

Patients and nurses attitude towards pain management with alternative methods

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ABSTRACT

Introduction: Alternative therapeutic methods are used frequently by health care professionals for pain management, particularly for patients whose disease is in advanced stage.

Purpose: To assess attitudes toward alternative methods for pain management among patients and nurses.

Results: This study's sample is comprised by patients and nurses randomly selected from three general hospitals in Athens, Greece. This is a quantitative descriptive study with the demographic factors association. Two questionnaires were used, which were answered under the principals of anonymity and confidentiality with synchronic design and survey elements to record nurses' and patients' knowledge and attitude concerning implementation of alternative methods for pain management.

Results: Patients clinic and age do not seem to affect the implementation of alternative methods

for pain management. Regarding the profession, the average reported pain score for manual workers is 3.25 (ranged from 1 to 5), whereas, the score for self-employed is 9.75 (ranged from 1 to 10). Pain intensity score decreases from 4.52 ± 3.3 to 1.92 ± 2.8 after the use of at least one alternative method for pain management ($p < 0.001$). Only 19.7% of nurses reported that they used alternative methods for pain management and 23% suggested them to patients. Less than 15% of nurses are not willing to be trained in alternative methods for pain management.

Conclusion: These results show that pain should be managed by combined conventional and alternative interventions and patients' opinion should be taken into account.

Key words: pain, attitude, knowledge, nurse, patient, alternative treatments.

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INTRODUCTION

Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage [1]. Furthermore, pain can be defined as an experience that restricts in a humiliating and painful manner all dimensions of human beings, that is physical, social, spiritual and emotional. Lack of knowledge and failure to manage pain on behalf of health care professionals can be misinterpreted as indifference by exhausted and desperate patients. Pain is the second most common reason people visit their doctor, after upper respiratory tract infections and the most common reason patients take medication [2]. Consequently, understanding of pain mechanisms as well as conservative and alternative analgesia methods must be an integral part of nurses' education [3]. Pain process comprises a sequence of patho-physiologic mechanisms, starting from mechanical, chemical or thermal noxious stimuli transduction into trains of action potentials at the peripheral terminal of neurons. The quality of pain is conditioned by the type of receptor. Acute, well-defined pain is transmitted through the myelinated and high threshold level A δ fiber axons. In contrast, deep, somatic and diffuse (clinical) pain is transmitted through non-myelinated C fibers [4]. The impulse travels to the dorsal horn of the spinal cord, and the noxious stimulus is allowed to reach upper levels of the Central Nervous System only when substantia gelatinosa cells are stimulated. Gate control theory is based on this fact. According to this theory, the stimulation of myelinated Ab fibers, which are sensory receptors, activate inhibitory interneurons that impede transmission cell activity and as a result pain is decreased. In contrast, A δ and C fibers impede the inhibitory cells and excite, thus, transmission cells[5,6] Techniques such as acupuncture, transcutaneous electrical nerve stimulation (TENS), pressure and massage aim to activate peripheral Ab fibers and close the "gate," that is, the repression of pain signal's transmission [7].

Patients often in several hospital wards experience pain that is underestimated by the physicians 8-10 whose attention is drawn in treating other symptoms. As a result, a large number of patients suffer either because there is not paid much attention to the pain verbal report or because of the fear of pain medication side effects.

There is a growing number of patients whose pain is inadequately controlled. Therefore, it becomes necessary for medical and nursing staff to receive the appropriate education concerning pain management with alternative methods and put them into clinical practice [8-10].

McCaffery and Pasero point out that there are many and various obstacles to pain

management, and they are often difficult to define and this fact on its own comprises a challenge to a creative effort to reverse the status quo [11].

According to Tiwana and Prestwich, 90% of clinicians who have experienced a form of complementary and alternative medicine therapy stated that it was effective in treating the condition for which they acquired the therapy [12].

Harvard medical school faculty's general assembly voted for the education and research on alternative treatments in the context of integrated care.

Concerning insurance coverage, according to NCCAM and National Center for Health Statistics, alternative treatments are covered by 77% of insurance programs. Health care professionals learn to develop combined thought and their ability of perception concerning illness. Thus, it is within their power to improve patient's management in the context of integrated and simultaneous treatment or holistic-combined treatment. The wide spread and the application of pain management with alternative methods in many hospitals in Europe and US as well as the awareness and patients demand in Greece was the spark to study patients and nurses attitude towards pain management with alternative methods. Considering the data, we believe that sensitization concerning alternative treatments is possible in academic and clinical level as well, in order to shape the appropriate academic programs for a targeted improvement effort on the provided health care services and direct clinical results.

The purpose of this study was to examine patients' attitude towards pain management with alternative methods.

MATERIAL AND METHODS

We used a sample comprised by 100 nurses and 100 patients from three general hospital clinics of the region of Attica, Greece. All participants were informed and consented to fill the questionnaires. The research took place in a three-month period at 2008-2009 academic year. We examined nurses' attitude towards the implementation of alternative methods for pain management. In addition, there were several questions, including whether nurses themselves are implementing alternative methods for pain management or not. Many other subjects have been also examined such as nurse's education upon alternative methods for pain management and whether patients themselves consider these methods effective or not, and, which factors influence this attitude. Two questionnaires (one for the nurses and one for the patients) which were allocated, preserving anonymity principals, to the clinics of three general hospitals of Attica (two of which have a "pain management unit") were used. There were allocated 100 questionnaires to

nurses, 70 of which were answered (a response rate of 70%). There were also allocated 100 questionnaires to patients, 85 of which were answered (a response rate of 85%). Each questionnaire consisted of demographic questions and questions regarding the attitude and behavior towards alternative methods for pain management for patients and nurses as well. We used a 10-degree pain score scale where 0 stands for "no pain" and 10 stands for "the worst pain ever had" in order to measure patient's pain.

Cronbach's α factor was used to check the questionnaire's reliability. The indicator of the questionnaire, which is deemed to be "adequate" was $A=0.77$. Statistical analysis was performed by SPSS ver. 16 for windows. the Chi square, t-test, and ANOVA were used.

RESULTS

Concerning gender, nurses' sample included six men and 58 women between 22 and 57-year-old, all Greek citizens. Patient's sample includes 41 men and 44 women between 23 and 95-year-old with an average of 68.5 years old and with a median of 70 years old. 58 of them were employed, and 26 were unemployed and the average of their years of education was 7.6. Nurses: 18.75% of nurses participated in the research work at a medical clinic, 28.57% at the surgical clinic, 10% at anesthesiology department and 12.86% at I.C.U. Although 100% of nurses recognize that "Pain is whatever the person undergoes it describes (verbally or not) and exists at the time and within the duration described, and we must confront it," but 80% believes that in case patient is in any analgesic. medication and reports (verbally or not) that are in pain, the nurse should inform the doctor, for the ineffectiveness of the treatment.

Almost 75% of the participants state that they would suggest an alternative method for pain management as long as the conventional treatment was ineffective. According to nurses, this method would be more accepted by the nurses than the doctors. In all, 89.06% of nurses are willing to be trained in alternative methods for pain management. 52.1% of those who are not willing to be trained (5.7% of the nurses questioned) pleading workload and only 12.8% (1.4% of the nurses questioned) declared that their education is adequate.

According to those who were asked, nurses are able to use all the alternative methods for pain management that mentioned in the research and especially the patients' education techniques (57.1%) massage (51.4%) and the patients' distraction techniques (50%) (Fig.1). However, nurses who were asked mention that they are not trained in the above techniques and only 30% of nurses had the knowledge required to perform

massage and 32.9% to perform patients' distraction. Specifically, 35.7% are willing to be educated and 22.7% are willing to put message into practice and less than 13% are willing to be trained and get involved with TENS (Fig.2). It is worth mentioning that even though 34.3% of them are willing to be trained in patient distraction techniques, only 12.3% is interested in using them in their practice.

In the question "Which alternative method for pain management is applied more often in the department you work at?" 27% (highest percentage) answered that is a patient's distraction from pain. More than half of 10% of those who have no interest in getting involved with alternative methods for pain management pleading workload as a cause, which is likely to have an impact on the implementation of alternative methods for pain management.

However, 86.96% of the nurses believe that it is necessary to be trained in alternative methods for pain management.

Patients: 41 men and 44 women participated in this study from the clinics abovementioned clinics The average reported pain score measured with the pain measurement tool was 5.2 for women and 3.7 for men. Regarding the profession, the average reported pain score for manual workers is 3.25, whereas, the score for self-employed is 9.75. Data are not shown

Oncology patients have the most inpatient days in the hospital with an average length of stay of 19 days, followed by surgical and orthopedic which have an average of 13 days. Patients hospitalized at the clinics above report the highest pain scores compared the others. Average length of stay for the rest clinics is approximately 4 days.

The average pain intensity score after the implementation of an alternative method for pain management decreases from 4.52 ± 3.3 to 1.92 ± 2.8 ($p < 0.001$). Data are not presented. Nearly all, 98% of patients who verbally express their pain believe that health care professionals confront it.

Only 7.4% of respondents verbally express their pain believe that only the doctors respond to their call, 8.6% only the nurse and 82% that both, doctors and nurses respond to them. There are no records for those who do not express their pain verbally. In our research, patient's age does not seem to affect their desire to try alternative methods for pain management. The average age of those who are willing to try an alternative method for pain management is 67.2 years comparing to 67.8 years, which is the average age of those who are not willing to do so. This can be explained by the old age of our sample.

In contrast to age, gender seems to affect the desire to try alternative methods for pain management since 50 % of women find it easier to try one, comparing 35%, which applies for men. 82.35% of patients are aware of whether they

receive analgesic treatment or not. 63.53% (52.3% of total sample) received an analgesic medication.

Overall, 82.73% (14.6% of total sample) do not know whether they receive analgesic treatment or not, they would like to do so. Sixty percent of patients who received an alternative

treatment claimed that it was quiet and very effective whereas 47.62 of those who did not receive an alternative treatment are willing to try.

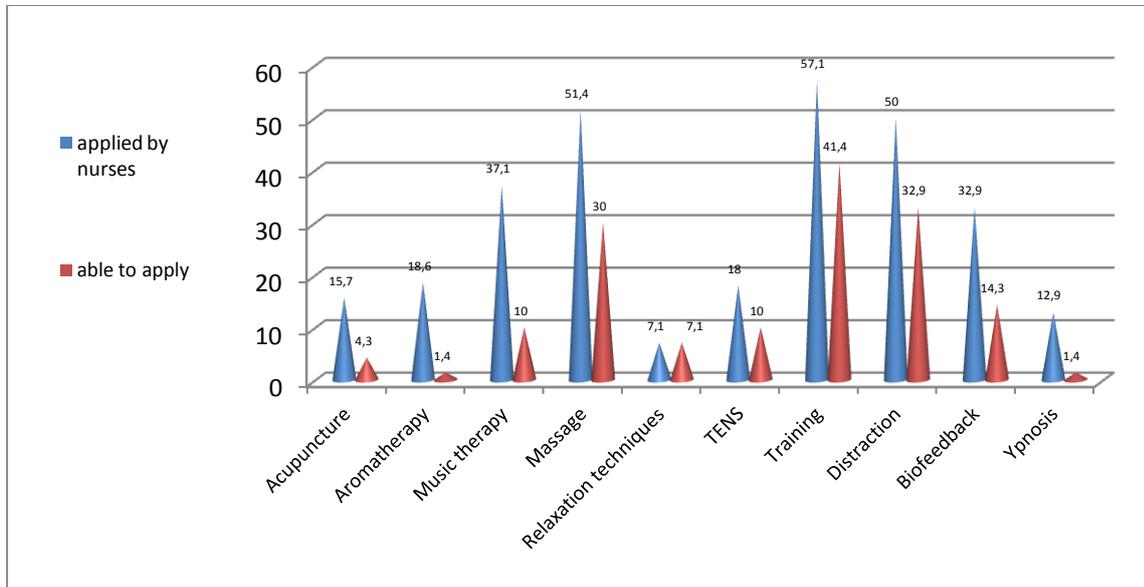


Figure 1. Methods of pain relief reported by the respondents (which are applied by nurses and which are able to apply).

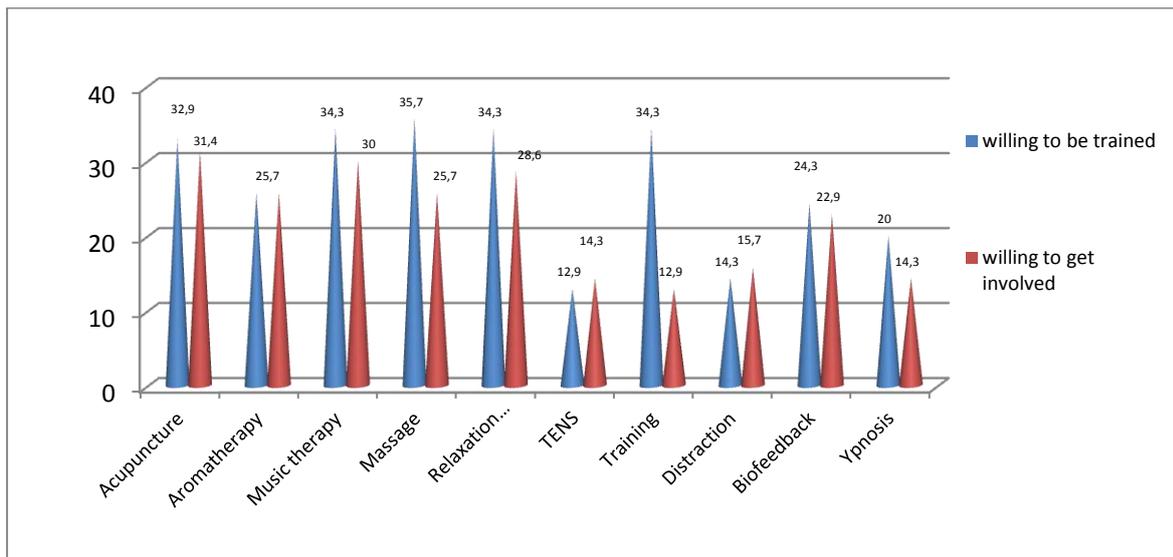


Figure 2. Methods of pain relief reported by the respondents which they would like to be trained or they are involved.

DISCUSSION

Patients and nurses attitude towards pain management with alternative methods has been examined on a satisfactory number of studies. Eisenberg et al cite that adults who use both conventional and alternative methods appear to value both and tend to be less concerned about their medical doctor's disapproval than about their doctor's inability to understand or incorporate complementary and alternative medicine (CAM) therapy use within the context of their medical management [13].

In Peters et al study, it is mentioned that those who suffer from migraines expressed an interest in what alternative therapies had to offer [14]. Moreover, according to a study conducted in Britain it seems that physiotherapists usually use complementary methods to treat low back pain such as acupuncture and massage, and they are familiar with them. However, more research is required on the use of CAM as little is known regarding the effectiveness of these therapies on low back pain [15]. What is more, the above CAM therapies for low back pain are part of Britain's National Institute for Health and Clinical Excellence guidelines [16]. In our study, 51.4% of nurses reported that message can be used as an alternative method for pain management in a clinic and 30% of them state that they are trained to implement it. However, only 10% mention that this method is used in the clinic they are working at. Chang et al survey demonstrates a similarly high prevalence of CAM use among oncology health care professionals, cancer and non cancer patients in Ireland. Furthermore, there is a need for further training to meet to the escalation of CAM use among patients and to raise awareness of potential benefits and risks associated with these therapies and 37.5% are willing to be trained for them [17]. These results are similar to ours, which is 34.3% of the nurses are willing to be trained. It is important to note that although 34.3% is willing to be trained for patients training techniques, only 12.3% is interested in applying them into clinical practice. A half of nurses who believed that distracting a patients attention is being applied by nurses and 32.9% knew the way to do that. Only 14.3% wanted to be trained whereas 13% wanted to get involved and be trained for TENS.

Acupuncture is used more often as an alternative method by medical staff [18,19] whereas aromatherapy and message are more likely to be used by nursing staff [19].

In the present study, only 15.7% of nurses were convinced that acupuncture is applied by nurses as well, whereas, 32.9% are willing to be trained on that. Furthermore, 18.6% of nurses reported that aromatherapy is applied by nurses. Only 4.3% and 1.4% respectively of nurses are so

well-trained as they are able to put the above interventions into practice.

The method that is believed that can be applied by most nurses is patients' education (57.1%), it is actually applied only in 20% of cases. Biofeedback follows with 52.9% and distraction with 50% although only in 14.3% and 32.9% respectively nurses have the training required to apply them.

More than half of the participants who tried alternative methods for pain management state that the results were really important. Of the respondents, 47.65% did not get any alternative methods for pain management are willing to try one. Regarding pain intensity, the average reported pain score for manual workers is 3.25, whereas, the score for self-employed is 9.75 and almost everyone asked for medication when the pain intensity score reached approximately 5.8.

CONCLUSIONS

Patients who tried alternative methods for pain management as a part of their treatment seemed to respond in a positive way, and their pain decreases. The most clinics prefer conventional methods for pain management rather than complementary-alternative methods. The education of nurses upon these methods is inadequate. However, they express interest to educate on them although their free time is particularly limited. Patients are aware of many methods, and they want to have options regarding the treatment they are about to follow and the use of alternative therapies in parallel with conventional therapy seems to have better results. In Greece, physicians and nurses have misgivings and many times reject patient's desire to use an alternative therapy either because they lack knowledge, or because they never intended to gain it.

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