

The Ghanaian Surgical Nurse and Postoperative Pain Management: A Clinical Ethnographic Insight

■ ■ ■
*Lydia Aziato, Doctoral Student, MPhil, ONDEC, FWACN, BA
Nursing and Psychology (Hons), RN,*
and Oluyinka Adejumo, Dlit et Phil, MSc, BSc Nursing
(Hons), RN, RPN, RNE†*

■ ABSTRACT:

Nurses form an indispensable part of the clinical team that manages postoperative pain (POP). Within a particular clinical context, nurses perceive and respond to pain based on specific factors. This study aimed at illuminating the perceptions and responses of Ghanaian surgical nurses regarding their patients' POP. It also identified the factors that influenced nurses' pain responses. A focused ethnography was used, and data were collected through individual interviews. Sampling was performed purposively to include junior, senior, day, and night nurses who cared for surgical patients. Concurrent data analysis was performed and data were saturated with 12 individual interviews. The findings indicated that nurses perceived POP as an individual phenomenon, and nurses responded to patients' pain by administering analgesics and by using nonpharmacologic measures. Factors that influenced the nurses' response were individual factors, such as commitment, discretion, fear of addiction, and organizational factors, such as organizational laxity and challenges of teamwork. The study recommended that nurses should be educated, supported, and encouraged to ensure pain relief after surgery and that they should see pain relief as a priority postoperative care to avert the negative repercussions of poorly managed POP.

© 2014 by the American Society for Pain Management Nursing

Traditionally, effective postoperative pain (POP) management has been problematic for health professionals who manage pain. Hence, previous researchers have devoted time and resources to discover measures that would improve pain management. The literature has discussed several of these measures that are used to effectively manage POP. It is also important to note that, although efforts have been made to ensure that postoperative patients experience effective pain relief,

*From the *School of Nursing, University of Ghana, Ghana; †School of Nursing, University of the Western Cape, Bellville, South Africa.*

Address correspondence to Lydia Aziato, School of Nursing, University of Ghana, P.O. Box LG43, Legon, Ghana. E-mail: laziato@ug.edu.gh

*Received June 1, 2012;
Revised September 26, 2012;
Accepted October 1, 2012.*

1524-9042/\$36.00
© 2014 by the American Society for
Pain Management Nursing
[http://dx.doi.org/10.1016/
j.pmn.2012.10.002](http://dx.doi.org/10.1016/j.pmn.2012.10.002)

studies continue to report inadequate POP management (Clegg-Lamprey & Hodasi, 2005; Dahl et al., 2003; Manias, Botti, & Bucknall, 2006; Qu, Sherwood, McNeill, & Zheng, 2008). An examination of the literature shows some reasons for inadequate POP management, such as effect of culture, inappropriate attitude of health personnel, patients, and their families, inadequate knowledge of health professionals, and lack of multidisciplinary approach to pain management (Carr, 2002; Mac Lellan, 2006). Studies have further explored these key barriers; for example, health professionals' barriers for POP management include lack of knowledge, lack of regular pain assessment, perceived lack of time to conduct pain assessment, prejudice and bias toward patients, and inability to empathize and establish rapport (Manias, Botti, & Bucknall, 2002; Rejeh, Ahmadi, Mohammadi, Kazemnejad, & Anoosheh, 2009).

Nurses have been found to contribute to the ineffective management of POP pain. According to Coulling (2005), doctors and nurses made their own judgments about the patient's pain instead of relying on the patient's self-report of pain. Studies have attributed most of the barriers associated with ineffective pain management to the nurse, perhaps because the nurse is the only health professional who spends 24 hours per day with the patient (Mac Lellan, 2006). Thus, the nurse plays a key role in the management of POP because it is the responsibility of the nurse to assess pain and provide a timely intervention. Within the Ghanaian clinical context, general nurses and midwives cared for surgical patients. In 1997, the perioperative and critical nursing programs started, and nurses with specialist knowledge in the domain of perioperative care are being trained as an advanced diploma program for 15 months. However, a review of the curricula for these programs indicated that there was no specific course for pain management, which presupposes that the educational preparation for Ghanaian nurses in pain management is inadequate. Also, the number of specialist nurses trained is considered inadequate to meet the surgical care demands of the health system in Ghana. Therefore, many of the specialist nurses work within the surgical theater and intensive care unit. In addition, at the time of the study, there was no specific policy on POP management by the Ghana Health Service or Ministry of Health. Also, advanced techniques for POP management such as patient-controlled analgesia and epidural analgesia were not routinely used on the general surgical wards involved in this study (Personal Communication, Heads of Surgery [Nursing and Medical], 2012).

This study sought to understand nurses' self-report of how they responded to their patients' POP

and the factors that influenced their pain management decisions. This article reports part of an ethnographic study that is aimed at developing an appropriate clinical guideline for POP management within the context of the study. The study reported in this article helped to understand the contextual factors that informed an appropriate clinical guideline.

METHODS

Design

The study explored nurses' perspectives by applying the principles of focused ethnography to fully understand the factors that influenced the Ghanaian surgical nurses' POP management activities. The study sought to answer the research questions: (1) How do nurses perceive and respond to their patients' POP? and (2) What factors influence nurses in their response and perceptions of their client's pain within the medico-socio-cultural context?

Setting

The study was conducted at two hospitals in Accra, located in the southern part of Ghana, at the Korle-bu Teaching Hospital (KBTH) and the Ridge Hospital (a tertiary facility and a regional facility, respectively). The hospitals attract patients from across the country. The KBTH is the first teaching hospital and the leading national referral hospital in Ghana and has a bed capacity of about 2,000; the Ridge Hospital has a bed capacity of about 191. The two hospitals have several departments, including the surgical departments where the study was conducted (In-service Units, 2012).

Population and Sampling Technique

Nurses at the surgical departments were targeted for this study. Nurses were purposively recruited to include day and night nurses, junior and senior nurses, and a nurse leader. Purposive sampling ensured that nurses who cared for surgical patients for at least 6 months were recruited to ensure that they had adequate experience to share. Potential participants were recruited voluntarily after reading the participant's information sheets on the wards. All the nurses who voluntarily joined the study completed the study, and data saturation was achieved with 12 nurses.

Data Collection Instrument and Process

Data were collected through individual face-to-face interviews. A semi-structured interview guide was used for all the interviews, and the first author, who is experienced in qualitative interviews, conducted all of the interviews. Probes were used to ensure full

understanding of the reports of participants, and the probes were directed at the medico-socio-cultural context. For example, the semi-structured interview guide comprised questions, such as: (1) please tell me how you know your patients are in pain? Probe: assessment, behavior; (2) what do you do when your patients' complain of pain? Probe: assessment, self-initiative, consultation; and (3) what are your beliefs about pain? Please explain further Probe: culture, tribe, socialization etc.

All interviews were conducted in English and transcribed verbatim. English is the medium of formal education in Ghana, and nurses spoke English at work. However, nurses sometimes communicated in local languages such as Ga and Akan based on their patients' background. Interviews were scheduled at nurses' convenience, and they chose to be interviewed in English. Fieldnotes were written after each interview to include nonverbal cues during the interviews and key concerns of the participants.

Data Analysis

Data were analyzed concurrently, applying the processes of thematic content analysis. Transcripts were read several times to make meaning of participants' accounts, and the NVivo software version 9 was used to manage data. Initial themes were followed in subsequent interviews and corroborated with fieldnotes to fully develop themes. The first author analyzed data, and the second author verified findings to ensure that participants' world were adequately and truthfully represented or captured, and any differences were discussed.

Rigor

Trustworthiness of the study was ensured by member-checks during concurrent data analysis, and it facilitated the full understanding of the emic (participant) perspectives. Also, in-depth interviews ensured follow-up on participants' perspectives and comments. Writing detailed field notes and discussion of findings among authors helped to ensure the trustworthiness of the research.

Ethics. The study was approved by the ethical review committee at the University of the Western Cape and the ethical review committee of the Ghana Health Service. Approval was obtained from the two hospitals according to their gatekeeping policies. Individual informed consent was obtained from all participants and permission was obtained for audiotaping interviews. The study ensured anonymity of respondents by representing interview participants with DN1 to DN5 (day junior nurses), NN1 to NN3 (night nurses), SN1 to SN3 (day senior nurses), and NL (nurse leader).

RESULTS

Nurses in this study described their perceptions of POP, which indicated that pain was a subjective individual experience. Nurses also responded to their patients' POP by administering analgesics and offering psychological care and other nonpharmacologic interventions. Also, themes that described factors that influenced nurses' POP responses and management decisions were delineated, as well as the background of participants.

Demographics

The nurses involved in the study were females aged 20 years to above 51 years. They had clinical nursing experience of 2 to 35 years, and they were all Christians. The primary languages of nurses were Akan, Ewe, Fante, and Ga, and these represent different ethnic groups in Ghana (all the nurses recruited were Ghanaians). Three of the nurses also had personal surgical experiences, such as hysterectomy, myomectomy, and Cesarean section. Nurses recruited in this study involved certificate nurses (5), diploma nurses (5), perioperative nurse (1), and a graduate nurse (BSc).

Individuality in Pain Experience

The study showed that nurses within the medico-socio-cultural context of Ghana perceived POP as individual subjective phenomenon. Nurses reported that individual patients responded to pain differently. The individuality in pain experiences was manifested in patients' pain expressions and demand for analgesics postoperatively. *"I have realized that we have patients that have low pain threshold and others who can bear pain;...some are able to hold on if it is very painful; they lay down quietly; ...and the way they express it too is very different. Someone maybe in pain and will not show anything and others too even the slightest pain, she will shout 'please come; I have this pain, I am suffering'"* (DN1).

Thus, nurses in this study associated particular behavioral expressions with pain after surgery and were able to identify the presence of pain. Thus, nurses perceived that the presence of POP was not only associated with verbal pain report or verbal expression of pain as indicated by SN3: *"...at times just getting into the ward, if you are a good observer you can see patient expressions and when you probe further, you get to know that it is really the pain?"*

The study further realized that nurses' perceived POP was a cause of inability to mobilize or ambulate early and sleep after surgery, and hence, they were conscious that effective POP management enhanced ambulation, rest, and sleep and, subsequently, prevented complications after surgery. They reported

that patients exhibited individual differences regarding these effects of pain. One nurse stated “...we encourage them to ambulate; ...most of them don't understand; they think we are wicked or something; but when you explain to some of them, they try their best to ambulate” (DN4). Another commented “...some of them do not sleep; they will be just laying down until you come to administer the analgesia and then they will all go to sleep” (NN3).

Pain Management Interventions

Study results showed that nurses within the context of the study responded to POP by using pharmacologic and nonpharmacologic measures.

Pharmacologic Intervention. Within the context of this study, surgical nurses responded to their patients' POP by the administration of analgesics such as injection (pethidine [meperidine]), suppository (diclofenac [Voltaren] or paracetamol [acetaminophen]), and tablet (tramadol [Ultram], paracetamol, and ketorolac tromethamine [Toradol]). However, it was reported that nurses did not administer the full dosage of pethidine prescribed postoperatively. “Normally, pethidine is supposed to be given strictly 6 hourly (a dose every 6 hours) within the first 24 hours; but because we give the suppository t.d.s. (3 times a day), sometimes the afternoon dose is not given; most of us do not give a dose of pethidine every 6 hours but ideally we should give” (DN1).

Some nurses reported that they responded to their patients' POP by informally assessing patients to confirm pain before administering prescribed analgesics. Sometimes the patients were asked to wait for a while if the time of medication was not due. Also, some nurses doubted the presence of pain and would administer a placebo while others administered analgesics to prevent the patient from disturbing or making noise. At the time of data collection, there was no pain assessment tool on the ward for the assessment of POP. One nurse said, “...we observe their facial expression; and some of them will be screaming; but one thing I have realized is that those who scream are rather the liars; those who are rather silent and who tend to take on some awkward position trying to sit or lie down in a particular way to ease the pain; you can sometimes judge that they are the ones really in pain; if they are screaming and because of the noise they are making, I want to shut them up; sometimes if you give them placebo; immediately, they will sleep; I've tried it before; so I think it is more psychological” (DN2).

Also, other nurses reported that they believed the patients' self-report of pain and gave the appropriate analgesics.

Nonpharmacologic Intervention. Nurses reported that postoperative patients were repositioned for comfort and reassured when they reported pain. It was not ascertained if positioning and reassurance helped in pain relief in this study. Also, some nurses reported that they did not “reassure” patients routinely because of increased number of patients. Within the context of the study, reassurance refers to comments such “sorry, it shall be well” (DN2), and it is noted that such “reassurance” does not contribute to effective POP management. For example, NN3 reiterated “...sometimes you position the patient very well and reassure when patient complains of pain”.

The study noted that nurses were aware that timely administration of analgesics was necessary for effective pain management. However, some nurses did not administer analgesics as prescribed, as indicated earlier in this study. Thus, the study further explored the factors that contributed to the pain responses described. The factors were grouped into two main themes as individual factors and organizational factors.

Individual Factors

This theme describes factors that emanated from individual nurses' personal characteristics or attitudes regarding POP management. The results showed that individual nurses were influenced in their pain responses by their commitment to care, use of discretion, and fear of addiction.

Commitment. Some nurses reported that they were committed to ensuring the comfort of their patient in pain and responded positively to patients' report of pain and administered timely analgesic. Some of the nurses stated that their commitment to patient care was negatively influenced by organizational lack of incentives, frustrations regarding obtaining study leave, poor retirement packages, and lack of paid health care. It was perceived that these factors affected all aspects of patient care, including POP management. The nurses reported that their concerns as nurses were not openly discussed on the ward, and there was no agitation during the period of data collection. Thus, the study did not authenticate the actual effect of nurses' concerns on pain management. In a follow-up interview with a nurse leader, it was reported that steps have been taken to initiate incentives in the form of annual awards for committed and hardworking nurses, such as best nurse award. “The individual commitment is key; because if the individual is not committed, no matter the workload he will be making flimsy excuses for everything;...National Health Insurance does not cover everything; yet the hospital does not

have any policy for its' staff to cater for them when they are ill; then you expect that when I am sick, I should come and take care of the sick, why should I?" (DN2).

Also, some nurses were committed to pain relief because they considered pain management as a priority among other nursing care activities. The nurses based their priority on the knowledge of potential complications of ineffective pain management. One nurse stated, *"I think pain is a priority; because pain in itself is a big issue; because if you don't tackle it, something else might be triggered; so even if you are alone on the ward with, let's say, more than twenty patients, you can still give analgesics" (DN3).*

However, some nurses also did not consider pain management as a priority nursing care activity, but they administered pain medication nonetheless as reported by NN2, *"...pain is not usually a priority; because if you give the medication as prescribed, they are usually quiet; so monitoring of their fluids; blood, sliding scales, and all those things are important".*

Also, other nurses were committed to pain management because of their previous pain experience. The previous pain experience contributed to the feeling of empathy for patients in pain and that influenced the nurses in their response to patients' pain. Thus, nurses within the medico-socio-cultural context perceived that some individual nurses were more committed to adequate pain management or were more concerned than others. One nurse stated, *"I wish every nurse goes through surgery at least once and if you are at the surgical floor; you will understand; because first day after the surgery, it looks as if the whole body is on fire; after 3 days, the whole body feels as if you have been hammered with a hammer; so when you go through it, you nurse your patient well and I have never regretted being a surgical nurse; because I have had the experience myself" (SN3).*

Discretion. In this study, discretion was used to represent nurses' ability to make individual clinical decisions based on knowledge, experience, and assessment of a particular clinical situation. Overall, nurses responded to their patients' POP based on the individual nurses' discretion. At the time of data collection, there was no protocol or guideline to guide nurses in their pain management decisions. Thus, nurses reported that when patients reported pain, the response to administer analgesic or to use a nonpharmacologic measure was influenced by the nurses' discretion. Also, it was reported that the nurses' discretion was closely associated with the clinical experience and competence of the nurse. One nurse said, *"You can use your own discretion; it is not really accepted on the ward but some of the doctors don't mind if you*

use your own discretion to help manage the pain or to save a particular situation, they encourage it; but you can't make it open; how long has the person been experienced or working in that particular unit for her to be able to take such a bold decision; because if you make it open, then things may go wrong on the ward; I for one, I am able to use my own discretion to do certain things; but some other nurses will always want to seek second opinion before they take any other step [sic]" (DN2).

Also, nurses reported that they were not permitted to prescribe analgesics for pain management, and doctors were not always available on the ward, such as late afternoons and in the night when patient was in pain, resulting in their use of discretion for POP management.

Fear of Addiction. It was reported that nurses' pain management decisions was influenced by nurses' fear that postoperative patients will be addicted to opioid analgesic, such as pethidine. The fear of addiction resulted from the nurses' misconceptions about pethidine and their observations of pethidine effect on patients with chronic pain. Thus, nurses reported that doctors prescribed pethidine to be administered every 6 hours instead of the standard 4 hourly dose (Pasero & McCaffery, 2011) for only 24 hours postoperatively because of their reluctance to administer the pethidine. Also, other non-opioid analgesics were prescribed because the nurses reported that they were more comfortable to administer these analgesics. The finding presupposes that the achievement of pain management goals heavily rest on nurses because prescribed analgesics may not be adequately administered by the nurse. *"We've been talking about it but some of them still believe that the more you give the pethidine, the patient may become addicted; so they are reluctant to give; as for the 24 hours, they give it religiously but subsequent ones, that is where the problem is" (SN1).* Beyond the individual factors, the study identified organizational factors that contributed to nurses' pain responses.

Organizational Factors

The study showed organizational factors that influenced nurses' responses to POP such as organizational laxity and challenges of teamwork.

Organizational Laxity

Some nurses within the context of this study responded to pain as a result of lack of accountability and ineffective supervision in clinical practice, indicating organizational laxity. It was realized that some senior nurses did not get fully involved with patient care and were unable to supervise inexperienced

junior nurses and students on the ward. This observation was also confirmed by a nurse leader and nurses thought that a lack of leadership contributes to a failure to more effectively manage POP. One nurse said, "...if we get good unit heads, when I say good unit heads, I mean hardworking nurses who would take charge of the ward and not be at the table; they should be involved to know what is going on, when we get good deputy directors who will not sit at one place but move and see what is going on and stop this seniority promotion but rather promote according to performance it will help the system" (SN3).

Another dimension of the organizational laxity identified was inadequate accountability, especially for pethidine. During the period of data collection, the surgical patients' folder was used to collect pethidine from the pharmacy, and the drug was kept at the bedside of the patient. However, two of the general surgical wards at the tertiary facility collected all the pethidine from patients, labeled them, and kept them in special containers, and these were locked or kept in a DDA (dangerous drugs act) cupboard. All of the pethidine supplied was sent to the surgical theater with the patient, and it was shown that sometimes the patient returned to the ward with no pethidine and a follow-up at the recovery ward could yield "we cannot find it" (NN1). Sometimes all the vials of pethidine were used for the patient in the surgical theatre or recovery ward, and the ward nurses had to borrow from another patient or "ward stock" left over drugs.

Also, the drugs kept at the bedside were not adequately monitored. It was reported that there were health professionals within the Ghanaian health system who were pethidine addicts. However, none of the participants in this study was considered a pethidine addict. This insight about the safekeeping of analgesics such as pethidine and the lack of replacement of "borrowed" analgesics could have a negative impact on effective POP management: "We mostly borrow; most of the time the discharged patients sometimes would leave their infusions and drugs on the ward;...so we use it as a ward stock and give it to such needy patients; some are able to replace it later; others are not able" (DN3).

Challenges of Team Work

Nurses reported some difficulties experienced as they worked with fellow nurses and doctors to manage pain. It was perceived by most participants that POP management was not a team decision. It was the doctor's and the anesthesiologist's legal responsibilities to prescribe analgesics for postoperative patients. In the context of the study, anesthesiologists were responsible for pain management at the recovery

(intensive care unit) ward, and the surgeons took charge of pain management on the general surgical wards involved in the study. Nurses in this study said they reported patients' pain complaints to doctors as necessary for the appropriate interventions. Some nurses also did not call doctors, especially on night duty, if patients were in pain: "pain management is supposed to be a team decision; usually if we notice any abnormality, we inform the doctors; not specifically on ward rounds, I can call or when the doctor comes around, I can tell him and suggest what I think can help;...sometimes if you want to volunteer an answer to a question on ward rounds, the way they receive it is not appreciated; so I just keep quiet" (DN2).

Also, some nurses did not take part in ward rounds as expected to afford team decisions. A senior nurse attributed this lapse to "lateness" (SN3); other nurses felt their "opinions were not appreciated" (DN4) during rounds; others believed it was because of "increased work-load" (DN2); and some nurses were just "not interested" (DN1). Nurses reported that doctors taught medical students during ward rounds, which delayed the rounds, and some nurses reported that if they followed the rounds, their nursing care activities, such as wound dressing, would be unduly delayed. Also, it was reported that when nurses did not administer analgesics as prescribed, the doctors only "made noise" and the culprit was not queried. The study further showed challenges of teamwork involving nurses who were ineffective in their work or avoided work, and it was reported that some of these nurses were not penalized, resulting in perpetuation of ineffectiveness in clinical practice such as inadequate POP management.

DISCUSSION

The subjective individual phenomenon of pain is accepted globally, and nurses in this study also perceived POP and its' effect on patients as an individual phenomenon. However, nurses' in this study sometimes did not believe patients' pain report, as reported by other studies (Rejeh et al., 2009). Effective pain management hinges on health professionals making constant effort to accept patients' self-report of pain as the gold standard of pain assessment is patients' self-report assessment (Pasero & McCaffery, 2011; Peters, Patijn, & Lamé, 2007). Nurses in this study sometimes did not believe the patients' self-report of pain and some "reassured" patients when in pain rather than giving analgesics. This indicated that nurse had inadequate knowledge on POP management and some had negative attitudes toward POP management as

supported by previous studies (Rejeh et al., 2009). It is noted that the gap in the curriculum on POP management for training specialist nurses in Ghana demands increased efforts to improve pre-service knowledge on POP management. Practicing nurses should have refresher courses on pain management to improve their knowledge and, subsequently, improve pain management.

Also, in congruence with other studies, nurses administered postoperative analgesics in the form of combination therapy, as in cases for which opioid (injection pethidine) was administered together with nonsteroidal anti-inflammatory drug (NSAID) such as suppository dactofenac (Costantini, Affaitati, Fabrizio, & Giamberardino, 2011). The combination of analgesics, referred to as multi-modal therapy, prevents the side effects of one analgesic, such as opioid analgesic. For example, the patient becomes less drowsy and nausea and vomiting subside (Strassels, McNicol, & Suleman, 2005). However, nurses reported an irregularity in the administration of prescribed opioid analgesics, and this contributed to inadequate POP management. Some Ghanaian surgical nurses had a misconception of fear of addiction to opioid analgesics, such as pethidine, and the literature suggests that addiction rarely occurs among postoperative patients, as opioid is administered for 24 to 48 hours (Pasero & McCaffery, 2011). The irregular analgesic administration was also reported to be related with inadequate accountability of opioid analgesic. It is emphasized that the hospitals should take the necessary measures to ensure that adequate opioid analgesics are supplied for POP management, and these drugs should be properly stored and used.

The commitment to prioritize pain relief was influenced by the nurses realizing the deleterious effect of ineffective POP management on the basis of previous personal pain or surgical experience, as reported by other authors (Patiraki-Kourbani et al., 2004). Nurses need not have personal surgical experiences to develop commitment to POP relief. However, the need for adequate knowledge is highlighted to improve competence, which will enhance nurses' use of discretion during POP management. Nurses' inadequate knowledge and lack of prioritization in pain management have been highlighted by previous authors (Rejeh et al., 2009; Seers, Watt-Watson, & Bucknall, 2006). It is realized that the development of an appropriate guideline for POP management would minimize nurses' use of discretion, as a novice nurse may not apply an appropriate discretion for pain management.

Inadequate POP management was perceived by nurses to be related to organizational laxity, by which

ineffective supervision and accountability contributed to irregular analgesic administration in this study. Similarly, institutional barriers to pain management have been reported by previous authors, such as lack of clear policies on POP management. Also, the core components of effective teamwork are based on effective communication, good interpersonal relationship, understanding the roles or expertise and limitations of individual team members, and appreciating the need for flexibility and adaptation. The effective integration of these components is believed to help the team achieve its goals, such as effective POP management (Hojat et al., 2003; Middleton, 2004; Taylor & Stanbury, 2009). In this study, the dominance of surgeons on issues of POP management was apparent, and it is envisaged that future collaborations between doctors and nurses and enhanced education of nurses on POP management would improve the gap identified as reported by previous authors such as Abdalrahim, Majali, and Bergbom, (2009).

STUDY LIMITATIONS

The limitations of the study stemmed from the recruitment of only female nurses who were all Christians. Perhaps male nurses and nurses from other religious denominations in Ghana could hold different perspectives from the nurses involved in this study. Therefore, the application of study findings among such populations should be performed cautiously. However, the study identified lack of pain management education for nurses, lack of institutional policies on POP management, and ineffective teamwork within the general surgical context.

In conclusion, the global interpretation of pain as a subjective personal experience was supported within the Ghanaian context. Inadequate administration of analgesics such as opioid analgesics was attributed to nurses' fear of addiction, organizational laxity, and challenges of teamwork. Nurses' ability to use personal discretion to manage pain stemmed from clinical experience and competence. Nurses must be cognizant, especially in POP management, of the dynamics of teamwork that are unavoidable in clinical practice and make efforts to be team players. It is hoped that Ghanaian nurses would be committed to pain management and realize that POP management is a priority component of care within the surgical milieu. There is the need for enhanced pain management education to empower nurses to effectively manage POP. The findings in this study would inform a context appropriate clinical guideline for POP management in Ghana.

The study identifies avenues for further investigations, such as an interventional study to assess the impact of a structured educational program on pain management and documentation for nurses. It is necessary to investigate a context appropriate pain assessment tool to enhance future pain studies. The dynamics of teamwork on pain management could be

further explored to develop an appropriate model for effective teamwork in Ghana.

Acknowledgments

This study was supported by the Centre of Teaching and Learning Scholarship (CENTALS) at the University of the Western Cape as a doctoral scholarship to the first author.

REFERENCES

- Carr, E. C. J. (2002). Refusing analgesics: Using continuous improvement to improve pain management on a surgical ward. *Journal of Clinical Nursing, 11*(6), 743-752.
- Clegg-Lamprey, J. N. A., & Hodasi, W. M. (2005). An audit of aspects of informed consent and pain relief in general surgical units of Korle-Bu teaching hospital. *Ghana Medical Journal, 39*(2), 63-67.
- Costantini, R., Affaitati, G., Fabrizio, A., & Giamberardino, M. A. (2011). Controlling pain in the post-operative setting. *International Journal of Clinical Pharmacology and Therapeutics, 49*(2), 116-127.
- Coulling, S. (2005). Nurses' and doctors' knowledge of pain after surgery. *Nursing Standard, 19*(34), 41-49.
- Dahl, J. L., Gordon, D., Ward, S., Skemp, M., Wochos, S., & Schurr, M. (2003). Institutionalizing pain management: The post-operative pain management quality improvement project. *The Journal of Pain, 4*(7), 361-371.
- Hojat, M., Gonnella, J. S., Nasca, T. J., Fields, S. K., Cicchetti, A., Lo Scalzo, A., Taroni, E., Amicosante, A. M., Macinati, M., Liva, C., Ricciardi, G., Eidelman, S., Admi, H., Geva, H., Mashiach, T., Alroy, G., Alcorta-Gonzalez, A., Ibarra, D., & Torres-Ruiz, A. (2003). Comparison of American, Israeli, Italian and Mexican physicians and nurses on the total and factor scores of the Jefferson scale of attitudes toward physician-nurse collaborative relationships. *International Journal of Nursing Studies, 40*, 427-435.
- Mac Lellan, K. (2006). *Management of pain: A practical approach for health care professionals*. (pp. 68-190). United Kingdom: Nelson Thornes Ltd.
- Manias, E., Botti, M., & Bucknall, T. (2002). Observation of pain assessment and management—the complexities of clinical practice. *Journal of Clinical Nursing, 11*(6), 724-733.
- Manias, E., Botti, M., & Bucknall, T. (2006). Patients' decision-making strategies for managing postoperative pain. *The Journal of Pain, 7*(6), 428-437.
- Middleton, C. (2004). Barriers to the provision of effective pain management. *Nursing Times, 100*(3), 42-45.
- Pasero, C., & McCaffery, M. (2011). *Pain Assessment and Pharmacologic Management*. (pp. 352-757). St. Louis: Mosby/Elsevier.
- Patiraki-Kourbani, E., Tafas, C. A., McDonald, D. D., Papatthanassoglou, E. D. E., Katsaragakis, S., & Lemonidou, C. (2004). Personal and professional pain experiences and pain management knowledge among Greek nurses. *International Journal of Nursing Studies, 41*(4), 345-354.
- Peters, M. L., Patijn, J., & Lamé, I. (2007). Pain assessment in younger and older pain patients: Psychometric properties and patient preference of five commonly used measures of pain intensity. *Pain Medicine, 8*(7), 601-610.
- Qu, S., Sherwood, G. D., McNeill, J. A., & Zheng, L. (2008). Postoperative pain management outcome in Chinese inpatients. *Western Journal of Nursing Research, 30*(8), 975-990.
- Rejeh, N., Ahmadi, F., Mohammadi, E., Kazemnejad, A., & Anoosheh, M. (2009). Nurses' experiences and perceptions of influencing barriers to postoperative pain management. *Scandinavian Journal of Caring Sciences, 23*(2).
- Seers, K., Watt-Watson, J., & Bucknall, T. (2006). Challenges of pain management for the 21st century. *Journal of Advanced Nursing, 55*(1), 4-6.
- Strassels, S. A., McNicol, E., & Suleman, R. (2005). Post-operative pain management: A practical review, part 1. *American Journal of Health-System Pharmacy, 62*(18), 1904-1917.
- Taylor, A., & Stanbury, L. (2009). A review of postoperative pain management and the challenges. *Current Anaesthesia & Critical Care, 20*(4), 188-194.