Original Article

The Relationship Between Pain Beliefs and Coping with Pain of Algology Patients'

Burcu Babadağ, RN, MSc, [*]
Güler Balcı Alparslan, RN, PhD, [*] *and Sacit Güleç, MD* [†]

Abstract:

A patient's beliefs, expectations, and attitudes about coping with pain are effective on the patient's pain control. The aim of this investigation was to evaluate the correlation between pain beliefs and coping with pain in algology patients. This descriptive study was carried out with 201 patients at a University Hospital Algology Clinic between May and July 2014. The research instruments used included a Descriptive Characteristics Data Form, Pain Beliefs Questionnaire, and Pain Coping Questionnaire. Data were evaluated by descriptive statistical methods, Spearman's correlation, and the Mann-Whitney U and Kruskal-Wallis tests. According to the findings, the duration of pain in the patients ranged from 1 month to 40 years, with a mean duration of 68.37 ± 89.42 months. Patients' organic beliefs mean score was 3.97 ± 0.78 and the psychological beliefs mean score was 5.01 ± 1.01. There was a significant negative correlation between patients' organic beliefs score and the self-management ($p < .001$, $r = -.388$) and conscious cognitive interventions scores ($p < .001$, $r = -.331$); with the helplessness score ($p < .001$, $r = .365$) there was a positive correlation. There was also a positive correlation between patients' psychological beliefs score and self-management score ($p < .05$, $r = .162$). Moreover, there is significant difference between organic beliefs score and patients who use opioid analgesic. Patients who believe that their pain's origin is a organic cause, such as damage and harm in the body, cannot cope with pain and feel more helplessness. Appropriate nursing interventions for individuals' pain beliefs should be implemented to nursing care plans on pain management.

*From the *School of Health, Department of Nursing, Eskisehir Osmangazi University, Eskisehir, Turkey; †Department of Anesthesiology and Reanimation, Eskişehir Osmangazi University, Eskisehir, Turkey.*

Address correspondence to Burcu Babadağ, RN, MSc, School of Health, Department of Nursing, Eskisehir Osmangazi University, ESOGÜ Campus, 26480 Eskişehir, Turkey. E-mail: burcubabadag1@gmail.com

Received January 23, 2015; Revised July 5, 2015; Accepted July 13, 2015.

1524-9042/$36.00

http://dx.doi.org/10.1016/j.pmn.2015.07.004

BACKGROUND

Pain is a common disease and a growing health problem worldwide (Kuru et al., 2011). Particularly, chronic pain is a complex clinical picture decreasing quality of life, adversely affecting well-being, and leading to abnormal behaviors, for

which psychological factors play an important role. Chronic pain is defined as at least 3-6 months of continued or recurrent pain that is not associated with acute injury or disease (American Chronic Pain Association, 2013; Aydın, 2002; Eti Aslan, 2011). For adults, the incidence of chronic pain has been reported as 2%-55% worldwide and 14.6%-64% in the United States (Larner, 2014). In Turkey, prevalence of chronic pain has been reported to vary from 73.0% to 76.6% (Erdine, Hamzaoğlu, Özkan, Balta, & Domaç, 2001, Ünde Ayvat, Aydın, & Ogurlu, 2011).

Pain is one of the symptoms of many chronic diseases related to aging and of several joint diseases such as arthritis, fibromyalgia, and osteoporosis (Özyalçın, 2007). In addition, it is also a problem for chronic diseases that associated with severe pain, such as cancer. Pain seen quite commonly throughout life and associated with many factors should be treated as a disease in and of itself, rather than only as a symptom.

The expression of pain is affected by many factors including age, gender, emotional status, the pain experienced, and racial and cultural differences and beliefs (Eti Aslan, 2011). Among these factors, pain beliefs are considered to be the building block of the thought system of the individual and are defined as observable, testable, and modifiable hypotheses (Ellis, 1997; Sharp, 2001). In several previous studies about pain beliefs of patients, negative pain belief has been found to be higher in patients who quit the treatment and has been predicted to decrease as treatment progresses (Rainville, Ahern, & Phalen, 1993). Also, in the study by Walsh et al. (2002), physical disability was reported to be higher among patients who believed that pain has an organic origin and that treatment-related beliefs can be changed by multidisciplinary pain management programs based on cognitive-behavioral interventions (Walsh & Radcliffe, 2002). Accordingly, in some previous studies, the possibility of asking for help has been found to be higher among patients who believe that pain has an organic origin, concluding that the multidisciplinary treatment of pain beliefs must be consistent with the beliefs, cognition, and coping methods of the patients (Cornally & McCarthy, 2011; Jensen, Turner, & Romano, 2001).

The coping status varies, especially for the individuals who have complaints of pain for a long period. Accordingly, in the study by Madenci et al. (2006), the Pain Coping Questionnaire (PCQ) was used to evaluate coping with pain in patients with chronic pain and fibromyalgia syndrome. The authors reported significantly higher levels of self-management and conscious cognitive attempts in patients with chronic pain and higher level of desperation in patients with fibromyalgia (Madenci, Herken, Yağız, Keven, & Gürsoy, 2006). Moreover, Ataoğlu et al. (1998) reported in their study that patients with fibromyalgia use the medical remedies and desperation interventions more frequently to cope with the pain, and that patients with osteoarthritis use the self-management and medical remedies interventions more frequently. Thus, it has been suggested that coping status with pain varies among individuals and that pain beliefs may affect the ability to cope with pain.

The pain experienced by the patient is a great burden for the individual, and a team approach, consisting of nurses, physicians, and other healthcare staff, is needed for the management of pain. Because nurses, the key component of primary care, spend more time with pain patients, they have the potential to observe and evaluate the patient more accurately. Nurses should play a large role in pain management by guiding the patient to cope with the pain, using pharmacological and nonpharmacological pain treatment methods, monitoring the treatment outcomes, and developing empathy (Eti Aslan & Badır, 2005). Particularly, nurses have the responsibility to evaluate the pain beliefs of the patients regarding management of pain, to evaluate the effects of these beliefs on coping methods, and to select an appropriate coping method for the patient (Kocaman, 1994).

Previous studies have suggested that the beliefs of the patients about the organic or psychological nature of the pain may result in differences in the coping strategies (Baird & Haslam, 2013; Briggs et al., 2010; Cornally & McCarthy, 2011; Ruzicka, Sanchez-Reilly, & Gerety, 2007; Slater, Briggs, Watkins, Chua, & Smith, 2013; Sloan, Gupta, Zhang, & Walsh, 2008; Walsh & Radcliffe, 2002). However, there are no studies in the literature confirming this idea. Determining the pain beliefs of patients may help in the selection of the best coping method, and thus an effective pain management method. Therefore, this study was planned to evaluate the correlation between pain beliefs and coping status in algology patients.

METHODS

This descriptive study was carried out with 201 patients hospitalized in an algology clinic in a university hospital between May and July 2014. Inclusion criteria were age 18-65 years, experiencing non-malignant pain, no psychiatric disease, no impaired consciousness (either caused by disease or drugs), ability to communicate, being at least 2 h post-interventional methods (Avşaroğulları, 2000), and willingness to participate in the study. After obtaining informed consent, data were collected through face-to-face