Nurses' competence in pain management in patients with opioid addiction: A cross-sectional survey study ☆

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SUMMARY

Background: There may be up to 21 million opioid abusers in the world. Drug abuse and associated health-related problems are increasing. Opioid addiction can cause serious bacterial infection, injury and trauma, conditions that can trigger pain. Opioid abusers experience pain differently from non-addicts. There is limited research on nurses' competence to provide pain treatment to patients with opioid addiction.
Objective: To report on a Norwegian pilot study examining nurses' knowledge about pain and competence in treating pain in patients who abuse opioids.
Design: A descriptive cross-sectional survey design was employed.
Participants: Nurses at medical (n = 64) and orthopaedic (n = 34) units at two urban, public Norwegian hospitals.
Methods: Data were collected in January 2010 using a self-administered questionnaire. Sample selection was determined by purposive sampling. The response rate was 54%.
Results: Eighty-eight percent of nurses did not have sufficient knowledge about pain treatment in patients with opioid addiction. Eight-eight percent and seventy-seven percent regarded work-place experience and colleagues as the primary contributors to their knowledge about pain treatment, respectively. Work-place experience contributed most to nurses' competence. Ninety percent, 70% and 84% of nurses responded that education, literature and information technology, respectively, played a minor role in obtaining knowledge about pain management. Sixty-five percent of the respondents had basic skills for evaluating pain, although 54% could not evaluate the degree of pain. Almost 62% of nurses did not trust the pain experience self-reported by patients who were opioid abusers.
Conclusion: Our study shows shortcomings in the nurses' competence to evaluate and treat pain, suggesting that patients with opioid addiction may not receive adequate pain management. Nurses' competence to offer pain treatment to opioid abusers could be characterized as experience-based rather than evidence-based.

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Introduction

Drug abuse causes major social and health-related problems for people and society in many countries. Opioid addiction is one form of drug abuse that poses a challenge to health care services in countries around the world. The main aspects of opioid addiction are craving the psychological drug effects and the continued use of the drug despite its adverse effects (Jan, 2010). It is estimated that 15–21 million people are opioid abusers (United Nations Office on Drugs and Crime, UNODC, 2009). Although the prevalence of use of illegal opioids in the general population is relatively low, the burden to society from opioid addiction is high because of associated extensive deleterious effects on health (Popova et al., 2006). Opioid abusers often develop serious bacterial infection,

injuries and trauma (Ford et al., 2008), painful conditions that may require hospitalization. Although addiction is a significant public health problem, so too is the undertreatment of pain (Oliver et al., 2012).

Research on nurses' competence to care for patients with opioid addiction is limited. Few have been published from Europe (Kelleher, 2007). There is a need for further research on nurses' competence to offer professional pain treatment to this group of patients.

Background

Pain and Pain Treatment in Patients With Opioid Addiction

Pain is defined as "an unpleasant sensory and emotional experience associated with actual or potential tissue damage, and is always subjective" (IASP, 2007). Opioid addiction contributes to the development of opioid tolerance (Huxtable et al., 2011). Tolerance is defined as "a loss of analgesic potency that leads to ever-increasing dose requirements and decreasing effectiveness over time" (Ferri, 2013), causing patients

with opioid misuse to require higher doses' of opioid in order to obtain pain relief. Clinical studies suggest that opioid addiction produces heightened pain sensations by lowering the pain threshold (hyperalgesia) and pain elicited by normally innocuous stimulations (allodynia) (Morgan et al., 2006; Pud et al., 2006).

The presence of pain in patients who abuse opioids is described as being more complex than pain in patients in general. Besides having a higher incidence of pain, the pain is also generally untreated or undertreated (Kirsh and Passik, 2006; Oliver et al., 2012). Unrelieved pain causes unnecessary suffering and inability for self-care, and reduces quality of life (Grant et al., 2007). Evidence show that stress from poorly treated pain may exacerbate an existing addiction (Oliver et al., 2012). The complex challenge in management of pain is made more so when dealing with opioid abusers, because they are met with negative attitudes or stigmatized by health care professionals (Oliver et al., 2012). This population represents a challenge to nurses' professional competence to provide effective pain treatment.

Competence

The literature describes two main approaches to the conceptualization of nursing competence (Murrels et al., 2009). The first is referred to as "behaviouristic" as it focuses on tasks and skills (Murrels et al., 2009). The second approach is referred to as "holistic" which allows for the incorporation of ethics, attitudes and values as elements of competence, recognizing the need for reflective practice (Cowan et al., 2005). There seems to be increasing support for a holistic approach to competence in nursing practice. For instance, the Australian Nursing and Midwifery Council (ANMC) have defined competence as "The combination of skills, knowledge, attitudes, values and abilities that underpin effective and/or superior performance in a profession/occupational area" (ANMC, 2006). Professional pain treatment requires continuous reflection on attitudes (Nortvedt and Nortvedt, 2001). The present study uses a broad approach to the term "nursing competence" to comprise knowledge, skills and attitudes.

In Happel et al.'s (2002) study most nurses reported that they did not have much knowledge about caring for drug addicts. This finding agrees with those of Ford et al. (2008) who found that only 25% of participating nurses felt they had sufficient knowledge to care for drug addicts. The literature does not identify the sources from where nurses obtain their knowledge in this area. Miller et al. (2010) identified the inability of nurses to use technology as a barrier to assessing and using information. Another study of the preferred information sources for clinical decision-making among critical care nurses found a preference for information from colleagues rather than from electronic-based sources (Marshall et al., 2011).

A literature review of studies on nurses' attitudes to drug addiction showed that nurses perceive caring for patients with drug-related problems as a difficult and unpleasant experience (Kelleher, 2007). Nurses often have negative views about drug addiction and people using drugs (Kelleher, 2007). Focus group interviews of nurses working with patients with opioid addiction showed that nurses described it as being difficult to have a professional relationship with these patients (Morgan, 2006). A grounded theory study of 18 patients with opioid addiction and a painful medical condition showed that the patients felt that nurses did not accept their pain (Morgan, 2006).

Previous studies have found that nurses' lack of professional competence contributes to insufficient pain treatment because nurses commonly disbelieve pain reports from patients using opioids (Grant et al., 2007). There is a common fear among nurses that using opioid analgesics will cause addiction or contribute to worsening of an addiction (Morgan, 2006). Health care professionals' level of competency may influence the pain treatment in patients with opioid addiction (Kelleher, 2007). Despite recent developments in the understanding of opioid abuse and associated implications, research on nurses' competence to treat patients with opioid addiction is limited. The literature cited above indicates that knowledge, skills, and attitudes are factors that influence the quality of pain management provided to patients with opioid addiction. An incorporation of these elements in competence is relevant when the quality of pain management provided by nurses is investigated.

The Aim

The aims of this pilot study were to evaluate nurses' self-perceived competence; 1) their knowledge about pain, 2) their competence to provide pain management to patients who are opioid abusers, and 3) the sources from where nurses obtain knowledge.

Methods

Design

This article presents findings from a cross-sectional study. A survey method was used to collect the data.

Sampling of Participants

Participants were purposively sampled from medical and orthopaedic departments at two urban, public hospitals in Western Norway. The inclusion criteria were registered nurses who, on a regular basis, cared for patients who abused opioids. There were no exclusion criteria.

The nurses received verbal and written information about the study and asked to participate. One hundred and eighty-one questionnaires were distributed and 98 were returned, giving a percentage of return of 54%. Data were collected during 2 weeks of January 2010.

Measures

A self-administered questionnaire of self-reported competence was developed for the present study, partly derived from a validated questionnaire used in a previous Norwegian study on pain in neonatal pain management (Andersen et al., 2007). The questionnaire had four parts covering knowledge, skills and attitudes.

Part 1 included socio-demographic variables such as age (years), sex, department of employment, whether the nurses were working full-time or part-time, had further education or specialization, experience as a nurse (years), and experience working with patients having opioid addiction (years).

Part 2 comprised nurses' sources of knowledge, included eight questions about sources nurses to obtain knowledge about pain and pain treatment for patients with opioid addiction, covering nursing education (undergraduate level), postgraduate education, courses, research literature, work-place experience, colleagues, Internet search engines such as Google, and professional Internet sites. The options for answers were none at all, to some degree, some, a lot and extensively.

Part 3 had 10 statements about nurses' knowledge and skills including their skills at recognizing pain, evaluating the source and degree of pain, administering and evaluating the effect of pain medication, the effect of opioid addiction on pain and knowledge about pain treatment to opioid addicts.

Part 4 was developed for the present study, and included 15 statements about nurses' attitudes relating to the lifestyle of opioid addicts, the pain experience of opioid addicts, patients' perception of pain treatment, and attitudes about working with patients with opioid addiction.

For part 3 and 4, responses were made on a Likert-type scale with five categories; agree completely, agree, disagree, disagree completely, and do not know.