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## Original Article

## Nurses' Advocacy of Clinical Pain Management in Hospitals: A Qualitative Study

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## ABSTRACT

**Background and Aims:** In hospitals, efficient pain care given by nurses is warranted because pain prevalence in the previous 24 hours has been reported to be high. This study aims to clarify nurse's experiences with pain management as a specific responsibility added to their regular clinical duties. In addition, this study aims to elucidate these nurses' attitudes about sharing their pain knowledge with their colleagues.

**Design, Participants and Methods:** This study includes semi-structured interviews of 17 registered staff nurses at the University Hospital, Linköping Sweden. The interviews were analyzed using a qualitative content analysis.

**Results:** A main thematic category emerged: Selected nurses experience shortcomings and obstacles in clinical pain management and are willing to improve their knowledge and share it with their colleagues. This main category was based on the following four sub-categories: a valued but unclear assignment; the presence of facilitators and obstacles; in need of support and collaboration; and a deficit of own knowledge and future teaching of colleagues.

**Conclusions:** Overall, the nurses maintained a constructive attitude about their responsibilities to teach colleagues about pain management in spite the difficulties they experienced fulfilling all their responsibilities. Nurses who have the added responsibility to teach their colleagues pain management need specialized education in pain management and pedagogic skills for teaching clinical pain management. Moreover, these nurses need to be given the time, support, and collaborative opportunities to develop their knowledge. A nursing model that provides nurses trained in pain management education should be developed and evaluated.

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In hospitals, efficient pain care given by nurses is warranted because pain prevalence in the previous 24 hours has been reported to be as high as 44%–84% (Jabusch, Lewthwaite, Mandzuk, Schnell-Hoehn, & Wheeler, 2015; Trentin, Visentin, de Marco, & Zandolin, 2001; Wadensten, Frojd, Swenne, Gordh, & Gunningberg, 2011). Despite specific guidelines aimed to reduce pain, pain still remains a common problem for hospital patients (Mrayyan, 2004) with up to 36% of respondents describing severe pain (Gregory &

McGowan, 2016). Furthermore, assessment and management of acute and chronic pain are still a challenge, and the knowledge of health professionals continues to be suboptimal (Carr et al., 2014; Horbury, Henderson, & Bromley, 2005; Lui, So, & Fong, 2008; Twycross, 2002). To inspire health professionals to improve pain management, education programs have been implemented, although these programs require significant resources and have not been fully evaluated (Crawford, Boller, Jadalla, & Cuenca, 2016). In addition, improvements in pain management have been connected to the concept of champions (Carr, Watt-Watson, McGillion, & Huizinga, 2016), which means that certain registered nurses actively embrace the assignment of pain nursing care. Further, the concept includes specific pain management registered nurses as the main source of pain management training and knowledge. The concept of champions is in line with an innovation model based on

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## Key Practice Points

Nurses who have the added responsibility to teach their colleagues pain management need specialized education in pain management and pedagogic strategies. Moreover, these nurses need to be given the time, support, and collaborative opportunities to develop their knowledge. A nursing model that provides nurses trained in pain management education should be developed and evaluated.

an extensive literature review (Greenhalgh, Robert, Macfarlane, Bate, & Kyriakidou, 2004). That model identifies several components that encourage the adoption of innovations by individuals in an organization. Innovations spread in various ways along a continuum between dissemination (formal, often centralized, planned innovation) and diffusion (informal, decentralized, unplanned innovation). Successful diffusion and implementation of an innovation requires modeling by peers and imitation of the innovative behavior by potential adopters (Greenhalgh et al., 2004). Furthermore, diffusion of knowledge in pain management improves when specialized nurses are used as experts and when these nurses apply a range of strategies to diffuse the knowledge (Kaasalainen et al., 2012).

In Sweden, staff nurses are often assigned detailed and specific nursing care responsibilities in addition to their daily clinical duties. These responsibilities include, for example, care of wounds, nutrition, hygiene, and, as in this study, pain management. This approach requires individual nurses to develop specific knowledge that they will share with colleagues, a special pain management responsible area (PMRA). The concept of a PMRA could easily and inexpensively be applied to pain management although to date no aspects of this model have been evaluated.

Our study assumes that planned dissemination of pain management information will be optimized if the program's organizers consider what potential adopters need by assessing their perspectives (Greenhalgh et al., 2004). To this end, we gathered the perspectives of hospital nurses assigned to the PMRA. Using this knowledge, we hope to provide support for these nurses in their efforts to disseminate pain management knowledge to their colleagues, ultimately improving the care of their patients.

This study aims to clarify how nurses experience the PMRA. In addition, we aim to elucidate these nurses' attitudes about spreading knowledge about pain management to their colleagues.

## Material and Methods

Registered nurses assigned to a PMRA in addition to regular clinical work duties at the University Hospital, Linköping, Sweden, participated in the study. After being assigned the PMRA (Table 1), the nurses were encouraged to attend a 2-day external symposium on pain and pain management sponsored by a commercial company. They were also encouraged to regularly attend a 1-day seminar on the same topic organized by the department specialized in pain management at the hospital; this seminar is offered once or twice annually. Because two of the authors (M.B. and A.P.) were staff nurses at that department and were members of the organizing committee for the 1-day seminars, they had access to names and telephone numbers of eligible nurses. To recruit participants, M.B. and A.P. compiled a list of potential of participants. Seventeen inpatient wards had at least one staff nurse (Table 1) assigned with a PMRA. One registered nurse from each of the 17 inpatient wards was recruited. Ten nurses had no postgraduate specialist training, three nurses had such training in internal

**Table 1**  
Professional Characteristics of the Respondents

| Variable  | Value      |
|---|------------|
| Professional experience as a nurse (years, mean [SD])                                 | 8 (4)      |
| No. of nurses with pain as responsibility area in the 17 wards (mean [SD])            | 1, 9 (0.7) |
| Experience as staff nurse with pain management as responsible area (years, mean [SD]) | 4 (3)      |
| No. of internal 1-day seminars attended   |            |
| 0   | 2 (12)     |
| 1-3   | 9 (53)     |
| 4-7   | 4 (23)     |
| 8-10  | 0 (0)      |
| 10  | 2 (12)     |
| Participation in the external 2-day seminar, n (%)                                    |            |
| Yes   | 12 (71)    |
| No  | 5 (29)     |
| Clinical affiliation, n (%)   |            |
| Surgery   | 10 (59)    |
| Nonsurgery  | 5 (29)     |
| Oncology  | 2 (12)     |

medicine, three nurses in surgery, and three nurses in radiation therapy, intensive care, and otorhinolaryngology. If these nurses were on duty and available via telephone on the specific days called, they were informed about the study and invited to participate. All 17 nurses contacted agreed to participate. They were provided with written information and signed a written consent before inclusion in the study. Data were collected between September 2015 and May 2016. The regional Ethical Review Board in Linköping approved the study (dnr: 2015/346-31). The mean age of the participants was 33 years (standard deviation = 8 years); 15 participants were women, and 2 were men. Professional characteristics of the participants are presented in Table 1. The Consolidated Criteria for Reporting Qualitative Research statement was used to guide this study (Tong, Sainsbury, & Craig, 2007).

## Interviews and Data Analysis

A.P. and M.B. conducted semistructured qualitative interviews in a quiet room in the participants' workplace. Using guides developed by Kvale (1996) and by Patton (2002), the authors developed an interview guide specifically designed to address the aims of our study. No themes were identified in advance. The opening question—"How do you experience pain management as a special responsibility area?"—gave rich information and often initiated discussions about the areas that were elicited; several follow-up questions were asked when more elaboration was needed. Follow-up questions are presented in Table 2. The same questions were posed to all respondents, and the interviews were conversational as the interviewers asked follow-up questions. The timing and the content of the follow-up questions varied, depending on how the conversation developed. A pilot test of the interview revealed that no changes were necessary. After asking the main question, A.P. and M.B. referred to the interview guide to guarantee that all follow-up questions were posed. All interviews were audiotaped and lasted in mean 22 minutes (standard deviation = 6 minutes). The interviews were transcribed verbatim by an experienced secretary. Three of the authors (A.P., M.B., and B.L.) checked the transcripts using the audio recordings.

The interviews were analyzed with qualitative content analysis as described by Elo and Kyngäs (2008) and Krippendorff (2004). Thus the interview material was read by all authors systematically, line by line, to identify meaning units relevant to the study's purpose and to gain a general understanding of the material as a whole using an inductive approach. The meaning units consisted of a

**Table 2**  
The Follow-Up Questions in the Interview Guide

| Questions  |
|--|
| What are your experiences with PMRA?   |
| Why did you become a nurse with PMRA?  |
| Can you tell us about your role in PMRA?   |
| Can you tell us how you work with the PMRA duty?   |
| Can you describe how nursing pain care and documentation function at your ward?                                  |
| How are newly employed nurses at your ward introduced to nursing pain care?                                      |
| Do you collaborate with other PMRA nurses?   |
| What is your opinion about the 1-day seminar on pain?  |
| What do you think about disseminating your knowledge on pain management by teaching your colleagues at the ward? |

PMRA = pain management responsible area.

sentence, several sentences, or a paragraph. Descriptive notes were written in the paper margins while reading the interviews, and these notes were used to form the codes. Next, A.P. and M.B. independently organized the codes into subcategories. Then they discussed their rationale for their subcategories. They held repeated discussions about the codes, alternative subcategories, and categories using quotations from the interview transcripts. Based on these categories, they created a main category. Although A.P. and M.B. were responsible for this process, they often consulted the other authors (B.L. and A.S.) regarding quotations from the primary transcript data and the clustering of the data into subcategories and categories.

All four authors are women (three nurses and one physician) and experienced in pain management, and B.L. and A.S. are experienced in qualitative research. To increase reliability and trustworthiness, we took several steps to verify the results. These steps included constant review and discussion of emerging subcategories and categories by all four authors, a systematic check of the developing categories against supporting quotations, and the use of two analysts to perform independent coding processes. Finally, three authors (A.P., M.B., and B.L.) tested the category system by for its consistency within categories and the categories comprising the complete picture (Malterud, 2001). Quotations are used to allow the reader to evaluate the results and were adapted according to Kvale (1996) to avoid incoherent or difficult language. In the Results section, brackets ([ ]) are used to indicate implied words. All interviews were organized in a computer program for qualitative methodology, Nvivo 9 (Edhlund, 2011), which facilitates the handling of large quantities of text and the sorting of data.

**Results**

The main category—Selected nurses experience shortcomings and obstacles in clinical pain management and are willing to improve their knowledge and share it with their colleagues (Table 3)—was based on the following four categories: a valued but unclear responsibility area, the presence of facilitators and obstacles, in need of support and collaboration, and deficit of own knowledge and future teaching.

**Table 3**  
An Overview of the Main categories and Subcategories in Interviews

| Selected Nurses Experience Shortcomings and Obstacles in Clinical Pain Management and are Willing to Improve Their Knowledge and Share it with their Colleagues |  |                                      |  |
|---|--|--------------------------------------|--|
| A valued but unclear assignment   | The presence of facilitators and obstacles | In need of support and collaboration | Deficit of own knowledge and future teaching |
| Reason for and attitudes about a nurse with pain as special responsibility area   | Support from the manager                   | Internal collaboration and support   | Lack of knowledge                            |
| Pain assessment, evaluation, and documentation  | Planning for the assignment                | External collaboration and support   | Concerns                                     |
| Unclear assignment  | Lack of time                               |                                      | Nurses want to teach                         |
| Tasks performed   |  |                                      | Spreading knowledge                          |

*A Valued But Unclear Assignment*

More than half the respondents said that they accepted the PMRA assignment because they were personally interested in the topic, had previously experienced shortcomings in pain management at the hospital, or were asked by the head of the ward to take on the responsibility:

I was asked [to take on the PMRA], when the nurse who had the duty before me ended her employment, but you always have a choice, and I thought it was a very interesting subject. (Respondent 7, 1 year of experience with PMRA)

About half the respondents expressed positive feelings toward the specific area of responsibility. They found the idea of advocating good pain management interesting and wished to contribute to improving pain management:

I think it is interesting because you can go to these seminars and learn a lot of different things, such as pain relief or new findings that you can benefit from at the ward and try to change different things that do not work, for example, update the written internal [pain management] guiding principles. (Respondent 1, 4 years of experience with PMRA)

Almost half the respondents reported that they were responsible for patients with complex pain:

We have many patients with acute and complicated pain, and when they experience pain breakthrough, you sometimes feel that you do not have a proper plan for or how to do ... it often feels as if we are doing just a little. (Respondent 7, 1 year of experience with PMRA)

Furthermore, almost all respondents stated that pain care at their ward was inadequate regarding pain assessment and documentation:

The pain assessments could be better ... I think it would be better to document the pain records with NRS [Numeric Rating Scale] and that you document the evaluation and what you did in the medical records, and my colleagues are bad at it ... they do not document. (Respondent 1, 4 years of experience with PMRA)

More than half the respondents were unclear on how to manage their PMRA:

We are very uncertain about where to start. What is expected of me as a nurse with this work duty? There is no instruction, as we have seen any way. (Respondent 3, 2 years of experience with PMRA)

Almost half the respondents believed that their colleagues were unaware of who had responsibility for the PMRA:

Well, they do not turn to me because I have this assignment, but maybe because I've been working five years, I think it's rather common to ask someone who has been working longer. (Respondent 10, 4 years of experience with PMRA)

Some respondents expressed that they did not fulfill the specific work duty of encouraging good pain management in their daily work because they experienced a sense of loneliness, unsupportive colleagues, and an unclear role:

I do not really fulfill my tasks and I have not been really active in my assignment. I feel that I do not contribute much at all, but that's something I'd like to develop. (Respondent 11, 1 year of experience with PMRA)

Some of the respondents had presented verbal information to their colleagues in connection with workplace meetings after they attended the annual seminars. Two of these respondents also had sent information via e-mails. Some respondents stated that their practical duties with PMRA consisted of introducing and training colleagues to use patient-controlled analgesia pumps and update the written internal pain management principles:

I am responsible for the pumps at the ward. It is a lot of practical work to take care of the pumps and send them to service, but that may not have to do with [pain management] improvement. (Respondent 17, 3 years of experience with PMRA)

A few respondents stated that they were expected to contact the department that specialized in clinical pain management when their patients experienced problems with pain relief. Some respondents expressed the importance of being a good model, for example, regarding pain assessment and documentation:

I try to document the pain assessment before and after given pain relief with NRS and I hope there will be rings on the water [that documentation will inspire and remind the one who works after me do the same thing] and that one who comes after now sees this and is reminded to do the same thing (Respondent 11, 1 year of experience with PMRA)

#### *The Presence of Facilitators and Obstacles*

About half the respondents reported that they perceived that the manager supported the PMRA model but did not pay enough attention to the PMRA work:

I think there is some support from the manager, but she does not care so much ... she knows there is a nurse with pain management as a responsibility area to trust and that that the nurse finds improvement suggestions. (Respondent 17, 3 years of experience with PMRA)

On the other hand, a few respondents stated that the manager provided active support and gave good advice:

I experience our manager as very good. When I said yes to take pain management as responsibility area, she very much encouraged me. She said: "well how good" you will have time for this and you will get the resources. (Respondent 6, 6 months of experience with PMRA)

A few respondents said that it was possible to plan for work with issues related PMRA within their work time schedule:

It is possible to set off time [save time] for planning [for the PMRA duty]. That's what the clinic needs to do; it works a lot with education. (Respondent 16, 1 year of experience with PMRA)

Furthermore, more than half the interviewed respondents stated that planning for work with the responsibility area was irregular and not structured as the tasks were not a priority for the ward:

Nurses with pain management as a responsibility area try to have a meeting every 2 months. Now it has not become so the last year because everyone has so much to do. (Respondent 17, 3 years of experience with PMRA)

Lack of time was considered to be result of staff shortages, high workload, and too many work duties. One nurse stated that the turnover of staff could explain why PMRA nurses were unsuccessful:

It is distressing that we have so many colleagues ending their employment, so the nurses with pain management as responsibility area are also replaced. (Respondent 15, 3 years of experience with PMRA)

#### *In Need of Support and Collaboration*

A few respondents experienced no external support from the department of pain management and did not even know how that department could be contacted:

Where do I get information about the seminars on pain the department offers? Do they contact me, or shall I look for them? I want to know a little more. (Respondent 9, 6 years of experience with PMRA)

However, one nurse said she had good support and cooperation with the department of pain management:

We get help from that department, so we do not have to do that much, because most of the patients who have real pain get immediate help from that department. (Respondent 5, 1 year of experience with PMRA)

Some respondents requested educational support from the department of pain management:

I think that department should know when a ward needs help with improving pain assessment routines, and they may be able to offer some education ... We should be able to contact that department easily when we feel we need help. (Respondent 3, 2 years of experience with PMRA)

A few respondents wanted to receive external support from other nurses with the same responsibility area in terms of meetings organized by the department of pain management:

I would like the department to try to gather together all nurses with pain management as responsibility area in the hospital, so we can have the opportunity to talk more about how to work

similarly and how we can cooperate in other ways. (Respondent 17, 3 years of experience with PMRA)

Almost all respondents had no internal collaboration with colleagues with PMRA in other departments, and half the respondents expressed that they experienced little or no internal collaboration with the other PMRA nurses. A few respondents, however, had regular internal collaboration with the other nurses who had the same responsibility area:

I think it's important that there are two nurses [me and another nurse] with this responsibility area in the department, because it's such an important role, and when you are alone [with the responsibility area], you have to work with someone and it gets more impact when you are two. (Respondent 12, 3.5 years of experience with PMRA)

Furthermore, some of the respondents found it difficult to collaborate with the physicians about the pharmacology strategy:

You go on in old routines, and it is the physicians above all who do not want to listen to what I have to come up with, I can feel. (Respondent 12, 3.5 years of experience with PMRA)

A few nurses believed that it would be good to collaborate in professional teams to reach an overall and common view of pain management.

#### *The Deficit of Knowledge of Pain Management and Teaching Colleagues*

A majority of the respondents felt that they had no more knowledge of pain management than their colleagues:

I feel I cannot do more than my colleagues, I have no expertise in pain management. So, I feel I have nothing to contribute that my colleagues do not already know. (Respondent 7, 1 year of experience with PMRA)

However, one respondent found that she had more knowledge than other nurses:

I think my knowledge on pain differs slightly compared to my colleagues. I have had training opportunities and sometimes I have a chance to study on my own ... Yes, I think it's different and that I can do more. (Respondent 17, 3 years of experience with PMRA)

In addition, a specific deficit of knowledge was reported about giving analgesics. Some of the respondents stated concerns about administering opioids because of risk of overdose:

I think it's about being careful in general to give pain relief; many [nurses] are a little afraid to provide pain relief. (Respondent 12, 3.5 years of experience with PMRA)

Nearly all the respondents stated that they would like to teach their colleagues about pain and pain management:

I think it [to teach to colleagues] is included in what I have to do. (Respondent 14, 6 years of experience with PMRA)

Almost as many respondents thought the annual pain seminars improved their knowledge of pain:

It feels like it's always valuable to get new information, replenishment. It's hard to keep yourself up to date, so it feels like these seminars are very good. (Respondent 11, 1 year of experience with PMRA)

Almost all the nurses expressed that they did not give a specific and structured introduction of pain to newly employed nurses. A few nurses reported that they supported and introduced new colleagues to pain management when they found it necessary. A few nurses expressed that they wanted newly employed nurses to receive specific introduction in pain management:

It [a specific introduction of pain management] should be an introduction point for newly employed nurses. We could present the goal of our pain management policy and the nurses with pain management as a special responsibility area. (Respondent 13, 12 years of experience with PMRA)

## **Discussion**

Overall the respondents had positive feelings about their special duty regarding pain management. Most of them agreed to taking on the responsibility because they had experienced shortcomings in pain management. Obstacles to the successful implementation of dissemination of pain management education included insufficient time to accomplish the assignment, the content of the assignment, lack of active support from the manager, and their own lack of adequate knowledge of pain and pain management. The interviews revealed that internal and external collaboration and support were warranted. The respondents were positive regarding teaching colleagues about pain management in the future and indicated that they would increase their own knowledge through specific education.

Our results are in line with a previous study in which nurses who specialized in pain management agreed to act as pain management coaches because of their commitment to better pain management (McCleary, Ellis, & Rowley, 2004). Like our respondents, the nurses in that study experienced lack of time, difficulty attending scheduled meetings, and lack of relevant knowledge. Another study also found that nurses experienced a lack of time to engage in responsibilities other than their regular clinical work (Carlson, Pilhammar, & Wann-Hansson, 2010). In a study on nurses' experiences of daily clinical work, nurses reported a positive attitude regarding improvement work but doubted that they had enough time to engage in the education and training required (Hallin & Danielson, 2008). Commitment to pain management was obvious by stressing the importance of structured pain assessment and documentation, which in fact has been found to be related to, for example, knowledge on pain (Ista, van Dijk, & van Achterberg, 2013). In our study it was clear that the respondents were uncertain about how to fulfill their PMRA assignment. Previously it was reported that absence of role messaging by senior managers contributes to uncertainty about the expected role behavior for change agents, the impact on fulfillment, and the sense of achievement and success (Tucker, Hendy, & Barlow, 2015). Several studies have noted the importance of internal and external support from leadership with respect to nurses' clinical work (Choi, 2015; Gardulf et al., 2008; Kaasalainen et al., 2015; Wisur-Hokkanen, Glasberg, Makela, & Fagerstrom, 2015). In the literature the significance of obtaining support from the organization compared with support from colleagues was discussed from different points of view. In fact, a supportive organization had a greater influence on job satisfaction than did supportive colleagues (Cortese, Colombo, & Ghislieri, 2010). This might also be the case in

our study because half the respondents reported that they did not receive support from their manager and often stated this in connection to experiences of insecurity on what the responsibility area meant in practice.

We have not been able to find studies like ours—that is, studies that dealt with nurses having specific responsibility areas. Therefore comparison between our study and previous research is difficult. However, several studies describe experiences of nurses who passed a structured pain management program and then were assigned a role as an advocate for good pain management (Ladak et al., 2013; Paice, Barnard, Creamer, & Omerod, 2006). Like our study, these studies found that a committed organization was essential in achieving success with pain management, including changing pain-related practice among colleagues. In our study it was apparent that the respondents also required internal support and collaboration with colleagues. Similarly, nurses assigned to pain advocacy and teaching after attending a pain program found they were better prepared to disseminate information to colleagues about pain management (McCleary et al., 2004). In addition, the significance of supportive discussions with peers proved to be one of the most important aspects in a study that aimed to change nurses' beliefs, attitudes, and norms regarding the management of strong analgesia (Edwards et al., 2001).

Several respondents in our study worked with one other nurse assigned to pain management PMRA. Some respondents stated that they would like to collaborate more with that colleague and to communicate with nurses assigned to the same task in other departments, a finding also present in previous research (McCleary et al., 2004; Williams et al., 2012). Our respondents believed that a shared responsibility and communication would decrease self-doubt and uncaring attitudes from colleagues. Impact on self-doubt and uncaring attitudes from colleagues also has been reported among nurses who had attended a pain training program (Holley, McMillan, Hagan, Palacios, & Rosenberg, 2005).

Some respondents had difficulties collaborating with the attending physicians about pharmacologic strategy even when the nurses expressed a desire to discuss issues on pain relief. In a previous study, more than half of all the interviewed nurses found it difficult to collaborate with the physicians during the therapeutic decision-making process and believed that physicians did not accept nurses' opinions (Matziou et al., 2014). Tang et al. (2018) report that physicians assess collaboration as being less important compared with nurses because physicians believe they are trained to find cures for diseases and nurses are trained to interact with patients and colleagues. Additionally, doctors and nurses have reported different opinions about what collaboration means (Sollami, Caricati, & Sarli, 2015). In fact, it has been reported that nurses and physicians rarely communicate about health care decisions (Lancaster, Kolakowsky-Hayner, Kovacich, & Greer-Williams, 2015). Difficulties in communication and collaboration, if any, need to be further explored, including how they affect patient treatment outcomes.

The PRMA model means that certain nurses actively embrace the assignment of pain nursing care, similar to the concept of champions. The champion concept and the PMRA model are potentially important strategies for helping implement best practices in nursing pain management. Like our respondents, champions are self-identified or selected by leadership and may be informally or formally trained. Furthermore, previous research has found that nurses prefer to gain knowledge through contact and communication with colleagues rather than through traditional sources of knowledge or even Internet-based learning (Estabrooks, Chong, Brigidear, & Profetto-McGrath, 2005; Pravikoff, Tanner, & Pierce, 2005), preferences that the PMRA model also addresses.

## Discussion of Method

The interview was semistructured and conducted with the help of an interview guide to ensure that important areas were discussed and that the same question was used to begin each interview. A validation of the dialogue was carried out by asking confirmatory questions during the interviews, which clarified and corrected potential misunderstandings (Kvale, 2008).

The presence of two interviewers may have affected the outcome because the respondents might have experienced a vulnerable situation, which in turn may have influenced what and how the respondents shared. The interviews might have produced more data if the respondents were interviewed by more than two interviewers.

Regarding credibility, to lend validity to the results, each author read, thoroughly discussed, and reflected on the entire analytical process of producing categories and subcategories. The category system was finally tested by all authors for consistency within categories and for categories comprising the overall picture (Malterud, 2001). To further strengthen credibility of categories and subcategories, quotations were used to evaluate the results (Kvale, 1996). Preunderstanding on the part of the first and second authors was an important aspect. The authors' personal knowledge of the topic may have influenced the research process. However, such knowledge and experience may also have been an advantage. According to Kvale (1996) and Patton (2002), interviewers should decide how questions are posed and what is important for follow-up; this process may be aided by a preunderstanding of the field. Previous experience in the field may have contributed to the appropriateness of the interpretations. The results from qualitative studies usually cannot be generalized, although they may potentially be transferrable to similar situations or groups. However, the purpose of this study was not to generalize but rather to explore the experiences of a specific duty of staff nurses. Additionally, because this study included participants from only one hospital, the transfer of these findings to other settings may be limited.

## Conclusions

Concerns regarding time, uncaring attitudes, self-doubt, support, collaboration, and knowledge were similar to previous research that focused on advocating good nursing pain management after attending a pain program. These concerns need to be explored and taken into consideration to improve pain nursing. The overall positive attitude about PMRAs and teaching colleagues the future in spite of difficulties suggest that the PMRA model may be an effective way to disseminate information about pain management.

## Clinical Implications and Future Research

The PMRA model has several disadvantages and limitations that should be improved by structured pain and pedagogic education of selected nurses. Available time, support, and collaboration for the designated nurses are requirements. A model of continuous teaching of colleagues in pain management by the trained nurses needs to be developed and evaluated.

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