloved children, Chinemerem, Chinecherem, Chisom, Chidimma, and Chidiebere for their support, and to my husband Dr. Chris Ogwa for his innumerable help. Lastly, I thank my typist Chinenye Okwuonu who typed this work and my analyst, Late Dr. Silas Okereke. May his gentle soul rest in perfect peace.

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ABSTRACT

The study investigated nurses' perception of patients' pain assessment in routine care. It was a cross-sectional descriptive research design. Four hundred and fifty (450) nurses working in the two tertiary institutions in Ebonyi State were used. Two instruments were used for data collection. The researcher developed questionnaire and in depth interview guide to validate further the qualitative responses. Reliability of the quantitative instrument was established using test-retest technique. Spearman's product moment correlation yielded a co-efficient of 0.86. The qualitative instrument was also test-retested using four unit heads from UNTH Enugu. Their opinions did not vary between test periods (two weeks), the instrument was therefore considered reliable. Quantitative data were analyzed using descriptive (mean and percentages) and inferential statistics (T-test and ANOVA) for testing at 0.05 level of significance. Content analysis of qualitative data was done using thematic approach. Nurses from the two hospitals were aware of the basic components of pain assessment with mean scores of (3.58, 3.00, 4.28 and 3.86). They agreed to assertion that they assess pain routinely when other vital signs are checked, during initial health assessment, when patients complain of pain, before and after giving pain relieving drugs (3.99, 4.17, 4.11 and 4.13) respectively. However, nurses' perceived barrier to pain assessment was burden of having so many patients to care for (3.17). They are quite aware that patients are the best assessors of their pain (3.88). However, they had fear of patients getting addicted to pain relieving drugs (3.80). Majority of the nurses use mainly patients' verbal report of pain (87%) and simple descriptive pain intensity scale (57%) as their pain assessment tools. They rarely document patients pain data on patients' case note (44%) where other health professionals can easily access and use it for clinical decision in pain management. The quantitative and qualitative findings are in agreement except on assessing pain routinely. Nurses' acceptance that they assess pain routinely with other vital signs was not validated by the qualitative study. This revealed that despite the awareness of nurses on what they ought to do in pain assessment, they do not do it especially when they have so many patients to care for. There was no significant statistical difference in perception of pain assessment between the nurses of the two hospitals ($P < 0.05$), and also between the nurses' demographic variables within groups ($P < 0.05$). The study concluded that the nurses' response to patients' report was affected by their fear of patients getting addicted to pain relieving drugs. It was recommended that an intensive training for nurses on pain assessment with emphasis on pharmacological and practical aspect of pain assessment should be organized by nurse managers to bridge the identified gap.

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CHAPTER ONE

INTRODUCTION

Background to the study

The nurses' perception of hospitalized patients' pain assessment stands absolutely essential in determining the actual pain diagnosis/management and improved quality of life. Although, physicians order the types and doses of analgesics, nurses are in the best position to influence patients' pain as they administer the medication and determine its effect. Nurses' perception of pain assessment determines how they assess, manage pain and teach patients about pain control. Also, nurses advocate for patients when ordered medications are not effective and can have a real impact on patients' pain management outcome.

Perception is an awareness and understanding of an impression that has been presented to the senses. The characteristics of perception are that it is universal, or experienced by all, subjective or personal and selective for each person. This means that any given situation will be experienced in a unique manner by each individual involved (George 2003). Perception is focused on activity in the present that is based on the available information; which could be based on knowledge, facts or belief/opinion, hence the subjectivity of perception. Therefore nurses' perception of patients' pain will indeed determine appropriate pain assessment/management strategies for quality nursing care of patients.

Gregory (2000), pointed out that when pain assessment is appropriately done, it leads to proper pain management, quick recovery, shorter hospital stay, fewer admissions and improved quality of life. Pain assessment is a continuous process of collecting data, making judgment, or forming an opinion about a patient's pain. It comprises relevant pain history, physical examination and observation of behavioural and physiologic responses, additional investigations of biological structures, functions and documentation of pain data.

Pain is also a systematic process. As a systematic process, pain assessment may be complex, time consuming and frustrating to the assessor, but it remains a viable strategy for essential quality nursing care. Its complexity is as a result of the subjective nature of pain. McCaffery and Ferrel (2000) pointed out that *"pain is what the patient says it is, and exists whenever the patient says it does"*. A patient's report concerning his/her pain should always be the primary source of information that the healthcare providers use to assess and control pain successfully. (Gabor B, Racz & Carl E. Noe 2012). Feeling of pain cuts across every race, age and status but individuals express it in different ways. Similarly, caregivers' view/opinion on patients' pain expressions may vary and this could adversely affect pain management. This informed this study of nurses' perception of pain assessment of hospitalized patients.

In the past, pain was viewed primarily as a sensory experience produced by a nociceptive or neural response associated with tissue injury. To this effect, pain assessment does not need any formal training (Gregory 2000). Later it was discovered that pain also affects every other aspect of the individual experiencing it, the family and the entire community. It is known to be pervasive and poorly treated in hospital settings (Smeltzer & Bare 2004). Studies show that pain is one of the most common reasons people seek treatment (McFachin, 2002). However, it is ironic that although pain is one of the most treatable symptoms, it is often cited as one of the failures of modern medicine (Mayer, Torma, Byolk & Norris 2001). This is because the ability of one individual to perceive and interpret accurately what another feels is complex.

In the United States of America (USA), three quarter of surgical patients report inadequate relief of acute pain, four in ten people with moderate to severe chronic pain have inadequate relief, more than twenty six million people aged 20-64 years live with frequent or persistent back pain, one in six suffers from arthritic pain, only 30% of cancer patients have adequate pain relief (Philips 2000, Richard & Hubbert 2007). Richard and Hubbert (2007)

found that 20% of people visiting emergency departments had moderate to severe pains. They further stated that despite enormous technological advances and substantial research in the area of pain management in recent years, numerous studies indicate that pain is not relieved in most patients. In Nigeria, Ogan & Enyiodah (2006) pointed out that even severe pain from episiotomy or perineal injury is often poorly treated.

The reasons for this failure have been the focus of several researchers. Inadequate pain assessment has been the greatest barrier to pain management (Clark 2005, Mac Donald et al, 2002). However, Laughlin & Tabler (2000) identified inadequate knowledge of pain assessment as one of the greatest barriers to optimal pain management. Kennedy (2000) in what he called “*triple whammy*” effect explained the reasons for the failure as follows: patients’ underreport of pain, nurses’ under-administration and physicians’ under-prescribing of analgesics (McCaffery & Psaro, 1999). Gordon & Love (2004) also, identified the following reasons for the failure in pain management:

-Practitioners’ perception of patients’ self report of pain, underestimation of patients’ pain in different circumstances, nurses neglect to reassess patients’ pain after interventions, poor and inconsistent documentation of pain assessment and reassessment of pains that leads to under-dosing for pains with analgesics and the resulting inadequate pain management, unfounded cultural and religious biases.

In 1995, the American Pain Society (APS), according to Mayer et al (2001) challenged all healthcare systems to make pain assessment the fifth vital sign. The essence of linking pain assessment as a routine vital assessment performed by nurses and its documentation is to ensure proper pain management (Berman, Synder, Kozier & Erb 2008). It will also help to ensure that pain is monitored on a regular basis compared with inconsistent ways of monitoring clients’ pain presently (Smeltzer & Bare 2004). The APS noted, “If pain were assessed with the same zeal as other vital signs, there would be a better

chance of it being treated properly. Sequel to this challenge some other efforts have been made by so many organizations in different countries to make pain assessment the fifth vital sign.

Joint Commission on Accreditation of Healthcare Organization, JCAHO, (2005) made pain assessment mandatory and incorporated it into its standards. One of the JCAHO standards states that pain is assessed in all times when other vital signs are done; patients have the right to appropriate assessment and management of pain. They further stated that since assessment and documentation of other vital signs are mainly done by nurses, likewise patients' pain assessment and documentation should equally be done by nurses (Asterin 2003). The United State Congress has equally designated the year 2000 - 2010 as the decade of pain control and research. All these effort attest to the importance of nurses' perception of pain assessment of hospitalized patients. Olaitan (2009), in a study on cancer pain management in developing countries pointed out that there was paucity of published data on pain assessment and pain management from developing countries. Richards & Hubbert (2007) observed that although nurses are the healthcare professionals that spend the most time with patients in pain, yet there is lack of research that has sought to understand the perception of nurses on pain assessment irrespective of the dire need.

Statement of problem

Generally, studies show that patients' self-reports (expression) of pain have been regarded as the golden standard of pain assessment for effective management, (Gregory 2000, Melzack & Katz 1994, Smeltzer & Bare 2004). Efforts have been made to implement this into practice. Despite massive multifaceted educational efforts, implementation of JCAHO standards, implementation of pain education programmes, policies and procedure and identification of pain management as a right for all, the recognition of nurses' perception of pain assessment as one of the core aspects of quality nursing care in developing countries is

doubtful. McCaffery et al (2000) pointed out that practitioners were not incorporating the guidelines into their practice. Peter and Watson (2002) stated that nurses appear to distrust patients' self report of pain which suggests that they may have their own bench mark /perception of what is acceptable, when and how patients should express pain. This failure of accepting patients' verbal report will grossly affect patients' pain assessment and management and quality of life. Hence the need to study nurses' perception of pain assessment of hospitalized patients in tertiary institutions in Ebonyi state.

Purpose of the study

The study investigated nurses' perception of pain assessment of hospitalized patients in the two tertiary Institutions in Ebonyi State.

Objectives of the study include to:

1. Ascertain nurses' perception on what they do during pain assessment in tertiary institutions in Ebonyi State.
2. Elicit nurses' perception on patients' report of pain.
3. Ascertain their opinion on preferred tools for pain assessment by nurses.

Research questions

The following research questions were answered by the study:

1. What do nurses say they do during pain assessment of hospitalized patients in tertiary institutions in Ebonyi State?
2. What are nurses' opinions on patients' reports of pain?
3. What are the nurses' opinions on their preferred tools for pain assessment?

Hypotheses

Two hypotheses were tested by the study. They include:

Ho1: There is no statistical significant difference in the perception of pain assessment between the nurses of the two hospitals, $P > 0.05$.

Ho2: There is no significant statistical difference in the perception of pain assessment of the nurses and their socio-demographic characteristic, $P > 0.05$.

Significance of the study

Findings from the nurses' perception of pain assessment

Will show areas of misconceptions, biases and ignorance in nurses' perception of pain assessment of hospitalized patients. The discovery of the deficiencies would help to determine where emphasis will be needed in planning programmes to integrate pain assessment into routine patients' care in Ebonyi State for quality nursing care services. Will help nursing schools in improving nursing curriculum with regard to practical aspect of patients' pain assessment. It will also serve as a source of information to all those concerned with teaching of pain assessment to incorporate pain as the fifth vital signs. The findings may also be useful in spurring further investigations into the differences in perceptions of nurses and patients on pain assessment and other related topics

Scope of the study

The study covered nurses' perception of pain assessment of hospitalized patients in tertiary institutions in Ebonyi State; the preferred tools for pain assessment; their opinions on patients' report of pain; the difference in their perception of pain assessment between nurses at EBSUTH/ FMC, within hospitals, the difference in perception of nurses' pain assessment of patients and their socio demographic variables. Nurses for this study, included those

currently working in clinics and wards of the two tertiary institutions where patients with pain are treated. The only two tertiary institutions in Ebonyi state are EBSUTH and FMC .They are within the state capital.

Operational definition of terms

1. **Nurses' perception of pain assessment:** In this study implies nurses' opinions, views and judgment about what they do during pain assessment and their preferred tools for pain assessment. It was measured with the researcher's self generated statements. The mean value for 1,2,3,4 and 5 is 3.0 was considered as mean decision point, any item that scored 3.0 or above was accepted as being significant and it indicated positive perception. While any item with the mean score below 3.0 was regarded as having been rejected by the respondents and it indicated negative perception.
2. **Pain assessment:** Comprises of relevant pain history, physical examination (observation of behavioural) and physiologic responses and documentation. This can be facilitated by using pain assessment tools. In this study, pain assessment refers to: Nurses' practices in assessing patients' pain and the preferred unidimensional tools, Interpretations or judgment of patients' pain report and documentation of patients' pain data
3. **Patients:** In this study means hospitalized persons in the two tertiary Institutions in Ebonyi State that experience any form of pain irrespective of the pain intensity
4. **Tertiary institutions:** Refers to Ebonyi State University Teaching Hospital and Federal Medical Centre, Abakaliki.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter presents related materials reviewed from both published and unpublished articles from University libraries, journals and internet materials. Discussion is organized under the following headings: **Conceptual review**- concept of pain, assessment of pain/tools for pain assessment, nurses's perception of patients's pain assessment

Theories underlying the study were Peplau's theory of interpersonal relationship and King's theory of goal attainment

- Empirical studies
- Model of the study
- Summary of literature review

Concept of pain

Pain is a universal human experience regardless of age, gender and economic status. However, the nature of the experience is unique to the individual, the type of pain experienced, the psychological context or meaning and the response needed. (Berman, Snyder, Kozier & Glenora, 2008). This suggests that this individuality and complexity of pain might create a gap in the perception, assessment and the interpretation by the caregiver.

Pain has been described with a wide range of words by different authors. The widely accepted definition of pain is "an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage" (IASP 2008, American Pain Society (APS), 2005; Gordon 2002). This definition of pain has three parts that are very crucial for nurses in their assessment of patients's pain. First, pain is a physical and emotional experience, not just concerned with the body or mind. Secondly, it is a response to actual or potential tissue damage. By implication, there may not be abnormal

laboratory or radiographic reports whenever pain is present. Finally, pain is described in terms of such damage. This final part of the definition agrees with McCaffery and Pasero, (1999) definition of pain. It states that "pain is whatever the experiencing person says it is, existing whenever the experiencing person says it does". However, McCaffery et al (1999) did not actually state in their definition, what pain is and what causes the discomfort, how and why pain arises. The definition by APS, (2005), strongly indicates that pain is conceived and experienced differently in an individualized manner. Their definition of pain suggests that experiences of pain depend only on the person experiencing the pain and that no other person is fully capable of understanding how the victim may be feeling as a result of the pain. This highly emphasizes the subjective nature of pain and its assessment by the caregivers. Validation of the existence of pain is therefore based on the patient's report that it exists, (Smeltzer & Bare, 2004). The APS (2005) goes further by stating that it is the responsibility of the patients to prove or complain they are in pain, while it is the nurses' responsibility to accept the patient's report of pain. Smeltzer & Bare (2004), stressed that in as much as it is important to believe the patient who reports pain, it is equally important to be alert to patients who deny pain in situations where pain is present. In such situation an inexperienced assessor might be deceived and this could be detrimental to the patient's health.

Usefulness of pain

Pain, in spite of its unpleasantness, still has so many advantages. It is protective in nature and alerts us of many bodily dangers. It tells us when something is wrong in the body structure or function and that it needed to be attended to. It is a strong motivator for an action, and therefore considered one of the body's most important protective mechanisms. Pain is so important and diagnostic that the American Pain Society called it the fifth vital sign, (Campbell 1995), to emphasize its significance and to increase the awareness among healthcare professionals. Documentation of pain assessment is now as prominent as the

documentation of the "routinized" vital signs (Smeltzer & Bare 2004). They further stressed that calling pain the fifth vital sign suggests that the assessment of pain should be as automatic as taking patients' blood pressure, temperature pulse and respiration. The Joint Commission on the Accreditation of Healthcare Organization (JCAHO) USA, (2003) mandated pain assessment as a basic legal right of patients. All these recognition of pain assessment revealed that nurses should consider it imperative in their routine health care procedures.

Types of pain

Pain can be acute or chronic.

Acute pain: It has an identifiable cause and it occurs soon after injury to tissues in the body such as bone, skin or muscle. It is protective and motivates a person to take action. Its onset maybe sudden or slow and its intensity may vary from mild to severe. It subsides as healing takes place. It is characterized by sympathetic nervous system responses like increased pulse rate, increased respiratory rate, elevated blood pressure, diaphoresis, client appears restless and anxious. Clients' report pain and exhibit behaviour indicative of pain, such as crying, rubbing the area or holding it (Berman et al 2008).

Chronic pain: It is constant or intermittent pain that persists beyond the expected healing time and that can seldom be attributed to a specific cause or injury. It may have a poorly defined onset, and it is often difficult to treat because the cause or origin maybe unclear (Smeltzer & Bare 2004). It is non-protective in that it serves no useful purposes. It is characterized by parasympathetic nervous system responses: normal vital signs. Patient appears depressed and withdrawn: may not often complain of pain unless asked and pain behaviours may often be absent (Berman et al 2008).

Theories of pain

Three major theories assist in explaining the concepts of pain were reviewed in the study. They are:

- (a) Specificity
- (b) Pattern
- (c) Gate ã control theory

(a) **Specificity theory of pain:** This theory originated in Greece. It was propounded by Descartes in 1664, (Brannon and Feist 2000). He likened the pain system to a bell ringing mechanism in a church. He explained that when someone pulls the rope to ring the bell, the bell rings in the tower. Hence, specificity theory suggests that pain is caused by injury or damage to the body tissue. The damaged nerve fibres in our bodies send direct message through the specific pain receptors and fibres to the pain centre (the brain), which causes the individual to feel pain.

The theory suggests that there is a strong link between pain and injury and that the severity of injury determines the intensity of pain experienced by the person (Brannon and Feist 2000). Then there was no room for psychological contributions to pain such as past experience and the meaning of pain to the person experiencing it. Pain experiences were held to be proportional to the severity of the injury or pathology. The theory was clearly deficient in these areas and that led to attempts to find a new theory. Patients who suffered pains without presenting signs of organic diseases were sent to psychiatrists.

(b) **Pattern theory of pain:** There were several different pattern theories but they were vague and inadequate (Brannon et al 2000). The theory was incorporated into the specificity theory which added more concepts in explaining pain. The pattern theory states that nerve

fibres that carry pain signals can also transmit messages of cold, warmth and pressure. The pattern theory claims that pain is felt as a consequence to the amount of tissue damaged.

Both pattern theory and specificity theory were not sufficient in explaining the experience of pain as theorists failed to include the psychological aspects of pain. Brannon et al (2000) also emphasize that these particular theories failed to incorporate how pain is felt.

Furthermore, if severity of injury is directly related to the amount of pain-experienced, analgesic should be given according to the injury and not according to the age and size of the person involved. These deficiencies further led to the modern theory (Gate control theory of pain).

(c) **The gate control theory of pain:** The theory was proposed by Walls and Melzack in 1965, (Brannon et al (2000)). The proponents stated that pain perception is influenced by a number of factors, which begin in the spinal cord. The pain message is carried by the specific nerve fibre that can be blocked before reaching the brain by the actions of drugs and psychological factors.

According to Melzack and Wall's gate control theory, the small diameters (A-delta, or C) peripheral nerve fibers carry signals of noxious stimuli to the dorsal horn. These signals are modified when exposed to the substantia gelatinosa (milieu in the central nervous system) that maybe imbalanced in an excitatory or inhibitory direction. Ion channels on the pre- and postsynaptic membrane serve as gates that, when open, permit positively charged ions to rush into the second order neuron, sparking an electrical impulse that will send pain signals to the thalamus. Peripherally, large diameters (A-delta) nerve fibers that typically send messages of touch, warmth or cold temperatures, have an inhibitory effect on the substantia gelatinosa, and may activate descending mechanisms that can lesson the intensity of pain perceived or inhibit the transmission of those pain impulse-that is close the ion gates. Higher centres in the brain, especially those associated with affect and motivation, are capable of modifying the

substantia gelatinosa and influencing the opening or closing of the gates. Brannon and Feist (2000) pointed out that some of the things that can cause the gate to remain closed include previous memory of how the prior painful situation was handled, supportive members, positive thinking of pain and cultural values.

Etiology of pain

It can be physiological or neuropathic. Physiological pain is experienced when an intact nervous system sends signals that tissues are damaged. It is neuropathic when there is damaged or malfunctioning nerve (e.g. phantom pain).

Neuroscience of pain/pathophysiology of pain

The physiology/experience of pain involves a complex sequence of biochemical and electrical events or processes. The term nociception is used to describe the various physiologic processes that bring about pain perception. Hence, pain receptors are synonymously referred to as nociceptors they are differently distributed in different organs of the body. For instance, they are more in the skin (where the concentration equally varies) than in deep organs of the body like kidneys, liver, brain, heart, lungs, oesophagus etc. Some nociceptors respond to only a specific class of pain stimuli (e.g. mechanical or thermal). These are called unimodal nociceptors. Some others respond to every class of pain stimuli including innocuous (non-pain producing) stimuli (like harmless group of nociceptor) are called polymodal nociceptors. Nociception involves four main processes. The processes are transduction, transmission, perception and modulation.

(a) **Transduction:** In this first phase of nociception, the noxious stimuli interacts with the tissue, causing the release of some alogenic biochemical mediators like prostaglandins, bradykin, substance P, histamine and serotonin into the site of the interaction. These excite the nociceptors to generate pain impulses. Some pain medications (e.g Ibuprofen and piroxicam) act by blocking transduction (that is by inhibiting the production of the excitatory

chemical mediators or by decreasing ionic movements across the membrane (as done by local anesthetic agents).

(b) **Transmission:** The second process of nociception, transmission of pain includes three segments. During the first segment, the pain impulse travels from the peripheral nerve fibres to the spinal cord. Substance P serves as a neurotransmitter, enhancing the movement of impulses across the nerve synapse from the primary afferent neuron to the second-order neuron in the dorsal horn of the spinal cord. Two types of nociceptor fibres cause this transmission to the dorsal horn of the spinal cord. Unmyelinated C fibres, which transmit dull, aching pain, and thin A-delta fibres, which transmit sharp, localized pain. In the dorsal horn, the pain signal is modified by modulating factors (e.g. excitatory amino acid or endorphins) before the amplified or dampened signal travels via spinothalamic tracts. The second segment of transmission from the spinal cord, and ascension, via spinothalamic tracts, to the brain stem and thalamus. The third segment involves transmission of signals between the thalamus to the somatic sensory cortex where pain perception occurs.

Pain control can take place during the second processes of transmission. For example, opioids (narcotic analgesics) block the release of neurotransmitters, particularly substance P, which stops the pain at the spinal level. (Berman et al 2008).

(c) **Modulation:** This is often described as the 'descending system' it occurs when neurons in the thalamus and brain stem send signals back down to the dorsal horn of the spinal cord (Paice 2002). These descending fibres release substances such as endogenous opioids, serotonin, and nor epinephrine, which can inhibit (dampen) the ascending noxious (painful) impulses in the dorsal horn. In contrast, excitatory amino acids (e.g glutamate, N-methyl D-aspartate (NMDA), and the up regulation of excitatory glial cells facilitate (amplify) these pain signals. The effects of excitatory amino acids and glial cells tend to persist, while the effects of the inhibitory neurotransmitters tend to be short-lived as they are

reabsorbed into the nerves. Tricyclic antidepressants block the reuptake of norepinephrine and serotonin; or NMDA antagonists (e.g. Ketamin) may be used to help diminish the signals of pain.

(d) **Perception:** The final process, perception, is when the client becomes conscious of the pain. Pain perception is the sum of complex activities in the central nervous system that may shape the character and intensity of pain perceived and ascribes meaning to the pain. The psychosocial context of the situation and the meaning of the pain based on past experiences and future hopes/dreams help to shape the behavioural response that follow (Berman et al 2008).

Nurses perception of patients' pain

George (2002) defined perception as a process in which data obtained through senses and from memory are organized, interpreted and transformed. This process of human interaction with the environment influences behaviour, provides meaning to experience, represents the individual's image of reality in learning.

The elements of perception are the importing of energy from the environment and organizing it by information, transforming energy, processing information, storing information and exporting information in the form of observable behaviours. It is unique to individuals, it also involves transactions. This implies that individuals are active participants in situations and their identities are affected by their participation.

Perception thus conveys meaningful interpretation of a particular situation under reference to the perceiver. It makes the situation real. It is the nurse's perception of the patient's experience of pain that will determine the nurse's reaction to the patient's pain either to manage it properly or neglect it. Since one of the nurse's major roles in pain management is effective decision making, therefore their perception is of uttermost importance.

Factors affecting nurses' perception of patients' pain assessment

The following factors were identified by Hall-Lord and Larsson (2006): Nurses' knowledge of patients' pain, Nurses' attitude about pain, Poor documentation of patients' pain, required skills in pain assessment, myths and misconceptions about patients' pain (McGiffery et al, 2005). These are informed by: Ethnic and cultural values, expectations, past experiences and preconceived ideas (Berman et al 2008)

Nurses' knowledge of pain assessment

Knowledge is a basic factor that facilitates changes because people act based on their previous understanding about things. Diamond (2002) confirms this by stating that it is unacceptable for nurses to have inadequate knowledge about pain and a poor understanding of their professional accountability in pain assessment, therefore Pre-registration nursing programmes should incorporate pain as a compulsory component. This is to equip future nurses with the knowledge, skills and attitude to carry out appropriate pain assessment and management from the start of their professional careers. This could result in all patients receiving a higher standard of pain assessment and management in the future and reduce the incidence of unnecessary suffering (Wilson, 2007). Archer (2003) stated that knowledge is conceptualized as ways of thinking, as well as a 'store' of what the nurse might know. This implies that for one to be knowledgeable the individual should have information, therefore the nurse must have good knowledge of pain, factors that might affect patients' experience of pain. This type of information acquisition can be formal or informal as in nursing profession.

Knowledge in the area of pain assessment revealed that nurses tend to make an arbitrary distinction between two sorts of knowledge (Archer 2003). These are content knowledge and process knowledge. The former refers to 'fact' It is a reference point of knowledge which the nurse takes as relatively constant and trustworthy across different pain assessment situations. An example of facts in this area of pain assessment include, e.g. the

acceptance that severance of spinal nerves stops the patients of physical pain in the affected limb. Pain thereafter is phantom and psychological. The nurses' good knowledge of this fact will help her to believe patients' report of pain on the affected limb since pain also has emotional component.

Conversely, process knowledge deals with ways of approaching a problem and thinking about the nurses' role with the patient and his pain. Two factors have been identified as causes of limited knowledge. These are i) limited experience and lack of orientation (Iwuchukwu 1997). One is said to be inexperienced when he does not have something to show for what he has been trained for. It might be from the training institution to follow up her curriculum as stated or due to lack of regular practice by the individuals involved. Also to prepare nurses for adequate pain assessment there should be regular orientation for them. This will help them to get acquainted with new development in various skills to help them perform better.

Furthermore regular practice of pain assessment should be encouraged. JCAHO (2003) supported this by stating that pain assessment should be automatic and regular as taking patients' traditional vital signs (temperature pulse, respiration and blood pressure). This is to equip nurses with the knowledge, skills and attitude to carry out appropriate pain assessment and management. This will result to all patients receiving a higher standard of pain assessment and management (Wilson 2007).

- **Nurses attitude about patients pain**

The nurses' attitude entails the way they think, behave or act towards the patients' experience of pain. Attitude is a way of behaviours or thinking or feeling towards patients' report of pain.

Nurses' belief of pain equally affects their attitude hence their perception of patients' pain. The belief may stem from the nurses cultural background. Beliefs about pain and how

to respond to it differ from one culture to the other. A nurse who recognizes cultural differences will have a greater understanding of the patients' pain and will be more accurate in assessing pain and behavioural responses to pain as well as more effective in relieving it (Berman et al 2008).

Berman (2008) also noted that the nurses' religion will equally affect the nurses' attitude to patients' pain or respond appropriately to patients' report of pain. For instance, a nurse that belong to a religion that believe that suffering or pain is a way of showing faith in God may not accurately perceive or assess patients' pain. This will lead to poor management of patients' pain.

- **Poor documentation of patients' pain**

Effective communication among healthcare professionals is vital to ensure quality patients' pain assessment by nurses. This can be achieved through adequate documentation of patients' experience of pain on the clinical record, also called chart or patients' pain record. This chart is a legal document that provides evidence of a patients' care. This implies that effective and adequate documentation of patients' pain is imperative. However, documentation of patients' pain by nurses has been shown to be poor, and even high pain scores do not result in nurses administering more analgesic (Walt-Watson et al 2001). This finding did not support the JACHO (2003), that pain should be assessed and documented like other 'traditional' vital signs.

Required Knowledge and skills in pain assessment: To provide optimal care, nurses require appropriate knowledge, skill and attitudes towards pain, pain assessment and its management. This must be based on the best available evidence to prevent patient from suffering, (Nursing & midwifery Council sS2008).

The nurse uses many skills in pursuit of nursing. These skills are necessary for pain assessment. Such skills include:

- Intellectual skills
- Interpersonal skills and
- Technical skills

Intellectual skills: These are those that form the knowledge component of nursing acquired data from educational and life experience. These give each nurse a basis for making a decision and set priorities. Drawing conclusions based on intellectual data enables the nurse to move more deliberately and with certainty. These skills are basic in assessing patients' pain by the nurse.

Interpersonal skills: are related to ability to communicate, listen and convey interest, compassion, knowledge and information. It also helps to obtain data in a manner that enhances the individuality of the patient as a person, (Berman et al 2008). This skill fosters good relationship with the patient.

Technical skill: This relates to methods, procedure and the use of equipment to collect data and to bring about specific result or the described behavioural responses of the patient. Depending on the needs of the patient and the setting where it is being provided, the utilization of technical skills by the nurse will vary. These skills involve the nurse's ability in detecting when patient has pain and her competence in using the required tool to measure pain.

Myths and misconception about patients' pain

This can also affect nurses' attitude to pain assessment. Berman et al (2008); identified the following misconceptions:

- That patients' experience severe pain only when they have had major surgery.

- Nurses and other health professionals are the authorities on patients' pain assessment.
- Administering analgesics regularly for pain will lead to addiction.
- The amount of tissue damage is directly related to the amount of pain.
- Visible physiologic or behavioural signs accompany pain and can be used to validate its existence.

They further stated that healthcare professionals should know that:

- Patients can experience intense pain even after minor surgery.
- Patients are unlikely to become addicted to an analgesic provided to treat pain.
- Pain is a subjective experience, and the intensity and duration of pain vary among individuals.
- The person who experiences pain is the only authority on the existence of pain and its nature.
- Finally, that even with severe pain, periods of physiologic and behavioural adaptation can occur.

- **Ethnic and cultural values**

Beliefs about pain and how to respond to it differ from one culture to the other; therefore nurses from different ethnic/culture may perceive pain differently. Nurses who recognize cultural difference will have a greater understanding of the patients' pain and will be more accurate in assessing pain and behavioural responses to pain, as well as more effective in relieving the pains (Smeltzer et al 2004).

- **Expectations**

Nurses expect patient to be objective about pain and to be able to provide a detailed description of pain (Berman et al 2008). The nurses' cultural expectations and values may include avoiding exaggerated expressions of pain, such as excessive crying and moaning, seeking immediate relief from pain, (Smeltzer et al 2004).

- **Past experiences**

Nurses' past experience will equally affect her perception of pain. This may either be positive or negative. Nurses with wealth of experiences may respond more to patients' pain or vice versa.

- **Preconceived ideas**

Nurses' preconceived ideas on what pain is, how and when patient should report pain can as well affect her perception of pain assessment.

Assessment of pain/tools for assessment

The assessment and control of patients' pain has often been cited as being the essence of what nursing care is (Smeltzer et al 2004). Pain's highly subjective nature makes it a challenge to every clinician. Assessment is the act of judging or forming an opinion about something or somebody that has been thought about very carefully. It is also a continuous process of collecting data about patients' response, health status, strengths and concerns to health problems (Ehiemere 2001). Pain assessment therefore can be referred to as a continuous process of collecting data about patients' pain and making judgment or forming an opinion about the pain after a careful thought.

Pain assessment comprises:

- (a) Relevant pain history (self report) and
- (b) Physical examination which comprises observation of behavioural and physiologic responses.

(a) **Self report (history of pain):**

It involves the nurse asking patients questions about the pain. Data that should be collected in a comprehensive pain history include the following:

Location: This refers to the site of the discomfort or the area of the body involved. Some assessment forms have drawings of the body and patient may be asked to mark or shade the

affected area. If the pain is multiple, different symbols or columns may be used to show the differences. Words like proximal, distal, medial, lateral and diffuse can be used to document pain location.

Pain intensity: Berman et al (2008) noted that healthcare providers may underrate or overrate the pain intensity. Thus the single most important indicator of the existence and intensity of pain is the patients' report of pain. They further stressed that questioning or doubting self report of pain hinders the establishment of trust needed to develop a therapeutic relationship. Intensity ranges from a state of no pain to a state of worst pain possible

Pain quality: The patient describes what the pain feels like with descriptive adjectives like unbearable sharp, piercing, agonizing, throbbing, nagging, cramping, dull, and radiating. It is important to record the exact word that patient used.

Pain pattern: This includes the onset, duration, variations (recurrence or intervals without pain) and the rhythms. This will help the nurse anticipate and meet patients' needs.

Precipitating factors: Certain activities may precipitate pain e.g. physical exertion, extreme cold or heat.

Alleviating factors: The nurse should ascertain things that alleviate or lessen the pain such as medication, rest, hot or cold application.

Associated symptoms: symptoms that maybe associated with pain example nausea, vomiting and dizziness. (Berman et al 2008).

Others include: Effect on activities of daily living, coping resources affective responses.

(a) Physical examination

Observation of behavioural and physiologic responses:

There are wide variations in nonverbal responses to pain. These may include facial expressions (grimace), clenched teeth, tightly shut eyes, biting of lips, moaning, groaning, crying or screaming. Others are immobilization of the body or part of the body, assuming

certain positions like flexing knee and hip etc. Behavioural changes like confusion, restlessness, hostility or aggression may indicate pain etc. Not all the patients exhibit the same behaviours.

Physiologic responses as a result of stimulation of sympathetic nervous system may include increased blood pressure, pulse rate, respiratory rate and diaphoresis. The presence or absence of these pain behaviours may or may not indicate pain, and because there is autonomic nervous system adaptation, these measures are poor indicators of the presence or absence of pain and judgment, and formation of treatment plan should not be only based on them (Smeltzer 2004).

- Tools for assessing patients' pain should be measured using a consistent pain rating scale that will help both patients and nurse to speak the same language regarding the pain intensity (Mayer et al 2001). Such tools may be used to document the need for intervention, to evaluate the effectiveness of the interventions and to identify the need for alternative or additional intervention if the initial intervention is ineffective in relieving pain (Smeltzer 2004). For pain assessment tool to be useful, it must require little effort on the part of the patient, be easy to understand and use, easily scored and be sensitive to small changes in the characteristics being measured.

The range of pain measurement tools is vast and includes both unidimensional and multidimensional tools. The researcher concentrated on the unidimensional tools.

A. Unidimensional tools (Gregory 2000)

These tools:

- Measure one dimension of pain experience example, intensity
- Are accurate, simple, quick, easy to use and understand
- Are commonly used for acute pain assessment.
- Have verbal rating and verbal descriptor scales

Examples:

1. Visual analogue scale
2. Simple descriptive pain intensity
3. 0 to 10 numeric pain intensity scale
4. Wong-Baker facial grimacing/expression pain rating scale etc

1. Visual analogue scale (VAS): They are useful in assessing the intensity of pain. It has a horizontal 10cm line, with ends indicating the extremes of pain. The person is asked to place a mark indicating where the current pain lies on the line. The left usually represents "no pain". Whereas the right anchor usually represents "severe" or "worst pain". To score the results, a ruler is placed along the line and the distance the person marked from the left or right end is measured and reported in millimeters or centimeter. The tool has been confirmed to be a useful tool for pain assessment in Nigerian patients Soyannwo, Amanor, Sanya & Gureye (2000). (See Appendix IV)

2. Simple descriptive pain intensity scale:

The patient describes the intensity of the pain using a designated number. The designated numbers and their interpretations are as follows;

0- No pain

1-2 Mild pain

3-4 Moderate pain

5-6 severe pain

7-8 Very severe pain

9-10 Worst pain (see Appendix IV)

3. 0 to 10 numeric intensity scales.

These are used in some patients (children, elderly patients, and visually or cognitive impaired patients) that may find it difficult to use an unmarked VAS. In such situations these ones are used. ((see Appendix v)

- 4. Wong-Baker face pain rating scale:** This features a series of facial expressions. The scale has six faces and a number scale in relation to each expression. The nurse observes the difference in the facial expression of the patient. Evidence for reliability and validity of the faces rating tools has been established (Hicks, Von Spafford 2001, Hunter, McDowell, Hunnessy, Cassey 2000). It is used mainly for children that cannot express themselves and very elderly patients. (see Appendix v)

B. Multi-dimensional pain assessment tools: (Gregory 2000)

- Provide information about the qualitative and quantitative aspects of pain.
- Maybe useful if neuropathic pain is suspected
- Require patients to have good verbal skills and sustained concentration, as they take longer to complete than unidimensional tools.

They include:

- McGill pain questionnaire (short and long)
- Brief pain inventory (short and long)
- Behavioural pain scales etc

Guidelines for using Pain Assessment Scales: Smeltzer et al (2004) state guidelines for using pain assessment scale. They noted that using a written scale to assess pain may not be possible if the patient is seriously ill, in severe pain or has just returned from surgery. On such case the nurse should orally but diligently use the 0 to 10 numeric scale for the patient.

- Whichever scale is used, should be used consistently.

- The nurse should teach the patient (e.g. surgery patients) how to use the pain scale before the pain occurs.
- The patients' numeric rating should be documented for effective management of pain.
- In situations where the patients cannot communicate well, an interpreter might be needed.

Nurses' role in assessing patients' pain

1. **Ensures a positive nurse-patient relationship:** This is the first step for a successful patients' pain assessment. A positive nurse-patient relationship is characterized by trust. The nurse lets the patient know that she believes his report of pain, and this eases off the patients' anxiety and even relieves pain.
2. **Nurse as an educator:** The nurse teaches both the patient and the relatives about pain.
3. **Assessment:** He/she equally assesses the patients' pain
4. **Documentation:** Document pain reports.

Theories underlying the study

Peplau's theory of interpersonal relationship in nursing and Kings Theory of goal attainment (George 2003) were used as the theoretical bases for this study; to examine the nurses' perception of pain assessment of hospitalized patients. This is because proper patients' pain assessment will not be effective without first establishing rapport with the patient. Assessment brings the nurse patient relationship into clear focus (Archer 2003). Archer further stated that assessment of patients' pain involves interpretation of reality-both by the patients and the caregiver- the nurse. Boluwaji & Fajemilehn (2004) noted that in the interaction so many factors favour the nurse to lead the relationship by virtue of her profession. George (2003) discussed Kings Theory by looking at both nurses and patients'

perception that eventually led to transaction (goal outcome). However, in this study the theory component of interest is the nurses' perception in patients' assessment.

(a) **Peplau's theory of interpersonal relationship:** She discussed the theory in three phases which are orientation phase, working phase and termination phase (George 2003).

Orientation phase: Commences at the nurses' first contact with the patient. Both of them meet as two strangers. The patient has a felt need and has come to seek the professional assistance of the nurse. This phase is affected by both the patients' and nurses' attitude towards giving and receiving. Also by several other factors like belief, age, religion, educational background, past experience, preconceived ideas and expectations. The effective handling of this stage successfully ushers them into the working phase of the relationship.

Working phase: In this phase both of them, the nurse and the patient must clarify each other's perception and expectation. In a situation, where the nurses' perception of patients' pain is positive, the patient begins to have a feeling of belonging and a capacity for dealing with the problem. This change decreases the patients' feeling of helplessness and hopelessness thereby creating an optimistic attitude. This leads the patient unto exploitation stage in which the patient takes advantage of all the services available. George (2003) noted that during this stage, some patients might even make more demands than they did when they were seriously ill. In this study, it implies that the patient may complain of more pain than when he was seriously sick. This is because he now feels that he is an integral part of the helping environment. He stated that the nurse must convey an attitude of acceptance, concern, and trust in order to maintain the therapeutic relationship. The nurse must also provide a nonjudgmental atmosphere and a therapeutic emotional climate. Communication tools like listening, accepting, teaching and willingness to offer services, solidify the relationship. Thus, in this phase the nurse aids the patient in using services to help solve the problem (pain).

Termination phase: The patient's need has already been met by the collaborative efforts of both of them. The relationship needs to be terminated. Sometimes they may find it difficult. The depending needs in the therapeutic relationship often continue psychologically after the physiological needs have been met. As in other phases, anxiety and tension increase in both the nurse and the patient if there is unsuccessful completion of the phase. In successful termination the patient drifts away from identifying with the helping person, the nurse.

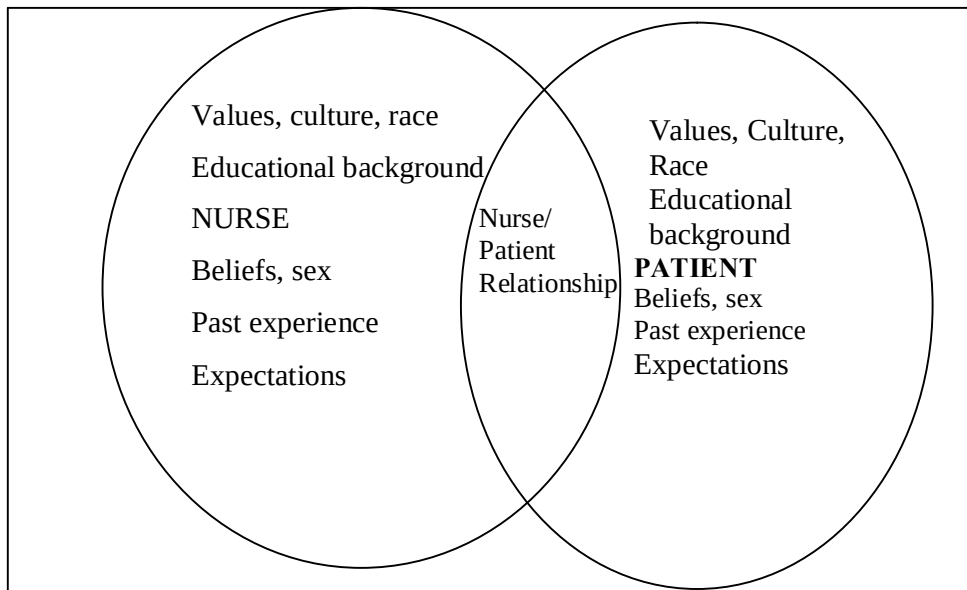


Fig. 1: Factors influencing the blending of the nurse/ patient relationship

Source: George, J.B. (2003), Nursing Theories: The base for professional nursing practice.

Theory II

Kings theory of goal attainment: Kings Theory asserts that there are six stages involved in interpretation of reality (patient's pain) by both the nurse and the patient. The nature of the nurse's profession favours her to lead the relationship; therefore in this study emphasis on this theory will be more on the nurse. The stages are: Perception, Judgment, Action, Reaction, Interaction, Transaction (Goal outcome).

Perception: Is reality as seen by each individual. The elements of perception are the importing of energy from the environment and organizing it by information, transforming energy, processing information, storing information and exporting information in the form of observable behaviours.

Judgment: This involves decision making based on one's perception.

Action: These are activities as a result of one's decision.

Reaction/interaction: This is the observable verbal and nonverbal goal directed behaviours of two or more people in mutual presence. The individuals come together for a purpose and perceive each other; each makes a judgment and takes mental action or decides to act. Then each reacts to the other and the situation.

Transaction: Is a series of exchanges between human beings and their environment that include observable behaviours that seek to reach goals of worth to the participants. When transactions occur between nurses and clients, goals are attained.

Application of the theory:

Nurses' perception of patient's pain assessment: Several factors affect nurses' perception of patients' pain assessment. This includes nurses' knowledge of patients' pain (educational background) nurses' view of patients' verbal report etc. Perception is the reality of patients' pain assessment as seen by the nurse.

Judgment: The nurse's judgment or decision-making concerning patient's pain assessment could either be affected positively or negatively by the nurse's perception.

Action: The nurse acts based on the decision or judgment that was made as a result of her perception. It is the nurse's action (practice of pain assessment) that will lead to reaction by both the nurse and the patient.

Reaction/interaction: This is the observable verbal and nonverbal goal directed behaviours of the nurse and the patient transaction (Goal outcome). It is the effect of both the reaction and interaction with the patient that will now determine the goal outcome (to relieve patient's pain).

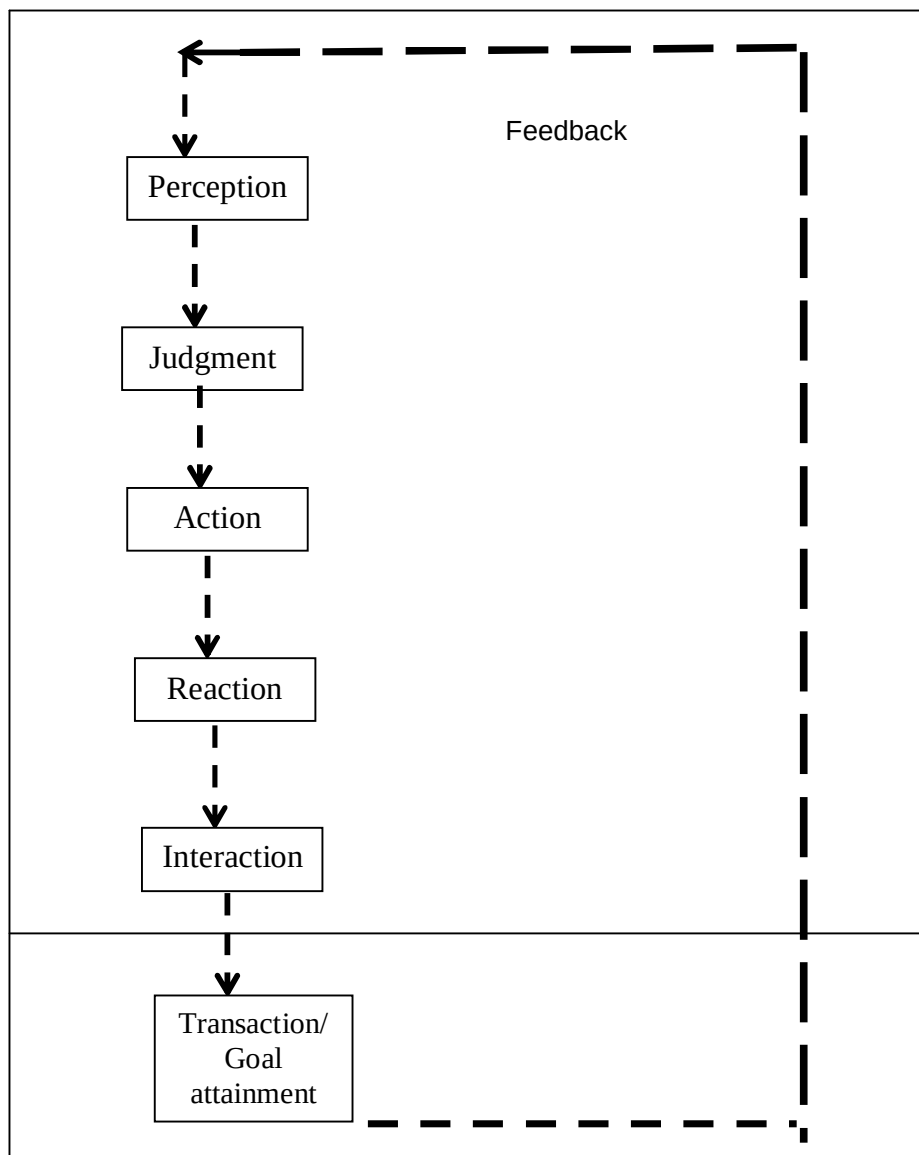


Fig. 2: King's theory of goal attainment.

Source: George J.B (2003), Nursing Theories: The base for professional practice.

Empirical studies

Horbury, Henderson and Bromley (2005) in their study on influence of patient behaviour on clinical nurses' pain assessment observed from analysis of 221 questionnaires that Nurses were reluctant to accept the patients' self report of pain and administration of opioids in the absence of objective signs of pains.

There was poor patients' pain assessment and exaggerated concerns over the risk of pain relievers. The implications of the findings to nursing practice were: To change these underlying attitudes and practice patterns, new innovative approaches are needed to help nurses believe patients verbal report of pain. That the patients' verbal report of pain is a more reliable indicator of pain than physical signs or pain behaviours (e.g. facial grimace).

That in the absence of over sedation or respiratory depression, opioids can be given more frequently or in higher doses to relieve pain.

Walt-Watson (2001), observed a negative attitude of nurses towards patients report of pain. He noted that nurses often appear to distrust patients' verbal report of pain.

In another study by McCaffery et al (2000) on nurses' personal opinions about patients' pain and their effect on recorded assessment and titration of opioid doses identified lack of knowledge about pain as a factor affecting pain management and saw that little was known about their personal opinion on pain assessment. Descriptive case studies were presented to the nurses. The survey presented two postoperative identical patients except for their behaviour. One patient was smiling and joking while the other remained quiet in bed and grimaced. Nurses were asked to identify their personal opinions about both patients' reported pain and intensity. The patients rated their pain as (eight) 8 on a scale of 0 to 10. The findings were: more nurses (78.3%) believed the grimacing patients' pain intensity, only 39% of the nurses believed the smiling patient's pain intensity.

Comparing this result with their previous studies done in 1995, the authors noted that there is a need for continuing education on different patients' responses to pain and the importance of the patients' report of the intensity of pain. Also, Harper et al (2007) noted that although military nurses were taught to believe what patients say about their pains, however, their attitude to pain was influenced by their cultural background and they disagreed with patients' self report. Military nurses belong to a military culture with different pain attitude.

In a study of 85 nurses caring for patients with cancer in two veteran hospitals, undesirable attitudes towards pain management for patients in pain were demonstrated. More than 22% of the nurses indicated that they would reduce a patient's reported pain when charting it, 89% believe that they should have more control over the timing of a patient's pain medication than the patient or family, and 84% believe that steady state analgesia achieved through round the clock dosing was undesirable. About 56% of the nurses exhibited misconceptions about addiction and 51% indicated that their estimation of pain were more valid than the patient's (McMillan, Title, Hagan, and Laughlin, 2000).

Ellen, Schuafheutle, Judith, Centril & Peter (2009) in their study on why pain management is suboptimal on surgical wards observed the following barriers: workload and lack of staff, institutional constraint, prescribed analgesia are sometimes inadequate, failure of nurses to ask patients pain related questions, nurses relied considerably on patients' nonverbal behaviour and used it to assess patients.

Nash, Edward, and Nebauer (2008) in their study examined the underlying determinants of nurses' behaviour regarding the conduct of pain assessments. Nurses were invited to complete an attitude intention questionnaire based upon the theory of reasoned action. Results provide some support of the theory of planned action, as nurses' intention to conduct pain assessment to be predicted by attitude, subjective norms and perceived control was proved by the analysis. The findings of the study are consistent with study, which

showed that the variables in the theory of planned behaviour provided reasonably accurate predictions of behaviours.

American Burn Association (1982) conducted a study to determine relationship that exists between burned patients' perception of pain and nurses' perception of pain using the Stewart pain-color scale (SP-CS) on 15 burned patients and eight nurses working with these patients. Each patient's pain perception was measured by the SP-CS, at three randomly selected times, immediately followed by the nurses' assessment of the patient and measurement of his/her perception of the patient's pain also using the SP-CS. Data analyzed on the 45 paired scores demonstrated that there was a positive correlation between the nurses' perception of the burned patient's overall pain experience and the degree of pain reported by the burned patients. However when data were analyzed in reference to pain experienced by burned patients during specific treatment methods (e.g. physical therapy, debridement and hydro therapy) there was no statistically significant demonstrable correlation. Neither were there any statistically significant relationships between length of time in nursing and perception of patients' pain. Nurses therefore need a means of evaluating their methods of pain assessment.

Askew et al (2000) carried out a study on physical therapists' perception of patients' pain and its effect on management. They found out that the most predominant factors found to affect physical therapists' perception of patients' pain were the therapist's personal and professional experience in practice and evaluative findings. It was concluded that there exists a common link between experience and evaluative findings; the longer the physiotherapist have been practicing the more efficient he becomes in performing and interpreting a thorough subjective and objective evaluation. Physiotherapists practicing in pain clinics were found to use more holistic and multidisciplinary approach to patients' care whereas therapists

practicing in out-patient and sports medicine facilities were more focused on patients' physical symptoms and complaints.

Emma & Gale (2000) in their study examined the factors that influenced nurses' perception of patients' pain. Sixteen vignettes were constructed on the basis of interviews with nurses about factors affecting their perception of patients' pain. Four variables were systematically varied within a factorial design: diagnosis (Surgery vs Oncology), level of patient mobility, presence or absence of physical and behavioural signs, and patients' gender. 27 nurses rated each vignette for degree of inferred patients' pain and degree of patients' psychological distress. Mobility and positive signs of pain had statistically significant effects on nurses' judgments of inferred pain but diagnosis had no main effect. Significant interactions showed that inferred pain in male patients was seen to be greater when immobile while mobility had no effect on the inferred pain of female patients. Oncology patients (compared with surgical patients) had greater inferred pain when displaying positive signs and positive signs yielded higher ratings where patients were immobile. Female patients were perceived to experience higher psychological distress than men, and oncology patients were perceived to experience higher distress than surgical patients. Ratings of perceived pain and distress were significantly correlated but did not differ in magnitude. Offered choice of analgesics to relieve pain for each of the patients, showed that nurses typically chose those with lowest strength. Also in another study by Ene, Nordberg, Bergh, Johansson & Sjostrom (2008) on post-operative pain management-the influence of surgical ward nurses. The aim of the study was to compare pain levels reported by patients with what was documented by ward nurses. The study showed a discrepancy in pain scoring between nurses and patients.

In Nigeria a study was carried out on management of cancer pain by (Soyannwo & Amanor 2001). A structured questionnaire on cancer pain management practice was administered to 80 fellows attending the Annual Scientific Conference of the West African

College of Surgeons in 1996. One of the questions in the questionnaire was their method of pain assessment. The findings of the study revealed that pain assessment was mostly done by the verbal rating scale, only 20% included psychological measurement in their schedules.

Summary of literature review

From the literature reviewed, it was observed that much work had been done on nurses' perception/opinion of patients' pain assessment. Their major findings were:

- Nurses' negative attitude towards patients' report of pain, pain assessment (Walt Watson 2001), misconceptions about addiction to pain relievers (McMillian et al 2000) and exaggerated concern over risk of pain relievers (Horbury et al 2005).
- Little was known about nurses' opinion on pain assessment (McCaffery et al 2000).
- Although nurses were taught to believe what patients say about their pains, however, their attitude to pain was influenced by their cultural background (Harper et al 2007) and professional experience in practice (Askew et al 2000).
- Ellen et al (2009) observed the following barriers to pain management: workload, institutional constraint and inadequacy of prescribed analgesic.
- Soyannwo & Ammon (2001) also observed that pain assessment was mostly done by verbal rating scale.

Most of these works were done in developed countries, only very few in developing countries. This study is an attempt to fill this gap in literature.

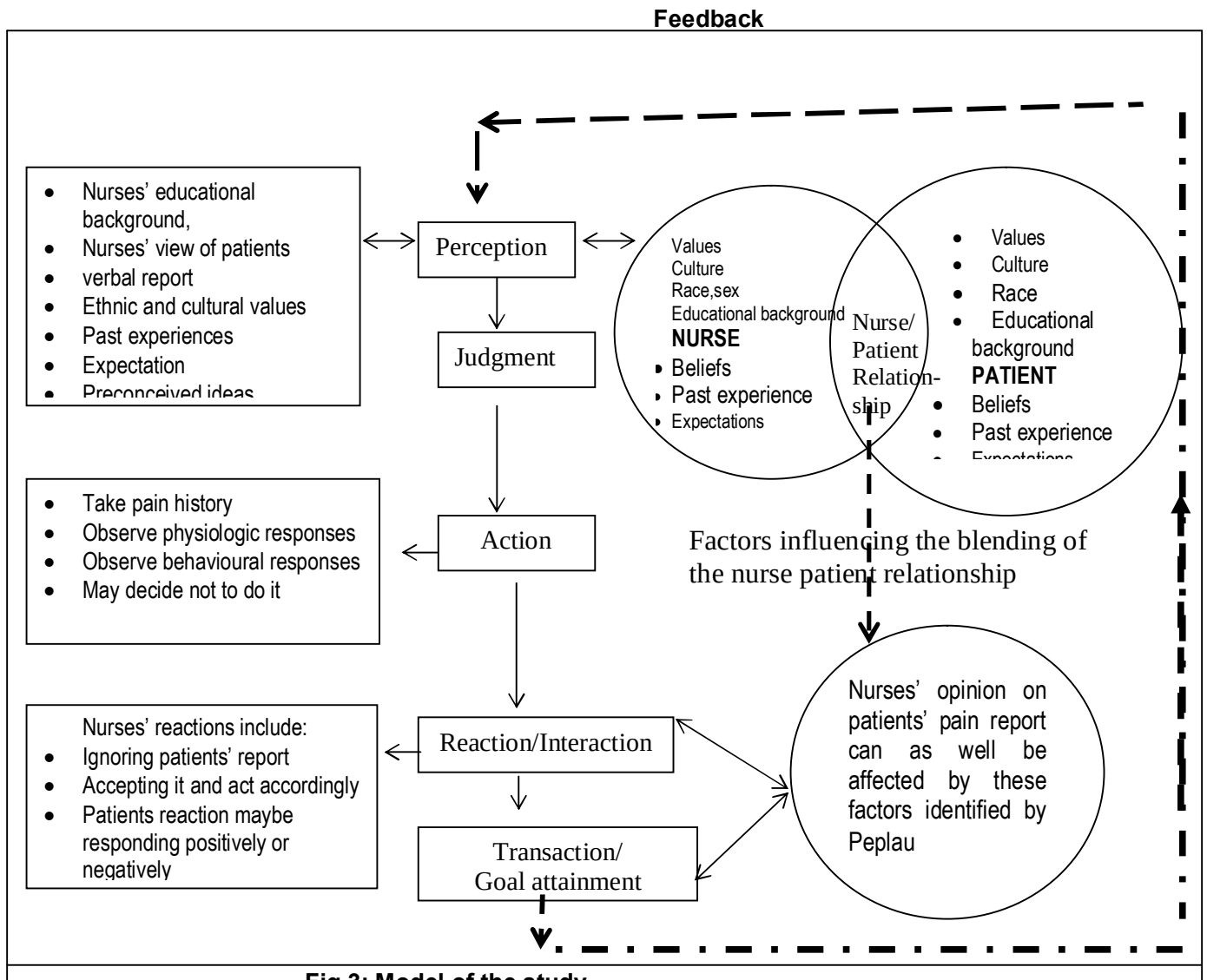


Fig.3: Model of the study

Variables of Interest in the Study Theory of goal attainment of Kings. Interpersonal Relationship of Peplau

Factors affecting patients' nurse relationship in theory I (Peplau's theory) are similar to those that affect nurses' perception of patients' pain report.

In this study Peplau's theory will give a guide on those factors that blend therapeutic relationship which as well affect nurses' opinion. Also, from theory of goal attainment, nurses' perception determines her judgment. The variables in perception are.

- Nurses educational background
- Nurses view of patients' verbal report of pain
- Factors that affect nurses' judgment which determine her action (practice of pain assessment)
- Past experience, expectations, educational background, sex etc. It is her judgment that will determine her action which may be to:
- Take pain history, observe behavioural response or observe physiologic response. (Nurses' action/practice of pain)

Whereas, her reaction might be to trust the patients' report, act accordingly or distrust patients' verbal report. This could as well lead to relieving patients' pain or not relieving it respectively (as the goal attainment). It has a feedback mechanism.

From the model of the study the variables identified by Peplau's theory reveals the possible associated factors of the subjective nature of patients' verbal report of pain. The nurses' perception to assess, interpret and manage what another feels could vary as well. The variation could be as a result of the variables identified in the King's theory of goal attainment as outlined in variables I, II and III. The study hypotheses were derived from these variables of interest in the two theories viz...

Ho1: There is no significant statistical difference in nurses' perception of pain assessment between the two hospitals.

Ho2: There is no significant statistical difference in nurses' perception of pain assessment and their socio-demographic characteristics.

Thus the variables measured in this study that were derived from Peplau's theory are the factors that affect nurse/patient relationship. These include sex, past experience/years of experience, educational background etc (socio-demographic characteristics) of the nurse. Variables of concern derived from the King's theory is the nurses' action (practice of pain assessment) and how it is affected by those factors that were identified by Peplau. This informed the formulated hypotheses that were tested.

CHAPTER THREE

RESEARCH METHODS

This chapter discusses the research design, area of the study, study population, sample size, sampling procedure, instrument for data collection, method of data collection and data analysis.

Research design

It was a descriptive survey study of nurses' perception of pain assessment of hospitalized patients in tertiary Institutions in Ebonyi State. The design was successfully used by McCaffery et al (2000), in their studies on nurses' personal opinions about patients' pain and their effect on recorded assessment and titration of opioid doses. It was to elicit information from the respondents in a natural environment without manipulating it.

Area of study

The study was carried out in Ebonyi State with Abakaliki as its capital lies between 7°30'N longitudes, 8°54'E with a land mass approximated at 5932km². The state has boundaries in the north with Benue State, East with Cross River, South-Abia State and West Enugu State. It has 13 Local governments and a population of 3 million people. There are only two tertiary hospitals in Ebonyi State. They are the Ebonyi State University Teaching Hospital and Federal Medical Centre. They are the biggest referral centers within the state. They have the highest population of nurses in the state and all categories of patients in pains are cared for.

Target population

All the nurses working in the two tertiary hospitals constituted the target population. Their available population was 450. FMC was 180 while EBSUTH was 240 nurses.

Sample

It was a total population study, applying inclusion and exclusion criteria. This was because the numbers of nurses in the two hospitals were not too large.

Inclusion criteria:-

Participants must be

- Employed and working presently in the hospital within the study period
- Must be working in the wards

Instruments for data collection

Two instruments were used i

- Nurses' pain assessment questionnaire
- In depth interview guide of nurses pain assessment.

(a) Nurses' pain assessment questionnaire

A researcher developed structured questionnaire was used to obtain information from the participants. Ideas and items in the questionnaire were generated from literature reviewed. The questionnaire elicited information from the nurses on their perception of pain assessment of hospitalized patients in tertiary institutions in Ebonyi State.

The questionnaire has fifty (50) items in four (4) sections (A -D). Section A of the questionnaire has 6 items designed to elicit demographic information of the subjects. The items in section B are 12 and were formulated to elicit information on nurses' opinion on what nurses do during pain assessment of hospitalized patients' pain. Section C has eight (8) items and it elicited information from nurses on their preferred tools for pain assessment. Section D has twenty four (24) items and was intended to obtain information on nurses' opinion on patients' verbal report of pain. The instrument was constructed on a five-point Likert scale.

B. The in depth interview guide of nurses' pain assessment.

This is an eleven (11) item open-ended interview guide formulated to guide the researcher in directing the interview. The questions aimed at achieving the study objectives. Six (6) items elicited demographic data of the participant. The interview questions covered the four main themes in relation to nurses' perception of pain assessment: their opinion on what nurses do during patients' pain assessment, their opinion on preferred tools for the assessment, nurses' opinion on patients' verbal report of pain and improving participation in pain assessment. The ultimate goal was to get information that would validate further the quantitative responses and identify other pain assessment issues not elicited from questionnaire.

Validation of instruments

The supervisor determined the face validity of the instruments. Her input was utilized to effect necessary corrections. Three expert nurses in the field of pain assessed the content validity of the tool. Expert nurses in the field of the study are those that have undergone a special training on pain assessment. They include a nurse anesthetist, oncology and orthopedic nurses. The expert nurses read through the questionnaire items and rated them according to how adequate and relevant they considered the items to be in relation to the topic of the study. They rated the items by using 4,3,2,1 which were interpreted as follows:

- 4 - Very relevant
- 3 - Relevant
- 2 - Irrelevant. Needs modification before re-consideration
- 1 - Very irrelevant, dropped

Their responses were analyzed by finding the mean of their ratings to each item. Items with a mean of 2.5 and above were regarded as adequate, while items with the mean below 2.5 were regarded as unsatisfactory. The unsatisfactory items were restructured or deleted.

Reliability of instrument

The reliability of the quantitative instrument was established using Test-retest technique. Their responses were analyzed using Spearman's Product Moment correlation coefficient, (r) to get the coefficient of reliability (r). The score of 0.86 was obtained which indicates that the tool is reliable.

The reliability of the instrument for the qualitative study was also test-retested by conducting an in depth interview with the four heads of the units of the respondents within two weeks. The respondents' opinion did not differ between test periods except for item (8): where one of them had a different opinion. Since only one of the respondents' opinion differed from previous response it was still treated as being accepted. Therefore, the instrument was considered reliable

Ethical consideration/Administrative permission

Ethical review and approval for the study was obtained in writing from the ethical committee of EBSUTH Abakaliki. Also administrative permission was obtained from the Head of Nursing services department of the two hospitals. The consent of the nurses was solicited, gained and assurance given to them that all the information given by them will be confidential.

Procedure for data collection

Data collection was both quantitative and qualitative. For the quantitative, the researcher and two trained nurse research assistants carried out the distribution of the revised questionnaire instrument. Questionnaire was distributed and collected on every shift until all were retrieved. The distribution of the questionnaire lasted for three weeks .450 questionnaires were distributed.

The qualitative data collection was also done. Ten unit heads from both hospitals were interviewed. Their consent and cooperation were sought and same gained. Appointments for interview were booked and were informed that the interview was to be conducted in their individual offices and that their responses would be audio taped. Each session lasted between 30 i 45 minutes. The interview was completed before normal routine ward activities commenced so as to reduce distractions. At the end of the interview, the outcomes of the discussion were reviewed. Each of them was appreciated for participating.

Method of data analysis

1. Quantitative analysis

The data gathered were cleaned and analyzed using SPSS version 16. Descriptive (percentages and mean) and inferential statistics, [both t-test (between groups) and analyses of variance (within groups)] were used. All the hypothesis were tested at 0.05 level of significance Research question 1-3 in Likert scale were assigned numerical scores to yield a mean score for each variable. The responses were scored thus:

Strongly Agree (SA)	=	5 points
Agree (A)	=	4 points
Disagree (D)	=	3 points
Strongly Disagree (SD)	=	2 points
No opinion (NOP)	=	1 point

The mean value for 1,2,3,4 and 5 is 3.0 considered as mean decision point. By the use of mean, any item that scores 3.0 or above was accepted as being significant and agreed by the respondents, while any item with the mean value (score (X))below 3.0 was regarded as having been rejected by the respondents.

2. Qualitative analysis: within 48 hours of conducting each interview session, the discussion recorded by the research assistant was transcribed verbatim and coded line by line. The transcribed information was checked for accuracy by listening to the tapes and editing the transcripts. This was done repeatedly. Finally, it was verified with the interviewee to ensure accuracy. Coded data were grouped into related categories (in themes).

CHAPTER FOUR

ANALYSIS AND PRESENTATION OF RESULTS

This chapter deals with the presentation and analysis of data collected from the researcher developed questionnaires and in-depth interview. Out of four hundred and fifty (450) copies of the questionnaire distributed, four hundred and twenty (420) were duly completed and returned, giving a return rate of 93.30%. The responses were tallied and presented in frequency tables and figures according to the research questions and hypothesis.

Socio-demographic characteristics of respondents

Table (1) shows that out of the 420 respondents, 180 (42.86%) were from FMC, while 240 (57.14%) were from EBSUTH. 382 (90.95%) were female, while 38 (9.05%) were male.

Respondents were predominantly nursing officer (11) -158 (37.62%) and 143 (34.05%) nursing officer (1) .48 (11.43%) and 41 (9.76%) were SNOs and PNOs respectively. 19 (4.52%) were ACNOs while 11 (2.63%) were CNOs. 190(45.24%) of the nurses have worked for 1-5years, 146 (34.76%) had worked for 6-9 years while 84 (20.00%) had worked for 10 years and above. 321 (76.43%) had diploma. 90 (21.43%) had first degree while 9 (2.14%) had additional higher degree.

On professional qualifications, all the respondents are registered nurses (RN), 420 (100%). Two hundred and thirty, 230 (54.76%) of them are also registered Midwives. Among the registered nurse/Midwives, some of them possessed additional professional certificates in other nursing specialties as: Intensive care nursing 5 (1.19%), Peri-operative nursing 12 (2.86%), Anesthetic nursing 10 (2.38%), Orthopedic nursing 2 (0.48%) and others 22 (5.24), respectively.

Table 1: Socio-Demographic Characteristics of respondents

Gender distribution of participants:	Number:	Percentage
Males	38	9.05%
Females	382	90.95%
n=	420	100%

Professional status		
NO II	158	37.62
NO I	143	34.05
SNO	48	11.43
PNO	41	9.76
ACNO	19	4.52
CNO	11	2.63
n=	420	100%

Years of working experience of respondents:		
1-5	190	45.24
6-9	146	34.76
10 ⁺	84	20.00
n=	420	100%

Highest academic attainment of respondents:		
Diploma	321	76.43
First Degree	90	21.43
Higher degree	9	2.14
n=	420	100%

Professional qualifications of respondents:		
RN	420	100%
RM	230	54.76
ICU	5	1.19
Peri-Operative Nurse	12	2.86
Nurse Anesthetist	10	2.38
Orthopedic Nurse	2	0.48
Others (health education)	22	5.24.

Table 2: Respondents' responses on what they do during pain assessment of hospitalized patients' pain.

Mean Score 3.0

S/N	OPTIONS	SA 5	A 4	D 3	SD 2	NOP 1	TOTAL	- X
7	During pain assessment nurses							
A	Collect relevant pain history from patients	200	63	24	50	83	420	3.58
B	Observe their behavioral responses	67	77	89	145	42	420	3.00
C	Observe patients' physiologic responses	186	181	40	12	1	420	4.28
D	Document patients' pain	137	143	87	50	3	420	3.86
8.	Patients' pain assessment is done							
A	Routinely, whenever other vital signs are checked	147	159	79	31	4	420	3.99
B	During initial health assessment on admission	178	164	53	23	2	420	4.17
C	When patients complain of pain	163	181	41	28	7	420	4.11
D	Before and after giving a pain relieving therapy	173	169	41	35	2	420	4.13
9.	Nurses do not assess patients' pain at times in details							
	For the following reasons.							
a	They view it exclusively as doctors' duty	110	106	68	125	11	420	2.75
b.	It is time consuming	88	108	99	119	6	420	2.73
c	Is too demanding	34	80	138	150	18	420	2.91
d	Have so many patients to care for	72	86	114	139	9	420	3.17

Research Question 1:

What are nurses' perceptions on what they do during patients' pain assessment?

Respondents' responses to items 7, 8, and 9 were analyzed to answer this research question.

As presented in table 2, nurses indicated that they collect relevant pain history from patients, observe their behavioural/physiologic responses and document their pain responses when pain assessment is undertaken, with mean scores of 3.58, 3.00, 4.28 and 3.86 respectively. They respectively assess patients' pain routinely whenever other vital signs are checked (3.99), during initial health assessment on admission (4.17), when they complain of pain (4.11), before and after giving pain relieving therapy, (4.13). However the in depth interview guide with heads of units showed that during pain assessment they carry out the aforementioned activities but less of doing them routinely when other vital signs were being done. They did not regard pain assessment as only doctors' duty, time consuming or too demanding. These items scored 2.75, 2.73 and 2.91 respectively. They accepted that at times, they do not assess patients' pain in detailed manner because they have too many patients to be cared for, and this scored 3.17

Table 3: Nurses' perception on patients' report of pain

S/No	Assertions	SA	A	D	SD	NOP	TOTAL	-
		5	4	3	2	1		X
10.	The following statements refer to nurses' opinion on patients' pain							
A	Patients are best assessors of their pain.	176	92	80	68	4	420	3.88
B	Patients' verbal report is highly subjective therefore should not be relied on always	104	117	96	98	5	420	3.52
C	Patients at times over-report their level of pain to gain attention	170	163	56	31	1	420	4.12
D	Patients will be addicted to pain relief and if nurses should rely on their verbal report of pain	118	161	84	54	3	420	3.80
E	Management of patients' pain would be very effective when nurses accept and believe the patients' verbal report of pain	132	164	94	28	2	420	3.94
F	Validation of patients' pain can effectively be done with patients' verbal report of pain only.	93	119	140	62	6	420	3.55
G	Nurses are the best assessors of pain.	108	118	120	70	4	420	2.99
H	Visible physiologic or behavioral signs must accompany patients' verbal report of pain to verify its existence	146	113	102	57	8	420	3.80

Research question 2:

What are nurses' perceptions on patients' report of pain?

Nurses' opinions on patients' report of pain

To answer research question 2, eight statements were posed to the nurses to ascertain their opinions on patients' verbal pain report. Their responses were computed and presented on Table 3.

Nurses recognized that they were not the best assessors of patients' pain (2.99) rather patients were the best assessors (3.88). However, nurses assert that patients often over-report their level of pain to attract attention (4.12). Majority had the fear that patients will be addicted to pain relief drugs if nurses rely on their verbal report only (3.80), hence nurses were of the opinion that visible physiologic or behavioural signs must accompany patients' verbal pain report as verifiers (3.80). This seems to contradict their view that management of patients' pain can effectively be done with patients' verbal report only.

Table 4: Nurses' tools for patients' pain assessment

Options		Yes		No	
		FREQUENCY	%	FREQUENCY	%
11	Which of the under listed tools are used in patients' pain assessment in your institution.				
A	Visual analogue scale	155	36.9	265	63.1
B	Simple descriptive pain intensity	238	56.7	182	43.3
c	O to 10 numeric pain intensity scale	129	30.7	291	69.3
d	Wong-Baker faces Pain rating scale	147	35.0	273	65.0
e	Patients Verbal report of pain	364	86.7	56	13.3
12	If none of these tools are used in your hospital which of the under listed are reasons for not using them				
a	Unavailability of any of the tools	327	77.9	93	22.1
b	Nurses' lack of knowledge to use the tools.	186	44.3	234	55.7
c	It does not add anything positive to pain management	73	17.4	347	82.6
d	There are no hospital policy/rule that demands its use	220	52.4	200	47.6

Research Question 3: What are the preferred tools used by nurses for patients' pain assessment?

To answer research question 3, responses were elicited from the nurses based on their preferred tools for pain assessment. Based on their responses, the percentages were calculated for each item and presented on table four (4).

Nurses' tools for patients' pain assessment

In response to research question 3, majority of the nurses indicated they used simple descriptive pain intensity scale (57%) and patients' verbal report of pain with good score of 87%. An appreciable number were of the opinion that the following pain assessment tools were being used for pain assessment: visual analogue 37%, 0-10 numeric scale 31% and Wong Baker's faces pain rating scale 35%.

When asked to state the reasons for not using the tools, nurses posited that it was due to unavailability of the tools and that no hospital guidelines demanded it, with scores of 78% and 52% respectively. On whether nurses lack knowledge to use the tools, 44% accepted, while 56% were in disagreement. The data also showed that only 17% of the nurses agreed that the use of tools did not add anything to pain management, whereas 83% of the respondents felt that the reverse is true. Further more, 52% of the nurses agreed that there were no hospital guidelines that demanded that pain assessment tools should always be used while assessing pain; however, 48% were against this opinion.

Nurses' choice of pain assessment tools for their Institutions					
		Yes		No	
		FREQUENCY	%	FREQUENCY	%
13	If asked to choose, which of the tools will you select for your institution.				
A	Visual analogue scale	281	67	139	33
B	Simple descriptive pain intensity	274	65	146	35
C	0 to 10 numeric pain intensity scale	280	67	140	33
D	Wong Baker faces pain intensity scale	278	66	142	34
E	Patients's verbal report of pain	325	77	95	23
14	Which of the following reasons informed your choice of pain assessment tools?				
A	Easy to use	330	79	90	21
B	Tools are available	291	69	129	31
C	Can be used for both literate and illiterate	332	79	88	21
D	Non age specific	297	71	123	29
E	Hospital policy mandated its use	180	43	240	57
15	Nurses document patients's pain assessment data on				
A	Patients's case note	184	44	236	56
B	Nurses's observation chart	243	58	177	42
C	Nurses's pain assessment chart	306	73	114	27
d	Nursing process profoma	265	63	155	37
e	Ward report book	314	75	106	25

Nurses were also asked their choices of tools they preferred for their institutions. Their choices were expressed thus: Visual analogue scale, 67%, simple descriptive pain intensity, 65%, 0 to 10 numeric pain intensity scale 67%, Wong-Baker faces pain intensity scale 66% and patients' verbal pain reports attracted 77% acceptance.

When asked to state the reasons that informed their choice of pain assessment tools, nurses expressed affirmation of easy usage 79%, if tools available 69%, the tool being used by both literate and illiterate 79%, non-specific age limit 71%, and hospital policy mandate 43%, while 21%, 31%, 21% and 29% did not accept these items respectively. Nurses mainly documented their patients' data on nurses' observation chart, 58%, nurses' pain assessment chart, 73% nursing process proforma, 63% and ward report book, 75%, and rarely on patients' case note, 44%.

Testing of hypotheses:

H₀₁: There is no significant statistical difference in nurses' perception of patients' pain assessment between the two hospitals

Table 5: Independent t-test analysis showing nurses' perception of patients' pain assessment of EBSUTH and FMC nurses

Hospital	Mean	Std Deviation	t _{cal}	Df	P-value	Decision
FMC	3.68	9.01	0.50	418	0.617	Not significant
EBSUTH	4.13	9.21				

The data presented on table 5 revealed that the variables had a t-calculated of 0.50 with df of 418. There is no significant difference in the means rating of nurses of FMC and EBSUTH ($P > 0.05$); therefore the H₀ is accepted.

H₀₂: There is no significant statistical difference between the nurses' social demographic characteristics (gender, years of experience, academic qualifications and ranks of nurses) and their perception of pain assessment.

Table 6: Independent t-test analysis of male/female nurses of EBSUTH and FMC

Hospital	Mean	Std Deviation	t	df	P-value	Decision
Male	3.58	9.01	0.349	418	0.727	Not significant
Female	4.14	9.20				

The data presented on table 6 showed that the value of t-calculated is 0.349 with df of 418. There is no significant difference in the perception of patients' pain assessment of male and female nurses of FMC and EBSUTH ($P > 0.05$); therefore the H₀ is accepted.

ANOVA

(a) Comparing the responses of the nurses perception of pain assessment according to their years of experience

Sources of variation	Sum of Squares	df	Mean Square	F	P-value	Decision
Between Groups	0.035	3	0.012	0.073	0.974	Not significant
Within Groups	12.760	80	0.159			
Total	12.795	83				

(b) Comparing the responses of the nurses on the academic qualifications of the respondents

Sources of variation	Sum of Squares	df	Mean Square	F	P-value	Decision
Between Groups	0.197	5	0.098	0.479	0.622	Not significant
Within Groups	12.306	60	0.205			
Total	12.503	62				

(c) Comparing the responses of nurses on different ranks on perception of pain assessment

Sources of variation	Sum of Squares	df	Mean Square	F	P-value	Decision
Between Groups	0.643	5	0.129	0.456	0.808	Not significant
Within Groups	33.815	120	0.282			
Total	34.458	125				

Decision:

In comparing the responses of the nurses perception of pain assessment according to their years of experience, there is no significant difference in their perception of pain assessment ($P>0.05$); therefore, H_0 is accepted.

The nurses responses on the academic qualifications also showed no significant difference in their perception of pain assessment ($P>0.05$); therefore, H_0 is accepted.

In comparing the responses of different ranks of nurses, there is no significant difference in their perception of pain assessment ($P>0.05$); therefore, H_0 is accepted.

QUALITATIVE DATA PRESENTATION AND ANALYSIS

The Informants are chief nursing officers, managers of sub units of the respondents. . The participants were ten in number, five were selected from each hospital based on the number of units aforementioned.

Theme 1: Nurses' perception of' pain assessment

Excerpts of information provided on nurses' pain assessment

Interviewer: As the unit manager incharge of some wards, could you please describe your opinion on what nurses do in your units during pain assessment?

Informants' responses: "In the units where I am incharge, patients' pain was assessed by asking the patients questions to find out where (location) and the level of pain they experience. As the patient is reporting or responding to the question, their behavioural responses will also be observed, like squeezing of face, gnashing of teeth, restlessness etc." "Is he that wears the shoes who knows where it pinches. Therefore in order to confirm what the patient said and what was observed, physical examination is equally carried out on the patient with the help of the patients. After the assessment, the findings are documented on the nurses' ward report book, nurses' observation chart or nursing process proforma and rarely on patients' case note."

"In an unconscious patients, we do physical examination, observe the behavioural response and check the vital signs."

"In my unit, we don't have special time of assessing patients' pain but mostly we do it during initial health assessment on admission, when patient complains of pain, after giving pain relieving drugs or invasive procedure."

"Here in paediatric unit, we assess patients' pain whenever the child cries, becomes restless or the mother complains. At times when the nurses on duty have so many patients to care

for,they may not go through detailed process of pain assessment rather may superficially assess the patient to enable them give prescribed analgesics and write consult to the doctor on duty to review the patients.

Summary of theme 1:

On theme 1,all the unit heads stated that they assess patients' pain by asking them questions and by carrying out physical examination.All said they do not routinely assess pain with other vital signs. Nine of them said they do it during initial health assessment on admission, when patients complain of pain,after giving pain relieving drugs or invasive procedures while one from paediatric unit stated they do it whenever the child cries, becomes restless or the mother complains Majority (eight) of them said that when they have so many patients to be cared for that they do not carry out detailed pain assessment. All said they document pain assessment findings on nurses report book ,observation chart or nursing process proforma and rarely on patients' case note

Theme 2: Nurses' perception on patients' report of pain

Interviewer: From your clinical experience, there are some patients who will never report they are in pain even after receiving pain treatment. How do your nurses regard such patients' verbal report of pain?

Informants:

Generally, nurses are aware that patients are in the position to assess and report their level of pain. At times, nurses still have the feeling that some of the patients may over-report their pains, when seeking for attention. In practice, those patients that do not complain of pains are at times seen as very co-operative and patients with high pain threshold. However, those that complain often maybe seen as those with low pain threshold and at times might be regarded as those seeking for attention.

The nurses' subjective opinion of the nature of pain at times may influence the nurse not to respond exactly the way patients report their pain because of fear of

addiction to the pain relieving drugs. Personally, I believe that if patients' report of pain is taken by nurses exactly as reported by patients without minding whether they over-report it or not, there will be good results. But the problem is that there is always fear of patient getting addicted to pain relieving drugs.

Summary of theme 2: All reported that patients are the best assessors of their pain however, majority (nine) complained that patients may at times overreport their pain to gain attention but if patients' report of pain is taken exactly as reported that there will be good result.

Theme 3: Tools for pain assessment.

Interviewer: Could you please, share with us the different tools used by your nurses in assessing patients' pain and your preferences?

Informants' responses: "We do not use any particular pain assessment tool. Mostly we determine or assess patients' pain through their verbal, facial expression, behavioural responses or physical examinations."

"In paediatric units, the major method we use to assess their pain is crying, being restless or their mothers' complaint. We don't use any special tool for their pain assessment."

"As per my preferences, I do not have any because we have not been using any of them. However, I have heard about some of them, but am not conversant with them and their usage. They are not also available in my Institution."

Interviewer: Where do nurses in your unit document patients' pain?

Informant:

"Nurses document patients' pain in the ward report book, nurses' observation chart, and nursing process form any time the assessment is done."

"We do not have any special method of documenting patients' pain. We document it in the report book or at times on nurses' observation chart."

Atimes we document it on nursing process profoma when drawing nursing care plan for the patients.ò

Summary of theme 3: All reported that they do not use any special pain assessment tool, rather they use patientsòreport of pain, facial expression and physical examinations to assess pain .Four stated that they have heard about the pain assessment tools but are not conversant with it. All stated that the pain assessment tools are not available in the hospital.

Theme 4: Nurses'need for update on pain assessment of hospitalized patients' pain.

Interviewer: In your own opinion, do you think nurses in your unit need an update course regarding current ideas on pain assessment and management?

Informants:

ñBased on my understanding and clinical experience, I feel they need update. This is to enable them see it as one of the core quality nursing care which should be done unconditionally even when they have so many patients to care for.ò

ñYes! there is a dire need for that because we need to incorporate it into other routine vital signs as the fifth vital signs which we have not started.ò

ñI think they need it because pain is one of the major problems in health care. Therefore every nurse should be an expert on pain assessment to ensure quality care.ò

All stated that there is a dire need for nursing update on pain assessment.

Major findings of the study

The following were the major findings in the study:

- Nurses of EBSUTH and FMC are aware of the four basic components of pain assessment which are to collect relevant pain history from patients, observe their behavioural/physiological responses and document their pain responses with mean scores of 3.58, 3.00, 4.28 &3.86 respectively.

- Their opinion on the timing of pain assessment agrees with Joint Commission on accreditation of health organization (JCAHO) recommendations including doing it routinely when other vital signs are checked (3.99), during initial health assessment on admission (4.17), when patients complain of pain (4.11), before and after giving pain relieving therapy (4.13).
- Nurses were quite aware of the indispensable nature of pain assessment in patients' care and that it is their core duty to ensure quality health care. Hence they do not regard it as doctors' duty only, time consuming or too demanding with mean scores of 2.75, 2.73 and 2.91 respectively
- Nurses recognized that they were not the best assessors of patients' pain (2.99) rather patients were the best assessors (3.88).

However, nurses assert that patients often over-report their level of pain to attract attention (4.12). Majority had the fear that patients will be addicted to pain relief drugs if nurses rely on their verbal report only (3.80), hence nurses were of the opinion that visible physiologic or behavioural signs must accompany patients' verbal pain report as verifiers (3.80).

This seems to contradict their view that management of patients' pain can effectively be done with patients' verbal report only.

- The nurses expressed that the greatest barrier to pain assessment is the burden of having so many patients to care for (3.17). This made them at times not to carry out detailed pain assessment on the patients
- Pain assessment tools were unavailable and hardly used.

Both quantitative and qualitative findings revealed that nurses mainly used patients' verbal report of pain (87%) and simple descriptive pain intensity scale as pain assessment tools (57%). Further findings revealed that nurses were not conversant with other pain

assessment tools and their usage, apart from simple descriptive and patients' verbal response.

- Nurses document patients' pain on ward report book (75%), nurses' observation chart (58%), nursing process proforma (63%), and nurses' pain assessment chart (73%) and rarely on patients' case note (44%), where other healthcare personnel would access it and use it for pain management.
- Nurses from FMC and EBSUTH perceive patients' pain assessment exactly the same way ($p > 0.05$) and there is no significant difference in their pain assessment perception based on their socio-demographic differences ($p > 0.05$)

Findings from the qualitative and quantitative study were in agreement except on assessing pain routinely when other vital signs were checked (assessing pain as the 5th vital signs). Nurses' acceptance that they assessed pain routinely with other vital signs was not validated by the qualitative study. This revealed that despite the awareness of nurses on what they ought to do in pain assessment, they do not do it especially when they have so many patients to care for.

CHAPTER FIVE

DISCUSSION OF FINDINGS

This study examined nurses' perception of pain assessment of hospitalized patients in tertiary institutions in Ebonyi State – the Federal Medical Centre (FMC) and the Ebonyi State University Teaching Hospital, Abakaliki (EBSUTHAI). The various findings from the data presented are discussed in this chapter.

Respondents for the quantitative study were predominantly young graduates of 1-5 years experience (No. I & No. II) that are likely to still have knowledge of pain assessment and management from learning experience in schools. Results showed that they carry out the four major components of patients' pain assessment. This is validated with in-depth interview of nurses' sub-unit heads, who unanimously opined that they carried out all the components of pain assessment. This acknowledgement of nurses' responsibilities in pain assessment might have emanated from their basic training in the schools of nursing, or in the course of cognate experience in their practice. Contrary to this finding that nurses carry out the four major component of pain assessment, Laughlin and Tabler (2000) and Clark (2000) identified nurses' inadequate knowledge of pain assessment as one of the greatest barriers to optimal pain management. However, nursing as a dynamic profession might have passed this aforesaid assertion.

As presented on table 2, nurses reported that they assess patients' pain routinely, whenever other vital signs are checked, during initial health assessment on admission. Nurses in addition, assess pain when patients complain of it. They also assess pain before and after administering pain relieving therapy. These findings supported Mayer (2001), that pain assessment should be done routinely as other routine vital signs, as declared by the American Pain Society to all healthcare system. Nurses were quite aware of the declaration of pain assessment as the fifth vital sign. However, the qualitative study by the researcher through (in-depth interview of unit heads of the nurses) revealed that (100%) of nurses do not assess pain

routinely when other vital signs are being done. This could be, that despite the awareness of the respondents on the declaration of pain as fifth vital sign, they did not practice it, especially when they had many patients to care for, as indicated in table 2 (item 9d). In other words they are quite aware of the right things that should be done during pain assessment but do not do it in practice. This assertion is based on the varied findings from the two instruments used. It revealed a gap in their awareness and what they practice. This clearly portrayed one of the weaknesses of using only questionnaire in eliciting information from the respondents.

Responding to the reasons that made nurses not to assess patients' pain in details, they opined that at times they may have so many patients to care for. This agrees with the findings of Ellen et al (2009) who identified workload as one of the greatest barrier to pain assessment. Despite this perceived barrier most of the nurses in this study did not accept that pain assessment is time consuming and too demanding. It is important that nurses accepted carrying out pain assessment as their legitimate duties because they knew its importance. Their rejecting pain assessment as being time consuming implied that nurses are indeed aware and accepted that to ensure quality nursing care, that pain assessment should remain one of their core duties in the hospital irrespective of the burden of work on them. The findings agree with MacCaffery and Ferrel (2000) observations that pain assessment may be complex and strenuous to the assessor but that it remains a viable strategy for essential healthcare. Asterin (2003) stated that since assessment and documentation of other vital signs are done by nurses, likewise pain assessment should equally be carried out by the nurses. Quantitative and qualitative data indicated that at times when they had so many patients to care for, nurses didn't go through detailed process of pain assessment, and rather they referred to the doctors to review the patients. It is clear in this regard that work pressure made nurses to relegate their work to the doctors at times. Ellen et al (2009) identified work load of nurses, and lack of staff as barriers in pain management.

Findings on nurses' opinion on patients verbal report of pain, table 2, (item 10) showed that respondents accepted that patients are the best assessors of their pain and that effective

validation of patients' pain would be done with patients' verbal pain report. This finding disagrees with McMilliam et al (2000) who found that 5% of the nurses indicated that their estimation of patients' pain is more valid than the patients' own. Most conscious patients always made verbal report of their pain, directing the nurses on the direction where their pains were felt. Gregory (2000) and Bare (2004) also pointed out that patients are the best assessors of their pain and not nurses. McCaffery et al (2000) also pointed out that pain as a subjective experience was what the patient said it was, and existed wherever the patient said it did exist. It is not for nurses to doubt patients' report of pain. Respondents on the other hand felt that patients' verbal report of pain is highly subjective and that patients could at a time over report their pain to attract attention. This seems to contradict their aforesaid response on patient being the best assessor of their pains. This revealed that despite their awareness on pain assessment, they still don't believe patients' report in practice. This attitude to patients' pain report is at variance with American Pain Society, (2005) who stated that it is the responsibility of the patients to complain, or prove that they are in pain, while the onus lies on the nurses to accept the patients' pain report. Peter and Watson (2002) also stated that nurses appear to distrust patients' self-report of pain which suggests that they may have their own bench mark of what is acceptable, when and how patients should express pain. These nurses were of the view that patients would be addicted to pain relief drug if nurses should rely on their verbal pain report. These are perceptual misconceptions often based on ignorance. Despite the nurses' good awareness on pain and what should be done during pain assessment they still nurse the fear that patients should be addicted to pain relieving drugs if they should attend to them according to their pain report. This revealed clearly the indispensable nature of nurses' perception in pain assessment. Watson (2001) also reported similar negative attitude of nurses towards patients' verbal report of pain. Respondents' responses unveiled a negative disposition and lack of detailed awareness of pharmacological perspective of pain management. Horbury et al (2005) pointed out that in the absence of over sedation, or respiratory depression, opioids, or pain relieving drugs can be given more frequently, or in higher doses to

relieve pain. This lack of detailed awareness on pharmacological perspective of pain assessment and management could also pose a problem to nurses' response to patients' pain report and appropriate intervention. Further findings from the in depth interview, also noted that patients who do not often complain of pains are often regarded by nurses as being very co-operative, and patients with high pain threshold, while patients who often complain are seen as those with low pain threshold confirming a bias in assessing patients' pain and response to their report of pain.

Harper et al (2007) noted that nurses were taught to believe what patients say about their pain. However, nurses in this study do not actually practice what they were taught. Majority of nurses in this study accepted that visible physiologic or behavioural signs must accompany patients' verbal report of pain to validate such pain existence (4.28). Ellen et al (2009) found also that nurses relied on non-verbal behaviour to assess pain. Similarly Horbury et al (2005) noted that nurses were reluctant to accept the patients self report of pain and administration of opioids (pain relieving drug) in the absence of objective signs of pain which must include physiologic behaviour.

In pain assessment majority of the nurses use mostly patients' verbal report of pain and simple descriptive pain intensity scale as their main tools. Their reasons were that the tools were easy to handle and should be chosen as it is available in the hospital. In addition to these factors, the tools could also be utilized for both literate and illiterate patients that are hospitalized. The tools are non-age specific. Since they are not age-specific the nurse could use them without bothering to find out the age of the patient before using the tools. Use of verbal report/rating scale was found as mode of pain assessment in oncology among surgeons (Soyanwo & Amonor 2001). The respondents rejected the reasons for using those tools as being a mere hospital mandate to use them. Few of the nurses agreed that the following pain assessment tools are used in their institutions; such as Wong Baker's face pain rating scale, 0-10 numeric pain intensity scale and visual analogue scale. It is not surprising that nurses rejected the use of Wong Baker faces rating tool. The reasons adduced for not using them were unavailability and that the

hospital did not have any guide line that mandated their use in pain assessments. The few nurses that accepted the use of Wong Baker's faces pain rating scale, 0-10 numeric pain intensity scale and visual analogue could be that they don't have good knowledge of what the tools are and how to use them. The in depth interview further revealed that they use only simple descriptive and patients' verbal response to assess pain. Interview confirmed that no tools are in use to assess pain. Since majority of the participants accepted that the tools are unavailable in their hospitals it is not surprising that they use only simple descriptive and patients' verbal response to assess pain. Equally findings from in depth interview with the unit heads equally revealed that they use simple descriptive and verbal response only. On if asked to choose a pain assessment tool, participants indicated the following interest: visual analogue scale, 0-10 numeric pain intensity scale, Wong-Baker's faces pain rating scale and patients' verbal report of pain. On the contrary, responses emanating from in depth interview with unit heads of the respondents on the same issue were different. The unit heads categorically stated that they don't use any of the pain assessment tools in their various institutions. Six of the heads said that they were not conversant with such tools and their usage and so cannot make such a choice. This seems to suggest that the nurses that filled the questionnaires may have done so based on their knowledge from school of nursing, seminars, books and workshop, or what they should be doing and not by virtue of what they practiced. However, it is clear that the nurses who participated in the in depth study actually revealed what is practiced. This indicated that a substantial gap exists between the knowledge of pain assessment and practice by nurses of the two institutions. This also points to the weakness in using questionnaire as only tool for data collection. Responses are often exaggerated (Polit & Hungler 2003)

In this study nurses reported that they document patients' pain assessment data mostly on ward report book, nurses' pain assessment chart and nursing process profoma. This depicts that nurses document patients' pain report as part of pain assessment practice. The findings are in line with that of Astern (2003) who posited that since assessment and documentation of other vital

signs are mainly done by nurses, patients' pain assessment and documentation should equally be executed by nurses. Responses from the in depth interview validated the quantitative findings. However, both the quantitative and qualitative studies revealed that nurses do not document pain reports\information on patients' case note where other clinicians will equally access it for pain management. Responses on nurses' need for update on pain assessment also showed that the respondents to the in depth interview unanimously agreed that nurses needed update on pain assessment.

The t-tests conducted showed that both nurses of FMC and EBSUTHAI perceived patients' pain assessment in exactly the same way $p>0.05$. Also ANOVA depicted that there is no difference between the nurses' perception of pain assessment and their socio-demographic characteristics $p>0.05$.

Nursing implications of the findings to practice

- The main finding of this study is the existing gap between the nurses' awareness and attitude to pain assessment which will certainly affect the nurses' quality of care to patients. There are undesirable attitudes reported by the cohort to patients' verbal report of pain.
- Nurses' similar way of perceiving patients pain assessment unveiled uniformity in their discharge of duties irrespective of their social demographic characteristics.
-This implies that the incongruence in the aforementioned gap in awareness and practice of pain assessment cuts across all carders of nurses.
- The direct application of routine pain assessment in the clinical area would provide the long awaited answer to the problems of pain management in healthcare system.
- Institutional constraint: Lack of practice guidelines/use of tools in uniform manner could equally affect nurses' perception and management of pain.

Recommendations

In view of the findings of this study, the following recommendations are proffered

- Nurse managers of the two hospitals should ensure that pain assessment is done routinely as other vital signs unconditionally
- Intensive training programs should be organized for nurses to update their pharmacological perspective of patients pain management in order to bridge the existing gap between theory and practice
- Attitudinal change with regard to patients' pain complaints and use of opioids should be inculcated in the nurses.
- Continuing nursing education from the two hospitals should increase the frequency of practical application of pain assessment during their study period.
- The unit heads should ensure adequate supervision of the nurses' pain assessment procedures
- The managements of the two hospitals should provide pain assessment tools for use in the hospitals
- They should provide policy guiding pain assessment in both hospitals

Limitations of the study

The limitations during the execution of this study were

- The use of questionnaire in collection of data revealed that participants at times responded according to their knowledge and not actually on what they practice during pain assessment. This agrees with Polit and Hungler (2003) as one of the weaknesses of questionnaire. Qualitative approach was used to overcome this limitation.
- Some respondents that filled the questionnaire were reluctant in filling it initially stating that they have so much work to do.

- During the interview with the unit heads of the respondents, there were several interruptions despite booking the interview earlier before commencement of the major procedures in the unit. Despite these limitations, the research achieved its purpose

Summary of the study

The study examined nurses' perception of pain assessment of hospitalized patients. Two instruments were used for data collection. They were nurses' pain assessment questionnaire and in depth interview guide of nurses' pain assessment to validate further the quantitative responses. The face validity was determined by the researcher's supervisor and three experts in the area of study assessed the content validity of the tool. The reliability of the questionnaire instrument was determined using test-retest method. The reliability coefficient (r) of the instrument was 0.86 using Spearman's product moment. The in depth interview instrument was also test re-tested with four unit heads from UNTH Enugu. Their opinions did not vary between test periods (2weeks), therefore the instrument was considered reliable. A total population study applying inclusion and exclusion criteria was done. Data was analyzed using descriptive and inferential statistics, (t-test and analysis of variance for testing hypothesis at 0.05 level of significance). The central findings of the study are the existing gap between the nurses' awareness and negative attitude to patients' report of pain practice of pain assessment and management. Also one of the major barriers that affected nurses' perception of pain assessment status is the numerous numbers of patients to be cared for (3.17) and nurses' fear of patients getting addicted to pain relieving drugs. The implication of the findings is that it will affect the quality of care rendered to the patients by the nurses. The researcher therefore recommends that there should be an intensive training for the nurses on pain assessment with more emphasis on the pharmacological and practical aspect of pain assessment. This will help to change their attitude towards pain assessment. Management of the two institutions should employ more nurses to ensure quality pain assessment and management.

Conclusion

The study concluded that nurses are quite aware of the four components of pain assessment. However; in practice pain is not assessed/managed as it should be due to some misconceptions and negative attitude to report of pain that patients will get addicted to pain relieving drugs. Health administrators and nurse managers in particular should create means of bridging the gap by organizing an intensive training on practical and pharmacological aspect of pain assessment and training to ensure quality health care. Innovative approaches are needed to help nurses believe patients' verbal report of pain.

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APPENDIX I
INFORMED CONSENT FOR PARTICIPATION IN PAIN ASSESSMENT
QUESTIONNAIRE

Dear Respondents,

I am a postgraduate student of Nursing Science, University of Nigeria, Enugu Campus. I am presently conducting a research on **nurses' perception of pain assessment of hospitalized patients in tertiary institutions in Ebonyi State**. The main purpose of this study is to determine where emphasis is needed in planning programmes to integrate pain assessment into routine patient care in Ebonyi State for quality healthcare services.

You are pleased invited to participate in this timely study. Your participation is voluntary, and the confidentiality of all information provided is assured. Your name should not be included in any publication using the result of the research. No risk is anticipated and the findings of the study should be made known to you if you wish. You are to fill a questionnaire. The attached questionnaire is therefore meant to seek your opinion. Your name is not required in the questionnaire, please spare few moments of yours to complete the questionnaire as honestly and carefully as you can.

Thank you for your anticipated co-operation.

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Enugu Campus.08035074128

Dr. C. Nwigwe
Chairman Ethics & Research Committee
EBSUTH AI
08035792970

NURSES’ PAIN ASSESSMENT QUESTIONNAIRE (NPAQ)

SECTION A

Instruction: Tick or fill in the blank space

* **Name of Hospital:** Federal Medical Centre ☐ Ebonyi State University Teaching
Hospital, Abakaliki ☐ Ward/Clinic ☐

Biodata

- 1. **Gender:** Male ☐ Female ☐
- 2. **Age (last birthday in years):**
- 3. **Rank/Status:** No. II ☐ No. I ☐ SNO ☐ PNO ☐
ACNO ☐ & CNO ☐
- 4. **Years of work experience since qualifications as RN:** 1-5 ☐
6-10 ☐ 10 and above ☐
- 5. **Highest academic attainment:** Diploma ☐ First Degree ☐
Higher Degree ☐
- 6. **Professional qualification registered with council:** RN ☐
RM ☐ Intensive Care Nurse ☐ Peri-operative Nurse ☐
Anaesthetist Nurse ☐ Orthopaedic Nurse ☐
Others Specify _____(e.g. health education)

SECTION B: Nurses’ perception of patients’ pain

The following statements refer to how patients’ pains are assessed. Could you please indicate your level of agreement to each statement as it relates to nurses’ assessment of patient’s pain in your institution

7. During pain assessment nurses
- a. Collect relevant pain history from patients

b. Observe their behavioural responses

c. Observe patients’ physiologic responses

d. Document patients’ pain
8. Patients pain assessment is done
- a. Routinely, whenever other vital signs (temperature, pulse, respiration and blood pressure) TPR are checked.

b. During initial health assessment on admission

c. When patients complain of pain

d. Before and after giving a pain relieving therapy
9. Nurses do not assess patients’ pain a times in details for the following reasons
- a. They view it exclusively as doctors duty

b. It is time consuming

c. Is too demanding

d. Have so many patients to care for

SECTION C

Nurses’ perception on patients’ verbal report of pain

10. The following statements refer to nurses’ opinion on patients’ verbal report of pain
- a. Patients are best assessors of their pain

b. Patients’ verbal report is highly subjective therefore should not be relied on always

c. Patients a times over-report their level of pains to gain attention.

d. Patients will be addicted to pain relief drug if nurses should rely on their verbal report of pain always

e. Management of patients pain would be very effective when nurses accept and believe the patients’ verbal report of pain

f. Validation of patients’ pain can effectively be done with patients’ verbal report of pain only

g. Nurses are the best assessors of patients’ pain

h. Visible physiologic or behavioural signs must accompany patients’ verbal report of pain to verify its existence

SA	A	D	SD	NOP

SECTION D

Preferred tools for pain assessment

Tick Yes or No to the following questions.

11. Which of the under listed tools are used in patients’s pain assessment in your institution.

a. Visual analogue scale

b. Simple descriptive pain intensity

c. 0 to 10 numeric pain intensity scale

d. Wong i Baker faces pain rating scale

e. Patients verbal report of pain
12. If none of these tools are used in your hospital, which of the under listed are reasons for not using them

a. Unavailability of any of the tools

b. Nurses lack of knowledge to use the tools

c. It does not add anything positive to pain management

d. There are no hospital rule that demands its use
13. If asked to choose which will you select for your institution.

a. Visual analogue scale

b. Simple descriptive pain intensity

c. 0 to 10 numeric pain intensity scale

d. Wong i Baker Faces pain intensity scale

e. Patients’s verbal report of pain
14. Which of the following reasons informed your choice of pain assessment tool. Indicate to the extent you agree with them.

a. Easy to use

b. If tools are available

c. Can be used for both literate and illiterate

d. Non age specific

e. Hospital policy mandates its use
15. Nurses document patients’s pain assessment data on

a. Patients’s case note

b. Nurses’s observation chart

c. Nurses’s pain assessment chart

d. Nursing process profoma

e. Ward report book

Yes	No

APPENDIX II

QUESTION GUIDE FOR INDEPTH INTERVIEW (QGFII)

Dear participants,

You are being invited to participate in the discussion being organized by an M.Sc student from the Department of Nursing, Faculty of Health Science, University of Nigeria, Enugu Campus. The researcher is interested in nurses' pain assessment of hospitalized patients in tertiary institutions in Ebonyi State. For effectiveness, the researcher wants to further validate the quantitative responses by discussing with the heads of units of the participants. The information gathered will help to determine where emphasis is needed in planning programmes to integrate pain assessment into routine patient care in Ebonyi State. Your information will be treated with confidentiality and will be used for this purpose only. Your name is not needed and participation is voluntary. In order to recall information given, the discussion will be audio taped. You will be interviewed in your office. The interview will take 30-45 minutes. Your permission therefore is also sought for that.

SECTION A: Demographic Data of Participants

1. Participant's initial
2. Age
3. Sex
4. Qualification
5. Religion
6. Ethnic group
7. Occupation
8. Marital status

SECTION B

1. As the unit manager in charge of some wards, could you please describe your opinion on what nurses do in your units during pain assessment?
2. From your clinical experience, there are some patients who will never report they are in pains, and others complain even after receiving pain treatment. How do you nurses regard these patients' report of pain?
3. Could you share with us the different tools used by your nurses in assessing patients' pain and your preferences?
4. How do nurses in your unit document patients' pain?
5. In your own opinion, do you think nurses in your wards need an update regarding current ideas on pain assessment and management?

APPENDIX III

Dear Sir/Madam,

REQUEST FOR INSTRUMENT VALIDATION

I am a postgraduate student of Nursing Science, University of Nigeria, Enugu Campus. I am carrying out a research on **nurses' pain assessment of hospitalized patients in tertiary institutions in Ebonyi State**. The main purpose of this study is to determine where emphasis is needed in planning programmes to integrate pain assessment into routine patients' care in Ebonyi State for quality healthcare services. A questionnaire has been designed and attached overleaf.

Kindly assist me with content validation of the instrument to enable me assess the suitability of the instrument in effectively using it to carry out the study. You are expected to rate each item using 4,3,2,1. This will be interpreted as follows: 4 very relevant, 3 relevant, 2 irrelevant and 1 very irrelevant. Your responses will be analyzed by finding the mean of ratings given to each item. Items with a mean of 3.0 and above will be regarded as adequate while items with the mean of below 3.0 will be regarded as unsatisfactory.

Thank you for your anticipated co-operation.

Ogwa Edith I.

*Department of Nursing Science
Faculty of Health Sciences and Technology
College of Medicine, University of Nigeria
Enugu Camp*

APPENDIX IV
Pain assessment tools

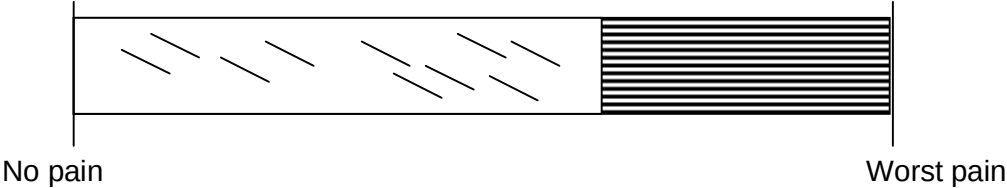


Fig 4: Visual analogue scale.

2. Simple descriptive pain intensity scale.

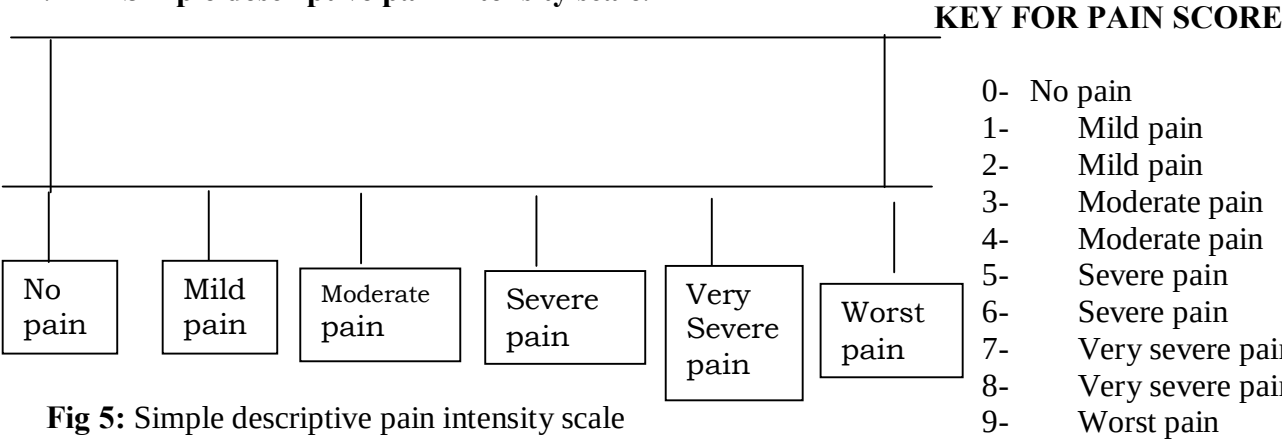


Fig 5: Simple descriptive pain intensity scale

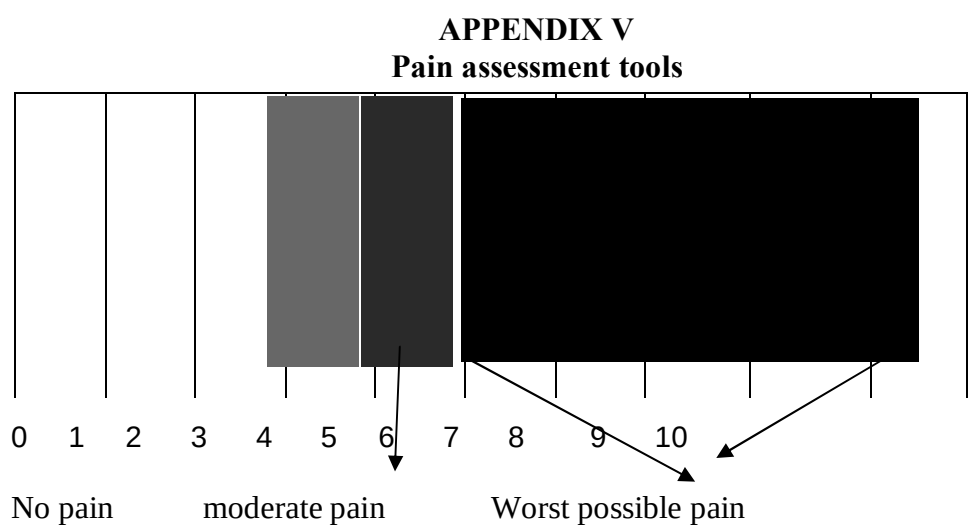


Fig. 6: 0 to 10 numeric pain intensity scales.

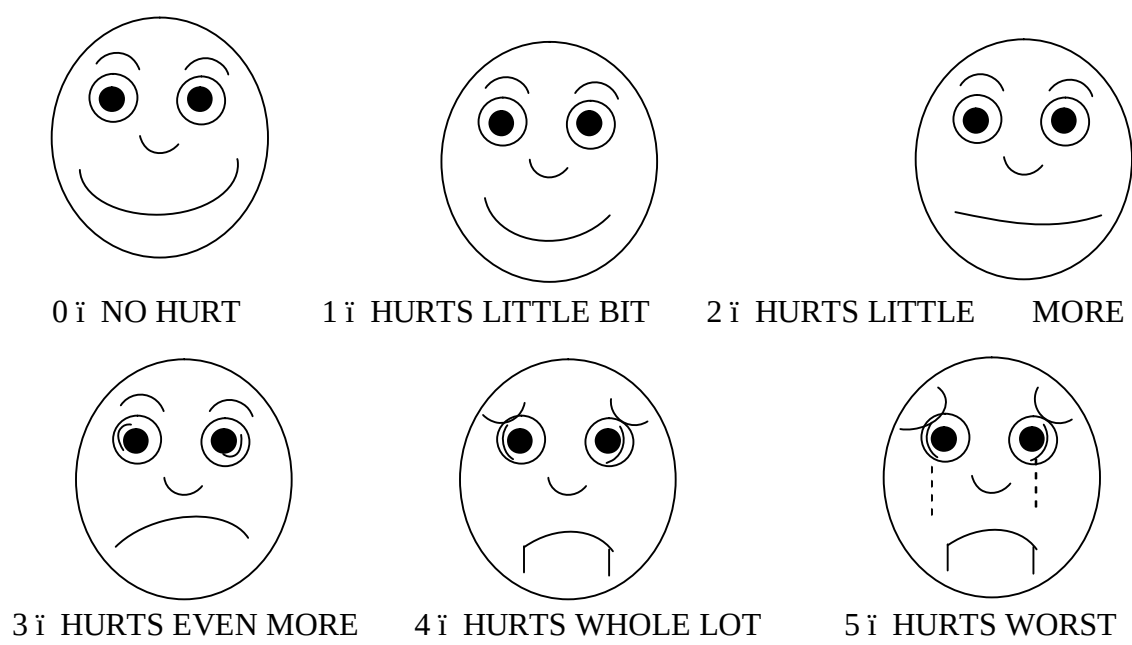


Fig. 7: Wong-Baker faces pain rating scale