POSTOPERATIVE PAIN EXPERIENCE OF MEN AFTER UROLOGICAL SURGERY AT THE KORLE BU TEACHING HOSPITAL

BY

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THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER OF PHILOSOPHY DEGREE IN NURSING

JULY 2019
DECLARATION

This is to certify that this thesis is the outcome of a study undertaken by Linda Hayford under supervision towards the award of a Master of Philosophy Degree in Nursing at the School of Nursing and Midwifery by University of Ghana. All materials used in this study have been duly acknowledged in both the text and list of references.

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DEDICATION

The thesis is dedicated to my Parents and Children (Francis and Franklin Adusu) for their love, support, guidance and understanding throughout the study journey.
ACKNOWLEDGEMENT

To the Almighty God, indeed his faithfulness endures forever and I am grateful. My heartfelt gratitude to my supervisors, Prof. Lydia Aziato and Dr. Mathew Yamoah Kyei for your support, commitment and guidance during the study. I am indeed grateful to all the faculty and staff of School of Nursing and Midwifery, University of Ghana, Legon for their tutorship and support throughout the program.

My gratitude goes to the Unit head and staff (especially Miss Phyllis Kumah) of the Genito-urinary unit of Korle-Bu Teaching Hospital, Accra. My appreciation also goes to the KBTH-IRB unit staff for their immerse support during the study approval and data collection. I acknowledge all my lovely and understanding research participants for their time and presence for this success. Finally, thanks to all my colleagues and cherished friends who served as a source of motivation and tremendous support; God bless you all.
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<table>
<thead>
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<tbody>
<tr>
<td>POP</td>
<td>Post-operative Pain</td>
</tr>
<tr>
<td>KBTH</td>
<td>Korle Bu Teaching Hospital</td>
</tr>
<tr>
<td>GU</td>
<td>Genito-urinary</td>
</tr>
<tr>
<td>IRB</td>
<td>Institutional Review Board</td>
</tr>
<tr>
<td>MoH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>IASP</td>
<td>International Association for the Study of Pain</td>
</tr>
<tr>
<td>BPH</td>
<td>Benign Prostate Hypertrophy</td>
</tr>
<tr>
<td>NMC</td>
<td>Nurses and Midwives Council</td>
</tr>
<tr>
<td>W.H.O</td>
<td>World Health Organisation</td>
</tr>
<tr>
<td>CPD</td>
<td>Continuous Professional Development</td>
</tr>
<tr>
<td>PIN</td>
<td>Professional Identification Number</td>
</tr>
<tr>
<td>GCNM</td>
<td>Ghana College of Nurses and Midwives</td>
</tr>
<tr>
<td>GHS</td>
<td>Ghana Health Service</td>
</tr>
<tr>
<td>CHAG</td>
<td>Christian Health Association of Ghana</td>
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ABSTRACT

Post-operative pain (POP) is a global phenomenon of concern, associated with Genito-urinary surgeries and has multidimensional effect. The study aimed at exploring the POP experiences of men after urological surgery at Korle Bu Teaching Hospital. The qualitative exploratory-descriptive design was used with twelve (12) participants purposively sampled. One-on-one interviews were conducted with a semi-structured interview guide and audiotaped. The interviews were transcribed verbatim and analysed concurrently using thematic content analysis. Under the guidance of the adapted multidimensional model of cancer pain by Ahles & Martins in 1992, six (6) themes emerged. They are the sensory characteristics of the pain, the cognitive, behavioural, affective and socio-cultural dimensions and Pain management experiences. The participants experienced moderate to severe pain at the incisional site, in their lower abdomen and penis. Descriptors used include: boiling, burning, throbbing and dull; others likened the pain to analogues such as ‘been cut with a cutlass or knife’. The pain was predominantly ‘on & off’ and increases within the first week post-surgery in the urethra; but pain assessments were irregular. The POP was considered as normal, with limited education concerning pain received. The cognitive and behavioural coping strategies were employed by the participants, who expressed their pain verbally or through pain behaviours. As a consequence, sleep was predominantly affected by the pain, as participants elicited negative emotional responses. Additionally, the sociocultural context and views influenced their pain response and management. Intravenous infusions and subsequent oral medications were administered, non-pharmacological management was limited. It is recommended that regular pain assessment and surgery-specific multimodal approach should be employed for effective pain management.
CHAPTER ONE

INTRODUCTION

1.1 Background

Pain is a common symptom expressed after surgery in most patients, also the number of days a patient stays on admission after surgery due to pain highlight the relevance of exploring pain experiences (Muhawenayo, 2017). Pain is defined as an unpleasant sensory and emotional experience associated with actual or potential tissue damage (Hartwig, 2016; IASP, 2017). Similarly, Postoperative pain has been defined as acute pain, resulting from surgical procedures or trauma; it can be of physiological or pathological cause and involve inflammatory reactions (Muhawenayo, 2017). Additionally, postoperative pain is usually acute and denotes the pain felt right after surgery as a consequence of the trauma to the tissue (Dalal & Bruera, 2012). Acute pain affects persons of all ages. Most commonly more than 80% of patient who have undergone surgery complain of pain (Ofori, 2016). Undoubtedly, post – operative pain is the primary concern of several patients before surgery. However, due to differences in pain threshold and ways of expression among individuals, pain is presented as a multidimensional and subjective experience (Dalal & Bruera, 2012; Ofori, 2016).

Patient experience has been defined by Muhawenayo (2017) as how a patient feels about what happens in his or her environment either internal or external. Patient experience is an individualized measurement of services to meet patient’s expectation (Muhawenayo, 2017). Most patients experience postoperative pain globally, with the prevalence of moderate to severe postoperative pain reported as 30-70% depending on
the type of surgery (Muhwenayo, 2017; Wolf, Niederhauser, Marshburn, & LaVela, 2014). According to Gan, Habib, Miller, White, and Apfelbaum (2014) in the US around 86% of patients who underwent surgery experienced pain postoperatively and 75% of them validate severe or extreme experience. Evidence shows that prevalence of moderate pain among patients in hospitals is between 26% and 33% while severe pain ranges from 8% to 13% (Machado-Alba et al., 2013). In Ghana, patient report moderate to severe post-operative pain and the incidence is about 70% (Aziato, Dedey, Marfo, Asamani, & Clegg-Lamptey, 2015). Studies have shown that patients express the existence of severe pain after surgery. According to a study in the US about 80% of patients who had surgery such as urological, experienced POP with 75% expressing severe pain (Gan et al., 2014). Additionally, in Germany about 29% of 2252 patients in 25 hospitals who had undergone operation experienced moderate to severe pain, while 55% of them were not satisfied with their pain management (Muhwenayo, 2017).

Urology as a branch of science, constitute the diagnosis and curing of urinary tract diseases including; the urethra, kidneys, urinary bladder, prostate, penis and scrotum (Ninan, Thomas, & Grohens, 2015). Prevalence of pain in the male Genito-urinary tract or organs may be as a response to infection, trauma or some irritating stimulus (Alaali & Irwin, 2015; Belanger & VerLee, 2016). Pain in the urinary system have two (2) main origin: neuropathic and nociceptive. Neuropathic pain results from injury to the peripheral nerves as a result of infection, surgery and/or trauma, whilst nociceptive pain is caused by somatic anomalies including inflammation, keloid formation, anatomical disorders or foreign bodies (Belanger & VerLee, 2016). The knowledge and understanding of the acute and/or chronicity of genitourinary pain
would be essential in providing a solution for those sufferers. Failure of which chronic pain becomes an unavoidable suggestion diagnosis (Alaali & Irwin, 2015).

In addition, some procedures undertaken in urology either diagnostic or therapeutic are in themselves pain inflicting such as; catheterisation, urethral dilation and a whole range of minor and major surgeries (Belanger & VerLee, 2016). Pain from urological surgery is often associated with urethral irritation, bladder spasms and bladder distension (Aloweni, Li, Tesalona, & Salleh, 2008). These are usually not associated with prior urethral catheterisation pre-operatively or amount of prostate tissue resected in surgeries which may be curative or palliative (Alaali & Irwin, 2015; Aloweni et al., 2008). Thus, this information about the origin of the post-operative pain can be factored into the pre-operative education of clients.

Pain plays an essential role in patient recovery and increases the length of hospital stay, affecting one socially, emotionally and economically. Due to these effects, pain has been considered as the “fifth vital sign” (Ofori, 2016). Diverse scales have been developed to assess, analyse and evaluate pain so as to provide comprehensive intervention for it (Machado-Alba et al., 2013). Additionally, appropriate culture-specific pain assessment tools should be acknowledged to ensure accurate pain assessment and management to decrease health care disparity (Aziato & Adejumo, 2015a, 2015b). The pain assessment requires the healthcare providers to be well acquainted with patient’s level of understanding, perceptions, previous experience and other socio-cultural associations with pain (Muhawenayo, 2017). Thus, planned care delivery should consider the individual and contextual factors especially in pain assessment. Meeting the patients' pain needs, involves a range of factors that have the sensory, socio-cultural, physiological, and psychological
components (Simon, 2012). Pain experience depends on several factors, which also influences pain expression, these may include cultural barriers, healthcare workers’ limited knowledge on pain assessment and management or the absence of standard pain management system (Muhawenayo, 2017).

Effective management of postoperative pain is known to positively influence the immune deficiency and wound healing; resulting in early mobilization after surgery and discharge from hospital (Hartwig, 2016; Muhawenayo, 2017). Effectively and efficiently managing a patient in pain can also influence the patients’ views of quality of service received thereby increasing their service satisfaction (Gerbershagen et al., 2013; Muhawenayo, 2017). Inadequate treatment of the pain is associated with the risk of developing persistent postsurgical pain; also linked to physiological complications that have impact on patient’s recovery, rehabilitation and quality of life (Cooney, 2016; Gerbershagen et al., 2013; Ofori, 2016). Uncontrolled pain negatively affects patient care outcome, quality care and psychologically, increase stress due to heightened anxiety and low moods (Gupta, Lee, Mojica, Nairizi, & George, 2014). Ineffective management of severe POP results in tissue damage which triggers responses; leading to complications such as delayed ambulation, pulmonary complications, coagulopathy, myocardial infarction, circulatory abnormalities, gastrointestinal disorders, genitourinary disorders and increased morbidity and mortality (Gerbershagen et al., 2013; Machado-Alba et al., 2013).

In order to facilitate faster discharge, postoperative pain management purposes to provide good analgesia with little or minimal residual sedation (Alaali & Irwin, 2015). In Africa, adequate postoperative pain management is noted in about 10% of
patients, in contrast to the view that effective pain management as a basic human right (Ofori, 2016). Some reasons associated with the low rate included; the rigorous measures regulating the access and use of opioids, inadequate clinical staff and the limited knowledge on pain among the patients and health workers (Ofori, 2016; Vijayan R, 2011). Patient recovery and incidence of perioperative stress is mainly reduced after urological surgery when evidence-based interventions are implemented. They include; early ambulation, preoperative preparation, nutrition, fluid management and nutrition (Merkel, Danaher, & Williams, 2015). Major urological cancer surgery highlights risk stratification and careful perioperative planning. Therefore, in providing quality care in POP management, analgesia in the form of epidural or patient-controlled multimodal analgesia are essential (Alaali & Irwin, 2015).

Multimodal pain interventions enhance pain relief and encourages early mobilization by reducing the use of opioids possibly seeking to lessen or avoid common opioid side effects, such as nausea, sedation, constipation, and vomiting (Alaali & Irwin, 2015; Merkel et al., 2015). Although, several efficacious pharmacological modalities are available ranging from non-steroidal anti-inflammatory drugs (NSAIDs), opioids and antipyretic analgesics, local and regional nerve blocks. The ultimate pain reduction experience is still dependent on the individual’s perception and pain experience (Alaali & Irwin, 2015; Machado-Alba et al., 2013). Synthesis of prostaglandins which is known to increase the risk of bladder spasms can be prevented with the use of ketorolac, a NSAID.

In conclusion, POP is usually acute due to surgical trauma to tissue which occurs in more than 80% of patients. POP is presented as multidimensional and subjective experience. In Ghana, it is noted that about 70% of patients experience moderate to severe POP. Therefore, healthcare providers must be conversant with the
multiple dimensions of patient’s pain and other factors, such as patient’s perceptions and level of understanding, influencing the pain experience. Multimodal pain management which is individualised and inclusion of non-pharmacological interventions are also crucial.

1.2 Problem statement

A major complaint reported at the out-patient department of health facilities, is pain and mainly accounts for health seeking behaviour of clients (Hartwig, 2016; Muhawenayo, 2017; Ofori, 2016). For patients who have undergone any sort of surgical manipulations, pain is the pivot of their discomfort and in most instances, pain determines the length of their hospital stay (Ofori, 2016). However, pain resulting from prostate abnormalities has a prevalence rate of 16% in a lifetime of a male (Belanger & VerLee, 2016; Kehlet, Jensen, & Woolf, 2006; White & Kehlet, 2010).

Male adults usually experience pain in the genitourinary tract/organs, which can be altered by internal or external stimuli (Alaali & Irwin, 2015). Clients who have undergone urological surgery experience two main forms of pain: incisional pain and/or discomfort and pain from bladder spasms (Merkel et al., 2015). Incisional pain has a nociceptive nature, and is felt after surgery due to the stimulation of the pain receptors at the site due to tissue injury. Whereas, bladder spasms occurs as a result of stimulation of visceral nociceptors present in genitourinary organs (Belanger & VerLee, 2016; Merkel et al., 2015).

Patients experience varying degrees of pain intensity within the first 24 hours after surgery, which affects the performance of activities such as turning in bed, sitting up, reposition, and/or their ability to sleep (Ofori, 2016; Subramanian, Ramasamy, Ng, Chinna, & Rosli, 2016). In addition, anxiety and surgical fear,
obesity and type and long duration of surgery have been identified as predictors of postoperative pain among urological clients. The predictors subsequently influence post-operative analgesic consumption rate (Wu & Raja, 2011).

Although several interventions aimed at ameliorating the urological postoperative pain in men abound, comprehensive analysis of the patient’s pain experience is lacking. There is scarcity of literature on the pain experiences of men who have undergone urological surgeries in Ghana. Therefore, the rationale of the study is to explore the postoperative pain experiences of men following urological surgeries, in order to augment the preoperative preparation and postoperative pain management protocols in the healthcare facility.

1.3 Purpose of the study

The purpose of this study is to explore the post-operative pain experiences of adult male clients who had undergone urological surgeries at the Korle Bu Teaching Hospital, Accra.

1.4 Objectives

- Explore the postoperative pain characteristics (sensory) experienced by men after urological surgery
- Explain the behavioural and affective responses to the post-operative pain experience of men after urological surgery
- Explore the cognitive influence of post-operative pain on men after urological surgery
- Explore the role of sociocultural dimension in influencing the postoperative pain of the men after urological surgery.
1.5 Research Questions

- What are the characteristics of the pain experienced by men after urological surgery?
- What are the men behavioural and affective responses to pain after urological surgery?
- To what extent does the cognitive influence the post-operative pain experience of men after urological surgery?
- What ways does the sociocultural dimension influence the pain experience of the men after urological surgeries?
- Which pain-relieving interventions were received by the men who have undergone urological surgeries?

1.6 Significance of the Study

The findings of the study explored the post-operative pain experiences of the men after urological surgery at the Korle Bu Teaching Hospital, Accra. This will aid the healthcare givers and other stakeholders in appreciating the issue and implement interventions to engage the men and improve the healthcare. However, with the increased awareness on prostate health and prostatectomy, publishing the report will help create the awareness of post-operative care delivery protocols at various urological units. It will significantly encourage more research into the area of urological pain among men. The study also contributes to literature on urological pain experience emphasising on the multidimensional aspects; such as sociocultural, sensory, cognitive, affective, and behavioural as well as pain management in both the health facility and the country.
1.7 Operational definition of terms

*Postoperative pain*: pain experienced by men after urological surgery within 1-7 days.

*Urological surgery*: major urological surgeries, including transurethral resection of the prostate, radical prostatectomy and open prostatectomy.

*Experience*: a condition that affects the normal daily functions/activities of the patients.

*Healthcare Providers*: refers to the portion of the hospital staff directly involved in the care of the patients (nurses and doctors)

*Family Caregivers*: refers immediate family relations of the patients who are directly involved in the care during the postoperative period.
LITERATURE REVIEW

2.0 Introduction

The study seeks to focus on the pain experiences of the men diagnosed with urological condition and had undergone surgery at the Korle Bu Teaching Hospital. The chapter reviewed studies, based only on published work to help afford a comprehensive appreciation of the problem under study and the objectives set. The theoretical framework of the study will first be discussed, followed by the literature review. The literature explores the sensory characteristics of pain, behavioural and affective responses and the cognitive, sociocultural factors that influences pain experiences of the men who have undergone urological surgery. Finally, the literature reviews the pain-relieving interventions received after the surgery. An electronic search of relevant literature relating to post-operative urological pain experience and other pain with similar characteristics, were conducted in Science direct, CINAHL, Taylor and Francis, Pub Med, Medline, Google scholar and others. Key words used in the search include; urological pain, post-operative pain experience, cognitive, sensory, affective, sociocultural, behavioural, coping strategies and pain interventions.

2.1 Conceptual Framework

Considering the multiple dimensions of pain experience, four published models were considered for the study. It is noted that all the later three models made efforts to understand the multidimensionality of pain by looking at a minimum of two dimensions. They are; Multidimensional model of cancer pain (Ahles & Martin, 1992), Bio-psychosocial model of health (Engel, 1977), Biopsychosocial-
Spiritual model (Siddall, Lovell, & MacLeod, 2015) and Biomedical model (Maxwell, Streetly, & Bevan, 1999) as reviewed by Tenkorang-Twum (2016). Notably in these models are the constructs of biological, psychosocial, spiritual and medical; these are however not extensive in the understanding of pain and its management. The multidimensional model was finally chosen because it explored extensively the meaning associated to pain experience and the cognition level of the patients is also considered.

2.2 Multidimensional model of cancer pain

The framework for the study is adapted from the multidimensional model of cancer pain, conceptualised by Ahles and Martin (1992). They looked at the pain experienced by patients with cancer at various stages; diagnosis, initial stage, terminal and advanced. They noted that 40 to 50% of the patients with cancer, experience moderate to severe pain whilst 20 to 30% of the patients experience very severe to excruciating pain. The pain also have a bearing on the patient’s quality of life (Ahles, 1993; Ahles & Martin, 1992). Basically, pain has been studied mostly from the medical/ unidimensional angle or the biopsychosocial-spiritual angle but Ahles (1993) suggests that recent advancements in health has proved pain to have other dimensions. Thus, the model assumes that individual pain experience is influenced by the sensory, cognitive, physiological, behavioural, socio-cultural and affective components. He therefore, called on the effective management of a painful experience with holistic attention to the interrelatedness of all the 6 dimensions (Ahles, 1993).
Postoperative pain experience of men after urological surgery
Fig. 1. Conceptual Framework: Multidimensional model of cancer pain by Ahles and Martin (1992)

The multidimensional model which constitutes 6 dimensions seeks to appreciate one’s pain experience in a more comprehensive manner. The physiological dimension involves the aetiology of the pain and the psychophysiological factors; the sensory dimension seeks to assess the components of pain such as quality, severity, location and their impact on daily functioning. Also, the cognitive dimension looks at the meaning the patients ascribes to the pain, attitudes, beliefs and knowledge acquired during the painful experience, coping style/strategies used and the cognition level of the patients. Additionally, behavioural dimension involves the client’s...
behaviours expressed during the pain experience, its associated symptoms such as fatigue and sleep, also the verbal expression of the pain. The influence of an individual’s cultural background, family dynamics/roles and caregiver’s perspective on his/her pain experience constitutes the socio-cultural dimension. The final dimension which is the affective critically looks at the emotional response such as suffering, mood, fear, anxiety and depression associated with a painful experience.

For the purpose of the study, the sensory, cognitive, behavioural, socio-cultural and affective dimensions will be considered. The rational of the model in application to the studying the pain experiences of men after urological surgery in Ghana is to ensure that both healthcare workers and patients understand the pain experience of the client taking into consideration all other factors that influence the experience aside the pain etiology or physiological components. This in turn influences greatly the pain expression of the patients and assessments and management by the healthcare workers.

2.3 Multiple dimensions of the pain experience

Medical or unidimensional perspective constituted the previous studies into cancer pain, which was limited to the origin of the pain. This assertion was proved to be inadequate; therefore, the multidimensional model which originally comprised of five (5) components (sensory, physiological, behavioural, affective and cognitive) was developed by Ahles, Blanchard, and Ruckdeschel (1983). In 1987, McGuire added the 6th component i.e. sociocultural (Ahles & Martin, 1992). The underlying multidimensionality of the concepts in understanding cancer pain experience can be applied to the study of urology and the pain associated with its surgeries. Urological disorders are very predominant and diverse including inflammatory, neoplastic, infective, neurogenic and functional disease (Belanger & VerLee, 2016). It affects
both men and women in all age groups. Anatomically, 3 diverse segments of the human body are involved; sexual organs of men (testicles, penis and ejaculatory apparatus), the kidneys, renal pelvis and ureters comprising the upper urinary tract; the bladder, prostrate and urethra in males (lower urinary tract) (Osman & Inman, 2013). The sub-sections below discusses’ the various components/factors in the model;

2.3.1 Sensory dimensions of pain

The sensory component attributes include; the pain location, intensity and quality (Ahles & Martin, 1992). Identifying the location, severity and quality of the post-operative pain (POP) is crucial in the care and experience of the patient. Risk of postoperative problems and chronic pain; negative effects on functional recovery and quality of life are basically the effects of poorly managed POP (Chou et al., 2016). Chronic POP with its extreme economic burden is experienced in about 20 – 50 percent of patients after surgery. The risk increases when persistent pain proceeds acute postoperative pain, which occurs in about 50 percent of the patients after general surgeries (Mazilu, Zazu, Nedelcu, & Sfetcu, 2018). The location dwells on “the pathophysiology and possible functional incapacity” associated with the pain (Ahles & Martin, 1992, p. 29). Notably, certain sites of the pain in the body are more disabling, and clients tend to report the severity of the pain instead of the several areas involved (Ahles & Martin, 1992). Effective management of the POP with regards to the multiple locations involved depend on the expression by the patients and assessment by the healthcare worker. Aziato and Adejumo (2015b) noted locations of POP as abdomen, wound (incisional site) and side of the wound. Incisional pain is characterized as a steady post-surgical pain at the incision site and below, where tissue, nerves, and muscle have been disrupted or cut (Merkel et al., 2015).
Descriptors used in relating the pain by the patients constitute the pain quality. They may be linked to the pain etiology such as neurogenic, somatic or visceral. Examples are; sharp and dull (Ahles & Martin, 1992). The clinicians understand the type of pain involved and interventions needed through the description (Chapman, 2011). Chin, Vincent, and Wilkie (2014) revealed in their study that participants described their POP as intermittent in nature, it also increases at night and subsides days after surgery. A similar finding was established in an ethnographic study in Ghana (Aziato & Adejumo, 2015b). Descriptors such as cramping, burning, stabbing, throbbing, tender and sharp describes nociceptive pain experienced in somatic or visceral injury. Also, neuropathic pain caused by nerve injury is described by descriptors such as aching, itchy or shooting (Chin et al., 2014; Ripamonti, Santini, Maranzano, Berti, & Roila, 2012). POP in the Ghanaian study was also described as burning and pulling (Aziato & Adejumo, 2015b).

The incisional pain is noted to be nociceptive in nature, however, bladder spasms following uro-surgery are often defined as a squeezing pain or manifested as an urge to urinate and categorized by a sudden onset of discomfort lasting few seconds (Merkel et al., 2015). Additionally, some patients used analogues in instances of lack of preferred usual pain descriptors. However, due to the subjective nature of pain, there is the tendency of diverse perception and experience (Stanley & Chinwe, 2016). Furthermore, the pain in the urethra tend to increase after catheter removal when urinating, the acute pain is also as a result of the indwelling urethral catheter with the risk of urinary incontinence (Aloweni et al., 2008; Kong, Deatrick, & Bradway, 2017). Thus, the acute pain is usually due to contact of the catheter and the sore within the urethra after prostate resection (Kong et al., 2017; Merkel et al., 2015).
Intensity of pain might be influenced by all the other 5 other components of the pain experience (Ahles & Martin, 1992). Its assessment is critical due to the subjective nature of pain and pain control, as it directs the caregivers on the choice of treatment, urgency of care and reassessment schedules (Okimasa et al., 2016). This and lack of consensus on the approved pain assessment guideline in various facilities poses a challenge in POP assessment and management (Bach, Forman, & Seibaek, 2018; Fatma & Serife, 2017). Acute POP is experienced in greater than 80 percent of patients, and it is typically moderate in the first few days after prostate surgery. The abdominal and incisional pain is most prominent (Joshi, Jaschinski, Bonnet, & Kehlet, 2015). The high intensity might result from the post-prostate resection neuropathic and nociceptive responses (Merkel et al., 2015).

Post-operative pain is likely the most important patient complaints, it is an acute pain starting with surgical trauma, lessening gradually and ending by the tissue recovery (Yaban, 2019). However, 50 – 90% of patients experience moderate to severe POP during hospitalisation despite improvement in pain assessment and management, signally the inadequacy of the treatment given as reported among 50% of patients (Fatma & Serife, 2017). Though, the participants described their POP as severe, much or terrible, particularly at night; others said the pain was ‘not-much’ noting they have experienced worst pre-operative pain (Aloweni et al., 2008; Aziato & Adejumo, 2015b). However, the urological patients experienced increased pain when urinating after the catheter is removed, and expressed concerns on blood in the urine and TURP syndrome (Alaali & Irwin, 2015). Sleep or rest are noted to relieve pain as well as prescribed analgesics and walking as an activity that relieved pain, but increased pain for a few participants (Aziato & Adejumo, 2015b; Chin et al., 2014). This is related to individual differences and subjective nature of pain (McPherson,
Hadjistavropoulos, Devereaux, & Lobchuk, 2014). Common activities that increased pain included: getting in and out of bed or positioning (sitting/standing) and moving too much, or too quickly (Chin et al., 2014).

Communication of pain is usually done verbally or expressed through the face and body. Thus, in assessing the patients’ pain, observation and tools for pain assessment such as Visual Analogue Scale must be employed (Francis & Fitzpatrick, 2013). This buttresses the view that the self-report of the patient is utmost reliable indicator of pain. Effective care involves patient partnership and participation in decision making and providing views on the effectiveness of the various treatment modalities (Bach et al., 2018; Francis & Fitzpatrick, 2013). This allows for empathy in good therapeutic communication between the healthcare provider and the patient.

Nursing practice often lack systematic pain assessment and evaluation. Nurses usually determine a patient’s pain using his/her activity level such as their ability to move, sleep or breathe well (Aziato & Adejumo, 2014b; Bach et al., 2018). They use their own senses and patient’s body language to infer pain. Most nurses also doubt the score given by most patients on the frequently used visual analogue scale (VAS) (Bach et al., 2018; Fatma & Serife, 2017). Differences in interpretation of the scores both by the nurse and patients is due to the subjectivity of the pain scale (Medico et al., 2017). The nurses scores on pain assessment were usually lower than that of the patients in most literature reviewed within the various departments; urology, thoracic, general, abdominal, orthopaedic etc. (Francis & Fitzpatrick, 2013; Medico et al., 2017). Also, it was noted that the use of standard pain assessment tools, pain education and non-pharmacological interventions were at the barest minimum, though nurses provide direct care for patients for 24 hours (Francis & Fitzpatrick, 2013; Xavier, de Lima, Burgos, de Lira, & Serrano, 2018).
Medico et al. (2017) came up with 4 main areas that needed attention in ensuring patients satisfaction with health care particularly pain management. These areas are: achievable expectations of patients, assessment, interventions and feedback from patients. For a positive feedback, the first three areas must be critical to the clinicians. These also dwells on healthy communication, thus realistic expectations are met with adequate control of pain. Jointly agreed-on functional objectives must be set by both the healthcare workers and the patients; as parameters for establishing an optimum relieve of pain, which is a basic symptom in early phase after surgery (Medico et al., 2017; Wikstrom, Eriksson, Fridlund, Arestedt, & Broström, 2016). Furthermore, pain scales that dwells on the extent to which the pain affects functional activities are encouraged, e.g. Geisinger pain scale. A practical understanding of the meaning of the numbers by patients and health professionals through dialogue and observations are welcomed; coupled with appropriate individualised interventions for control of pain (Medico et al., 2017). Various factors such as; pain assessment and knowledge, pain- relieving medications and other actions, patient’s participation in decision – making, complications after surgery, and patient’s pain behaviour and communication skills must be considered in planning towards optimum relieve (Wikstrom et al., 2016).

According to Aziato et al. (2015), various pain scales or pain assessment tools are in use both in Ghana and globally. Examples include; Verbal Descriptor Scale (VDS), faces Pain Scale, Visual Analogue Scale and Numeric Rating Scale (NRS). Validation of these scales have been subsequently done for its administration in the healthcare setting. The assessment findings are also valid or reliable when the suitable
tool is administered during a particular pain experience (Aziato et al., 2015). The commonly used (preferred) scale for postoperative pain assessment is the NRS (Wikstrom et al., 2016). However, the NRS has interpretation difficulties therefore patients should be encouraged to describe the pain and set goals devoid of anticipated consequences (van Dijk, Vervoort, van Wijck, Kalkman, & Schuurmans, 2016; Wikstrom, Eriksson, Arestedt, Fridlund, & Brostrom, 2014). Factors facilitating pain assessments are either related to the patient or healthcare system. The former include the patients’ emotional and verbal expressions including pain ratings. The health-care factors include; time, clinical competence of the healthcare workers and continuity in care (Aziato et al., 2015) as well as communication skills and working conditions (Wikstrom et al., 2016). Additionally, POP assessments and the methods used by nurses depend on varied purposes such as observation of individual pain expressions, classification and authentication of causes of pain and legitimating pain’s intensity (presence and severity) (Wikstrom et al., 2016).

The pain location, intensity and quality comprises the attributes of the sensory dimension (Ahles & Martin, 1992). Identifying the location, severity and quality of the post-operative pain (POP) is crucial in the care and experience of the patient. Risk of postoperative problems and chronic pain; negative effects on functional recovery and quality of life are basically the effects of poorly managed POP (Chou et al., 2016). The use of validated standard scales in the assessment of pain is very important and must be adhered to. The evaluation of pain after interventions given is usually absent in the everyday nursing or health practice.

2.3.2 Cognitive dimension of pain

Cognitive component involves variables such as the import of the pain to the patient, the coping strategies used and the attitudes and knowledge regarding the pain
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(Ahles & Martin, 1992). For instance, Ahles et al. (1983) concluded that pain differences could mean worsening disease in 61% of patients, which in turn affected their emotional responses when measured. These were mostly based on personal beliefs of the clients not in relation to health education received concerning the pain, but influenced by formal education exposure (Ahles & Martin, 1992). However, causes of pain as perceived by patients is influenced by their traditional beliefs and misconceptions (Baker, O'Connor, & Krok, 2014; Turner et al., 2017). Secondly, coping with pain can be expressed in the patient’s level of anxiety which is a tendency to process somatic symptoms in an affective mode (Ahles & Martin, 1992; Aloweni et al., 2008). Thus, the treatment strategies must also focus on decreasing anxiety such as relaxation and discretion techniques due to the link between anxiety and pain (Nelson, Adamek, & Kleiber, 2017; Ozer, Karaman Ozlu, Arslan, & Gunes, 2013). Additionally, research suggests quality of life is negatively affected by the effects of treatment (narcotics) and cognitive factors such as alterations in memory, appraisal and orientation to environment. These can be confused as affective disorders (Peters, 2015; Wool & Mor, 2005). However, falsely diagnosed mood disorders or patient’s un-cooperation can affect their healing process (Adams, White, & Beckett, 2010).

Most patients’ experience moderate and severe pain, this might be due to their unfamiliarity of the nature of the pain, modern treatment options and partial expectation of pain relieving interventions (Mavridou, Manataki, Arnaoutoglou, & Damigos, 2017). This necessitate the yearning to be taught and brief about post-operative pain and management options. Such knowledge will positively influence the pain experience by reducing the pain intensity, anxiety before surgery, intake of pain medications, also improving post-operative recovery as well as patient’s satisfaction and sense of security and reliability (Aloweni et al., 2008; Mavridou et al., 2017). The
third variable looks at the attitude and beliefs of the client and the health care workers concerning the postoperative pain (Ahles & Martin, 1992). Patients misconceptions tend to serve as barriers to effective pain control, Cogan et al. (2014) revealed in study on analgesics that patients agreed that analgesics; causes addiction easily and should only be taken for severe pain; also good patients don’t express their pain. Mavridou et al. (2017) noted that an adequate information provided preoperatively and after discharge, aid in settling the patient’s confusion in their attitudes towards post-operative pain. Thus, the giving of oral messages or written material is encouraged on pain since experience of previous surgery seem irrelevant in preparing the patient for the pain (Ahles & Martin, 1992; Mavridou et al., 2017). Similarly, Francis and Fitzpatrick (2013) suggested that pain perception, preoperative pain anxiety and attitude are positively influenced by the nursing pain intervention implemented during the preoperative periods. However, clinicians do not provide enough avenue to the patients for them to express and discuss their concerns. This affects their post-surgery coping and early mobilisation and discharge (Aziato & Adejumo, 2015b; Francis & Fitzpatrick, 2013; Kehlet et al., 2006).

The fourth variable tend to explore the cognition level of the patients experiencing the postoperative pain (Ahles & Martin, 1992). Artus, Laviolle, Maurice, Malledant, and Beloeil (2014) in their study identified acute POP as the predominant risk factor associated with post – urological surgery persistent pain, with opioid analgesic use playing a role. Gunnarsson and Agerström (2018) in their study concerning pain, self-control on depression and cognitive abilities in such painful periods, realised that patients tend to physically focus on the self at the very moment. This was revealed when they sought to establish that abstraction is negatively influenced by physical pain (Gunnarsson & Agerström, 2018) as well as expectancy,
appraisal and attention are also affected (Peters, 2015). Seeking adequate and effective pain relief becomes the devotion of the patients experiencing the pain at extreme levels of pain intensity. Thus, such patients experiencing persistent and extreme pain intensity tend to have their abstractions compromised; which predicts lower self-control with depression (Gunnarsson & Agerström, 2018). The severe pain can result in withdrawn mood and calmness in some participants (Artus et al., 2014; Machado-Alba et al., 2013). Pain which is intense, aggressive and novel may involuntarily capture attention to the source of a possible danger enabling escape and further harm. Attention on the pain may rise the intensity when brought into focal awareness (Peters, 2015). Strong expectation induced by proposing pain relief verbally can increase actual pain experience. However, appraisal involves our understanding of the meaning of pain, sources and consequences. Actual or anticipated pain triggers exaggerated negative mental thinking such as pain reflection, overstate pain threat and deserted pain feeling (Peters, 2015).

Cognitive component involves variables such as the import of the pain to the patient, the coping strategies used and the attitudes and knowledge regarding the pain (Ahles & Martin, 1992). Pain could mean worsening disease, personal beliefs which is usually not related to the health education received or formal education exposure. Patient’s misconceptions influences negatively pain experience and management, thus, pain information is highly important. Avenues must be provided for patients to share concerns and have discussions on their pain experience.

2.3.3 Behavioural dimension of pain

Behavioural component of the pain experience focuses on the pain behaviours of the individual, communication of the pain and the associated symptoms such as fatigue and sleep. The “behavioural aspects of pain are overt, observable behaviours
which communicate to others in the environment that the patient is experiencing pain” (Ahles & Martin, 1992, p. 31). For instance; guarding, grimacing, verbal complaints, analgesic intake and bracing. Ahles and Martin (1992) also noted that social support, attention or avoidance of unpleasant tasks which constitute environmental factors can reinforce pain behaviours. Bach et al. (2018) noted that post-operative pain is mostly as a result of trauma to nerves and tissues which is basically a subjective experience. The pain to the caregiver which is indiscernible can only be made known through the behaviour and expression of the individual/ patient, mostly body language (Aziato & Adejumo, 2015b). This greatly influence pain assessment by healthcare providers, since the communication of a pain episode with all these diverse behaviours by the patients are either exhibited knowingly or not (Aziato & Adejumo, 2015b; Roulin & Ramelet, 2014). However, pain expectations and tolerance affect patients and fear of been seen as whining or conflict with the healthcare pro limit their pain expression (Eriksson, Wikstrom, Fridlund, Arestedt, & Brostrom, 2016).

Active strategies are used in relating pain; therefore, patients inform the health professionals and make enquires to partake in pain decisions. Passive strategies involved distraction, avoiding or treating pain by themselves, others were inert in enduring pain or avoid reporting pain considering the staff workload (Eriksson, Wikstrom, Arestedt, Fridlund, & Brostrom, 2014). Communication of pain is linked to medication intake which is greatly influenced by the pain behaviour. Thus, analgesic schedules with fixed time are appropriate in reducing re-enforcers for pain behaviours (Ahles & Martin, 1992; Aziato & Adejumo, 2015b). Assessing pain behaviours makes use of the behavioural observation method, in performing tasks that has influence on pain behaviours, the patient is videotaped (Bach et al., 2018). Patients often exhibit pain behaviours which is mainly body language as opposed to
words to communicate their pain which must be observed and assessed (Bach et al., 2018). Examples include agony suggestive sounds- groaning, shouting, grimacing, dragging of legs, guarding of their abdomen, hanging onto a chair and squinting of eyes. Similarly, Stanley and Chinwe (2016) noted these can be both physical and psychological expression of pain. Additionally, pain control behaviours such as analgesic use, positioning, distraction and manipulation, applying pressure to the painful area must be observed and evaluated. Thus, pain control behaviours should be incorporated in management of pain experiences by identifying and modifying it (Ahles & Martin, 1992; Wool & Mor, 2005).

Wikstrom et al. (2016) agreed that when patients tend to describe pain comprehensively, declare pain and use the pain assessment tool/scale to rate their level of pain, therapeutic communication is improved. The quality of POP assessment is affected by the patients’ pain expression, sometimes reduced by the associated symptoms and opioid medications effects such as fatigue and drowsiness (Wikstrom et al., 2016), as well as negative clinicians attitudes and non-adherence to procedures (Eriksson et al., 2016). Additionally, lack of pain knowledge and finance, family relation and attitude of nurses are factors that influence patient’s pain expression (Stanley & Chinwe, 2016). Bach et al. (2018) revealed that communication between nurse and patient often took place on the nurses’ initiative; the patients seldom called the nurses, even though they were in pain. Nurses normally tend to ask about patients’ pain during their care delivery activities. Thus, patient’s pain tolerance, possible fears and individual pain behaviours during their pain experience must be thoroughly investigated in ensuring excellent pain assessment and management (Wikstrom et al., 2016). Nurses must also involve relations of patients in care and show positive attitude towards their patients (Stanley & Chinwe, 2016); because in Ghana relatives
are worried and concerned with the relations predicament thus, patients avoid expression of pain in their presence (Acheampong, 2016).

Subsequently, healthcare workers tend to either understand these pain behaviours and physically manage it with the appropriate pain-relieving technique; or misread (disregard) these expressions, thereby, requiring the verbalisation and detailing of their pain by some patients. Generally, healthcare workers mostly assess and evaluate pain by observing the patients’ body language and ability to mobilise (Bach et al., 2018). Furthermore, Ruben, Meterko, and Bokhour (2018) concluded that the standard for superior healthcare system is communication which is patient-centered. Reduced levels of pain interference and intensity is influenced by positive patient-provider communication and related to high self-efficacy levels, needed in patients to reduce their pain and improve their overall functioning. Secondly, Ruben and colleagues admitted that the factor can be improved in patients through patient-centered communication which stresses on patients’ expression of that which is significant to them, patients’ goals and needs, and identifying their personal feelings, concerns and emotions (Ruben et al., 2018). Lessened pain experience was established through the intervention of a supportive nonverbal therapeutic communication such as reduced unbiased pain indicators in both males and females (Ruben et al., 2018). Moreover, he observed that long-term effects such as declining pain expressions, memory of pain and physical experience, and growing pain tolerance.

Ruben, Blanch-Hartigan, and Hall (2017) proposed that patient’s participation in personal activities and postoperative interventions might be reduced by the presence of pain. Examples of such activities/interventions include: ambulating, sleep, daily activity, coughing and deep breathing exercises (Lindberg et al., 2013).
Significant, is the distraction in their rest and sleep, which influence negatively on their hospital experience and quality of life (Doghramji, 2012; Krause & Stanford, 2011; Mercadante et al., 2015). Thus, such observation of diminished behaviours or associated symptoms such as fatigue and sleep can be incorporated in pain assessment. Because it results in complications and can intensify the pain experience (Astrup, Rustoen, Miaskowski, Paul, & Bjordal, 2015; Lavigne, Nashed, Manzini, & Carra, 2011). Postoperative pain relief in its adequacy is critical to avoid or minimise the probability of complications such as deep vein thrombosis, atelectasis and late wound healing as clinicians observe pain control behaviours in ensuring patient-centered pain management (Francis & Fitzpatrick, 2013; Wikstrom et al., 2016).

Behavioural component of the pain experience focuses on the pain behaviours of the individual, communication of the pain and the associated symptoms such as fatigue and sleep. The observable behaviours communicate to others in the environment that the patient is experiencing pain” (Ahles & Martin, 1992, p. 31). For instance; grimacing, verbal complaints, analgesic intake and bracing. Other factors influence pain behaviours as well as pain assessment. However, pain expectations and tolerance affect patients due to fear of being seen as whining or conflict with the healthcare, thus, limiting their pain expression (Eriksson, Wikstrom, Fridlund, Arestedt, & Brostrom, 2016).

2.3.4 Affective dimensions of pain

Affective component looks at the established link between pain and affective/psychological factors. The unique psychological factors such as anxiety and depression shape the already complex pain experience (Parsons et al., 2013; Peters, 2015). The factors include; personality influences controlling pain, affect/mood role, anxiety, depression (emotional responses) and suffering (Francis & Fitzpatrick, 2013).
Anxiety, anger, fear and depression as psychological disorders can worsen the pain experience, although when expressed positively and assessed, the emotions help in the pain management (Dunham, Ingleton, Ryan, & Gott, 2013; Pastore et al., 2017; Peters, 2015). Then, it is critical to incorporate these components of emotional response into pain assessment and management (Ahles & Martin, 1992). A reaction to a particular elicitor refers to emotion and it has a distinct focus, whereas, mood lacks a clear focus in a more diffuse. However, affect refers to emotions and mood collectively (Peters, 2015). Additionally, Ahles and Martin (1992) observed that patients undergoing urological surgeries have their tumour type, sex and surgical approach related to their psychological suffering. Increased surgical risk is linked to the rise in patient’s anxiety level indicated by; high blood pressure, high dose of medication for sedation and increased pulse rate. Therefore, the risk for morbidity and mortality is intensified.

Furthermore, they noted that unless the psychological disorder affects patient’s quality of life, it is not given the needed attention (Pastore et al., 2017). Outcome of uro-oncological surgeries such as pain, hospitalization, urinary incontinence, sexuality concerns, changes in the body guarantees’ depression and anxiety related to the treatment. It was also noted that patients with increased kidney growths and females exhibit higher psychological distress (Pastore et al., 2017). Fear and suffering as emotional responses are also present as revealed by Hong, Kim, Shin, and Huh (2014). Anxiety which increase pain experience comprises of the anticipation of possible threat, whilst fear is an alarm reaction to present threat which may suppress pain (Hong et al., 2014; Peters, 2015). However, ‘pain-related fear’ relates to both current pain and anxiety but depressed mood results in increased perceived pain discomfort and activity of brain pain-areas (Peters, 2015). This fear increases stress
response, development of chronic pain and affect patient’s homeostatic; the anxiety changes physiological processes which may result in death of patients. Thus, the reduction ensures healing, surgical efficacy and patient satisfaction (Selimen & Andsoy, 2011).

Additionally, it's noted that persistent chronic pain experience among patients is accompanied with emotional/mood symptoms such as depression and anxiety (Dunham et al., 2013). Other authors also believe that depression and anxiety in turn causes the pain among the patients. Whilst some view pain problem to be affected by anxiety independently but not depression (Amenorpe, 2017). Hong et al. (2014) revealed that fear witnessed in the patients is not limited to the disease condition or progression, but also extends to the apparent side effects of the treatment modalities or pain-relieving interventions. This fear is also present in those experiencing non-cancerous origin pain, in addition to other negative emotions (Crombez, Viane, Eccleston, Devulder, & Goubert, 2013). Tissue injury triggers a series of responses that may cause ventilation abnormalities (5.0–25.0% of patients), local circulation disorders, gastrointestinal and urinary disorders, and even lead to infarction or heart failure; as well as cortical and emotional responses, that occur when pain is not well managed (Machado-Alba et al., 2013). Alaali and Irwin (2015) showed that patients had lower levels of anxiety and depression than those described in the literature.

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Then, it is critical to incorporate these components of emotional response into pain assessment and management (Ahles & Martin, 1992).

### 2.3.4 Socio-cultural dimensions of pain

Sociocultural component of the pain experience dwells on the patients’ cultural background, family dynamics and role as well as the caregivers’ perspectives. It included factors such as demographic characteristics, ethnic background and family support (Crombez et al., 2013; Dunham et al., 2013). Frequently, ethnic–based individual responses to pain dominated studies, also gender–based and racial differences. Postoperative pain also tends to affect ones’ family relationships, occupational roles, and financial concerns which also affects one’s quality of life (Ahles & Martin, 1992). There are differences in the way patients’ especially, men seek help due to their understanding and considerations of indications of diseases/conditions across communities and nations. It is also influenced by the level of health care provision services (Wool & Mor, 2005). Ones’ cultural influence in their health seeking behaviour and belief may stem from several factors which include; spirituality, purpose of life in relation to others and finally the interpersonal relationship between the patient and clinical staff (Aziato & Adejumo, 2014b, 2014c, 2015b; King-Okoye, Arber, & Faithfull, 2017; Kwok & Bhuvanakrishna, 2014; Schreiber, 2014).

Similarly, individual’s awareness of pain and subsequent treatment response might be influenced by matters in relation to cultural factors including ones’ sex, age and ethnicity (King-Okoye et al., 2017). Thus, measures implemented to improve ones’ quality of life may not be limited to ensuring a decline in pain interference and intensity; and pain education. Instead focus on other factors involved other than pain may influence ones’ consciousness of quality of life. Schreiber (2014) described
‘Culture’ as the recurrent behavioural responses in civilisation accompanied with intellectual, social, artistic and religious influences. Whilst ‘Ethnicity’ was appreciated to depend on context and is fluid; integrating the concepts of a shared cultural, religious or social background which is distinct and handed over through generations to create a shared identity.

Aziato and Adejumo (2014c) revealed that one’s culture is modified by the socialisation process an individual is exposed to. The culture intends influence ones’ pain expression and intervention due to the subjective nature of pain. Past experience of pain, feelings, thoughts and sensations were identified to influence pain expression among postoperative patients (Issahaku, 2018). Family socialisation of an individual during their formative years also influences their pain expression even as adult (Kwok & Bhuvanakrishna, 2014). Family predetermined concepts of pain tend to influence the individual’s concepts of pain (Pasero & McCaffery, 2011). In their quest to develop a culturally appropriate pain management practice guideline for the Ghanaian clinical setting, Aziato et al. (2015) found that pain scale usage was low and assessment was not standardized. Thus, precise pain assessment and control can be guaranteed with definite culturally suitable pain assessment tools. This helps to ensure equality in the health care service provision with effective pain interventions/controls (Aziato et al., 2015).

The cultural background of the patient can affect their readiness to promptly self-report pain. Aziato and Adejumo (2014c) revealed indication of black and Hispanic patients increased unwillingness to self-report. They also concluded that caregivers’ issues of language barriers in communication or health clinicians’ underrating of client’s pain intensity might lead to poor pain assessment. The unwillingness to self-report the pain experience can be linked to the perceptions of
health care workers indifference to their symptom experience (Aziato & Adejumo, 2014c; Aziato et al., 2015). This might discourage positive health-seeking behaviour leading to delays in management of critical conditions such as prostate cancer. Substantial cultural differences in the concepts of masculinity and views of trust in the health care system. As such, some clients believed that the clinicians are mainly responsible for their health care needs (Aziato et al., 2015).

Kwok and Bhuvanakrishna (2014) review of literature showed that a patient’s ethnicity influences their pain perception due to differences in diverse ethnic groups’ outcome in pain dimensions. Thus, doctors preferred to depend greatly on the self-pain reports and ratings of the clients to provide management options in the therapeutic environment emphasising on patient-centred approach. Decisions on health-seeking and understanding of conditions is substantially influenced by the caregiver perspectives and network of lay referrals. King-Okoye et al. (2017) agreed that men among similar social class mostly appreciate the referral system to understand the changes in their body functions and tend to seek help. Concerns shared and decisions made in seeking help affects the interpretation of their symptoms and the trusting relationship built among the members. Furthermore, Kwok and Bhuvanakrishna (2014) recommended distinctive patient-centered approach to pain management, encouraging the health care workers to continually appreciate the psychosocial context of the patient experiencing the pain. This reference was based on the framework of analgesic ladder proposed by World Health Organization (Aziato & Adejumo, 2015b).

The family which involves a group of individuals connected by blood ties, marriage or through adoption; forms a critical part of the life of an individual in the African setting (King-Okoye et al., 2017). The family usually provides the needed
support when an individual is ill especially during the postoperative period. The period is usually characterised by pain, weakness and reduced mobility due to the surgery and anaesthetic effect. Emotional reaction such as depression or anxiety may be exhibited by the family caregiver during the postoperative period depending mainly on the surgical outcome (Aziato & Adejumo, 2014c). This is influenced by the emotional ties shared by the caregiver and patient.

Sociocultural component of the pain experience dwells on the patients’ cultural background, family dynamics and role as well as the caregivers’ perspectives. It included factors such as demographic characteristics, ethnic background and family support (Crombez et al., 2013; Dunham et al., 2013). Postoperative pain also tends to affect ones’ family relationships, occupational roles, and financial concerns which also affects one’s quality of life (Ahles & Martin, 1992). There are differences in the way patients’ especially, men seek help due to their understanding and considerations of indications of diseases /conditions across communities and nations.

2.4 Pain – relieving interventions

Pain experienced by patients hospitalised is due to varied reasons, this may include iatrogenic causes such as intravenous cannulation, urethral catheter etc., malignancy, postoperative, trauma and infection. Effectively controlling pain serves as process indicator of healthcare quality, resulting in optimal clinician-patient relationship and improved hospital service experience and satisfaction (Kwok & Bhuvanakrishna, 2014). The objective of POP management is to decrease or eliminate pain and discomfort with least complications (Garimella & Cellini, 2013). Majority of patients experience acute pain post operatively; however adequate pain relief is reported in fewer than 50% of the patients. Also, high incidence of needless pain which affects their recovery (Aziato & Adejumo, 2014b). This inadequacy in acute
pain-relief can result in medical complications (pneumonia, deep vein thrombosis, infection and delayed healing), delayed ambulation after surgery, insomnia, extended admission period and/or chronic pain (Francis & Fitzpatrick, 2013; Mackintosh-Franklin, 2014; Meissner et al., 2015). Effective and appropriate management of postoperative pain must guide treatment plans of care, which is client-centered focusing on the surgical procedure done and diverse multimodal analgesic regimens available (Lokapur, Vasani, & Page, 2018). Control of POP involves; routes (intravenous, oral, neuraxial, regional) modes (patient controlled vs. “as needed”) and agents (opioid vs. non-opioid) (Garimella & Cellini, 2013). Chou et al. (2016) noted the complex process involved in pain assessment and management due to the subjective nature. Therefore, pain intervention should incorporate appropriate analgesic route, timing and usage. Although, pain management techniques have been developed and evolved with the inclusion of multimodal analgesia and patient-controlled analgesia which sought to reduce side effects of opioid and augment pain scores, pain experience is still moderate to severe (Francis & Fitzpatrick, 2013; Garimella & Cellini, 2013).

Similarly, in the urological setting pain interventions is paramount. Chou et al. (2016) noted that principles and practice of nurses might interfere in their assessment and understanding of the patient’s pain experienced, since the role of the nurse is essential in POP control (Aziato & Adejumo, 2014b). The erroneous principle held by nurses that clients will experience some extent of pain regardless of the pain relieve administered; therefore, nurses are sometimes thought not to appreciate and understand the patient’s pain (Aziato, Ohene, Dedey, & Clegg-Lamptey, 2016; Francis & Fitzpatrick, 2013). Nurses must prioritise POP control through their 24-hours stay with the patients, thereby, assessing individual pain and providing timely
intervention (Aziato & Adejumo, 2014b). Assessment and subsequent review of pain which are crucial in pain management and part of the nurses’ role (Francis & Fitzpatrick, 2013). Additionally, unexpressed health beliefs and routine actions influences control of postoperative pain. Client involvement is a less likely influence (Francis & Fitzpatrick, 2013). Moreover, the therapeutic interventions for pain is also influenced by the hospital culture, a blend of the attitudes, knowledge and experiences of the clinicians, and clinical context (Francis & Fitzpatrick, 2013). POP is usually managed inadequately by nurses due to factors such as disbelief of patients’ report of pain, fear of addiction, lack of knowledge of pain concepts and culture (Bach et al., 2018).

Positive therapeutic communication between the health workers and patients is important. Bach et al. (2018) highlighted 3 main areas in tackling the deficiencies in optimal pain assessment and control, these include; the use of standard forms/guidelines, in-service refresher programmes for healthcare workers and provision of information to clients and appreciations of their concerns. Agreeably, Aziato et al. (2016) revealed lapses in basic pain management such as opioid use and cancer pain in relation to deficits in the nurses’ knowledge, practice and attitude. This conclusion was reached after they conducted a survey using a questionnaire involving 248 nurses working in tertiary health facilities in Pune, India. Positive outcome of pain and satisfaction is reported by patients in the first 24hours post-surgery when they are educated on pain whilst involved decisions with nurses and reduced pain intensity (Connor, 2016). Concurrently, relevant information on discharge on analgesic usage with other measures to manage pain and avoid chronic POP is important. Patients complain of insufficient analgesic post-discharge, thus supportive follow-up and/or
strategies for self-management must be employed after discharge (Bjornnes et al., 2017).

Fatma and Serife (2017) concluded that postoperative pain was viewed as a normal phenomenon by the nurses unless out of the ordinary, thus, complete pain relieve is not a focus (Mackintosh-Franklin, 2014). Thus, the pain management approach used by the nurse is mainly pharmacological and non-pharmacological depending on the cause of the pain (Mackintosh-Franklin, 2014). Pain is considered on its location, cause and kind; thus, interventions may differ such as physical activity, bed rest, medication, or a heating pad. Lokapur et al. (2018) therefore, observed that patients appeared to adapt to the various department’s or unit’s pain management practice. Thus, regardless of diverse pain-relieving interventions employed in other places; these patients tend to request for the same intervention again and again. However, Mackintosh-Franklin (2014) noted that most registered nurses assume adequate pain control as a humanitarian act and mainly concerned about patients regaining functionality and avoiding complications. Also, strives made in pain management principles have not been upheld since opportunities for patients’ self- administration of pain treatment is limited or nonexistence (Bach et al., 2018).

Multimodal analgesics used in pain management proved to adequately control and improve positive pain experience, with functional recovery as a goal (Bach et al., 2018). Also, multimodal analgesics aids in limiting or preventing postoperative pain complications such as those related to immobilization or paralytic ileus and risk of developing chronic pain (Bach et al., 2018; Choi et al., 2017; Levy, Mills, & Rockett, 2019). Effective interventions endorse analgesic techniques which are procedure-specific analgesic based on the use of simple analgesics, combined with regional or local anaesthesia administered with the multimodal opioid-sparing analgesia (Francis
This reduces damage in motor function and systemic opioid side effects. In urological surgeries such as cystectomy, oral or intravenous acetaminophen and/or use of non-steroidal anti-inflammatory drugs are often used. Similarly, strong and weak opioids are inadequately received by patients with severe pain (Fatma & Serife, 2017; Lorentzen, Hermansen, & Botti, 2012). However, evaluation of both therapeutic treatment effect through regular pain reassessment as suggested by Francis and Fitzpatrick (2013) was generally limited in the facilities (Azhar et al., 2016; Chou et al., 2016).

Furthermore, Bach et al. (2018) reported other forms of non-pharmacological interventions used in controlling pain. They observed that 47.6% of the patients under study used hot/cold compresses, 75.7% prefers an environment which is silent and calm and 78.6% focused on appropriate positions. Also, non-pharmacological interventions such as listening to music, massage, relaxation exercises, aromatherapy, reflexology, acupuncture or distraction were barely employed. Ozer et al. (2013) advised that listening to self-choice music has potential positive effect on the pain intensity and physiologic responses in post-operative patients. Likewise, music therapy has potentials in pain and anxiety reduction in patients (Nelson et al., 2017; Ozer et al., 2013). Massage therapy also positively influences patients’ capacity to manage their health’s psychological and physical aspects, when implemented in clinical pain care (Adams et al., 2010). Nurses’ practice is usually restricted due to limited; staff numbers, time, knowledge about pain control and incidence of patients’ reluctance. It is suggested that avenues should be provided for training of clinicians on non-pharmacological pain measures with legal regulation to ensure holistic nursing (Selimen & Andsoy, 2011; Yaban, 2019).
Subsequently, in Ghana the inadequacy linked with knowledge of effective pain control among nurses was potentially stemmed from: gaps in nurses training curriculum, irregular workshops for practising nurses’ due to funds deficit and lack of practise of new knowledge in clinical area (Aziato & Adejumo, 2014a). However, these lapses can be rectified if main courses on all pain concepts are incorporated into the training curriculum, also proper training programmes on pain management as well as the continuous auditing of the programme impact on nursing practise (Aziato & Adejumo, 2014a). Non-pharmacological POP relief measures must also be incorporated in the multifaceted approach to effectively control POP (Levy et al., 2019). Consequently, Meissner et al. (2015) noted four (4) keys to improve POP management which include: involvement of patients in treatment decisions, professional education of multidisciplinary team, optimizing treatment and organisational change.

Effectively controlling pain serves as process indicator of healthcare quality, resulting in optimal clinician-patient relationship and improved hospital service experience and satisfaction (Kwok & Bhuvanakrishna, 2014). The objective of POP management is to decrease or eliminate pain and discomfort with least complications (Garimella & Cellini, 2013). Effective and appropriate management of postoperative pain must guide treatment plans of care, which is client-centered focusing on the surgical procedure done and diverse multimodal analgesic regimens available (Lokapur, Vasani, & Page, 2018).

2.5 Summary

The literature review covers studies published on the sensory, cognitive, behavioural, affective and socio-cultural dimensions of the post-operative pain experiences of the men who had undergone surgery such as urological. It is noted that
the clients experience moderate to severe pain which is usually inadequately managed and also pain assessment is limited. However, the experiences of pain by the clients are less likely to be explored from a multidimensional angle. Finally, limited studies were conducted in the lower- and middle-income countries such as Ghana as most were linked to high income countries like the United Kingdom, USA, Singapore, Sweden, etc.
CHAPTER THREE

METHODOLOGY

The chapter covers descriptions of the research design, setting of the study, target population, the sample and sampling method, data gathering method, data management and analysis, rigour and ethical considerations.

3.1 Research Design

An explorative descriptive approach as a form of qualitative research design was used for the study. This enabled the researcher to explore the pain experiences of men who have undergone urological surgeries. It is appropriate for a comprehensive explorative study of the problem. The design allows the researcher to build a multifaceted holistic image, to report in detailed the views of the study participants, analyse their words and generally conduct the study in their socio-cultural setting (healthcare setting) to enable interaction (Fatma & Serife, 2017).

According to Fatma and Serife (2017); the context, process, and lived experiences is particularly considered in qualitative research. Thus, the participants’ experiences, feelings or judgement of the problem is reflected in the research data which is in words other than numbers. An individual (man) who have experienced the problem (urological surgery) of study becomes the focus of interest. A systematic approach was employed to generate a comprehensive description from the participants to offer an in-depth appreciation of the meaning they attach to their lived experiences as opposed to that which quantitative method cannot reveal.
3.2 Research Settings

The setting comprises of the environment where the study was conducted. The proposed setting for the study was at the Korle- Bu Teaching Hospital in Accra Metropolis of the Greater Accra Region of Ghana. The Greater Accra Region, the smallest among the ten regions in Ghana covers a total land area of 3245km² (Service, 2014). It is located at the south-central part of Ghana and bounded by Volta Region to the east, Eastern Region to the north, Central Region to the west and the Gulf of Guinea to the south (Service, 2014). The 2010 population and housing census revealed about 4010050 people live in the region (Service, 2014). However, Korle Bu Teaching Hospital (urology ward/ clinic) was used to recruit participants, whereas the interviews were conducted in the participant’s place of choice mostly an open quiet space in the hospital premises whilst others were at their residence after discharged.

Participants were recruited at the urology ward (ward G) which is under Allied Surgery, a Sub-division of the department of Surgery. The urology unit also has its clinic days on every Mondays and Fridays. Korle-Bu was preferred to other facilities because it is a tertiary hospital and serves many people with different urological problems. It also serves as a referral point with a number of clients being admitted every week for urological surgeries. About 50 major surgeries are performed on men every month at the unit.

Korle-Bu Teaching Hospital, the name denotes the valley of the Korle lagoon (KBTH, 2018). Under the administration of Sir Gordon Guggisberg, the quest to address health needs of the indigenous people led to the establishment of the general hospital. He was the then Governor of the Gold Coast in October 9th, 1923. The facility is situated in the Southern part of Greater Accra Region. In the African continent, the facility is deemed as the third largest and a leading national referral
centre in Ghana. The hospital receives referred cases from all over the country since it is of tertiary (teaching) level, as well as referred cases from other neighbouring countries on the continent.

Korle-Bu Teaching Hospital is the largest public tertiary hospital in southern Ghana, it is also affiliated with the University of Ghana Medical School (UGMS) when it gained the teaching hospital status in 1962 (KBTH, 2018). It also serves as the foremost training facility for now School of Medicine and Dentistry (SMD) students and other health programmes of College of Health Sciences of University of Ghana, such as School of Nursing, School of Pharmacy, School of Basic and Allied Health etc. Additionally, students of postgraduate medical programmes of the Ghana College of Physicians and Surgeons, and West African College of Surgeons, Nursing students from various public and private nursing training institutions also use the facility for training.

The hospital also has a strong focus on research. It has an established research department which conducts and supervises research in all its specialties and also does collaborative research works with other institutions such as University of Ghana, Ministry of Health and External Health Institutions. The hospital is of about 2000 bed capacity and a staff strength of about 3,500 whiles it also sees to an average of 1500 patients daily. It has 17 clinical and diagnostic departments or units. It is also has special centers of excellence which attract their clientele from neighbouring countries, namely the National Cardiothoracic Centre, the National Radiotherapy Centre, Nuclear Medicine and the Reconstructive Plastic Surgery and Burns centre.

The hospital has over seventeen (17) clinical departments within, among which are: Medical, Surgical, Surgical and Medical Emergency, Child Health, Central
Laboratory, Obstetrics & Gynaecology, Radiotherapy, Diet-therapy, Physiotherapy, Psychiatry, Radiology, Fevers and Pharmacy departments etc.

3.3 Target Population

Men (adults) above the age of 18 years with urological (prostate) condition who have undergone surgery at the urology unit of the Korle-Bu Teaching Hospital and discharged constituted the target of the population.

3.4 Inclusion and Exclusion Criteria

3.4.1 Inclusion Criteria

Participants eligible for this study included;

1. Adult males 18 years and above who have undergone urological surgery and discharged for two (2) weeks to three (3) months.
2. Those participants who are able to speak Twi, Fante or English to aid in communication since the present researcher is fluent in these three languages.
3. Those participants who voluntarily gave their consents to participate in the study after the details of the study has been outlined to them.

3.4.2 Exclusion Criteria

Participants to be excluded from the study included;

1. Clients/ participants diagnosed of any form of mental illness
2. Clients in pain, greater than 4 as assessed with the NRS.

3.5 Sample Size and Sampling Technique

A sample is a sub-group of the population selected and the findings generalized to the entire population, also the process of selecting the sample is called sampling (Creswell, 2013). The study being a qualitative study focused on the use of
semi-structured interview to solicit for participants views, thus the sample size was determined when data saturation was achieved. Data saturation occurs when no new information/responses is being said. However, 12 participants were involved in the study.

The purposive sampling technique with respect to the inclusion criteria was used to recruit the study participants. The purposive sampling is a form of nonprobability sampling where the researcher selects study participants based on personal judgement and on some particular characteristics (Polit, Beck, & Hungler, 2001). Thus, male adults who have experienced pain after urological surgery were recruited to explore their pain experiences.

3.6 Instrument of Data Collection

As the study is qualitative, it is necessary to develop an instrument/method that would enable the phenomenon under study to be explored for a better understanding. A semi-structured interview tool with open ended questions consisting of two (2) main segments was used as a guide during the data collection. The first segment (A) consisted of participants’ personal/ demographic data; the second segment (B) constituted a semi-structured question intended to explore the cognitive, sociocultural, behavioural and affective factors that influence their pain experience and the pain-relieving interventions administered during the experiences.

Creswell (2013) argues that the semi-structured guide allows probes and follow up questions to clarify the meaning of responses and encouraged in-depth descriptions of concepts that arises. The development of this instrument was guided by: the aims and objectives of the study, the multidimensional model on cancer pain selected for this study, literature reviews of related studies and the responses from respondents during the pilot study.
3.7 Data Collection Procedure

An introductory/permission letter was taken from the Korle Bu Teaching Hospital review board to the head of the surgical department, after ethical clearance had been sought from KBTH and NMIMR. The letter sought the permission to use the urological ward (ward G) as the first point of contact and recruitment of study participants taking into consideration the inclusion criteria. The consent form emphasising the purpose of the study as well as the expectations of the participants and researcher was attached to the letter. After permission was granted, the urological unit head and staff were briefed on the nature and purpose of study.

In relation to the participants, a consent form explaining the details of the study were provided to them to seek their permission. They were assured of their anonymity and confidentiality as discussed in ethical consideration. Also, the interviews were conducted in an open location of choice and comfortable to the participants. The interview was done with a semi-structured instrument, also permission was sought from the participants to record the individual interviews to ensure precise data analysis whilst assuring them of their anonymity. Additionally, with their permission notes were taken from the observations to add to the recorded interviews. The tool was piloted at genitourinary unit at 37 military hospital with two (2) participants who had undergone urological surgery with similar characteristics to those at Korle-Bu Teaching Hospital.

The three languages used for the interviews were Twi, Fante and English which allowed for free expressions and also the researcher is very fluent in them. About Forty-five minutes to One (1) hour was used at each interview session. The
The researcher endeavoured to avoid leading questions and encourage the participants to freely express themselves.

### 3.8 Management of the Data

The researcher used basic sorting and filing procedure to safely keep the audio recordings, transcribed data, signed consents forms and field notes. The information was made available to only the researcher and her supervisors to maintain the participants’ anonymity, the demographic data of clients were separated from the general data. All data is stored under lock and key and only produced if need be. A soft copy of the data is also been kept in a protected file to serve as backup.

### 3.9 Analysis of Data

Concurrent data collection and analysis was done. The analysis begun with the precise transcription of the tape-recorded data. The recorded data was transcribed before analysis. Thematic content analysis was used to deduce emerging themes identified from the transcribed data based on the conceptual framework adopted for the study. Thematic content analysis is a method for identifying, analysing and reporting patterns within data. It has 6 clearly defined steps that ensures clarity and rigour in the process (Braun, Clarke, Hayfield, & Terry, 2018; Vaismoradi, Turunen, & Bondas, 2013). These steps include; Researcher familiarising herself with data, generating initial codes, searching for themes, defining and naming themes and producing a report. The write – up of the result of the analysis includes verbatim extract to provide a clear and sufficient example of the themes that emerged. In exploring the pain experiences of men after urological surgery, the researcher reviewed the relationships established in the emerged themes and subthemes.
3.10 Ethical Considerations

The ethical issues to be considered in this study include; Informed consent – it involves the potential participants having the full and open information about the study. Thus, the participants enter into the research voluntarily while understanding the nature of the research and any disadvantages or obligations that may be involved. Thus, a consent form as mentioned earlier was given and explained to every participant to help them make an informed decision. Also, anonymity and confidentiality were considered in this study, the researcher reminded the participants not to mention their names or say anything to reveal their identity. Additionally, the researcher ensured that she handle the data alone especially during data collection, transcribing of the recorded discussions and analysis.

The researcher sought ethical clearance and approval through ethical committee at the Noguchi Memorial Institute for Medical Research (NMIMR) of the University of Ghana, Legon and the Korle Bu teaching Hospital, Accra. The rights, safety and protection of the participants which are of importance was secured. An introductory letter that sought permission was taken from the review board of Korle Bu Teaching hospital to the Head of Department of the Surgical Department, and as well the urologist(s) and nurse in-charge of the Urology unit were briefed on the study. Consent forms, audiotapes, field notes and typed transcripts is kept confidential for at least five (5) years following completion of the study, after which data can be destroyed.

3.11 Trustworthiness (Rigour)

The 4 main components used to ensure rigour of a qualitative study is credibility (internal validity), transferability (external validity and generalizability), dependability (reliability) and confirmability (objectivity). Trustworthiness in a
Postoperative pain experience of men after urological surgery

Qualitative research is a valid inquiry which demonstrates the true value, providing the basis for applying it, allowing for external judgments to be made about the consistency of its procedures and the neutrality of its findings (Lincoln & Guba, 1985; Siegle, 2017).

Triangulation was used to ensure the credibility of the study data and its interpretation; done by discussing with participants the transcribed data to make clarifications if necessary and ascertain the true information they gave, this member/participant check approach helped avoid the researcher’s influences of any preconceptions. Peer and supervisor examination were another method used to achieve credibility of the findings; a colleague and my supervisor where given the findings to review and comment on. The comments increased confidence in the findings of the study.

Transferability of the findings looks at how the findings will be transferred to similar participants who did not take part in the study. A comprehensive account of the study will be provided to guide another to apply or determine the ability to transfer the findings to another setting. Dependability or consistency in qualitative study corresponds to a reliability of findings in the quantitative study. In order to address this phenomenon, the same interview guide will be used to interview all the participants. Also, study materials such as audiotapes and transcripts will be stored carefully and made available when the need be. The concept of conformability is synonymous with objectivity, which deals with the findings of the study being strictly the experiences of the participants only. The member check approach as earlier mentioned, triangulation to reduce the effect of the researcher’s bias and ‘audit – trail’. ‘Audit – trial’ is an inquiry audits to examine documentation, running account of the process and the product thus attests that it is supported by data (Siegle, 2017).
CHAPTER FOUR

FINDINGS

4.0 Introduction

The findings of the study are presented in this chapter, the constructs of the multidimensional model of cancer pain by Ahles and Martin (1992) in addition to the objectives of the study were used to organise the presentation of the findings. Thus, the descriptions in the chapter includes; the participants demographic characteristics, the themes, sub-themes and also the participants’ verbatim quotations.

4.1 Participants’ demographic characteristics

Twelve participants in total were interviewed for the study, all the participants went through a major prostate surgery involving transurethral resection of the prostate (TUR-P), open prostatectomy and radical prostatectomy. Their ages ranged from 59 to 82 years. All the participants had formal education from childhood though with varied levels attained: primary/basic level – two (2), secondary/middle school level-six (6), tertiary level-three and professional training-five (5). Considering their ages, most of the participants were currently retired whilst some have picked up some part time jobs to keep them busy. These include: businessman, security man, poultry farmer, music director, farmers and pharmacy attendant. The participants were all Ghanaians who lived in the Accra metropolis, Central, Eastern and Volta regions. They were all married except three (3) who had lost their spouses prior to the surgery, the participants had children ranging from two (2) to eleven (11). The 12 participants
were all Christians and the languages spoken by the participants included: Fante, English, Twi, Ga, Larteh and Ewe. Also, the participants have had the symptoms of the prostate condition within a duration of few months to fifteen years. Their conditions included benign prostate hypertrophy (BPH) and prostate cancer, in addition others had kidney or bladder stones. The details of the participants’ demographic characteristics are presented in appendix – F

4.2 Organisation of themes

Six (6) major themes identified from the data guided the presentation of the postoperative pain (POP) experience of men after urological surgery. The major themes included: Sensory dimension, Affective dimension, Behavioural dimension, Cognitive dimension, Socio-cultural dimension and Pain management. The main constructs of the multidimensional model of cancer pain as utilized in this study are five (5) major themes; sensory, affective, sociocultural, behavioural and cognitive dimensions. The last theme, pain management was the additional finding to model. Sub-themes were derived under all the major themes which guided the exploration of the pain experiences of the participants. The sub-themes derived from the data were 18 and mainly in line with the model used.

Table 4.1 presents the major and sub-themes:

Table 4.1: Postoperative pain experiences among men after urological surgery: organization of themes and sub-themes

<table>
<thead>
<tr>
<th>Major Themes</th>
<th>Sub-themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensory dimension</td>
<td>• Location of pain</td>
</tr>
<tr>
<td></td>
<td>• Quality of pain</td>
</tr>
<tr>
<td></td>
<td>• Severity/ intensity of pain</td>
</tr>
</tbody>
</table>
### Postoperative pain experience of men after urological surgery

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Affective dimension</strong></td>
<td>- Anxiety and fear</td>
</tr>
<tr>
<td></td>
<td>- Suffering</td>
</tr>
<tr>
<td></td>
<td>- Other mood changes</td>
</tr>
<tr>
<td><strong>Sociocultural dimension</strong></td>
<td>- Family dynamics and roles</td>
</tr>
<tr>
<td></td>
<td>- Cultural background and belief system</td>
</tr>
<tr>
<td><strong>Behavioural dimension</strong></td>
<td>- Pain behaviours</td>
</tr>
<tr>
<td></td>
<td>- Verbal communication of pain</td>
</tr>
<tr>
<td><strong>Cognitive dimension</strong></td>
<td>- Knowledge of pain</td>
</tr>
<tr>
<td></td>
<td>- Attitude and beliefs</td>
</tr>
<tr>
<td></td>
<td>- Meaning of pain</td>
</tr>
<tr>
<td></td>
<td>- Coping strategies</td>
</tr>
<tr>
<td></td>
<td>- Influence on thought processes</td>
</tr>
<tr>
<td><strong>Pain management</strong></td>
<td>- Pharmacological</td>
</tr>
<tr>
<td></td>
<td>- Non – Pharmacologic interventions</td>
</tr>
<tr>
<td></td>
<td>- Effects of treatment</td>
</tr>
</tbody>
</table>

### 4.3 Characteristics of pain experienced by the men after Urological surgeries

The main theme of sensory dimension explains the characteristics of the pain experienced by the participants after surgery.

### 4.4 Sensory dimension of pain

The three (3) sub-themes derived from the sensory theme included; location, quality and intensity of the pain. The location includes the parts of the body pain was
felt, these were: in the penis (urethra), lower abdomen and the incisional site. The pain in the urethra was related to the urethral catheter and urine flow. The quality of pain describes the pain felt using varied descriptors as well as comparison to everyday occurrences such as ‘being cut with a knife’. Some descriptors include: boiling, burning, throbbing, biting and dull. The pain was noted to be intermittent and also continuous in some instances. The intensity of the pain experienced focuses on the severity of the pain, encompassing the periods of increase, relieving and worsening factors. The participants described the pain as painful, severe, worst and too much. The pain worsens after the first few days of surgery or with some activities depending on the cause. The activities included; coughing, unguided movement of the catheter, urinating with or without the catheter in situ. Pain assessment involved the self-rating of the pain by the participants. The participants rated their pain between 2 – 5 for low pain periods, 5 - 7 for moderate pain and 7- 10 for high pain periods on a scale of 0 to 10.

4.4.1 Location of pain

This subtheme describes the various locations of pain postoperatively. The pain experienced by the participants was felt inside the penis after the urological surgery:

“it was inside the prick, hmmm inside the prick” – M2

“it was not easy; I really felt the pain inside the penis really well” – M10

Some of the participants also complained of post-operative pain in the lower abdomen in addition to the pain inside the penis. The pain was present when the weather was warm or during urination:

“yeah in my lower abdomen, also at the same time the catheter in your manhood makes you feel very uncomfortable ... - M5
“I feel it at the lower abdomen, also when the weather is warm, i.e. heat comes. When I urinate, I feel pain” – M7

“I felt the pain in lower abdomen and penis, actually they passed catheter for me afterwards” – M12

Other participants who underwent open prostatectomy complained of pain at incisional site:

“this side, where the operation has been done, in fact I couldn’t cough ... but it was obvious, hmmm” – M1

“where they cut me was paining me too, you see that me I will just put my hand there at where they do the surgery” – M10

“pain at freshly sutured cut from theatre during the first 3 to 4 days. On the 5th day you see that the pain is subsiding” – M5

However, the POP in the penis was related to the urethral catheter in situ and urine flow during the first week after surgery:

“I felt pains in the penis when the urine is passing through the catheter, though I was urinating well and didn’t strain” – M11

“hmmm I really felt pain in the penis when I am urinating but it didn’t take long to relieve, just about a week” – M12

“It is really painful in the penis when at times clots are within and want to flow thus blocks the catheter ... you have been advised not to strain too” – M5

4.4.2 Quality of pain

Different descriptors were used by the participants to describe the post-prostate surgical pain. These included biting, throbbing, dull, burning and boiling.

The biting nature of the pain was therefore, described as unusual:

“it is biting pain, it quite unusual with me” – m6

Other participants expressed their post-operative pain as burning and dull, comparing it with pepper or chilli (vegetable). The burning pain was felt within the penis during urination after the catheter was removed:
Postoperative pain experience of men after urological surgery

“the pain was with ‘burning sensation’ and dull, hmmm for the surgery its feels like they have cut you” – m1

“hmmm I can’t really describe it, it burns. At first, it burns like pepper, now the inside the penis is no more burning.” - m7

“Inside the penis burns, it was like the small pepper ‘Mesiwa’ has been applied there” – M9

The burning nature of the post-operative pain was further related to the sore in the penis after the removal of catheter and alkaline nature (salty) of urine by a participant:

“the pain really burns, even when they removed the ‘rubber’ (catheter), hmmm and I urinate ‘stop’ it was not easy.” - m9

“... that day the blood clots blocked the urine and you know urine is also salty with sore also in my ‘penis’ so it was burning eeeh” – m12

However, other participants described the POP experienced as ‘boiling’ and ‘throb’. With the urge to urinate, the pain was felt deep within like a blister had formed within the penis:

“in fact, it was ‘boiling’ after 3 days before I felt the pain, especially when urine want come aah the way you feel it - m2

“It was really throbbing, not easy koraa” – m12

“the pain I was feeling was ‘throbbing’, when the urine want to come out ... and it stops then I feel that the site is ‘burning’ me”- m8

Familiar occurrences were also used to describe the pain. Some post-operative patients compared it to having being cut with a cutlass:

“the pains hmmm let’s take it like eeeh somebody cut you with cutlass ‘hehee’ that’s how you feel it, that’s how the pain is” – m2

“hmmm for the surgery its feels like they have cut you, with ‘burning sensation’ and dull” – m1

Similarly, another participant described the postoperative pain as similar to pain felt during instances when something hits your hand:

“oh, the pain it’s like something hits your hand and if the rubber is still there and you pass urine ‘aah my friend, the pains I used to feel eeeh’ is not easy”- m10
The participants were further asked to describe the pain in terms of ‘continuous or an intermittent’ experience. The pain usually ‘comes and stops’, it starts in the morning and subsides after a few minutes:

“oh, it’s comes and stops, oh it used to come in the morning time but when you take your medications the pains will reduce after few minutes” – m10

“oh it was ‘on and off’, I was asked to drink a lot of water.”- m7

“oooh like lets say about 20 minutes then it comes down”- m2

In contrast, the post-operative pain was described as continuous without a break by some participants. This was evident in the first few days after the surgery:

“yes, when they you are brought at first it is continuous for the first 4 days ‘I swear you will feel it’- m5

“truthfully it was really continuous pain and there was no break in the pain. I feel pain when the urine wants to flow, but after urinating the pain was worse” – m12.

Others noted that the intermittent pain resulted when the pain decreased with urine flow and sometimes after the urine leaked out. The leak resulted after the urine flow was obstructed:

“when the urine doesn’t flow then you are in pain but it leaks afterwards you are relieved”- m3

“oh for the pain when you are done urinating but you don’t feel the pain when you are not urinating’ - m9

“So the pain is recurrent as long as the urge to urinate is there and it happened for about 3 to 4 days” – m5

4.4.3 Intensity of pain

Participants described the severity of pain they experienced after the urological surgery. Some described the pain as very painful with the leaking of urine around the catheter:
“the surgery was very painful” - m5

“hmmm as for mine I don’t know how to describe it, it is very painful, very very really painful” - m9

“the urine that leaks around the catheter is very painful, apart from the lower abdominal pains, you feel pain when you try to urinate” - m3

In addition, other participants described it as very painful especially, related to the blood clots that blocked urine flow and pain at intravenous cannula site:

“I will say it is very painful, it will definitely worry you for example this cannula on my hand when it takes a while before they administer a drug it then it is very painful” – m11

“hmmm when you urinate and the blood is flowing is very painful. Other times the blood clots and blocks the urine in the catheter” – m12

The pain was also described by other participants as very severe. This was explained to be as a result of the sore in the penis after the surgery and warm urine:

“the pain was very severe” - m5

“it was very severe I bet you, so a certain doctor came and explained that I felt the pain because of the sore in the penis. Do you know that the urine is hot when coming out!” – m10

“It was quite severe when I was urinating” - m6

The pain was also described as worst and too much by some participants. However, minimal pain existed although there was bloody urine flow:

“The pain from the urine retention was worst though there was an incision that was sutured here (points to the lower abdomen)” - m3

“The pains is too much, I swear three (Fitzmaurice et al.) days after they make the surgery dea, I felt the pains oh, you cannot urinate” - m2

“hmmm not really, I didn’t feel much pain and the only thing that happened was that, in my urine there was a lot of blood” - m4

Some participants reported minimal incisional and lower abdominal pain in the first three to four (3-4) days postoperatively:
“But the first four (4) days apart from the lower abdominal pains that you feel, when you try to urinate, the urine that leaks around the catheter is very painful.” - m3

“After the operation, the pain too you won’t feel it until three (Fitzmaurice et al.) days after which you will be feeling the pains. If you are urinating as if there was a wound there, you will feel the pain paa” - m2

“ooh for the incisional pains dea I was feeling it slightly but by the 3rd day that the urine wasn’t flowing well and was leaking you really feel it before you are free” - m3

Other participants noted that the pain worsened with some activities or events such as;

coughing, urination and unguided movement of the catheter in situ:

“where the operation has been done, in fact I couldn’t cough, how to cough and then, even to clear your throat, anything that pushes the stomach up but it was obvious, hmmm” - m1

“As for me when they came to remove my catheter, truth be told I really felt the pain when I am urinating, now I could feel that only my lower abdomen is paining me.” - m8

“you see the catheter at the penis tip is very sensitive, when you trying to lift it and the thing moves or just rub the surface of the thigh, eeei. I don’t know whether they stitch the penis with the thing” - m1

The participants rated their post-operative pain between two to four (2 – 4) for low pain periods:

“the kind of pain, if I have to give at all it will be 2/10 because it wasn’t something that was disturbing me” - m4.

“oh let say 3 or 4- low pain period” - m5

However, as earlier stated most participants were in severe pain, thereby rating the pain between 7 and 9 for the high pain periods:

“I will give it between 7 and 8 for the severe pain period” - m5

“I chose exactly 8 for the high pain” - m8

“hmmm I pick 9 when I was in severe pain... like just as I am sitting here then I will pick about 3” - m9
Other participants viewed their pain as severest thus indicated ten (10) on the scale of 0 to 10. Though the pain was very severe, it sometimes reduced to low pain levels:

“Severe pains, oh that one I can take 10. Because of the pains they put water on me, I took drips more than 20” - m2

“severe pain I will pick 10, and 2 when the pain was down” - m12

“for severity I will take 10, ... low pain is will take 4 or 3” – m10

Some participants observed that though the pain went up and down (intermittent), the severity was not static. The pain was usually manageable and moderate:

“let’s put it at 5. The pain is mild, this is no pain, it just comes and then goes. After the medications let just say 5, let’s take it” - m1

“let say 6, sometimes it goes down too because I knew I could have felt worse maybe so bad that I may scream for help but I didn’t” - m6

“when it subsided after the doctor checked and said it was good, it was about 5” - m8

However, though the pain were intense; some participants said it was never assessed or enquired about during the post-operative admission period:

“no both nurses and doctors, nobody asked me about pain” - m4

“But the pains they will not ask you anything about it, that one dea is between you and your God. oh no, only they will say something about your file to see how things are going that’s all” - m2

“no doctor asked about my pain, they just ask how you were doing so you complain when you are in pain. No one asked” - m9

Additionally, the severe pain experienced was enquired by the doctors usually during their ward rounds; whereas the nurses basically serve medications and document:

“the doctor himself comes to ask about the severe pain not the nurses. The nurses just come to write and give medications and leave. They only ask whether you are okay ... and they write it and leave” - m8

Pain assessment is effective when a validated tool is used, it was noted that the numerical pain scale was once used by some medical students. Other participants said no assessment tool was ever used:
“I am trying to remember, some of the student nurses or doctors they asked me about this pain thing, they asked me to put it on a scale of 1-5 or something and then I said well I don’t know how severe pain can be so I cannot tell what level I should put it” - m6

“yeah, they do some of them do, they ask about my pain. But no, they don’t use anything, they ask a few times, not a regular thing” – m5

4.5 Cognitive dimension of pain

The theme of cognitive dimension constitutes the meaning the patients ascribed to the pain, their attitudes and beliefs, coping strategies, knowledge received concerning the pain and cognitive influence of the pain experience. Most participants expected the pain considering it as normal due to the incisional cut during the surgery. The pain was therefore not attributed to any spiritual attacks, worsening disease or failure of surgery. The participants believed God for relieve and healing. The knowledge of the pain was from the diverse information received before or during the pain experience which served as a source of relief to the participants. Limited information on pain was received prior to the surgery and afterwards. The cognitive influence of the pain experience focuses on the effects of the pain on individual thought processes. The findings revealed that the pain the patients experienced influenced their thinking thereby causing some to lose concentration or remain calm. The cognitive dimension also encompassed the coping measures the participants employed during the pain periods. These measures included ignoring the pain, enduring and hoping for a better outcome which were cognitive in nature. Others also engaged in behavioural strategies such as praying, reading books, listening to music and pacing about to help deal with their pain.

4.5.1 Meaning of pain

The sub-theme sought to explain and understand the meaning ascribed to the POP experienced by the participants after the urological surgery. The pain was
understood as normal and expected, related to the surgical procedure or incisional cut received:

“It’s just normal you know human being, I have been cut with the knife so normally there will be some pain, not any excruciating pain at all … It’s not like giving birth” - m1

“oooh, I felt the pain but it was normal from the operation after they cut me” - m3

“It is expected, specific to pain after the surgery … I didn’t know how long it was going to last because there is a mark (cut) that had to heal and I know that my bladder too was opened so they could remove something from it.” - m6

The post-operative pain was also linked to the reducing efficacy of pain medications administered during the surgical procedure or a probable complication of the surgery:

“Meaning the injection, I was given was gradually wearing off in my system so I can now feel the pains, though not much. They brought me to another room and hanged some medication on me for about one hour before I started feeling some pains.” - m8

“oh well I have never done an operation before so I thought it was a complication of the operation since this is the first, I have done. Hmmm so I thought that when you do operation you will never be the same as before” - m9

The pain felt during urination or defecation after the surgery was interpreted by the participants to occur because of straining:

“my understanding about the pain I was feeling is that you strain often when you go to the toilet because maybe it is a fresh wound after surgery” - m4

“yes, because if you want to urinate it as if you want to go to toilet at once. Hehee so you have to really strain and the gas comes out that all, it very painful” - m2

“It is really painful when you have been advised not to strain too, sometimes clots are within thus blocks the catheter. ‘aaah Jesus’, you feel like urinating and it is not flowing so you are forcing it” - m5

The pain felt during urination was also explained to occur because of the warmth or alkaline nature of the urine:

“actually, after the surgery I was in pain even when the urine passes through the catheter. But as long as you are human you will experience pain, especially, when the warm urine was to flow through the catheter” – m11
“That day the blood clots blocked the urine and you know urine is also salty with sore also in my ‘penis’ so it was burning eeei. So, I had to take taxi to Fete and they passed catheter for me and that was when I was discharged” – m12

4.5.2 Attitude and Beliefs

According to majority of the participants, the pain was not due to spiritual attacks even though attribution to spirituality were held and suggested by some relatives:

“a spiritual attack? No no since when the sickness started and they passed urethral catheter for me, here too they pass catheter oh. I was admitted into the ward and I saw a lot of people there too. So, knew I wasn’t alone.”- m8

“Even my family people were suggesting since it might be spiritual, as a ‘family head’, lets seek treatment somewhere else but all my life I don’t believe that. I just tell them it is just the condition and it might be my time” – m12

“Spiritual? Well, people have those ideas but I had a totally different point of view with spiritual things. I even tell myself that if I do wrong, I would not blame it on the devil but will blame it on myself … so I would not say that I am feeling pain because somebody do not want me to live”- m6

Likewise, the participants trusted the competence of healthcare service providers thus the pain was not perceived to result from surgical complications:

“I didn’t think something serious was happening, so, I saw the pain as normal … the reason why I say I don’t think like that is because I know that doctor, they say he is a specialist”- m2

“oh hmmm I hope this thing is done so I can go home that was what I was thinking. That’s all that comes to my mind. It never occurred to me at all that is an issue concerning the surgery”- m1

The participants who were Christians entrusted their hope in God throughout the surgical and post-operative periods. They believed God for their healing:

“No attack will succeed because I follow God’s laws, so His angels are protecting me … It wasn’t part of my thought koraa … I told you earlier that I was a police man but now I am a Christian, with God all things are possible”- m3

“eerrm yes you see before I had the problem, I had a prophesy on this on two occasions you see… You see if you have God, you have everything”- m5
Postoperative pain experience of men after urological surgery

“I just plead for God to heal me since he is the healer since I am really suffering with too much pain. I didn’t think of other things because I knew the pain is because of the condition” – m12

4.5.3 Knowledge of pain

This sub-theme focuses on the information the participants received on post-operative pain, the disease and surgery. Only one participant received information on pain and the disease prior to the surgery:

“yes, pain was mentioned. The doctor said one needs courage before doing the thing so in such cases I need patience with the sickness. Ooh, they said prostate has enlarged at my lower abdomen” - m8

However, based on the limited information received prior to surgery; some participants perceived that when the healthcare providers discusses the pain with them, they would be scared:

“no but as long as they cut you as a human you will feel pain, if they discuss pain then you will be scared then and the person might change his mind and not give the consent” – m11

“You know before the operation I was saying I was lectured on at the clinic so I knew something, they didn’t touch on pain at all, if you touch on pain there then the patient will run away, eeeh” – m1

“They didn’t go into details at all, he didn’t mention pain, they didn’t educate me... he gave three treatment options and each came at a price so if I want surgery then I chose” – M9

Notably, five (5) participants received some information on pain after the surgery. The information on pain and coping styles were mostly provided by doctors:

“eerhh Dr A. spoke to me about the pain, she advised me on deep breaths and sort of things you see, so I was able to cope with pain ... she sometimes come to me because we speak the same language so we talk about those things” - m5

“oh, that what I said I reported the pain to one of the doctors and he said it is normal”- m9

“yes, they said if I want to cough I should hold there, if not the stitches would some will get torn. Also, if I am doing something strenuous I should hold there to help relieve the pain” – m10
However, most participants were not educated on post-operative pain and condition by the health workers. Thus, depended on the bits of information received from other patients during the admission period:

“no one shared anything on the condition or medications ... sometimes by the time they come the pain might have subsided a bit and I have gone to sleep so they write the drug and put it down” - m8

“no they didn’t say anything, but rather when I complain about the pain they prescribe treatment for me” - m7

“I talked to people and they said oh it is like I woman who have gone to deliver so it takes like 3 to 6 months before you would yeah. I didn’t have any idea as to how long for it will take to heal I rationalised it” - m6

Information on details of the surgical procedure including the risk involved and activities to aid healing were received by participants. They expressed appreciation to the doctors who provided them with such information:

“Okay before, Dr O. explained the problem to me and advise surgery to take the stone that was in my bladder out. thus, they will have to cut me ... I was told there will be a risk.” - m3

“oh, more importantly if I want to say anything about the surgery, Dr Lamptey was all the time with me and he tried to go into details with me.” - m5

“Also, the doctor that operated on me was a female and she informed me afterwards that I should be exercising my legs on the bed ... I was informed to move and not to sleep at one place with my urine bowl which aids in the healing” – m10

The limited information on the surgical procedure was an issue of concern to some participants. However, participants felt that details of the surgery were needed to help clear their doubts:

“the doctor? Oh he did not say anything to me about the prostate surgery, because am not the only person we are there more than 200 for operation ... only said it’s a major surgery and will take about one and half hours, that is what he told me” - m2

“all I learnt are those things from my folder, if I hadn’t been that educated am not sure I would have been told. Rather, when I had signed the consent form for the surgery, then a young man asked me do I know what is going to happen to me and I said yes, an open prostatectomy and cysto – something” – m6
“Hmm, to be frank that is why a lot of people prefer to go to MM because they educate you. They have a video on what you need to eat or not, what you need to avoid such as smoking cigarette, alcohol, coffee etc. also what to eat such as fruits hehee but since I have been here for a week now, nothing as such has happened” - m3

Other participants related their ability to endure pain to the knowledge about pain gained from previous surgeries and early life experiences:

“Hmmm I have done so many surgeries oh... So, I just take them normal, so I am not afraid of surgeries at all. I have been cut here once and down there twice, the first one was the fistula and the second one was the varicolectomy” - m1

“after I gave birth when something is happening, I just keep it to myself” - m8

“yes, I am able to endure pain, hmm I can say my upbringing had an influence on it since between 12 to 25 years I travelled a lot trying to make money. But none worked even though I know a lot of places in Ghana so I returned home” - m12

Additionally, the participants expected education on issues such as coping strategies, specific prostate conditions and scientific management as against herbal treatment:

“what I would say is that when you are done with the ‘surgery’ then you teach the person what to do when in pain and coping strategies otherwise it is problem if you don’t teach the person” - m9

“You see when people are there who can cure certain diseases, and the public is also made aware and educated on the things that cause this prostate problem, and they will also go and test it” - m1

“... Because the herbal treatment will not help them unless the hospital which will help. The suffering I have been through hmmm, the doctors must tell people that” - m8

4.5.4 Cognitive Level of pain experience

The cognitive influence of the pain experience explains the effects of the post-operative pain on the individual’s thought processes. Some of the participants during the pain experience preferred to remain quiet and not disturbed:
“No no, I was quiet when the doctor refused the washout and also the man told me that he uses diapers when he experienced same” – m3.

“well my mind was just not really disturbed... but as human at times you will be wondering why the pain is not subsiding even though I wasn’t shouting or groaning but I was enduring the pain within” – m5

“So I know what God is capable of doing so I was calm.” -m4

Others mentioned that they were oblivious to their surroundings since they were not alert and drowsy immediately after surgery. This indirectly affected their participation in decision making:

“most of the time the things that they did koraa I wasn’t even aware I was sleeping all the time. they were taking care of me when I was brought in fresh, that one dea they were there,” – m1

“I didn’t see anything, even I came back I didn’t see anything it seems I was still drowsy even it was this woman ‘wife’ who said she came to see blood on me as for me I didn’t see” – m9

However, other participants acknowledged altered concentration though they were fully conscious during the pain periods. Thus, they focused mainly on the pain:

“in fact, I tried reading my bible but eerrh when I start I put it down because the pain supersedes it so I don’t have that sought of concentration for it ... before I started to cope with the situation and then discuss issues with the other inmates there”- m5

“eerrh you lose concentration when the pain is so severe your thinking is only directed solely on the pain so you tend to forget almost about everything ... and I am thinking of that severe pain you see, you become a bit absent minded, that how I see it”- m5

“Eeeh, you wouldn’t be your usual self because the thing is disturbing. If you are in pain, I don’t know how to describe it but it is something that will make you feel restless.” – m4

Other participants noted the pain to be disturbing which made the surgical experience very stressful. Thus, thoughts of death occurred amongst some participants during the post-operative pain periods:

“I even said it ‘plainly’ that if I knew that was how it was, I wouldn’t have gone to do it, I would have allowed it to hide it and kill me” - m9
“The operation was very hard; you wish if you die self it will be better. You see so after the operation I don’t think anything else again ... but through God everything went on successfully” - m2

“oh, I thought this is the end of my life but once God is around, he has taken care of me. Anything that will happen will happen” - m10

**4.5.5 Coping styles**

This sub-theme findings are presented under two main headings; cognitive and behavioural coping measures.

**4.5.6 Cognitive coping techniques**

These involved the psychological strategies employed by the participants to endure, ignore or distract themselves from the pain experienced. Some participants chose to endure with the pain without showing any outward signs:

“I try to keep it to myself unless it is unbearable before somebody will know, that is if it is beyond me” - m4

“I crack jokes with them even when I was in pain, I tried to contain it ... so I was able to cope with my situation. Everyone and their level of pain threshold” - m5

Other participants chose to ignore the post-operative pain or avoid thinking about it in other to cope with it. Instead, they trusted the health care providers of the care they received:

“I was not thinking of anything ha-ha, I knew the medication was taking care of the pains, me it’s like you see I knew that there will be pain anyway” - m1

“at the ward I try not to concentrate on the pain, so later I take my mind of it and think of the bible to help” - m7

“you see if you do that you become free, take your mind from it. Sometimes I sing but just that if you ‘leave or give yourself to the pain’ then you don’t think about it again” – m11

Additionally, other participants preferred distraction techniques such as; reading the bible, watching TV, writing of notes and listening to music/radio:
“... but you see what I normally do at night is that I have my phone radio on so I chose to focus on that other than think about the pain because it was quite severe ... since I was home one listen to radio, watch tv, read or get occupied one way or the other on the computer or with respect to making notes of the things that I have been on my mind that I want to keep record of” – m6

“because I don’t or didn’t feel much pain. I lie down, at times I sit on the bed, listen to music” – m4

“oh me if I am in pain, I use to take my bible to read so that I concentrate on the words I am reading so that I don’t think about the pain” – m10

However, other participants could not achieve the desired distraction even with the techniques mentioned above; due to the severity of the pain and the associated discomfort:

“eerrh I wasn’t even listening to music, I was just, I try to close my ears because the pain was too much” – m5

“sometimes when family is talking and I keep my mind on the conversation even though I will still be urinating frequently. You can’t even listen to music, I was lying down and turning much in bed” – m12

“no no nothing like that, our ward too there is nothing like that. Television, no no nothing like that in the ward – m2

4.5.7 Behavioural coping techniques:

The behavioural strategies are the physical activities done to cope with their pain; such as praying, sleeping and pacing about. However, some participants reduced their movement and preferred to lay still in bed:

“I try to remain station at one place, not to move so lying at my back all the time, that relieve me a lot from the pain even though I would have loved to turn, I sleep mostly on my side but because I was forced to ...” – m1

“when it happens, the pain is high I lie down quietly in bed and clench my teeth then it subsides” – m9

“Me when I am in pain, I lie down on my back; I either move sideways after a while to assist in urinating” – m10

Whereas, some chose to lie down and reduce activities to help relieve the pain, other participants said post-operative pain was relieved with sleep:
“To be frank with you, the pain after a while subsides on its own and when I feel severe pain n I doze off, by the time I wake up I am relieved” - m3

Other participants employed worship and singing to their supreme being during their post-operative pain periods:

“I was usually lying still, praying and singing” - m3

“Honestly speaking I tune myself so much so that anytime I was in pain like this I only pray over it” - m5

“Quietly, I don’t move any this thing, no no oh, I just lie on my bed just praying for God to intervene” - m2

“Hmm when the pain is very severe, am praying to my God to take good care of me” – m10

Non-strenuous ambulation or strolling when pain is unbearable was another strategy employed by participants to cope with their pain. These were however usually encouraged by the health workers:

“Yeah, after the third day the doctor will come to urge and advise you to try to start walking around bit by bit, gradually to help with the pain” - m5

“So far since I went back home, I have only been doing a little walking without straining, it really helps” - m6

“It the walking around that help take my mind off the pain, eeeh actually personally I don’t like sitting at a spot” - m9

A few had the habit of taking prescribed pain medications to achieve the needed relieve the POP, which usually becomes bearable:

“No, I usually didn’t do anything but if the medication is available, I take it to reduce the pain and I can sleep” – m10

“On admission I only report to them when I feel the pain, they prescribed drugs for me to take. I could not do anything else” - m6
4.6 Behavioural dimension of pain

The behavioural dimension under the multi-dimensional model of pain was derived as a theme in the study and 3 sub-themes emerged. The sub-themes focused on the apparent pain behaviours exhibited by the participants and verbal communication as well as other pain related symptoms. Diverse pain behaviours expressed by the participants included: groaning, clenching of teeth, sleeplessness, change of mood or grimace. Verbal communication related to the willingness to report pain to the healthcare providers. Some participants did not appreciate the severity of the pain to necessitate the calling of the providers, however they reported when directly asked. Those who willingly reported their pain believed that doing so will grant them access to some pain relieve interventions. Others were stoic or reported depending on the pain intensity. The pain associated symptoms explains the other symptoms that are evidently experienced by the participants as a direct result of the pain. The study revealed that the pain evidently affected their; sleep, walking/movement and strength to work.

4.6.1 Pain behaviours

Amongst, the diverse pain behaviours elicited, some participants preferred to accommodate their pains without shouting but clenched their teeth in response to the pain:

“when the urge to urinate comes again then you must ‘clench your teeth’ since I don’t want to shout or misbehave otherwise” - m3

“should I say I accommodate it, I don’t scream or shout but I just feel the pain but then I can’t tell anybody, I absorb it till there is an opportunity for me to voice it” - m6

“When you shout you feel the pain more, it becomes more severe so you need to contain the pain in a way” - m5
Other participants however groaned in pain during the post-operative periods, these they did to prevent screaming in order not to draw the attention of the healthcare providers:

“oh, for that I groan small small and I turn often in the bed so when the nurses see that I am suffering then they go and bring the doctor himself to come and see me.” - m8

“I cant scream but sometimes I groan in pain, I say ‘ajei, ajei’, I can’t scream so I cry within myself, do you understand” - m9

In addition, the findings indicated that some participants used gestures to express the presence of their pain such as using signals to communicate pain presence or held tightly to an object:

“I just hold the ‘gate’- door tight until the severe pain subsides, it is not easy” - m9

“oh, you will be making sign for them do this, do that for you. you are on admission so that one is only the nurses you will be talking to them,” - m2

“well if I am in pain you see that me I will just put my hand there at where they do the surgery, I press it then ... so I won’t make any sign to show that I am in pain” – m10

Some participants acknowledged the obvious change in their ‘jovial’ nature or facial countenance after the surgery which indicated the presence of pain. These they believed were easily recognised by the nurses:

“at first when I came to the ward I was playing with them before they took me to the theatre. So coming back, my playing with the nurses was not like that again; they knew that I am feeling pains. Hehee then they know that something is wrong with me. I am feeling pains so they don’t want to disturb me. Heheee” - m2

“My face really shows am in pain and also sometimes I tell them that ‘today it is really painful Doctor’. Sometimes too I endure it and I don’t talk about it please” – m12

“I was a bit lucky the nurses were around most of the times, I am very jovial so I tried to appeal to their conscience to come to my aid” - m5
4.6.2 Verbal communication of pain

Verbal expression of the participants included their willingness to report pain to the healthcare providers. Some participants did not draw the attention of healthcare providers because the pain was bearable and expected:

“I don’t know why I had it that way there wasn’t any pain for me to call a nurse or doctor to complain.” - m4

“I don’t remember calling any one, I always try to be myself ‘hahaa’ so I just stump my fist on the bed, lift myself and then turn.” - m1

“for me I didn’t experience severe pain to call any nurse because I understood that whether I call a nurse or not it will come” - m9

Other participants verbally expressed their pain but mostly in situations where their pain was specifically inquired by the healthcare providers especially doctors:

“I came after the surgery I was brought back to the ward, they will come to you and ask ‘are you in pain’ because as for the doctors they did well” - m5

“oh ok kk maybe in the mornings the doctors will come, you are having any pain and I will say no. for that one every morning when they come, are you okay, are you in pain, no no” - m1

“oh when they come to ask I inform them about it, they say it will stop soon” - m7

“oh yes, the doctors use to come around to come and ask that if anyone is in pain, the nurses also come around in the afternoon, night, every time they come around if you are in pain you tell them” – m10

However, some participants took advantage of the presence of the health providers to willingly report their pain. Thus, they were provided with the care and the pain relieve needed:

“oh if I see that I am too much in pain, I call for their help especially when the thing chokes with blood clots” - m5

“oh, when I am in pain, I call the doctors to come and see ... yes I call them, no I don’t shout. The person who would shout means theirs has exceeded the usual. I don’t shout.” - m8

“for me I will tell you that I am in pain at such and such place of my body so that if they have any painkiller, they can help me with it if not then I know how to accept it” – m11
In addition, a participant refused reporting the pain but chose to endure the pain due to clinicians’ attitudes, such as the nurses ignoring a previous verbal complaint:

“\textit{I say it but the nurses don’t mind me, I told one nurse who said since they have passed the catheter then I will pain me so I should inform the doctor so I try to endure it}” - m9

Furthermore, opportunities to report such pain episodes were indirectly provided by the caregivers during their rounds. The caregivers generally enquired about their health but not the pain specifically:

“\textit{when they come they ask about any problem and I say oh I don’t feel anything. They don’t ask about pain per say}” - m7

“\textit{Unless the doctors are on their rounds and also the nurses too in the evening, those coming ask you how are you feeling. They come in to ask how you are feeling but not after giving you drugs}.”-m4.

“\textit{they come to ask about any problem so if you are in pain you say it. They don’t ask specifically whether you are in pain but ask you for any problem, so if you too you have a problem and you won’t say then it is up to you}” – m11

4.6.3 Pain associated symptoms

Predominant amongst the symptoms associated with the post-operative pain was its effects on the participant’s sleep. Sleep patterns of most of the participants were disturbed by the post-operative pain. They cited the intermittent nature of the pain to cause sleep interruptions both during the day and night:

“\textit{I definitely become a little sleepless by day when I want to take a nap or sleep and then am feeling pain. If I don’t tell anybody, definitely am sleepless let’s call it more or less}”- m6

“\textit{I was sleep on my sides because of that I can’t sleep well, so when I want to stand up I have to move on my side to the edge of the bed first before I can stand up}”- m9

“\textit{yes, when the pain is severe it can really affect my sleep, for my sleep itself we 'loan' it to sleep but when you sleep a little then you take it like that but the pain was not continuous but it comes for a short while but you suffer}” – m11
Some participants also said the sleep was disturbed due to the discomfort associated with the indwelling catheter as well as the pain felt with the urge to urinate whilst asleep:

“I sleep but after a while around 1 or 2am I wake up and I don’t sleep again ... I laid in bed for a long time because of urine bags hanging around makes it uncomfortable to walk around” - m7

“hmmm as for sleep, when the thing is worrying you dea it will definitely affect your sleep, unless when the pain subsides a little ... when the urine wants to flow then the pain comes again.” - m8

“so, the pains affect me in my sleep when the urine wants to come ... also in my sleep you don’t feel pain but only when the urine wants to flow” - m9

Walking or ambulation after surgery was another area affected by the post-operative pain. Most of the participants had difficulty in ambulating during the first few days after the surgery, they were advised to take slow steps:

“Ooh sometimes even if you want to rise up and move it was difficult, it was a struggle. I try to walk around small ... so after the operation it was not easy, so when doctor came around and I was lying on my side and he asked me to turn and sleep well. ”- m3

“hmmm, after the operation it was difficult to walk fast. I was walking slowly because of the wound; I was advised to walk slowly but as you saw me earlier. I usually walk fast and my family complain sometimes when we are walking together” – m10

“you see the first 3 or 4 days; you can’t walk or don’t feel like going to toilet so at times you wet your bed. it is also an embarrassing situation as an adult not even a girl” - m5

Other participants argued that the POP affected their ability to turn in bed. It was difficult and uncomfortable with the urethral catheter in situ, which obstructed the participants, movement in bed:

“The only thing I realized I couldn’t do was to turn. It was very difficult for me to turn and all that especially with that catheter... On the Wednesday there was pain, that why I was saying I couldn’t shift and turn” - m1

“yes, you are not comfortable lying down since you have catheter in situ and pain since you have been cut and sutured” - m5
“When you also turn, the catheter also obstructs your movement, the urethral catheter is bigger than the normal size so I don’t comfortable until about one week” – m3

Subsequently, the pain was noted to have affected the participants’ interaction with their significant others and carrying out strenuous activities:

“Ooh to shout or call somebody like that, you can’t do it again because you are feeling pains. Or to converse or to laugh, you can’t do it … so my wife was with me, so anything I just say oh madam (signals), that means I want water” – m2

“yeah, I try to work if not I just stop and lie down and rest why because I was advised to take it slow. I am have still not gone back to work … but when I think I am strong enough or okay to work, I try to” – m6

The POP after urological surgery affected the breathing of the participants, mainly due to the pain and stress of frequent use of the washroom. It was perceived that the pain felt at the lower abdomen could interrupt deep breathing:

“Yes, it affects seriously your breathing which is on the surface because when you take in deep breath you feel it down there (points to lower abdomen)” – m5

“It really disturbed my breathing because my room has washroom in it so kept using the washroom frequently that I get tired and restless” – m12

“Breathing is even difficult and when I was discharged eeei stop, hmmm eeei when it happens like that as for me so I hold the door. Even at the ward when I have the urge to defecate and the urine flows, after the pain alone unless I hold the door” – m9

However, some participants said their sleep was intact and not distracted they anticipated:

“The pain wasn’t disturbing my sleep, they asked me not to stay on bed for too long so I was walking around.” – m4

“I could also sleep off but normally when I was home about 2-3 am I wake up to pray so same happened here too but before that I try to sleep. Oh, those times, even if I wake up, I still go back to sleep” – m3
4.7 Affective dimension of pain experience

The theme, affective dimension of pain experience focuses on the emotional responses elicited by the participants during the pain periods. These responses included; anxiety and fear, the feeling of suffering expressed and other mood reactions such as the feeling of sadness and depression mostly due to the pain associated with the urethral catheter. The participants related their anxiety and fears to the unknown outcome of surgery and pain. In relation to the immediate post-operative period, present and anticipated pain due to the urethral catheter in situ and discomfort during urination elicited a level of anxiety. The feeling of suffering was derived as a sub-theme. The suffering caused by the post-operative pain experience amongst the participants resulted in thoughts of death in some instances. Others also related the suffering to the pain and discomfort related to the urethral catheter and urination. Significant mood changes during the pain periods were acknowledged by the participants. These included: worry, calmness, crying/sadness and despair.

4.7.1 Anxiety and Fear

This sub-theme focused on the feeling of anxiety and fear elicited during the POP periods. The anxiety elicited was linked to the pain in the urethra and discomfort with the urethral catheter in situ:

“I was quite anxious I also heard about the removal of my catheter, because the next patient said the nurse forced his catheter when it was been removed, so he bled” - m3

“eerrm I was anxious to urinate but I was not angry because I had already tuned my mind already” - m5

“I was anxious when the urine flow is ending, that is the issue when I feel the urge. It not easy I have really suffered” - m9

Other participants in the study also expressed anxiety, related to unknown outcome of surgery. The possible risk of developing surgical complication resulting in death was a concern:
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“I wasn’t sad but I was anxious because right from the beginning when I was being brought here my senior brother and wife didn’t like it. They said sometimes when you are brought for operation, sometimes it is not done well and you end up dying” – m8

“yes, I was really scared and anxious after the operation I didn’t know what was happening because the blood was coming out from the wound merges with the urine flowing out too” – m10

Furthermore, the expression of fear was explained to be as a result of the pain experienced and burning sensation during urination:

“that’s why when I came home, I was a bit afraid because I am somebody who would like to see that medicine they use to clean the wound, I want to feel it there all the time” – m1

“apart from anxiety I was scared because the thing the way that it was paining and burning me, it made me scared.” – m8

“Sometimes when I look at both ends and I see the tubes it was scary. At first it was about 3 or 4 (catheters) so quite uncomfortable to carry around, hmmm” – m7

4.7.2 Suffering

The sub-theme, feeling of suffering under the affective dimension of the post-operative pain experience was expressed by some participants. The suffering as expressed during the post-operative period was related to the pain some participants experienced:

“I really suffered, all those on admission after the surgery are all going through a lot eeei Jesus Christ. I have already read it on the internet that prostatectomy is a very painful surgery and indeed It was painful” – m5

“eeei for the pain, I have really suffered, as for that I have really suffered after the operation” – m9

“I suffered oh, hehee the way I was feeling the pains, I tell God that even if I die it will be far better than that. Hmm” – m2

Additionally, other participants also expressed suffering during the post-operative period but related it to the pain and discomfort associated with the urethral catheter and urination:
“also, when you suffering upon urination because the whole place has been punctured and you have to hehe you see, sore here, sore there” - m5

“since I was really suffering with too much pain, I just pleaded for God to heal me since he is the healer. It didn’t think of other things because I knew the pain is because of the condition” – m12

4.7.3 Changes in mood

This sub-theme dwells on the other changes in participant’s mood during the POP periods. The participants were worried and disturbed with the pain experience. This was related to the healthcare workers attitude and the anticipated pain:

“I was a little disturb about the fact that the lady ignored and went and slept till the following morning when I complained she said she didn’t hear, I said it was one of those things” - m6

“eeei I was worried, I am to endure this pain even with the urine bag in your pocket, when it is full and you open the bottom to allow all the urine to flow out then the pains come back again” - m9

However, other participants had a calm disposition since they understood the reason why they were experiencing post-operative pain. This was also because they had experienced worst pain prior to the surgery:

“after the surgery, I was calm and it wasn’t disturbing at all. I took it to be something normal just because eerrrm they were a fresh wound” - m4

“I was calm, eerrh is just that you have to live with the pain, you can’t do anything about it” - m5

“I did not react after the operation, the pain was not that bad since I have really cried a lot before the surgery, I have really suffered.” - m7

Despair was also exhibited in speech when one’s existence on earth is questioned during the post-operative pain episodes. Anger was however, not evident or expressed during the period:

“I was never angry but sometimes in pain I even regret ever coming to earth, I ask myself ‘what I came to this earth to do’” – m12
4.8 Sociocultural dimension of pain experience

This theme focused on two (2) sub-themes, which are the participant’s cultural background and belief system; and Family dynamics and roles. Most of the participants were brought up in typical Ghanaian village where pain management focused mainly on traditional herbal treatment. Family unity helped individuals to accept and handle pain, they presented certain views based on their culture. Such as; fear instilled in a child from infancy, adultery committed in the past can result in death during the pain periods. Also, it was believed that sounding negative in symptoms communication to doctors might irritate and discourage the caregivers.

Family dynamics and roles as a sub-theme, focused on the participant’s pain perception and expression in relation to their upbringing; as well as interaction with others. Most participants tend to endure pain and keep their experiences to themselves, sometimes based on their strict upbringing. Some however, believed it is an individual conviction not as a result of their upbringing, knowledge from previous surgeries or experiences. They acknowledged that during the post-operative pain periods; their family caregivers and other post-operative patients were very supportive and tended to appreciate and understand their pain experience.

4.8.1 Cultural background and belief system

This revealed the belief system and cultural background of the participants and its influence on their pain experience. Most of the participants had the typical Ghanaian traditional/ village experience where management of pain focused entirely on traditional herbal treatment:

“My maternal grandmother was well vexed in herbs, especially for petty treatment for cuts, burns etc … Well in the village there was no hospital, I was born and trained in a typical Ghanaian village” - m3
“previously one thing is that my grandfather was an herbalist and when we were young when they prepare foods, we had some herbs that were put inside... In the morning when we wake up, in the olden days they boil the herbs-leaves and they gave us that as tea instead” - m7

Other participants also believed an individual was able to accept and handle pain based on the unity in the family and upbringing which encouraged children to partake in house chores:

“Normally, we have gone through doing chores which today they call child labour... parents of course, let say mother and grandmother help you to relieve pain or overcome it over time” - m6

“how does the family/society see and manage pain? - they try to unite and support financially or materially, also they send you to the hospital or do herbal too” – m11

However, some held views that influenced their perception and reactions to life, these views include; children had fear as a phenomenon instilled in them infancy and also a participant believed that, presenting negative complains whilst on admission discourage clinicians in providing quality care:

“hmmm for someone right from childhood has fear. There is something called ‘fear’. So, there is fear about doing something that the father or mother will beat me or you will get hurt and shout in pain. But as for me I did not witness any” - m8

“Hmmm even that day, I said that if you are a man and you do bad things especially you have been sleeping with your someone wife, like I will die, I swear” - m2

“My father told me something before he died in 1981... He said when you are on admission and always have complains doing doctors rounds, you will be left to die. You know you are not fine but you say I am very fine. Then they tend to give you more medication and you recover” – m3

4.8.2 Family dynamics/ roles

This sub-theme focused on the individual’s pain perception and expression as associated with the family relations influence in their life. Most participants endured
the pain and kept their experiences to themselves. This was perceived as a personal habit and not related to their family influence:

“eeeh it has nothing to do with culture or my upbringing. It seems am someone who tries to keep things within himself so that why I say when the thing has become unbearable that is where you will know that something is happening to me.” - m4

“I can really endure pain, for someone when they get a cut and feel the pain then they start shouting as for me I am not like that ‘shakes head’. When I was admitted those also there when they are in pain then they begin to shout, I didn’t do that at all” - m8

“oh I am someone who can really endure pain, so if you don’t study me you won’t see but then it is really painful. I need to endure without talking, you only meet me sitting” - m9

According to few participants, they learnt to endure pain and avoid expressing it based on their strict upbringing from a disciplined parent:

“We don’t talk about pain, I am a disciplinary father and my father too was so if he says yes you can’t say no. I followed my dad not like the rest of my brothers” – m3

“my late dad was military personnel so you can imagine. Military personnel at the same time a head teacher and catechist. If you are able to stay with him for a lengthy period of time then you are a champion” – m5

Differences in the expression of emotions and pain among siblings were noted. A few of the participants saw their birth dynamics e.g. an only male or having 10 male siblings, as an avenue of which they learnt to endure pain:

“Heheee I was born into a family of 11, 10 boys and a lady … So, all my life, boys, boys so you have to maintain your posture and composure as a man. Whether you are feeling the pain, you have to ‘squeeze your face’” – m1

“Hmmm some of my siblings if anything happens to them that is painful the way they express theirs is different how I express mine. A little thing with them then everybody will know but mine was different.” – m4

“I didn’t really express it because I don’t have any one to talk to and its my individual thing not my community. I was born an only male to my mother and I strive to make it in life early enough to care for my mum” – m12
Two (2) participants were of the view that growing up they learnt to be silent on disturbing issues but rather confronted it. Thus, the same habit was employed in their post-operative pain expression:

“hmm me for instance it was something easy, I just keep quite, I keep quite I don’t talk about it. If I know it is going to disturb me, I just walk out and when I come back it is gone”- m1

“not the way they treated me, but we were told to keep mute on issues because it is not everything you see and talk about it” – m10

However, some participants believed that regardless of the differences in their response to pain and expression of other emotions, they felt and understood the pain of their family members:

“But surprisingly, when something is happening to someone in the family, I rather stand behind feeling for the person but not for myself when I am in pain”- m7

“yes very much but I feel for others in the house than myself … I will take it as such because I am one who doesn’t like to have things easy I prefer to suffer to gain … I have been through a lot” – m11

The participants recognized that their family care givers were very supportive during the pain periods. Thus, they felt and understood their pain even much more than expected:

“oh when my family come and see me in pain then they become very sad like my in-law has always been around when I was sick”- m7

“eerrm let me talk about my cousin who has been very helpful to me through this surgery and also my wife, they have both helped me a lot, he has gone through different types of surgery, so he understands it”- m5

“They were rather feeling for me more than I felt for myself, because if am doing something they say ‘take it easy’ but I don’t feel anything. They will be far away looking at me and feeling bad’- m4

However, based on the participant's diverse views on pain expression and management, they encouraged their own family to promptly seek treatment and express their pain generally:
“I think it depends on the situation, at times it is manageable and also pain has different categories; there is a difference with the one which a child has done wrong and has been punished, but this one is quite a different ball game altogether” - m5

“pain, oh definitely if you are feeling pain why won’t you say it ... if I think it is beyond me, I tell you go to the hospital yeah or may be let say for starters go and get paracetamol assuming I am prescribing something” - m6

“my family if I hear any small pain then with the ‘quickness of alacrity’ I will rush them immediately” - m1

4.9 Pain Management

Management of the POP after the urological surgery was identified as an additional theme from the study. Amongst the relieve interventions received by the participants were pharmacological and non-pharmacological management. The pharmacological treatment comprised the hospital prescribed medications and some over-the-counter drugs. The prescribed medications received included intravenous infusions and oral medications. However, some participants mentioned the intravenous paracetamol as the main analgesic received in addition to other medications during the immediate post-operative period. The healthcare givers also anticipated the pain and made provisions for the medications prior to the surgery. Over the counter drugs or self-prescribed medications were used by two (2) participants upon discharge, based on advice from family members. The study revealed that most participants had no idea of other non-pharmacological interventions, therefore, alleged that none was received. However, others made mentioned of interventions such as body massage and bladder washout. The medications were not entirely effective in relieving the pain as the pain was either completely or partially relieved.
4.9.1 Pharmacological management

The sub-theme comprised of the hospital prescribed medications and the over-the-counter drugs used by the participants. Intravenous pain medications were initially prescribed by the doctors at the hospital during the post-operative period. However, the specific names of the drugs could not be named:

“They gave me drip for a while and then later the one I swallow, so I even have left over drip with me here. After the surgery, this is the drugs they gave me” – m4

“They put some drips on me after the surgery but I can’t tell which ones they were” – m9

“For that I can’t mention the names but they gave me a lot of IVs at first after the op, the way this my hand has suffered. later they gave both the IVs and oral” – m10

However, some participants mentioned the intravenous paracetamol as the main analgesic received during the immediate post-operative period:

“So they took the liquid paracetamol and put it into the cannula ... yes, apart from that I was made to buy the tramadol. But other drug I have forgotten the name, the tablet is orange plus paracetamol tabs” – m5

“I was given the liquid paracetamol; I can’t really mention the names but I was asked not to drink water so everything is pass through the ‘cannula’. Also, BP drugs and antibiotics” – m3

“I remember I was given paracetamol infusion even there was so many I bought I sent 4 back home then they moved from the IVs to the tablets till I was discharged”– m6

The participants believed the clinicians made provisions for analgesics and other medications prior to the surgery, based on anticipated post-operative pain:

“They know the type of drugs to prescribe for you even before the procedure, usually because they have been doing it often. So as soon as you are done, they start giving you” – m1

“I remember I told the doctor in there is a lady Dr Monnie and she prescribed some drugs for me for a week. I have taken it for a week and the pain has reduced but it is not gone totally”– m6
Self-prescribed medications or over-the-counter drugs were accessed by some participants after discharge. Ibuprofen was taken for an acute pain whilst another took ‘capsules’ given to him by his sister:

“I remember at home I was feeling pain again, waist pain or something and a visitor told me to go and buy ibuprofen, yeah well I went and bought it ... I think it is 10 in pack so after two days the pain was gone and I stopped”- m6

“no, they didn’t give me medicine so when I went home then my big sister who has also gone for an operation before gave me some medicine to go and buy. So, where I go the medicine is with me ’brings out a sachet of capsules from his pocket’ - m8

4.9.2 Non-Pharmacologic management

It focused on the existence and use of non-pharmacological pain management during the post-operative period. A participant received body massage and range of motion exercises as a form of pain relieve. Another participant massaged himself as a personal initiative:

“no not at all, I was rather massaging myself because of the chest and side pains after lying on the mattress”- m1

“oh, I was told to exercise my body for me to heal quick, sometimes the nurses come to massage my feet and hands before the doctors will come” – m10

Subsequently, most participants in severe pain experienced relieve with interventions such as; bladder washout and bladder irrigation with fluid:

“You see they did irrigation with the 5000mls of fluid and gave me pain killer- liquid paracetamol. That eases the pain a bit and then goes up again”- m5

“They came to do washout for me when it was blocked with blood clots and it was down for me about 3 or 4 times after I complained of pain where the catheter was. The blocked tube is very painful”- m6

“So, they selected a nurse who stood by me at night and takes care of me from night till morning because some ‘dirty’ blood can block it. He will then wash it out, and the severe pain will reduce” - m8
However, most of the participants did not have an idea of non-pharmacological pain management options, thus assumed none was received:

“Is there something else? No, just the medications. Nothing was done.” - m4

“I don’t even know such things (other interventions) are available, none was done’ - m3

“ooh no, they didn’t do anything just the ‘pills’ – medication” - m8

4.9.3 Effect of pharmacological management

The clinical effects of the pain management options used was derived as a sub-theme from the study findings. A few of the participants who received the analgesics administered revealed that, the medications were not effective in relieving the post-operative pain:

“hmmm, I think after the surgery the drugs that were given eeeh when I take them I don’t feel anything special” - m4

“the drugs weren’t so good but it didn’t worry me too” - m7

“all the medications they gave me could not deal with the pain. It wasn’t easy oh, this operation and they can’t give you any strong pain killer to ‘beat’- relieve the pain - m9

Other participants acknowledged that the treatment received was very effective in reducing the post-operative pain:

“no, because the medications they gave me it works for me because it reduces the pain often everyday … oh all the drugs they are good hmmm, they treated me fine. It works for me; the pain goes down when I take it” – m10

“As I am sitting here now, I would say the medications worked because as the pains was earlier it’s not same.” -m3

‘you see if you complain, they will be changing the medication for you, that’s what they use to do. They give you medicine if you use this one and still the pain is coming, they will change the medication for you until you down before they know that now you are ok’” - m2

The post-operative pain was however relieved partially amongst most of the participants after they received the prescribed analgesics:
“oh, for the drug I can’t say it didn’t work, since the pain reduces a bit after I am given the drug if not all the pain” – m11

“so, after the selected nurse does the bladder wash out, and the severe pain will reduce slightly”– m8

“hmmm well that is eeeh okay let say first the pain reduced a bit after I take the medications and when they did the washout it also reduced”–m6

However, two (2) participants noted that the medication they were prescribed made them experience good relieve mostly, usually during the day:

“hmmm I call the doctors and they come to ask about the pain and give me some pills and the pain subsides when I take it. Then I can also sleep, if they don’t give you the pills then you are worrying yourself” – m8

“hmm there is no any other drugs that you take that will relieve the pains … the doctor prescribed medication- tramadol but when I take it I only feel its effect during the day not the night, due to the numerous times I urinate” – m12

All the participants had varied effects of the pain medications and acknowledged that no pain reassessment after medication administration was ever done:

“no, they come in to ask how you are feeling but not after giving you drugs. Unless the doctors are on their rounds and also the nurses too in the evening, those coming ask you how are you feeling”–m4.

“no they don’t ask about the pain again when they give you the drugs, oh you see when you become quiet they can see that you have become quiet”– m7

“I didn’t even know they have to assess my pain again afterwards, no one did”– m5

4.10 Summary of findings

This study recruited 12 participants for the interviews, six (6) major themes emerged from the interview data. The first five (5) themes were consistent with the multidimensional model of cancer pain by Ahles and Martin (1992). These are: sensory dimension, cognitive dimension, behavioural dimension, affective dimension and sociocultural dimension. Pain management as a last theme, was also derived from the data.
The post-operative pain characteristics involved the location, quality and intensity of the pain. The pain was situated in the urethra, lower abdomen and at the incisional site. Participants described their pain as *boiling, burning, biting and throbbing*. Others used analogues such as *being cut with a sharp object or knife*. The pain was usually ‘on and off’ and described as: ‘very severe’, ‘too much’ and ‘very painful’ in terms of severity. The study participants expected the POP after surgery, thus described the pain as *normal and not related to any failure of surgery, other complication or spiritual attacks*. Few participants received limited information on pain prior and after the surgery. The participants believed God for healing, however they employed cognitive and behavioural pain coping strategies. The intense pain caused an alteration in the participant’s concentration and attention.

The POP was expressed through verbal and pain behaviours such as: *clenching of teeth, groaning and grimace*. Most participants were unwilling to report their pain to the healthcare providers, with fear of being seen as whining and conflicting with the healthcare providers. Sleep was predominantly affected by the POP felt after the urological surgery. The affective dimension focused on the emotional responses elicited by the participants after surgery. *Anxiety, fear and the feeling of suffering* were associated with to intense pain felt during urination and catheter discomfort. The participants acknowledged the support of their family members and other patients in the ward during the post-operative period.

Additional findings that emerged were the pharmacological and non-pharmacological pain management interventions that were employed during the pain period. The pain was managed by prescribed pharmacological medications, mainly intravenous acetaminophen and later oral analgesics. Non-pharmacological management of the pain was usage was limited, and scarcely employed. The
pharmacological management received was not entirely effective as the pain was either completely or partially relieved.
CHAPTER FIVE

DISCUSSION

5.0 Introduction

This chapter presents a discussion on the key findings of the study as linked to related existing literature, the discussion is presented around the major themes of the study. The study purposed to explore the post-operative pain (POP) experiences of men after urological surgery. The major themes of the study include: sensory dimension, cognitive dimension, behavioural dimension, affective dimension, sociocultural dimension and pain management. The chapter presentation began with the demographic characteristics followed by the emerging themes guided by the multidimensional model of (cancer) pain derived by Ahles and Martin (1992).

5.1 Demographic data of the study participants

All the participants involved in the study went through a major prostate uro-surgery; that is transurethral resection of the prostate (TUR-P), open prostatectomy or radical prostatectomy. The ages of the twelve participants interviewed for the study ranged from 59 to 82 years, with 70 years as the average age. Majority of the participants were elderly and retired thus, less productive, though some took part time jobs to keep busy with only four (4) currently in active service. They were all married except three (3) who had lost their spouses prior to the surgery. All the participants have had formal education with varied educational levels attained. They spoke English, Twi, Fante, Ga, Larteh and Ewe. The participants were all Ghanaians and Christians who lived in the Accra metropolis, Central, Eastern, Western and Volta regions. Also, the participants have had the symptoms of the prostate condition within
a duration of few months to 15 years. Their conditions included enlarged prostate and prostate cancer, with some having kidney or bladder stones as comorbidity.

Prostate conditions such as benign prostatic hyperplasia (BPH) and prostate cancer occur among men. They are known to mostly affect elderly men over the age of 60 years and currently common with the aging population in most countries (Alaali & Irwin, 2015; Fitzmaurice et al., 2015). This explains the elderly-ages of the participants who are less productive with enough time to undergo the surgery – TURP and radical prostatectomy (Alaali & Irwin, 2015). The participants basically associated their POP with the surgery and related issues, which might have been influenced by their formal education earlier received. Thus, participants understanding and management of their pain can be linked to some level of formal education serving as a prerequisite (Baker et al., 2014). The participants’ diverse places of residency and languages spoken are possible as they are predominantly from cities not distant from the Accra metropolis. Also, the Korle-Bu Teaching Hospital serves as a tertiary institution which receives referrals from all over the country (KBTH, 2018). Christianity remains the largest religious domination in southern Ghana with about 71.2% as at 2010 estimate (Christianity, 2011, Ghana Demographic Profile, 2018). All the participants being Christians and family men, could possibly explains their attitude towards the pain experience, pain expression and support of their relatives. Most participants mentioned their trust and hope in God during the post-operative period.

5.2 Sensory dimension of Post-operative pain

The theme, sensory dimension comprises of the: location, quality and the intensity of the post-operative pain. These help to guard the health workers on the cause, type and management of the pain during pain assessment. Persistent acute POP
occurring after surgery is linked with the risk of emerging chronic pain (Mazilu et al., 2018). In this study, the locations identified were lower abdomen, in the penis and the incisional site. However, flank and chest pains were also reported by a participant. The participants experienced pain at single or multiple sites, they pain expression focused on the most painful or disabling sites instead of the several areas involved. Consistently, in their study among post-operative patients in Ghana, the participants located pain at their abdomen, wound (incisional site) and side of the wound (Aziato & Adejumo, 2015b). Other studies in urological surgery also noted POP at the incisional site, lower abdomen and in the urethra with issues of bloody urine or bladder spasms. The location of pain typically depended on the type of urological surgery the participants had such as TURP or radical prostatectomy (Alaali & Irwin, 2015; Joshi et al., 2015; Merkel et al., 2015). Based on this finding, understanding the locations of the pain as related to the surgery will guide the healthcare provider on pain assessment and subsequent management. Healthcare providers must also acknowledge other locations expressed by the patient during pain assessment.

Chapman (2011) noted that the quality of pain involves pain descriptors the patients’ use in describing their pain, it informs the physician on the type of pain and the apt intervention. The participants in this study described their pain as boiling, burning, throbbing, biting and dull. Similarly, Aziato and Adejumo (2015b) study participants described their POP as burning and pulling. Pain descriptors are usually linked to the type of pain involved such as nociceptive or neuropathic, though this study did not specify the type of pain. Previous studies revealed neuropathic pain caused by nerve injury results in aching, stabbing, shooting, tingling, sharp pain while nociceptive pain (somatic or visceral) also results in aching, cramping, burning,
throbbing, pressure, tender and sharp pains (Chin et al., 2014; Ripamonti et al., 2012). However, incisional pain is suggested to be nociceptive in nature in uro-surgery (Merkel et al., 2015). Consequently, clinicians should encourage patients to express their pain with descriptors to help direct their focus on the source and type of pain involved. This will further inform the appropriate control measure. Additionally, in this study the pain was further compared to painful occurrences such as a cut with a cutlass or when something hit your hand. The participants preferred describing their pain with such analogies, probably due to difficulty in understanding and use of the pain descriptors (Bender et al., 2008). This finding then encourages the healthcare providers managing POP among urological patients to take into consideration those clients who prefer to describe the pain with such analogues. Efforts must be made to also understand such analogues resulting from individual differences in pain perception (Bender et al., 2008; Merkel et al., 2015).

Most participants in this study revealed that POP after major prostate uro-surgery was predominantly intermittent (‘on and off’) in nature. None the less, a few participants suggested that it was continuous. The pain usually subsides after a few minutes with or without any efforts. This finding is consistent with previous studies among post-operative participants, who described their pain as intermittent (Aziato & Adejumo, 2015b; Chin et al., 2014). The POP in the urethra usually increases within the first week post-surgery, and related also to the urethral catheter in-situ and urine. This was in contrast with the incisional and abdominal pains in this study which subsides after some days. Aloweni et al. (2008) greed that the pain increases upon urinating first time after the urethral catheter removal. Also, the use of indwelling urethral catheter served as a source of pain, and the risk of urinary incontinence posed a challenge in managing POP (Kong et al., 2017). The resection of the prostate leaves
a wound within the urethra which elicits pain when it comes into contact with the urethral catheter and urine (Kong et al., 2017; Merkel et al., 2015). The differences in pain progressions in either the penis/urethra or incisional area following few days post-surgery must be noted and included in assessment. This is to lower the risk of developing complications of acute pain such as persistent surgical pain, reduced immunity and delayed wound healing (Chou et al., 2016; Mazilu et al., 2018).

Okimasa et al. (2016) agreed that assessment of pain measures such as severity of the experience is a crucial component of pain management. It directs the caregivers on the choice of treatment, urgency of care and reassessment schedules. The participants described the pain as very painful, worst, severe and too much. Most participants experienced moderate to severe pain; thus, they chose the figure 8 to 10 on a scale of 0 to 10 where 0 showed the absence of pain and 10 showed the most severe pain. This agrees with previous studies which observed that moderate to severe pain is experienced by 50-90% of patients postoperatively. The pain is high during first few days after surgery which interferes with care activities (Aziato & Adejumo, 2015b; Chou et al., 2016; Fatma & Serife, 2017; Lindberg et al., 2013). Likewise, moderate to severe pain is experienced after prostate-urological surgery (Joshi et al., 2015). The severest pain is however linked, to the pain in the penis when urinating, leaking of urine and also when blood clots block the catheter. Ensuing neuropathic and nociceptive responses after the resection of the prostate may possibly be the reason for the high intensity of the pain (Merkel et al., 2015).

Though, few participants experience much pain as they anticipated, they were in low pain during the post-operative period and just talked of bloody urine. Similarly, Aziato and Adejumo (2015b) concluded that some post-operative patients did not experience much pain owing to the fact that worst pain was present pre-operatively.
Low pain levels were also recorded in a study during post-TURP as experienced by some of this study participants (Aloweni et al., 2008). Consistently, though, there was an increase in the POP during attempt to pass urine after the urethral catheter has been removed. Concerns on bleeding, bloody urine and TURP syndrome are present in uro-surgery (Alaali & Irwin, 2015), therefore, surgical diversity in pain intensity should be appreciated by the healthcare givers, incorporating periods of increase and concerns related to the specific surgery.

Pain relief was mostly assured in this study after taking pain medications prescribed, rest and leaking out of the urine, which occurs when blood clots blocks the catheter and urine flow. Others preferred to engage in less strenuous activities such as turning in bed or slow walks to help reduce the pain. This finding was related to findings of previous studies, though walking can also worsen the pain in some instances. Pain worsens due to the increase pressure on the incisional site and lower abdomen (Aziato & Adejumo, 2015b; Chin et al., 2014). However, the participants’ pain worsened with some level of activities such as; coughing, unguided movement of the catheter stitched to the penis and urinating with the catheter in situ or removed. This current assertion agrees with the findings in previous studies, this highlights the subjective nature of pain among the participants (Jebakani, Sethu, Pahinian, Tipandjan, & Devi, 2015; McPherson et al., 2014). Thus, in identifying the effective pain control measures for individual patients, caregivers are to focus on thorough assessments of patients, identifying deficiencies in personal care activities (Aziato & Adejumo, 2015b).

The participants subsequently revealed that caregivers did not assess their pain or the practice is limited in few cases. However, verbal reports were made when their health was enquired by caregivers. The self-report of the patient is an utmost reliable
indicator of pain (Francis & Fitzpatrick, 2013). The use of validated pain assessment
tools was absent in most instances of caregiver’s pain assessments. Inconsistent to
previous studies, the use of standard pain tools was limited among nurses in most
health areas (Francis & Fitzpatrick, 2013; Xavier et al., 2018). However, the
subjectivity of pain experience and lack of consensus on the approved pain
assessment guideline in various facilities poses a challenge in post-operative pain
assessment and management (Bach et al., 2018; Fatma & Serife, 2017). Though the
NRS is most preferred, pain scores are valid or reliable when the suitable tool is
administered during a particular pain experience ensuring optimum pain relieve
(Aziato et al., 2015; Wikstrom et al., 2016). Arguably, the challenges in the
caregiver’s pain assessments may be related to patients’ emotional and verbal
expressions including pain ratings and time, clinical competence of the healthcare
workers and continuity in care. Communication skills and working conditions also
have an impact on performance of pain assessment, this must be given reconsideration
in effective pain care (Bach et al., 2018; Wikstrom et al., 2016).

Additionally, in this study, the nurses were however, noted to infer the pain
experienced by the participants during their shifts rounds by their non-verbal cues
expressed. Similarly, incognizant nursing practice often lack systematic pain
assessment and evaluation, the nurses usually use their own senses and patient’s body
language to infer pain. The nurses determine patient’s pain using his/her activity level
such as their ability to move, sleep or breathe well (Bach et al., 2018; Fatma & Serife,
2017). These acts might result in differences in pain perception and interpretation,
which does not encourage the patients to explain their pain experience (Medico et al.,
2017). Effective care involves patient partnership and participation in decision
making and providing views on their pain experience and effectiveness of the various treatment modalities (Bach et al., 2018).

5.3 Cognitive dimension of Pain

Most participants in this study revealed that they expected the POP, considering it as normal due to the incision made during the surgery. The severe pain felt was related to the warm urine flowing over the fresh wound within urethra, also the blood clots that block the catheter. The pain was therefore, not attributed to any spiritual attacks, worsening disease or surgery failure. The idea that the presence of POP is normal and expected can be linked to the participants’ understanding of the surgical procedures. In accordance to Ahles and Martin (1992), the participants’ understanding of pain is usually based on an individual beliefs, not in relation to pain–related health education received prior or after the surgery. This personal conviction is seen to have been influenced by the participants’ exposure to formal education (Baker et al., 2014). Thus, formal education appears to serve as precondition in participants’ appreciation of the pain experienced and the care received. Thus, misconceptions and traditional beliefs are dwelled on by patients when appreciating the causes of the pain they experience, which serve as barrier to effective pain control (Baker et al., 2014; Cogan et al., 2014; Turner et al., 2017).

The knowledge of the pain basically dwell on the diverse information received during the pain experience which served as a source of relief to the participants. In this study, only one (1) out of twelve participants received pre-surgery information on pain, though others revealed post-surgery education was provided, of which the doctors played a key role. Consistently, adequate pre-surgery information which enhances POP experience is noted to be limited, it leaves the patients with unanswered questions which they strive to answer (Mavridou et al., 2017). Usually,
the answers received through unconventional means may result in ill pain experience and management. Pre-operation education on pain results in positive satisfaction with treatment and less anxiety, thus, POP reduces remarkably with limited opioid consumption (Borracci et al., 2016; Mavridou et al., 2017). In this study, most participants had concern regarding post-surgery education on pain. Mavridou et al. (2017) noted that even after discharged, patients seek information basically on pain management even among those who have prior exposure to surgery. The desire to be educated is fuelled by their unfamiliarity with the POP duration and intensity, as well as available options and risks of pain control. Usually, the intermittent low and severe urine-related ‘sharp’ burn seem new to the patients and cause undue post-surgery anxiety (Francis & Fitzpatrick, 2013). Avenues provided by the health workers to the patients to present personal concerns and discuss information about POP is usually brief and scarce (White & Kehlet, 2010). Post-operative education on pain must also be encouraged, as the focus is on other aspects of the surgery not pain. This might limit the patient’s pain expression, assessment and increase the risk of persistent post-operative pain. Coping and early mobilization after surgery and discharge are also positively affected (Francis & Fitzpatrick, 2013; Hartwig, 2016; White & Kehlet, 2010).

Health workers providing the needed information constituted mainly the doctors which revealed a deficiency among nurses who spend the most time with the patients. Aloweni et al. (2008) sought to encourage nurses’ participation in educating patients undergoing surgery, as the provision of essential information tend to allay anxiety and result in positive patients’ attitudes (Francis & Fitzpatrick, 2013). Patients’ involvement in care interventions and cooperation with assessment and use of analgesic is diminished with poor healthcare providers’ attitude towards the pain
experience (Francis & Fitzpatrick, 2013). Adequate information and pre-operative nursing pain intervention implemented influence the positive attitude that establishes a sense of trustworthiness and security (Francis & Fitzpatrick, 2013; Mavridou et al., 2017). However, the participants believed and trusted God for total healing, though hopeful of pain relieve with time. The total reliance on God for relief and healing in the participants’ speech can be related to their religious orientation as Christians. Therefore, they totally relied on God for intervention and appeared incapable of helping themselves.

The coping measures the participants employed during the pain periods to adapt included, ignoring the pain, enduring and hoping for a better outcome which were cognitive in nature. Others also engaged in behavioural strategies such as praying, reading books, listening to music and pacing about to help deal with their pain. Fear and anxiety response induced by surgery can be managed by relaxation and distraction techniques such as ignoring the pain (Nelson et al., 2017). Additionally, incorporating listening to music as a treatment option is very necessary to allay anxiety (Nelson et al., 2017; Ozer et al., 2013). Health workers should assess client and observe their coping strategies since adverse effects of medications can alter their attention, emotions and psychomotor activities. These can be mistaken for mood disorders or un-cooperating on the side of the patient affecting the healing process (Adams et al., 2010).

The cognitive influence of the pain experience focuses on the influence on participant’s thought processes. This study showed that the pain experience caused some participants to lose concentration or remain calm to endure the pain, whilst others had their thoughts distracted by the intense POP felt. Likewise, cognition level during the POP period can be influenced by the adverse effects of the opioid analgesic
used with the tendency of causing neuropathic persistent pain (Artus et al., 2014). Similarly, treatment effects and cognitive factors such as expectancy, appraisal and attention negatively affect quality of life (Peters, 2015). A previous study revealed that persistent and intense physical pain undesirably affects an individual’s thought precisely less abstract thinking (Gunnarsson & Agerström, 2018). Thereby, urging the patient to be focused and dedicated in seeking effective pain control. However, other studies also revealed that lower self-control with depression can be linked in such severe and persistent pain periods interfering with daily activities. This can lead to withdrawn mood and calmness as stated by some of the study participants (Artus et al., 2014; Gunnarsson & Agerström, 2018; Machado-Alba et al., 2013). Health workers are therefore, entreated to be conscious of the disabling effects of poorly managed severe and persistent pain on the cognition of their patients (Adams et al., 2010; Gunnarsson & Agerström, 2018). Also, relationship between the pain, anxiety, cognitive factors and attitude towards the surgery and post-operative experience must be established and managed appropriately.

5.4 Behavioural dimension of Pain

Pain expression goes beyond verbal communication of the pain but also exhibition of pain behaviours which suggests presence of pain. The study revealed the participants exhibited diverse behaviours such as clenching the teeth, groaning, sleeplessness, using hands to guard the lower abdomen and changed their jovial mood or facial countenance. This current finding is consistent with previous studies that revealed that patients preferred exhibiting pain behaviours using mainly body language such as agony suggestive sounds rather than communicating pain with words (Aziato & Adejumo, 2015b; Bach et al., 2018; Stanley & Chinwe, 2016). Different behaviours were noted to have been exhibited by the individual participants
since POP is basically a subjective experience due to trauma to nerves and tissues (Bach et al., 2018). However, though it is usually not the participants’ intention of expressing their pain episode, these changes in body language especially, tend to expose their pain and influence their pain experience. In other previous studies, pain related behaviours were experienced among patients during their pain experience.

However, the communication of a pain episode with all these diverse behaviours by the patients are either exhibited knowingly or not (Aziato & Adejumo, 2015b; Romano et al., 2016; Roulin & Ramelet, 2014). Also, some patients limit their expression due to fear of being seen as whining or conflicting with their caregivers (Eriksson et al., 2016). Based on these findings, caregivers can discern patient’s pain through their behaviour and expressions which in most cases greatly influence pain assessment. However, these pain behaviours are sometimes reinforced by attention received, social support or avoidance of unpleasant tasks (Bach et al., 2018; Wikstrom et al., 2016). Therefore, healthcare providers, especially, nurses should employ behavioural observational method in assessing patient’s pain behaviours (Bach et al., 2018). Healthcare providers must also note that intake of medication is linked to communication which is also greatly influenced by the patient’s pain behaviours as propounded in the multidimensional pain model by Ahles and Martin (1992). Thus, in an attempt to reduce pain and behaviour re-enforcers’, prescribed analgesics schedules with fixed time must be adhered to by the caregivers. Adequate POP relief is critical in minimizing the probability of complications (Francis & Fitzpatrick, 2013).

Verbal communication dwells on the verbal expression of the pain and the willingness to do so to the healthcare providers. The standard for superior healthcare system is patient centered communication. Thus, communication of pain is mainly
depended on by healthcare providers in ensuring adequate pain assessment and control. However, the communication of pain encompasses the existence, location, quality, intensity and assessments of the pain. In this study, most participants were not willing to verbally express their pain though others did. They stressed that the pain was manageable thus, did not need to call for attention. However, others reported their pain with intention to receive some pain relieve when either directly asked to or not by the healthcare providers. Some participants also either endured or remained calm until the pain is unbearable before disclosing it. Wikstrom et al. (2016) revealed in their study that the quality of pain assessment is usually affected to the patient’s ability to communicate. It is sometimes reduced by negative clinicians’ attitudes and knowledge, medications side-effects, family relations and associated symptoms (Eriksson et al., 2016; Stanley & Chinwe, 2016). Thus, therapeutic communication is improved when the pain is well-described and appropriate pain assessment tool used (Eriksson et al., 2016). Inconsistent with the finding of this study, some patient’s unwillingness to report their pain to the nurses even though they were in pain was also noted by Bach et al. (2018). Therefore, in ensuring ultimate pain assessment and control, nurses must fully explore the patients’ possible fears, individual pain tolerance and behaviours during their pain experience (Bach et al., 2018; Wikstrom et al., 2016).

Some participants were unwilling to report their pain during the experience so as not to disturb their relatives and also, with the view that the clinicians knew the procedure is painful thus must anticipate their pain. In accordance to this finding, it is to prevent disturbing the relatives of their pain episode thereby, raising a lot of concerns amongst the family especially in the Ghanaian community (Acheampong, 2016). However, others were discouraged from reporting the pain since the
healthcare providers were reluctant in attending to their calls and care as well as ineffective pain control measures. However, Aziato and Adejumo (2015b) suggested that participants could be discouraged to report their pain again due to the healthcare provider’s inability to attend to or control the pain. Furthermore, it is important an attempt is made to improve the expressing of pain among patients by coaching them on interactive communication of pain related concerns (Street et al., 2010). Positive patient-provider communication results in reduced levels of pain interference and intensity, which is related to high self-efficacy levels needed in patients to reduce their pain and improve their overall functioning. it is improved through patient-centered communication based on expression of patients’ goals and needs, and identifying their personal feelings, concerns and emotions (Ruben et al., 2017).

The pain associated symptoms indirectly affect the general pain experience of the clients after urological surgery. The POP evidently affected the participants’ sleep, walking/ movement, fatigue and strength to work in this study. Predominant amongst them was the influence on the participant’s sleep, as their sleep is usually disturbed due to the presence of the pain due to intense pain in the penis when there is the urge to urinate. Previous studies also suggested interrupted sleep as a main pain-associated symptom (Doghramji, 2012; Krause & Stanford, 2011; Lindberg et al., 2013; Mercadante et al., 2015). Thus, these symptoms tend to negatively impact on the participants service experience and the quality of life (Doghramji, 2012). The interrupted sleep due to the pain can worsen their pain experience and results in complications affecting their productivity (Alsaadi et al., 2014; Astrup et al., 2015; Lavigne et al., 2011). Additionally, patients’ pain communication and participation in postoperative interventions is sometimes lessened by the POP associated symptoms and opioid medications effects such as fatigue and drowsiness (Francis & Fitzpatrick,
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Thus, based on this finding it is suggested that in managing POP, observation of pain associated symptoms or reduced behaviours must be incorporated in pain assessment (Francis & Fitzpatrick, 2013). Also, nurses must observe and evaluate pain control behaviours such as analgesic use, positioning, distraction and applying pressure to the painful area. This should be incorporated in patient-centered pain management (Bach et al., 2018; Francis & Fitzpatrick, 2013).

5.5 Affective dimension of pain experience

Post-operative pain (POP) as a multidimensional experience occurs as a result of trauma to the tissue, can result in physical, cognitive and emotional discomfort (Parsons et al., 2013). Result of changes due to the pain influences the outcome of a surgery and uncontrolled POP may cause sleep distraction and psychological problems such as anxiety and depression (Parsons et al., 2013). In this study, the participants reported emotional responses which included; anxiety and fear, suffering, worry, being disturbed, calmness, crying/ sadness and despair in their speech. The anxiety and fear due to the unknown cause of the postoperative pain, unknown outcome of the surgery and complications. In accordance to previous studies, anxiety and fear exists during the pain periods, mostly intensified when pain is not well managed (Alaali & Irwin, 2015; Davies et al., 2013; Dunham et al., 2013; Pastore et al., 2017; Peters, 2015). However, in the study during the immediate POP periods, present and anticipated pain due to the urethral catheter in situ, blocked tube and discomfort during urination elicited a high level of anxiety and depression. Similarly, urological surgical outcomes such as pain, urinary discomfort and incontinence and sexuality changes assures depression and anxiety, mostly related to the treatment (Pastore et al., 2017).
Generally, most patients’ pain experience is usually associated with depression and anxiety as well as other emotional responses such as worry, fear and suffering (Davies et al., 2013; Dunham et al., 2013; Schaller, Larsson, Lindblad, & Liedberg, 2015). However, other studies contradicted this finding suggesting that anxiety and depression though link to pain, rather increase the pain and associated symptoms (Honerlaw, Rumble, Rose, Coe, & S., 2016; Williams, Pasco, Jacka, Dodd, & Berk, 2012). Although, the levels of psychological responses may not always be profound in the patients’ pain experiences (Alaali & Irwin, 2015), however its presence should be acknowledged and managed. Pastore et al. (2017) noted that an increased in patient’s anxiety usually results in heightened surgical risk as shown in the patient’s high dose sedation medicine, high blood pressure and pulse rate. Also, anxiety and depression may in turn cause the pain among the patients (Honerlaw et al., 2016; Williams et al., 2012). Thus, psychological disorders tend to worsen the pain and affect the patient’s quality of life if needed attention is not given to understand the relation with the pain experience. Incorporation of components of the emotional response in pain assessment will improve pain management (Machado-Alba et al., 2013).

Subsequently, the feeling of suffering and sadness were expressed which mostly related to the pain and discomfort associated with the urethral catheter. This finding is in contrast with Pastore et al. (2017) study which revealed that psychological suffering in urological surgeries is linked to the participants’ sex, tumour type and surgical approach. The feeling of suffering and despair due to the POP experience resulted in death thoughts and regret of existence among some participants due to the severe pain felt after the surgery. In accordance, pain experience is usually noted to elicit fear and suffering responses (Dunham et al., 2013; Schaller et al., 2015); however, pain-related fear relates to both current pain and
anxiety resulting in increased perception of pain discomfort (Peters, 2015). Based on the diverse emotional responses elicited due to the POP and associated symptoms, effective pain management and treatment adherence can be achieved with individualized assessment of patient’s emotional state (Honerlaw et al., 2016).

The fear of pain and pain anxiety plays a significant role in increasing stress response, the development of chronic pain and disability (Hasenbring, Chehadi, Titze, & Kreddig, 2014; Linton & Shaw, 2011; Selimen & Andsoy, 2011). Likewise, the feeling of fear and other negative emotions are not limited to pain or condition but also to apparent side effects of the pain-relieving interventions and treatments (Crombez et al., 2013; Dunham et al., 2013). Thus, the reduction of pain-related emotional responses might improve healing and patient satisfaction (Selimen & Andsoy, 2011). Thus, mechanisms of motivation to regulate emotions and associative learning must be integrated to understand individual pain responses (Hasenbring et al., 2014).

5.6 Sociocultural dimension of pain experiences

Based on the model underpinning this study by Ahles and Martin (1992), it establishes that there are ethnic-based individual responses to pain, as pain tends to affect one’s social relationships and quality of life. Similarly, in a previous ethnographic study by Aziato and Adejumo (2015b) among Ghanaian surgical patients revealed that pain response and experience is usually influenced by their socio-cultural context. In this study, most participants had the typical Ghanaian rural upbringing where traditional herbal treatment dominated pain management options. Individuals in the family were usually encouraged to accept and handle pain based on the various cultural views instilled into them during their upbringing. King-Okoye et al. (2017) noted that differences in pain experience and response are based on one’s
understanding of indications of diseases across communities and nations. This is influenced by the level of healthcare services available (King-Okoye et al., 2017). Also, pain expression among individuals are influenced by such views as such one noted that the family believed that one must sound positive in presenting complaints to a doctor, so not to irritate and discourage them in providing the care.

In accordance, other studies view the interpersonal relationship between patients and clinical staff as well as spirituality and purpose of life as factors that can affect one’s cultural/ ethnic influence on their pain beliefs and health seeking behaviour (Aziato & Adejumo, 2014c, 2015b; King-Okoye et al., 2017; Kwok & Bhuvanakrishna, 2014; Schreiber, 2014). Thus, measures implemented to improve ones’ quality of life may not be limited to the ensuring a decline in pain interference and intensity; and pain education. Because other factors involved other than pain may influence ones’ consciousness of quality of life.

Other participants preferred to endure pain rather than report, keeping it to themselves. This, they believed is an individual conviction not necessarily as a result of their upbringing. The view that as adults they should be able to control their reactions to pain and not alert others was held by most participants. Based on personal inclinations some patients preferred to endure their pain experiences and probably report when its severe (Aziato & Adejumo, 2015b) as opposed to the cultural background of the patient (Kwok & Bhuvanakrishna, 2014). The unwillingness to self-report the pain experience can be linked to the perception of healthcare workers indifference to their symptom experience, leading to delays in management of pain and conditions (Aziato & Adejumo, 2015b; King-Okoye et al., 2017; Kwok & Bhuvanakrishna, 2014). However, the strict mostly military-like and Christian-leaders upbringing that some were subjected to mostly by their ‘paternal figures’ played a
major role in their views of life as well as their reactions towards pain. Likewise, the difficult childhood or young adulthood in trying to make ends meet also influence their perceptions concerning life.

Similarly, Aziato and Adejumo (2015b) concluded that social environment and individual somewhat strict or difficult upbringing usually led to their ability to bear pain, thereby influencing their pain response. They explained these situations entreated them to present themselves as men who are fearless in all situations, regardless of the pain involved. Factors such as; family predetermined concepts of pain, culture and family socialisation of an individual during the formative years or adulthood influences their concepts of pain, pain expressions and management (Aziato & Adejumo, 2014c, 2015b; Pasero & McCaffery, 2011). These factors also influence their concepts of masculinity and views of trust in the health care system (King-Okoye et al., 2017). Thus, in ensuring effective pain assessment and management in the provision of optimum health service, definite culturally suitable pain assessment tools must be employed (Aziato & Adejumo, 2015b).

Additionally, the experience derived from previous exposure to any form of surgical intervention as well as severe pre-operative pain experiences might have altered their POP expression and response. This finding is incognisant with the view that knowledge from earlier pain experiences, feelings, thoughts, sensations and negative attitudes of clinician regarding pain management can influence the patients’ personal inclination towards pain response (Aziato & Adejumo, 2014c; Issahaku, 2018). Understanding the various factors that can influence a patient’s response to a pain experience, clinicians must therefore consciously educate their clients in reporting their pain. Health caregivers especially were noted in a study in Ghana to usually avoid enquiring about their patients’ pain experience but preferred to dwell on
the pain behaviours the patients exhibited (Aziato & Adejumo, 2014b). However, pain expressions involving orientations with sociocultural-influences must be encouraged among the patients to help in clarifying misconceptions (Aziato & Adejumo, 2015b).

Relations and family caregivers support were available for all participants, they appreciated the supportive role played by their significant others specifically; personal care, finances and guidance during the condition and pain periods. The participants strongly believed that the relations tend to understand and are affected by their pain. In Africa, family forms a critical part of an individual life, providing support when one is ill especially the post-operative period. Depending on the surgical outcome, the family members exhibit emotional reactions influenced by the emotional ties shared (Aziato & Adejumo, 2014c). In accordance, Kwok and Bhuvanakrishna (2014) noted family caregivers perspectives and network of lay referrals affects patient’s decisions on health-seeking and understanding of conditions. Also, this study noted some participants got support and advises from the other patients in the ward in handling their pain experience. Similarly, in other studies noted that social interactions with either other patients or relatives influence the patient’s response to pain (Aziato & Adejumo, 2014c; King-Okoye et al., 2017; Kwok & Bhuvanakrishna, 2014). However, Concerns shared and decisions made in seeking help affects the interpretation of their symptoms and the trusting relationship built among the members. Thus, clinicians must appreciate the patient’s psychosocial context in providing distinctive patient-centered approach to pain management.

5.7 Pain- Relieving interventions

Pain is known to be a subjective experience, which can be related to the actual tissue damage among surgical patients that resulted from the surgical incision (Aziato & Adejumo, 2015b; Francis & Fitzpatrick, 2013). Inadequate treatment of severe
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Acute POP has an effect on most systems of the human body, thus, effective pain management is a priority when optimal clinician-patient relationship and improved hospital service experience is expected (Aziato & Adejumo, 2015b; Bach et al., 2018; Choi et al., 2017; Lokapur et al., 2018; Ozer et al., 2013). In this study, pain management comprised of pharmacological and non-pharmacological treatment depending on the cause of the pain (Pasero & McCaffery, 2011). During the POP periods most participants received intravenous infusions and later oral medications though most could not name it. Some were of the view that the healthcare givers anticipated the POP and made prior provision for medications, amongst which intravenous paracetamol was the main analgesic used. Previous study noted the use of oral or intravenous acetaminophen (paracetamol) and NSAIDs in urological (Fatma & Serife, 2017). This was however, in addition to other oral medications and antibiotics. This finding symbolizes the limited participation of the participants in the decision making of their pain management options, as ignorance of the medications names and their role was paramount in their speech. However, previous studies entreat effective and appropriate management of POP to client-centered focusing on the surgical procedure done and diverse multimodal analgesic regimens, prioritizing active client participation in decision making (Chou et al., 2016; Francis & Fitzpatrick, 2013; Lokapur et al., 2018).

Notably, the use of over-the-counter (OTC) drugs or self-prescribed medications were very relatively low during the POP period except some participants (two) who indulge after discharge. This act was prompted by the advice given by close relatives based on their past knowledge of pain and surgical experience. However, they complained of inadequate analgesic during the discharge periods as most of them were out of medications though experiencing pain thereby resorting to
the OTC drugs. Consistently, Chou et al. (2016) reported that fewer than 50% of patients reported adequate pain relief though majority experienced POP. Similarly, even in urological setting some caregivers especially, were of the erroneous view that clients will experience some extent of pain regardless of the pain relieve administered, thus, must learn to endure (Francis & Fitzpatrick, 2013). Based on this finding, pain assessment and management though complex due to its subjective nature, can be improved by incorporating appropriate analgesic route, timing and dosage. Current approaches such as the World Health Organisation’s analgesic ladder involving multimodal analgesia and patient-controlled analgesia (PCA) must be adhered to, creating opportunities for patient’s self-administration of pain treatment (Aziato & Adejumo, 2015b; Francis & Fitzpatrick, 2013).

The study revealed that most of the participants did not have an idea of other interventions, therefore, said none was received. Other participants however, mentioned interventions such as body massage and bladder washout though not regular. In accordance, in a document/paper on clinical trials, introduction of massage therapy into pain-relieving interventions among urological surgery patients was highly recommended (clinical trials, 2014). This was based on the view that POP recovery in urology can be a distressing and anxiety-provoking process. However, in study most participants expected and requested for only pain medications since they hardly witnessed other non-pharmacological interventions done for others in the unit. Previous studies suggested that though pain interventions may differ based on the pain location, cause and kind, patients usually adapt to their hospital unit’s pain management practice thereby, requesting for the same intervention always (Francis & Fitzpatrick, 2013; Pasero & McCaffery, 2011).
Most participants complained of moderate to severe pain often the acute periods stating that the medications were not entirely effective in relieving the pain as their pain was either not completely relieved or to an extent. However, studies have shown that the global goal of optimal POP management is for the patient’s pain to be relieved throughout the 24-hour period (Aziato & Adejumo, 2015b; Fatma & Serife, 2017). Therefore, analgesic interventions appropriate for acute POP is needed in reducing the unnecessary pain experienced by the patients. Nurses should endeavour to administered around-the-clock analgesics to their patients (Aziato & Adejumo, 2015b).

Additionally, the study participants expressed concerns on the lack of education on POP experience, poor assessment and nurses unconcerned attitudes towards their pain. In cognisance, previous studies noted the limited education on pain concepts received by the patients, limited knowledge on pain and negative attitudes of the clinicians especially, nurses during the pain periods (Aziato & Adejumo, 2015b; Fatma & Serife, 2017; Francis & Fitzpatrick, 2013; Lokapur et al., 2018). This study also noted the apparent non-existence of regular pain reassessment as evaluation of therapeutic treatment effect as revealed by other studies (Bach et al., 2018; Chou et al., 2016; Fatma & Serife, 2017). Noting the effects of these deficiencies on effective pain expression among the patients and management, positive therapeutic communication between health workers and patients must be encouraged (Francis & Fitzpatrick, 2013). However, routine actions, unexpressed health beliefs, hospital culture and context, fear of addiction, disbelief of patient’s pain report and attitudes and knowledge of clinicians influences therapeutic pain interventions (Aziato & Adejumo, 2015b; Aziato et al., 2016; Bach et al., 2018). Basically, the use of standard context-appropriate guidelines, in-service refresher programmes for healthcare
workers and education of clients and appreciations of their concerns were highlighted in achieving optimal pain assessment and control (Fatma & Serife, 2017).

5.8 Evaluation of Model

The conceptual framework underpinning this study is the multidimensional model of cancer pain (Ahles & Martin, 1992). This study employed five (5) of six (6) main dimensions of the model which includes: sensory, cognitive, behavioural, affective and sociocultural dimensions; excluding the physiological dimension. However, the model was found to be appropriate in exploring the post-operative pain experiences of men after urological surgery. Additionally, pain management emerged as a theme from the data and was explored. The location, quality and intensity of the post-operative pain as revealed in this study was consistent with the sub-dimensions of the sensory dimension of pain in the model. The pain location was specific to type of urological surgery done and described as moderate to severe in most cases. Pain descriptors were used by the participants and the pain was predominantly ‘on & off’; these findings were supported by the model.

The cognitive dimension of the model constituted the meaning of the pain, knowledge about the pain, attitude and beliefs, coping measures and the cognition level of the post-operative patient. All the subthemes were in support of the model; however, coping strategies were described as cognitive and behavioural. Post-operative pain was either verbally communicated or expressed by pain behaviours. These subthemes as well as pain-associated symptoms constituted the behavioural dimension. Affective dimension in the model was described as emotional responses elicited by the pain experience, which included depression, anger, anxiety, fear and suffering. These was also elicited in this study in support of the model.
Influence of the cultural background, the family dynamics and caregiver perspective were the sub-themes of the socio-cultural dimension described in the model; as supported in this study. Most participants had the typical Ghanaian rural upbringing where traditional herbal treatment dominated pain management options. Individuals were encouraged to accept and manage pain based on the various cultural and family views instilled into them. Other participant’s unwillingness to report their pain was based on personal preferences; influenced by previous pain experience and attitudes of clinicians. However, family-caregivers support were available for all participants; and other patients in the ward provided bits of information as support. However, though the caregivers’ perspective was not explored in detail in this study

In line with the emerging theme of pain management, most of the participants during the POP periods received intravenous infusions and subsequent oral medications. Non-pharmacological management was limited and irregular. The pain medications were noted to be relatively effective and pain reassessment was basically non-existent. The model adopted was limited in exploring the pain control interventions available in POP management. Suggestion for model modification include the incorporation of pain management approaches as a main construct, since it is influenced by all the multi-dimensions of the model. This is significant in understanding and effectively controlling the post-operative patient’s pain experience.
CHAPTER SIX

SUMMARY, IMPLICATIONS, LIMITATIONS, CONCLUSIONS AND RECOMMENDATIONS

6.0 Introduction

This chapter presents a summary of the study key findings, implications on nursing education, practice, policy and avenues for further research. It further discusses the study limitations, conclusions and recommendations based on the study.

6.1 Summary of the study

This study employed the exploratory descriptive design under the qualitative approach to explore the post-operative pain experiences of men after urological surgery at the Korle-Bu Teaching Hospital. The Genito-urinary (G) ward and surgical-urology clinic of the hospital served as the recruitment outlet for the study participants. The study specifically explored the post-operative pain experience characteristics, cognitive influence on the POP experience, the patients’ behavioural and affective response to the POP, also described the sociocultural influence on POP experiences and the pain-relieving interventions employed during the POP periods. The study was guided by the adapted form of the multidimensional model of cancer pain by Ahles and Martin (1992) as the conceptual framework. Review of literature was specifically based on the chosen main constructs of the guiding model and the objectives of the study. Twelve (12) participants were purposively recruited for the study and interviewed one-on-one with a semi-structured in their most comfortable language – English, Twi and Fante. The interviews were audiotaped with the
participants’ consent, transcribed verbatim whilst analysing concurrently using the thematic content analysis.

The study participant’s POP experiences were characterised into six (6) major themes, which included: sensory dimension, cognitive dimension, behavioural dimension, affective dimension, sociocultural dimension and pain management of the POP. Subsequently, two (2) to four (4) sub-themes emerged from each main theme in this study. The last main theme, pain management was not in consonant with the main constructs of the multidimensional model. The study findings however revealed that most were consistent with existing literature. The locations of the POP were basically felt in the lower abdomen and the penis as well as the incisional site. The participants varied their description of the pain, as some used pain descriptors such as boiling, burning, throbbing, biting and dull. Also, others preferred to relate their POP to painful occurrences (analogies) such as pain felt after a knife cut. Moderate to severe pain intensities were felt by majority of the participants, who rated their pain at seven (7) to 10 on a scale of minimum zero (0) to maximum 10. A few participants said their pain was mild and tolerable. The POP varied over time and mostly ‘on and off’ throughout the day, though others thought the pain in the urethra to be continuous. The increase in the pain severity of the participants was related to factors such as; cough, unguided movement of the catheter, presence or removal of indwelling urethral catheter, urge to or the act of urination. The POP in the urethra was also thought to worsen a few days after surgery, whilst the incisional pain subsides with days.

Most participants understood the POP as normal as they related it to the surgical incision, believing in God and hoping for a better surgical outcome. However, the severe pain felt was usually related to the urine flow over the fresh
wound within urethra, and also the blood clots that block the intra urethral catheter. The pain was therefore not attributed to any spiritual attacks, worsening disease or surgery failure. The participants had limited knowledge on their pain as none except one had information on pain prior to the surgery. Others also received bits of information regarding the surgical procedure by some doctors. The POP influences their thought processes, thus some lost concentration whilst others preferred to remain calm and endure the pain. The participants employed coping measures that include; ignoring the pain, enduring and hoping for a better outcome which were cognitive in nature. Others used behavioural strategies such as praying, reading books, listening to music and pacing about in dealing with the pain.

Pain behaviours such as clenching of teeth, groaning, sleeplessness and grimace constituted the non-verbal expression of the POP experience. Some participants were reluctant to report their pain because the pain was tolerable, not enquired of and they expected the clinicians to know they were in pain. Others reported with the aim of getting access to some pain relieving interventions. The pain evidently affected their sleep, walk/ambulation, urine-leaking discomfort and strength to work or carry out activities. Sleep distraction was noted to be predominant. Emotional responses associated with the POP experience were the feeling of anxiety, fear, suffering, sadness/ depression, calmness, worry and despair in speech. Thoughts of death and questioning of one’s existence were entertained. These emotions were usually associated with: the unknown cause of pain and outcome of the surgery, present and anticipated pain and discomfort associated with the urethral catheter during the urge or act of urination.

Sociocultural influences on pain concepts was evident in this study, as views from one’s culture/ ethnicity and immediate environment had an influence on their
pain perception and expression. Individual’s pain expression was noted to be influenced by the views of relatives and other participants. Reluctance in reporting pain but endure it was seen to be a personal conviction, though in some stances might have been influenced by their strict upbringing, difficult life led, previous experiences with pain and healthcare givers. They acknowledged the support, understanding and guidance of their relatives during the post-operative periods. Most participants expressed satisfaction with the healthcare service received.

Pharmacological relief received were mainly prescribed intravenous (IV) and oral analgesics, of which IV paracetamol was often used. Over-the-counter drugs were scarcely used, except two (2) participants who gave: influence of relative and absence of prescribed analgesics as the reason for their use. However, knowledge and practice of non-pharmacological pain interventions was limited among the participants. Conversely, other participants revealed interventions received such as body massage and bladder washout though not regular. The treatments were noted to relieve the pain in most instances but the effect was to an extent.

6.2 Implications

In ensuring improvement in the post-operative pain experiences of men after urological surgery, implications related to the findings of this study will be addressed. Categories under which the implications will be discussed are nursing practice, management, research and education as well as health policy.

6.2.1 Implications on nursing and clinical practice

The study findings revealed POP after the urological surgery to be acute and subjective in nature, with the pain sited at the incisional site, lower abdomen and the severest in the penis. The pain had varied quality and intensities as well as worsening
and relieving factors. The pain though described as either intermittent (on & off) or continuous in some instances will require variations in the management. Additionally, the cognitive and sociocultural influences; also, the emotional and behavioural responses of the participant’s POP experiences were explored. The pain-relieving intervention comprising the both pharmacological and non-pharmacological were also identified.

Based on these findings, healthcare providers especially, nurses who usually spend more hours with the patients are entreated to incorporate the knowledge of the characteristics of the pain into the assessment and reassessment of the pain towards the achievement of optimal pain management. The use of appropriate pain tools/scales are important in assessing of the patient-centered post-operative pain. Additionally, the differences in the progression of intensity with respect to the incisional pain and pain in the urethra, must be well evaluated. Nurses are however advised to develop a good interpersonal relationship with the clients and showcase good professional attitude, encouraging the self-report of pain and also making extra efforts in picking up behavioural cues. Additionally, efforts should be made in assessing and understanding the cognitive influences on the pain experiences, as well as the individual coping strategies employed. Nurses must seek to ensure effective POP management through a 24-hour pain-free period for all clients. This can be achieved when analgesics are served around-the-clock not when requested by the clients. WHO multimodal analgesic, patient-controlled and interdisciplinary pain management should be encouraged and coordinated by the nurses.

The relative influence of the patient’s support system (relatives and other patients) should be acknowledge by the nurses in managing the POP. Similarly, POP experience is known to be influenced by the individual sociocultural context, thus the
caregivers notably the nurses must ensure the use of validated context-appropriate
guidelines for the management of pain. However, nurses must closely monitor and
coordinate the interdisciplinary management of the emotional responses exhibited by
the patients during the pain periods. Furthermore, continuous education on POP
experiences should reflect the patient’s age, level of education, productivity, religion
as well as cultural and belief system. Thereby, encouraging patient’s active
participation in their pain management.

6.2.2 Implication on nursing education and management

The nurse managers at the various facilities should ensure that context-appropriate pain protocols and guidelines are adopted for use in their domain. They should also enhance supportive supervision in the various units to ensure the high standards of nurse’s professional attitude and discipline at all times and shifts. Subsequently, as suggested by Fatma and Serife (2017) an improvement in optimal and effective POP management can be achieved by educating the nursing students and providing in-service refresher programmes for the practicing staff. These is to help in tackling the deficiencies in optimal pain assessment and control. Also, education on the use of standard forms/ guidelines and provision of information to clients and appreciations of their concerns should be incorporated.

6.2.3 Implication for policy

This study findings highlighted the limited information the participants received on their condition as well as the pain experiences prior to the surgery. Also, their health seeking behaviour; and pain responses and experiences were influenced by the general public perceptions which may be misconstrued. Therefore, these findings suggest the policy direction toward the deliberate education and screening of general public on urological conditions especially those related to the prostate.
Additionally, the government should ensure urological investigations are covered by the health insurance, and incorporate routine investigations for patients after a certain age bracket. These will help improve the quality of life of patients specifically males during their restful and less productive age periods.

6.2.4 Implication on future research

Thorough exploration of the emerging theme in this study revealed that further studies into this phenomenon will be appreciated. The further study should explore the POP experiences from the health professional perspective, as well as a mixed method or quantitative to aid in generalization of the findings. Additionally, the spiritual dimension of the POP can also be incorporated in future study, since the vulnerability of humans are exposed by the experience of pain thereby seeking solace in a superior divine existence. Finally, the pain management practices in the Genito-urinary area and the surgical treatment effects on their sexuality must be explored.

6.3 Limitations

In this study, during the transcription of the interview data though the researcher did a direct translation of data from Twi and Fante to English, inability to do back-translation may pose as a limitation on the accurate description of the POP experiences. Additionally, the study sample were recruited from a single health facility in the country. Thus, further studies are needed in considering other health facilities offering Genito-urinary surgical services to ascertain their patient’s POP experiences with diverse cultural and ethnic orientation. Furthermore, future studies should explore the pre-operative pain experiences and relief interventions resorted to by the uro-surgical patients as this study concentrated on the POP experiences. This will help in appreciating the influence of the urological patient’s pre-operative pain
experiences and relief-seeking behaviours such as herbal treatment on their POP expression and management.

6.4 Conclusion

The purpose of the study was to explore the POP experiences of men who had undergone urological surgeries. It was revealed that, POP experience among male uro-surgical patients is acute and subjective, which in some instances can be overbearing in intensity. The study established that the POP experience of the men after urological surgery was multidimensional in nature with focus on the sensory, cognitive, affective, sociocultural and behavioural in nature. These dimensions were inconsonance with the underlying framework of the study. Conversely, the pain-relieving interventions fell outside the model but its integration could be ultimately useful in effectively controlling the POP experience in urology. Effective protocols that ensure regular improved pain assessment practices, incorporating validated culturally-sensitive tools which focuses on the location, intensity and quality of the pain. Healthcare providers must improve their professional attitudes to encourage effective communication of pain and other concerns amongst the clients and themselves. Likewise, the institution of interdisciplinary pain management is important, especially, clinical psychologist in relation to the cognitive effects and the affective responses elicited by the clients. Incorporation of the patient’s sociocultural context and support systems are needed in the optimal management of POP and improving the quality of life of the uro-surgical patients. Optimal pain management must also focus on multimodal treatment regimens and client-centered, with effective re-assessment or evaluation practises after interventions are administered. The use of both pharmacological and non-pharmacological interventions must be emphasised.
6.5 Recommendations

Based on this study findings, the following recommendations were made to these bodies:

6.5.1 Ministry of Health (MoH)

- Ensure the inclusion of effective pain management principles and practices into the training of health professionals such as nurses, highlighting the condition-specific management needed.
- Lobby with government to include urological investigations in the national health insurance for the general public as well as incorporate the inclusion of prostate screening into the routine examination of men after a certain age in the health facilities.
- GHS and CHAG under the auspices of MoH must ensure all its health facilities has established in-service training units for their clinical staff in support of POP control.

6.5.2 Nursing and Midwifery Council (NMC) – Ghana

- Ensure continuous in-service refresher programmes on effective pain assessment and management for its professional members
- Incorporate the use of standard context-specific guidelines in pain assessment and management in the current curriculum for training nurses and midwives to enhance their knowledge and practice.
- Incorporate the concepts of pain and management in NMC professional examinations, this will improve the knowledge and skills of health professionals in effective pain management.
• Higher CPD points should be attached to crucial areas of practice such as pain management with evidence of training and knowledge, in the renewing of professional PIN of nurses and midwives.

6.5.3 Korle Bu Teaching Hospital and other health facilities

• Adopt a multimodal analgesic and multidisciplinary approach such clinical psychologist to handle the negative emotional responses elicited in pain management in all departments especially the Genito-urinary.

• Develop pain assessment and management protocols which are specific to the sociocultural context and religious beliefs of their geographical areas of operation.

• Nurses and midwives should institute strong advocacy for effective pain management through the use of multimodal analgesics and interdisciplinary coordination.

• Conduct Periodic in-service refresher trainings on all the concepts of pain and positive health professional attitudes towards clients to update the skills and knowledge of their staff.

• In-service training units must be well equipped with resources and managers. The hospital’s research and monitoring unit must research into and monitor the POP practices among nurses especially at the G.U department. This will yield setting-specific evidence to guide the nurses’ POP practices.
References


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Hartwig, M. (2016). Differences in the experience of postoperative pain amongst women compared to men after laparoscopic gastric bypass surgery. A cohort study. Örebro University- School of Medicine


Postoperative pain experience of men after urological surgery


Ofori, F. (2016). *Assessment of Post Operative Pain Management at Agogo Presbyterian Hospital, Asante Akyem North District.* (MPH in Health Services Planning and Management), Kwame Nkrumah University of Science and Technology, Kumasi, Ghana.


Appendix A: information sheet and consent form

CONSENT FORM

Topic: Post-operative Pain Experiences of Men after Urological Surgeries in the Korle Bu Teaching Hospital.

Principal Investigator: Linda Hayford
C/O School of Nursing and midwifery,
University of Ghana,
P. O. Box LG43 Legon

General Information about Research
This study seeks to investigate the Post-operative pain experiences of male clients who had undergone urological surgery at the Korle Bu Teaching Hospital. The study will explore the postoperative pain characteristics experienced by men after urological surgery. The study will also look at the factors that influence the post-operative pain experience of men. Finally, it seeks to explore how the pain was managed. To achieve the objectives of this study, I will like to interview you because you recently underwent an operation. With your permission, the interview will be tape-recorded and it will last for 45 minutes to 1 hour.

If you agree to participate, you will be required to sign this form and the interview conducted. I assure you that no one will get to know you took part in this study and also have access to what you said. The audiotapes would be kept in a locked cupboard with the researcher.

Possible Risks and Discomforts
There will not be any risk associated with this study and your participation is voluntary. You will be free to withdraw at any point in the course of the interview by just telling the researcher.

However, if during the interview you become emotional as a result, the researcher has scheduled
with a specialist counsellor (Esther Tamakloe - 0243858473) to be readily available during days of interview for support at no cost to you.

Possible benefits
The study is self-funded by the researcher and there will be no financial benefits to you as a participant. However, it is hoped that the findings from this research would benefit the nursing profession in appreciating the pain experiences of men undergoing urological surgeries in Ghana.

Confidentiality
The identities and responses of the participants will be kept safely from the public.
Confidentiality would be maintained by doing; No identifiable information about you will be collected during the interview. All identifiable information about you such as your name and signature on the consent form will be de-identified, labelled with a protected number and kept under lock and key. Only the researcher and his supervisors will have access to this information, your consent thus authorizes such access as and when necessary. The recorded interview would be stored and kept in my secure cupboard.

Compensation
You will not be compensated for participating in this study. However, you will be given a bottle of water, snacks and a hand towel during/after the interview.

Voluntary Participation and Right to Leave the Research
Your participation in this study is entirely voluntary. You have a right to withdraw from the study at any time during the interview process. You have the right to refuse to answer any question which makes you feel uncomfortable. Withdrawing from this study at any time will not adversely affect you personally.
Contacts for Additional Information

If you need more clarification about this research or in case of any unforeseen problems during your participation, you can contact me or my supervisors as follows:

**Linda Hayford (Researcher)**

C/O School of Nursing and Midwifery,
University of Ghana,
P. O. Box LG43 Legon

**Mobile:** 0246348008

**Email:** linhay89@gmail.com

**Professor Lydia Aziato (Supervisor)**

School of Nursing and Midwifery
College of Health Sciences
University of Ghana
Accra, Ghana.

**Mobile:** 0244719686 /0208552719

**Email:** aziato1@yahoo.com

**Dr. Mathew Kwame Yamoah Kyei (Supervisor)**

Department of Surgery
School of Medicine and Dentistry
College of Health Sciences
University of Ghana
Accra, Ghana

Mobile: +233244653186

Email: matkyei@yahoo.com

Your rights as a Participant

This research has been reviewed and approved by the Institutional Review Board of Noguchi Memorial Institute for Medical Research (NMIMR-IRB) and Korle-Bu Teaching Hospital (IRB-KBTH). If you have any questions about your rights as a research participant you can contact the IRB Office between the hours of 8am-5pm through the landline 0302916438 or email addresses: nirb@noguchi.ug.edu.gh

VOLUNTEER AGREEMENT

The above document describing the benefits, risks and procedures for the research title “Post-operative pain experiences of men after urological surgeries in the Accra Metropolis” has been read and explained to me. I have been given an opportunity to have any questions about the research answered to my satisfaction. I agree to participate as a volunteer.

__________________________________________
Date

__________________________________________
Name and signature or mark of volunteer

[Stamp: VALID UNTIL 06 NOV 2019]
If volunteers cannot read the form themselves, a witness must sign here:

I was present while the benefits, risks, and procedures were read to the volunteer. All questions were answered and the volunteer has agreed to take part in the research.

Date ___________________________ Name and signature of witness

I certify that the nature and purpose, the potential benefits, and possible risks associated with participating in this research have been explained to the above individual.

Date ___________________________ Name Signature of Person Who Obtained Consent
Appendix B: Interview Guide

TOPIC: POSTOPERATIVE PAIN EXPERIENCE OF MEN AFTER UROLOGICAL 
SURGERY AT KORLE BU TEACHING HOSPITAL

SECTION A: BACKGROUND INFORMATION FORM

Code Number: .........................

1. Age (Years) ..................................
2. Level of Education ..........................
3. Occupation ..................................
4. Place of Residence .........................
5. Marital Status ..............................
6. Number of Children .......................
7. Religion ..................................
8. Languages Spoken.........................
9. Nationality ..............................
10. Duration of Disease ......................

[Stamp] VALID UNTIL 06 NOV 2019
SECTION B: INTERVIEW GUIDE

1. Please can you share with me how the pain started? (Probe)
   - Location (where was the pain felt often and severest)
   - Periods when the pain was felt (before/after surgery)
   - Severity (mild, moderate, severe)
   - Worsening and relieving factors
   - Quality (Dull, sharp, throbbing etc.)

2. Please how did you react (behaviours) during the pain periods?
   - Anxious
   - Calm
   - Depressed
   - Confused
   - Fear
   - Angry
   - Restlessness
   - Groaning

3. Please how was the pain influencing your daily functional activities?
   - Walking
   - Breathing
   - Sleep

4. Please how was your pain assessed (Probe)?
   - What was used for the assessment
   - How often (frequency)

5. Please how did you understand (Beliefs) the pain you were experiencing? (Probe)
   - Worsening disease
   - Surgery failure
   - Surgical complications that will eventually resolve
   - Ineffective/ inadequate medications
   - Partial expectation of relieve by individual
   - Low individual pain threshold

6. Please how were you coping with the pain? (Probe)
   - Relaxation
- Distraction (reading, listening to music, chatting with significant others)
- Pressure to painful site
- Appropriate positioning
- Analgesic (medication) use
- Body massage
- Physical activity
- Cold compresses
- Silent/calm environment

7. Please can you share the education you were given on pain? (Probe)
   - On medications regimen
   - Other treatment available
   - Periods to expect pain
   - Coping strategies
   - Regularity of the education

8. Please how did your cultural background influence your pain experience? (Probe)
   - Upbringing
   - Acceptance of pain expression
   - Pain management approaches and caregiver perspectives

9. Please can you share how your pain was managed? (Probe)
   - The route and periods of administration
   - Other interventions used

10. Please what were the effects of the drugs/ interventions used?

11. Please what else would you like to share?

THANK YOU
Appendix C: Introductory and permission letters

The Chairman
NMIMR - IRB
P.O. Box LG 581
Univ. of Ghana
Legon.

Dear Sir/Madam,

LETTER OF INTRODUCTION

This is to introduce to you Liada Hayford, an MPhil second year student of the School of Nursing and Midwifery.

The Scientific Review Committee of the School has approved the thesis topic: “Postoperative Pain Experience of Men after Urological Surgery in the Accra Metropolis”.

I hope that the Institutional Review Board will consider the proposal to enable her collect data.

Counting on your usual co-operation.

Thank you.

Yours faithfully,

Prof. Lydia Aziatu
Ag. Dean

College of Health Sciences
P.O. Box LG 43, Legon, Accra, Ghana.
Tel: +233 (0) 302 513 250 / 0289 531 213
Email: scn@chs.ug.edu.gh
Website: www.nursing.ug.edu.gh
Appendix D: Ethical Clearance from Noguchi-IRB

NOGUCHI MEMORIAL INSTITUTE FOR MEDICAL RESEARCH
Established 1979A Constituent of the College of Health Sciences

INSTITUTIONAL REVIEW BOARD

Phone: +233-302-916438 (Direct)
+233-289-522574
Fax: +233-302-302182/513202
E-mail: nth@noguchi.ug.edu.gh
Telex No: 2556 UGGL GH

My Ref. No: DF.22
Your Ref. No: 

7th November, 2018

ETHICAL CLEARANCE

FEDERALWIDE ASSURANCE FWA 00001824
NMIMR-IRB CPN 015/18-19
IRB 00001276
IORG 0000908

On 7th November 2018, the Noguchi Memorial Institute for Medical Research (NMIMR) Institutional Review Board (IRB) at a full board meeting reviewed and approved your protocol titled:

TITLE OF PROTOCOL : Postoperative pain experiences in men after urological surgery at the Korle-Bu Teaching Hospital

PRINCIPAL INVESTIGATOR : Linda hayford, MPhil Cand.

Please note that a final review report must be submitted to the Board at the completion of the study. Your research records may be audited at any time during or after the implementation.

Any modification of this research project must be submitted to the IRB for review and approval prior to implementation.

Please report all serious adverse events related to this study to NMIMR-IRB within seven days verbally and fourteen days in writing.

This certificate is valid till 6th November, 2019. You are to submit annual reports for continuing review.

Signature of Chair: ........................
Mrs Chris Dzide
(NMIMR – IRB, Chair)
Appendix E: Ethical clearance and introductory from Korle Bu Teaching Hospital- IRB

KORLE BU TEACHING HOSPITAL
P. O. BOX KB 77,
KORLE BU, ACCRA.

Tel: +233 302 667759/673034-6
Fax: +233 302 667759
Email: Info@kbth.gov.gh
pr@kbth.gov.gh
Website: www.kbth.gov.gh

12th March, 2019

LINDA HAYFORD
SCHOOL OF NURSING AND MIDWIFERY
COLLEGE OF HEALTH SCIENCES
LEGON

INSTITUTIONAL APPROVAL: KORLE BU TEACHING HOSPITAL-SCIENTIFIC AND TECHNICAL COMMITTEE/INSTITUTIONAL REVIEW BOARD (KBTH-STC/IRB/000128/2018)

Following approval of your study entitled “Postoperative pain experiences of men after urological surgery at the Korle Bu Teaching Hospital” by the Korle Bu Teaching Hospital-Scientific and Technical Committee/Institutional Review Board.

I am pleased to inform you that institutional approval has been granted for the conduct of your study in Korle Bu Teaching Hospital.

Please contact the Head of Department to discuss the commencement date of the study.

Please note that, this institutional approval is rendered invalid if the terms of the Institutional Reviewed Board/Scientific and Technical Committee approval are violated.

Sincere regards,

Dr. Ali Samba
Director of Medical Affairs
For: Chief Executive Officer

Cc: The Chief Executive
Korle Bu
LINDA HAYFORD
SCHOOL OF NURSING AND MIDWIFERY
COLLEGE OF HEALTH SCIENCES
LEGON

POSTOPERATIVE PAIN EXPERIENCES OF MEN AFTER UROLOGICAL SURGERY
AT THE KORLE BU TEACHING HOSPITAL

KBTH-IRB /000128/2018

Investigator: LINDA HAYFORD

The Korle Bu Teaching Hospital Institutional Review Board (KBTH IRB) reviewed and granted approval to the study entitled “Postoperative pain experiences of men after urological surgery at the Korle Bu Teaching Hospital”

Please note that the Board requires you to submit a final review report on completion of this study to the KBTH-IRB.

Kindly note that, any modification/amendment to the approved study protocol without approval from KBTH-IRB renders this certificate invalid.

Please report all serious adverse events related to this study to KBTH-IRB within seven days verbally and fourteen days in writing.

This IRB approval is valid till 30th January, 2020. You are to submit annual report for continuing review.

Sincere regards,

MR OKYERE BOATENG
CHAIR (KBTH-IRB)

Cc: The Chief Executive Officer
Korle Bu Teaching Hospital
## Appendix F: Personal Characteristics of the Participants (Demographic Profile)

### PERSONAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>Pseudo/code</th>
<th>Age (years)</th>
<th>Marital status/residence</th>
<th>No. of kids</th>
<th>Occupation</th>
<th>Academic background</th>
<th>Duration of diagnosis</th>
<th>Type(s) of surgery</th>
<th>Tribe/language</th>
<th>Religion</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1</td>
<td>59</td>
<td>Married, Mallam</td>
<td>4</td>
<td>Businessman entrepreneur</td>
<td>Technical school-Aviation</td>
<td>2 yrs.</td>
<td>Radical prostatectomy</td>
<td>Ga/Twi</td>
<td>Christian</td>
</tr>
<tr>
<td>M2</td>
<td>58</td>
<td>Married, Aflao</td>
<td>3</td>
<td>Security man GRIDCO</td>
<td>Middle school</td>
<td>2 yrs.</td>
<td>Open prostatectomy</td>
<td>Ewe</td>
<td>Christian</td>
</tr>
<tr>
<td>M3</td>
<td>69</td>
<td>Married, Accra</td>
<td>4</td>
<td>Retired police/security man</td>
<td>Middle school Police training</td>
<td>1 year</td>
<td>Open prostatectomy + stone removal</td>
<td>Akan</td>
<td>Christian</td>
</tr>
<tr>
<td>M4</td>
<td>69</td>
<td>Married Tesano</td>
<td>2</td>
<td>Retired Electrician</td>
<td>Technical school-electric</td>
<td>2 yrs.</td>
<td>Open prostatectomy</td>
<td>Ga, English</td>
<td>Christian</td>
</tr>
<tr>
<td>M5</td>
<td>69</td>
<td>Married Odorkor</td>
<td>5</td>
<td>Retired airline branch manager/Poultry farmer</td>
<td>A level – 6 form</td>
<td>1 year</td>
<td>Open prostatectomy + urethrogram</td>
<td>Ga, English, Fante/Twi</td>
<td>Christian</td>
</tr>
<tr>
<td>M6</td>
<td>67</td>
<td>Married Kasoa</td>
<td>&gt;4</td>
<td>Retired lecturer</td>
<td>Graduate</td>
<td>2017</td>
<td>Open prostatectomy + stone removal</td>
<td>Fante</td>
<td>Christian</td>
</tr>
<tr>
<td>M7</td>
<td>75</td>
<td>Married Winneba</td>
<td>2</td>
<td>Retired electrician/records company</td>
<td>Standard 7</td>
<td>2015</td>
<td>TURP</td>
<td>Fante</td>
<td>Christian</td>
</tr>
<tr>
<td>M8</td>
<td>60+</td>
<td>Married Kasoa-Nyanyano</td>
<td>9</td>
<td>Retired Fisherman/Farmer</td>
<td>Class 6</td>
<td>5 yrs.</td>
<td>Open prostatectomy</td>
<td>Fante</td>
<td>Christian</td>
</tr>
<tr>
<td>M9</td>
<td>66</td>
<td>Married Dansoman</td>
<td>4</td>
<td>Retired businessman</td>
<td>Middle school Workers college</td>
<td>Few months</td>
<td>Radical prostatectomy</td>
<td>Asante Twi English</td>
<td>Christian</td>
</tr>
<tr>
<td>M10</td>
<td>58</td>
<td>Married</td>
<td>4</td>
<td>Retired</td>
<td>Secondary</td>
<td>6-7 yrs.</td>
<td>Open</td>
<td>Ga</td>
<td>Christian</td>
</tr>
<tr>
<td></td>
<td>Dansoman</td>
<td>mechanic Pharmacy attendant</td>
<td>school</td>
<td>prostatectomy</td>
<td>Language</td>
<td></td>
<td></td>
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<tr>
<td>M11</td>
<td>80</td>
<td>Widow Takoradi - Aburi</td>
<td>Retired ECG staff</td>
<td>Form 5</td>
<td>&gt;1yr</td>
<td>TURP</td>
<td>English, Twi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M12</td>
<td>69</td>
<td>Widow Gomoa-Ojobi</td>
<td>Farmer/Senior Presbyter</td>
<td>Middle school</td>
<td>3 yrs.</td>
<td>TURP</td>
<td>Fante, Larteh, English, Christian</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>