

Title: Burns pain management in Ghana: The role of nurse-patient communication.

Authors

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Abstract

Background: Nursing is an embodiment of knowledge, clinical work, and interpersonal communication. Effective nursing care has a distinct influence on the overall satisfaction and experience of the patient. Communication is said to be indispensable in the delivery of quality healthcare. Effective communication between nurses and patients has proven to yield better results with pain control and improved psychological status of patients.

Objective: The aim of the study is to explore nurses' perceptions on the role of communication in the management of burns pain.

Methods: A qualitative design with purposive sampling was carried out to recruit 11 registered nurses from a Reconstructive Plastic Surgery and Burns Center in Ghana. To identify the participants' perception on the role of nurse-patient communication in the management of burns pain, a face to face semi-structured interviews were conducted using an interview guide to collect data.

Results: Thematic analysis was done with various themes emerging. Helping patients manage pain, early detection of patient's distress, improved patient participation in their care were some of the positive effects of nurse-patient communication while reduced level of cooperation during caregiving, and endurance of pain by the patient were the results of poor nurse-patient communication. Language and time factor were the barriers that were identified to hinder effective communication between nurses and patients.

Conclusions: Due to the subjective nature of pain, the current study highlights the need for increased communication for an effective assessment and management of pain among patients

with burns. It is, therefore, imperative that nurses be well trained in communication with an emphasis on patient-centered communication.

Keywords: Communication, Burns, Pain, Nurse, Qualitative.

Highlights

- Good nurse-patient communication can produce positive outcomes in the assessment and management of burns pain.
- Lack of nurse-patient communication can lead to decreased level of cooperation during caregiving and result in endurance of pain by the patient.
- Patients, especially those with facial burns, become isolated and withdrawn due to the deformities
- There is a need to train nurses further in communication with emphasis on patient entered communication within the clinical care setting.

1.0 Introduction

Nurses are front liners within the healthcare delivery system. As a result, the provision of effective nursing care has a distinct influence on overall patient satisfaction and experience [1]. Thus, there is a need for nurses to be committed to the identification of patients' needs, provide timely nursing care, and a corresponding treatment plan [2]. Generally, there is a positive correlation between patient satisfaction and the care patients receive, in terms of treating patients with respect, explaining procedures, and pain management[3]. One of the areas that reflect this correlation is communication.

In this study, communication means establishing a therapeutic relationship that encourages patients to complain about their pain experience, gaining the nurse's attention to listen, answer questions, and gives an explanation to all care procedures. With respect to pain management by nurses, communication involves applying suitable measures to manage pain based on feedback from patients. Communication is said to be indispensable in the delivery of quality healthcare [4]. Besides, nursing is an embodiment of knowledge, clinical work, and interpersonal communication [5]. Through communicating with patients, nurses can draw information on pain management, plan for discharge, and promote health [6]. There are two types of communication; verbal and non-verbal. Verbal communication has to do with spoken words while non-verbal communication, on the other hand, is associated with body language, touch, and eye contact. For communication to be considered effective there should be an alignment of both verbal and non-verbal messages and it should be deciphered in the way the sender envisioned[7].

A study by Norouzinia, Aghabarari, Shiri, Karimi & Samami [8] reported that effective communication skills between health care providers and patients have proven to yield positive results, such as a reduction in patient's pain, anxiety, and guilt. However, Mistiaen and colleagues

[9] reported that it is the positive suggestions that are associated with communication from the care provider that relieves the patient's pain. Therefore, improving the role of nurses, in terms of communication with the patient, is necessary not only for the satisfaction of the patient but also for the job satisfaction for the nurse [10].

Pain, which is considered the 5th vital sign (American Pain Society, 1996), can be from any form of injury including burns. It can be acute or chronic, nociceptive, neuropathic, or psychogenic. Nociceptive pain stems from tissue damage, neuropathic pain is due to nerve damage whilst psychogenic pain is associated with psychological factors [11]. Burns pain is unique because of its acute, neuropathic, inflammatory, and nociceptive features [12]. Apart from being a major cause of death, burns might also result in deformities, prolonged hospitalization, physical and psychological stress with suicidal tendencies compared with other types of trauma (WHO, 2014).

Within the study context, the pharmacological management of burns pain involves the use of Non-Steroidal Anti-inflammatory Drugs (NSAIDs) and Opioids as the main classes of drugs. Some of the NSAIDs include Ibuprofen, Naklofen, and Diclofenac. Narcotics or opioids including tramadol, pethidine, morphine, and ketamine are the drugs of choice for severe burns pain. However, most of these drugs are not covered by the National Health Insurance Scheme making it difficult for disadvantaged patients to obtain drugs needed for their treatment.

Additionally, the costs of items for wound dressing, surgical procedures, and physiotherapy are high thereby increasing the financial burden of many burn patients as most of these patients have to cater to the cost of these items and procedures themselves.

Another factor affecting the pharmacological management of burns pain is the reluctance of the hospital pharmacy to supply drugs after a period of non-payments of already supplied drugs. This

has devastating effects or consequences on burns pain management. To minimize the impact of such instances, Baron et al., [13] reported the relevance of a non-pharmacological approach, such as psychological support and communication to augment pharmacological management in burns due to its safety, and relative accessibility and availability.

Generally, most patients in pain expect a reduction in their pain and suffering by their health care providers, especially nurses, through the use of nonpharmacological measures, a demonstration of understanding and empathy [14].

Effective communication between nurses and patients, within the clinical care settings, has proven to yield better results with pain control [15] and improve the psychological status of patients. Pain management, which is an important aspect of patients' care, can be achieved only when the magnitude and locus of the pain are rightly assessed by caregivers [16]. The burns unit where the study was carried out did not have structured pain scales as outlined by De Jong, Hofland, Schuurmans, Middelkoop & van Loey [17] though some participants informally referred to these scales when assessing patients pain. To be effective, pain assessment and management will require collaboration between the caregivers and patients. The adoption of pain assessment tools that validate the patient's pain behaviour can enhance the quality of information assessed and reduce discrepancies in pain assessment.

Lotfi, Zamanzadeh, Valizadeh & Khajehgoodari [18] reported that poor communication between nurses and patients is one of the contributory factors in the dissatisfaction of patients with nursing care. Nurses have been identified as the largest cause of either distress or improvement for patients including those with burns. Though a study by Ayers, Vydellingum & Arber [19] revealed that nurses display effective communication skills, other studies have recounted poor communication and interpersonal skills between nurses and patients [4, 21, 22, 23].

Factors such as hospital resources, working hours, and the work environment are reported to be associated with nurses' inability to provide total nursing care including lack of communication with patients [20, 21]. Though Ghana has made considerable improvement in terms of the nurse-patient ratio from 1.07 per 1000 population in 2005 to 2.65 per 1000 population in 2017 (Ghana Health Service (GHS) annual report for 2017), there is a wide variation in staffing need availability rate which is more pronounced amongst specialist [22].

Other factors that impede effective nurse-patient communication include lack of knowledge on communication, nurses' discomfort with cultural and language differences [26, 27, [8]. To avert these, nurses must be equipped with different skills and capabilities to be able to tolerate the tension and pressure, among which the skill for communication is critical [23]. Previous studies by Alaloul et al., [24] have highlighted the integral role of nurse-patient communication in the effective management of pain among patients with burns. However, to the best of our knowledge, very little attention has been given to the role of nurse-patient communication in the management of burns pain within the Ghanaian context. As a result, the aim of this study is to explore the perspectives of nurses about the role of nurse-patient communication in the management of pain among patients with burns in Ghana.

For the purpose of this study, burns pain refers to both procedural (pain as a result of procedures such as wound dressing) and background pain (long-lasting and persistent while the patient is at rest) experienced by patients with burns[25]. By extension, it is the experience of pain from the time of injury through to the recovery phase. This study has the potential to enhance the communication skills of nurses. Additionally, it will set the tone to enact policies to increase the patient's satisfaction and overall patient's pain experience.

2.0 METHODOLOGY

2.1 Strengths and rigour of the study

The rigour of the study focused on credibility, transferability, dependability, and confirmability [26]. For credibility, an exact reflection of the phenomenon under study and responses derived from participants was projected. To ensure the transferability of the research, the methodology and research setting were all described in detail. With the aim of ensuring dependability, questions used were simple and easily understood by the participants in the course of the interviews. In terms of confirmability, interviews were recorded verbatim and transcribed afterward. Themes and subthemes were subsequently developed from the transcribed data.

2.2 Research Design

A qualitative exploratory descriptive design was conducted to explore the perceptions of nurses on how nurse-patient communication affects the pain management of patients with burns. Qualitative descriptive research design seeks to understand and describe a phenomenon and also recognizes the participants' and the researcher's subjective experiences [27]. The study was guided by the Pain Transaction Model which is a conceptual framework by Keen et al. [28]. This framework recognizes that the interpersonal communication between the nurse and the patient can influence the assessment, treatment, and management of pain.

2.3 Research Setting

The study was conducted at a Reconstructive Plastic Surgery and Burns Center (RPSBC) in a tertiary hospital in Ghana. Ghana has over eighty dialects, out of which 11 are government-sponsored. However, English is the official language. The RPSBC is within the biggest tertiary hospital located in the Southern part of Ghana and serves as a referral center for the whole nation.

In addition to Ghanaian patients, the unit caters for patients from the West African sub-region. The unit triages people with all forms of burns injuries, manages burns pain, dressing of the wound, provides fluid resuscitation, and psychosocial support for patients with burns.

2.4 Sample

The predetermined inclusion criteria were qualified nurses working at the burns unit. On this basis, purposive sampling was used to recruit a total of 11 nurses from the source population of 30 nurses working at the burns unit. The point of saturation was attained on the eleventh participant thereby explaining the sample size. Moreover, it is assumed that the study sample is representative of the entire nursing workforce in the burns unit due to their knowledge of the phenomenon under inquiry [29].

2.5 Ethical Consideration

The Institutional Review Boards of Korle-Bu Teaching Hospital (KBTH/MD/G3/19) and the Noguchi Memorial Institute for Medical Research (NMIMR-IRB CPN 014/18-19) reviewed and approved the study.

2.6 Data collection

A face to face interview using an interview guide was employed for data collection. The interview guide comprised of two questions and eight probes which centered on the perception of nurses regarding the positive and negative effects of communication in managing burns pain [30, 10]. The questions used in the interview were “Do you think the communication that exists between a nurse and the patient can have any influence on pain assessment and management? “What are some of the barriers to effective communication between the nurse and the patient?” The probes

used included cordial, language, empathy, respect, participation in care, comfort, mental support, and trust.

To ensure privacy, the face to face interviews were conducted in an office within the unit by the first author to avoid any interruptions. Each interview lasted between 45 to 60 minutes. The interviews were recorded with audiotape and significant observations made in a field diary. The field notes included the researcher's observation of the ward environment, interactions between the researcher and the participants, and the general nursing care given in the burns unit.

Prior to the interviews, participants were given an informed consent with a detailed explanation about the benefits of the study, their right to participate or refuse, and/or to withdraw at any point in the study. The participants were also assured of confidentiality regarding their responses and encouraged to be as candid as possible. Anonymity with the data collected was ensured by giving each participant a code (BN=Burns Nurse) without any personal identifiers.

2.7 Data analysis

All interviews were recorded, transcribed fully, and analysed initially by the authors. The transcription of the interviews was done by the first author who was also the principal investigator (PI). The data analysis was done by the first, second, and third authors. For openness and to ensure that all the perspectives from participants about the phenomenon of interest were captured, thematic analysis was done based on a descriptive phenomenological approach[30]. To minimize researcher bias there was triangulation in the analysis and discussions to compare and agree on themes by the researchers [31].

3.0 RESULTS

The demographic data of the participants are shown in Table 1. Most of the participants were between the ages of 30-39 years, with the majority having between 6-10 years of nursing experience. The views of nurses with working experience ranging between 2 and 15 years were obtained indicating diversity to the data collected. All participants except one, had gained their experience and expertise in burns care through continuous professional development (CPD). Three major themes with eight subthemes were identified on nurses' perceptions of the role of communication on burns pain management as illustrated in Table 2.

3.1 Positive effects of nurse-patient communication

Four subthemes were found to describe the positive effects that nurse-patient communication had on burns pain management which were: help patients to manage pain, early detection of patient's distress, improved patient participation in their care, and openness on any other causes of patient's distress (Table 2):

3.1.1 *Help patients to manage pain*

Participants highlighted that effective communication between the nurse and the patient can help to relieve burns patient's pain, especially in between pain medications.

I will say communication with the patients affects pain management because when you are on good terms with the patient, often communicating with him/her, definitely if maybe the pain medication is not due and you involve the patient in a conversation, it helps (BN-7)

Sometimes even though we may not get medicines for them, that is the analgesics; we can give them soothing words which helps calm them down as well. So I can say that it is not only medicines that work on the patient, the communication you have with them also has a higher percentage in their pain relieve (BN-6)

3.1.2 Early detection of patient's distress

The majority of participants (9) reported that effective communication is very important as it helps identify patients who are in pain as well as to ascertain their total well-being:

You know, in the beginning, when you interact with the patient, you will know how he/she does his things so from there, you realize that if the person is in pain, or if the attitude has changed then you realize that there is something wrong. Sometimes you approach the person and ask if he is in pain and he says yes (BN-2)

3.1.3 Improved patients' participation in their care

When nurses communicate with their patients, it helps the patients appreciate what nurses are doing for them and they contribute meaningfully in their care. This was found in the narration of some of the participants.

Let me tell you, patients contribute to their pain management when they understand what you're doing for them. Some of them will be having money and hiding it but when your communication with them is good, they will show you where it is to buy pain drugs and other items for them (BN-10).

They participate with you in their care when you have effective communication with them (BN-5).

3.1.4 Openness on any other causes of patient's distress

According to the participants, effective nurse-patient communication makes patients open up to nurses and tell them everything including other factors that causes or aggravate the pain for these patients.

Sometimes the screaming, the gnawing, the lamenting is not only due to the burns pain but sometimes when you probe further, there may be other underlying issues. For instance, psychosocial, like how are people going to take my new look now that I'm burnt or my face is burnt. So you can only tell what is bothering the patient by getting close and talking to them. (BN-1)

With burns, I won't say all the pain is physiological, some are psychological and they don't need drugs but they just need someone to talk to them about their situation especially those who lose loved ones in a fire explosion. Sometimes the patient might be grieving and will be very quiet. It is when you communicate with them that they open up to you and tell you what they are going through which also helps in their pain management. (BN-5)

3.2 Negative effect of nurse-patient communication

Two subthemes were used to describe the negative effects of poor nurse-patient communication on burns pain management. These were a reduced level of cooperation during caregiving and endurance of pain by patients as illustrated in Table 2.

3.2.1 *Reduced level of cooperation during caregiving*

Ten (10) out of the eleven (11) participants observed that when nurses communicate less with their patients, it resulted in a reduced level of cooperation during caregiving. In as much as the patient needs the nursing intervention to recover, the nurse also needs the patient as a collaborator for care to be effective. In effect, both the nurse and the patient complement each other for effective pain assessment and management:

If you do not have good interpersonal communication with them, they will not even partake in their management (BN-1).

3.2.2 *Endurance of pain by patients*

Most of the participants also reported that when there is poor communication between nurses and patients, it can sometimes result in the endurance of pain from the patients.

There are some patients when you don't have effective communication with them, no matter what, they will never tell you even if they are in pain and will rather endure the pain but when another person comes they will tell the person easily. So there are certain things they will tell one nurse they won't tell the other nurse (BN-3).

At times what I have realized is that they will rather keep quiet about their pain and not tell you if you don't have effective communication with them. You can see clearly that the person is in pain by just looking at the face but when you ask him if he's in pain, he will say no (BN-11).

3.3 Barriers to effective nurse-patient communication

Two subthemes were developed to describe the barriers to effective nurse-patient communication which were language and time factor (Table 2).

3.3.1 Language

Language barrier is identified as a constraining factor hindering effective communication between nurses and burns patients thereby affecting burns pain management. Participants believed that caregiving becomes very difficult when they do not understand the dialect of the patient or the patients are not able to communicate in the country's official language. This sometimes resulted in patients becoming angry, frustrated, and aggressive. This was found in some participant's expressions as follows:

Language has always been a barrier because, in this unit, we receive referrals from all over. The person may say he is in pain and I will understand it to be another thing, hence managing their pain sometimes is a challenge (BN-6).

Language can affect pain assessment and management. Some of them come in and they don't understand anything so when they say they are in pain and you don't understand what they are saying, they feel frustrated and angry (BN-1).

For some of these burnt patients, once they are in pain and we are not able to understand the pain, sometimes they can get aggressive (BN-6).

3.3.2 Time factor

Another factor that was identified to hinder effective communication between the nurse and the patient was the time factor. According to the participants, the burns unit is very busy and as result,

they do not have enough time to communicate effectively with their patients, even though they acknowledge it's importance.

You know working here is hectic especially when the ward is full, the male ward is there, the female ward is there, the children's ward is there, so you see, you become busy and the problem is there's very little time to even chat with the patient. Though we know that we need to make time and converse with these patients because it is very important (BN-8).

The burns unit is heavy if there are lots of patients especially when there are mass disasters like gas explosions, it becomes quite difficult to communicate because you are attending to one thing and something is also happening here so you weigh priorities in a way. If you need to suction a person, you can't go and be conversing (BN-5).

4.0 Discussion

Effective nurse-patient communication has positive effects whilst poor communication has negative implications on the assessment and management of burns pain. Chatchumni, Namvongprom, Sandborgh, Mazaheri & Eriksson [32] in their study stated that to meet the goals of nursing care and achieve positive pain management results, healthcare providers must establish effective communication and understanding with their patients. Hence, the building of effective communication between patients and caregivers is strongly recommended not only to improve understanding and meet nursing care goals but also for positive pain management outcomes.

In carrying out this study, the guiding conceptual framework was that the interpersonal communication between the nurse and the patient can influence the assessment, treatment, and management of pain. According to the participants, effective communication enhances burn pain assessment and management because patients get the opportunity to tell nurses about their pain. Similar to this finding, Tapp et al., [33] reported that due to the subjective nature of pain, its assessment and management can only be attained when there is effective communication between

patients and health care providers. Specifically, effective communication between nurses and patients can result in more effective pain management [34]. This, notwithstanding, pain assessment tools such as the visual analogue scale and the numeric rating scales can be useful guides for comprehensive pain management in the burns unit.

In this study, it was identified that effective communication between nurses and patients enhances patient's cooperation and in turn, contributes immensely to their care. This is consistent with an earlier publication by Kwame & Petrucka [35] in which the authors identified that nurse-patient communication, to some extent, influences patient's compliance with medical advice and the decision to either participate or not to participate in the caregiving process. This finding also corroborates an initial survey that revealed that for effective pain management outcomes, the participation of the patient in the plan of care is a major requirement that can only be attained through communication [36].

The majority of the participants observed that poor nurse-patient communication can lead to a decreased level of cooperation during caregiving and result in the endurance of pain by the patient. Thus, for an effective assessment and management of pain, both nurses and patients must complement each other. This is in line with a previous report that revealed that when patients are not engaged in the assessment of their pain, poor pain management outcomes could result [37].

It was also identified that burns' patients, especially those with facial burns, become isolated and withdrawn due to the deformities they sustain from the burn. To avert this, Lofti et al., [18] suggested that burns' patients, especially those with facial, head, neck, and hands burns, should be engaged through communication to identify their needs and help them adjust to their present situation. However, according to Kalisch [38] nurses sometimes, are inconsistent in assessing the

psychological status of their patients as they try to avoid spending long hours communicating with patients which will delay the performance of the numerous tasks scheduled for them.

One major obstacle to effective communication between nurses and patients within the burns unit was the language barrier. This results in a delay of transfer of crucial information particularly on pain and interferes with the administration of needed pain medications for effective pain relief. Similarly, a study by Zoëga et al., [39] revealed that conflicts can arise when language becomes a barrier impeding the communication that exists between nurses and patients. This is because nurses usually expect that the patient's pain expression will be in a manner that they understand.

Another factor that was found to impede effective nurse-patient communication was time. Although participants acknowledged the benefits of communication between the nurse and the patient, excessive workload on a shift makes it a challenge to converse with the patients as required. Previous studies have confirmed that due to time spent on administrative, paperwork, and communicating with other agencies, most nurses have little contact with patients [40-42].

This is also buttressed by a report from another research, that some aspects of care provided by nurses are dominated by the workload of caring for patients who are critically ill [43]. In circumstances where it is difficult for nurses to create more time for communication, it is recommended that nurses must develop resilience [44] as well as be intentional and mindful about communicating with the patient while routinely providing care [45]. Other studies also suggest that to resolve the grievances of nurses centered on a shortage of staff and heavy workload, which affects communication, it is imperative to increase staff numbers [44, 46].

Despite these situations and concern that impede the interaction between the nurse and the patient, the principal idea remains that communication is a crucial element to the overall patient's care, not

only to foster a peaceful working atmosphere in the unit but also for the growth of an empathetic care culture and experience of the patient.

5.0 Limitations of the study

The findings of the study cannot be applied to all nurses in other burns unit. This is because the study was conducted in one burn unit in a developing setting with unique organizational culture and atmosphere. However, to facilitate possible transferability of findings to other settings and practices, authors have provided a thick description of the processes which may be judged against other similar contexts. Furthermore, the opinions from the sample of both junior and senior nurses ensure diversity to the data collected.

6.0 Conclusion

This study sought to explore the perspectives of nurses about the role of nurse-patient communication in the management of pain among patients with burns in Ghana. From the study, helping a patient manage pain, early detection of patient's distress, improved patient participation in their care were some of the positive effects of nurse-patient communication. On the other hand, a reduced level of cooperation during caregiving, and endurance of pain by the patient were the results of poor nurse-patient communication. Language and time factors were the barriers that were identified to hinder effective communication between nurses and patients.

6.1 Recommendation for daily practice

The study highlights the need for nurses to be well trained in communication with an emphasis on patient-centered communication and its application within the clinical care setting including the burns unit. To reduce workload thereby enhancing nurse-patient communication, hospital management must address the issue of staff shortage which has the potential to impede effective communication. Additionally, regular in-service training and continuous professional

development in the area of effective nurse-patient communication can positively impact patient outcomes.

6.2 Recommendations for future research

Similar studies in other Burns centers in Ghana to enrich the discourse are highly recommended.

Besides, quantitative studies to broaden the breadth of the study on the subject matter will be useful and therefore, recommended.

Author agreement

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Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Author contributions:

The study was designed by LT, LA, GM., data collection was conducted by LT while data analysis was performed by LT, LA, GM.

The writing of the manuscript was done by LT, GM, EK-A, LA, and KV-J. All authors read and approved the final draft for submission.

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