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**THE ATTITUDES OF NURSES IN THE CCU ABOUT PAIN MANAGEMENT IN  
PATIENTS WITH MYOCARDIAL INFARCTION**

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**ABSTRACT**

**Objective:** This study aimed to determine the attitudes of nurses about pain management for patients with myocardial infarction. **Problem:** pain is not a trivial phenomenon and is considered as a health problem. Pain existence is confirmed by the patient and it exists when he says and the fact confirms it. The nurses' attitude is the most important factor in controlling pain. The gaps between the knowledge and attitudes can prevent the optimized pain management, so nurses must have strong knowledge base and attitudes toward pain management. **Methods:** This study is a cross-sectional study that is performed in Modares and Torfeh hospitals affiliated with the Shahid Beheshti University. In this study, 200 nurses participated and the data collection tool was the questionnaire prepared by researcher consists of two parts, the demographic information and the attitude questionnaire that was validated by 10 members of the faculty of the Iran Medical Sciences University. The questionnaires were distributed among nurses in the morning, afternoon, and evening while the time to respond was determined 15 minutes after collecting data, data were edited using SPSS version 21 statistical tests and t test statistics were analyzed. **Results:** In connection with the nurses

attitude to pain management in patients with myocardial infarction, the majority of nurses had a positive attitude towards pain management. (Mean  $\pm$  SD "69.86  $\pm$  8.66). **Conclusion:** The results showed that more nurses does not have negative attitude about pain management and more nurses have a high level of experimental attitudeand it seems that the level of nurses attitude about pain management can be increased by holding annual training courses.

**Keywords:** Attitude, nurses, pain management, myocardial infarction

## INTRODUCTION

Pain is one of the common problem in patients with cardiovascular disease. Many patients who feel pain suffer from inadequate treatment and this problem can cause a negative attitude in them and have negative effect on patient's quality of life and ultimately lead to problems such as stress, anxiety and depression and even lead to insomnia. The examination and pain treatment are considered as one of the key activities of nurses. [1]. Pain is a personal experience that is why patient is the only person who can give the most accurate information about the intensity and quality of pain to the nurse [2]. Pain can cause anxiety, fear, helplessness, deprivation of sleep, anger, depression, lack of confidence in the ability and motivation of the care team to relieve the painand finally unsuitable communication between the patient, physician and nurse[3]. Today, in many countries, non-communicable diseases including cardiovascular disease is increasing [4]. Myocardial infarction or heart muscle death is because of the lack of oxygen-rich blood flow that is associated

with various symptoms [5]. Acute myocardial infarction is also known with other terms such as heart attack and coronary artery blockage that is a life-threatening condition characterized by the formation of necrotic areas within acute myocardial. This disorder is caused usually due to blockage of a coronary artery and sudden lack of oxygen and blood to the heart. According to studies, the incidence of this disease in our country is 3 percent and is the first cause of death in the country, so that annually per 30 heart disease, a person have a heart attack [6]. Pain is the most important and most common symptom of coronary artery that shows reduction of blood flow in the cardiac musclewhich if not considered immediately, it willlead to heart failure, arrhythmias, cardiogenic shock and death [7]. It is estimated that acute myocardial infarction annually causes 529000 American citizen death despite the fact that each year about 1.1 million americans are suffering from myocardial infarction. The statistic shows that every 29 seconds, an

american citizen confronts coronary problems and nearly every minute, one patient dies from coronary events. It also concluded that annually 250,000 people die before reaching the hospital, it is noteworthy that due to the seriousness of this disorder, most mortality occurs among 24 - 48 hours after myocardial infarction while the first two early hours has the highest death accounts. On the other hand, the research shows that 10-15% of skeletal muscle mass and power is lost in the first week and 20-25% within 3 weeks of resting. Given the fact that more than 50% of myocardial infarction associated with complications which may cause reinfarction in patients or impaired cardiac function and finally leads to more severe problems for the patient with myocardial infarction [8]. The nurse as a member of the health team plays a key role in pain management. They are the main witnesses of patient pain and in fact are the doctor and patient interface. In a large number of studies in different countries, one of the most important barriers of pain relief is the lack of knowledge or inadequate knowledge of pain of nurses and even doctors about pain management and relief in different age groups as well as having a negative attitude about pain experienced by patients [9] stated that all feelings, attitude or a person's emotional responsibilities is about ideas and

values. Nurses' actions in relation to issues such as health care to pain, are influenced by various factors such as beliefs, values, customs, economy and in general society, and these factors cause different attitudes to agree or disagree with an issue and since several factors affect the consolidation or change of these attitudes therefore the awareness of the nurses' attitude about the pain can bring necessary factors to change or consolidation of the desired attitude. Awareness of the nurses' attitude makes the possibility to change the negative attitude in the desired direction and thereby take an effective step in nursing care [9].

#### **MATERIALS AND METHODS**

This cross-sectional study is performed on 200 nurses in a special section of Modares and Torfeh hospitals affiliated with the Shahid Beheshti University. Research units were available for nurses with specific inclusion criteria that include working in specific area, the completion of their projects, and their agreement to intend to this research. Exclusion criteria included nurses who want to leave during the study, non-responding to the questionnaire. The study questionnaire used for data collection had two parts, the first part was demographic data and the other measured nurse's attitude about pain management in patients with myocardial infarction. The questionnaire had 15 questions that were

studied by 5-scaled Likert scale with 5 parts totally agree with the score 5, agree with a score of 4, no idea with a score of 3, disagree with score of 2, and strongly disagree with the score of 1. Nurses attitudes is classified into three categories: positive attitude of completely agree and agree (100-70), no idea (40-70) and positive attitude of completely disagree or disagree (10-40). The researcher after obtaining written justification from research ethics committee of officials of Shahid Beheshti University referred to medical centers and after obtaining the consent of management and matron of the hospital entered study units and introduced himself to the authorities of units and explained to them objectives of the study. The nurses consent was obtained from who had the inclusion criteria. The questionnaire was distributed among nurses in all shifts: morning, afternoon, evening and collected about 30 days. Each nurses responded to the questions in 15 minutes. After collecting the data, descriptive statistics was used for the data category that includes absolute and relative frequency tables and then to achieve specific objectives, inferential statistics and

independent t-test was used and SPSS version 21 was used to analyze the data.

## FINDINGS

Characteristics of studied units and average frequency percentage of nurses based on age, gender, place of employment, education, work experience, type of employment and companies listed in the workshop are shown in table 1. The most staffs ages are between 25-35 years with the average of 33.81 and a standard deviation of 7.04 while 60.6% of participants were female and 65.2% were working in Modares hospitals. It also observed that most of the nurses i.e. 90.1% are at the undergraduate level, with an average work experience 10.43 and the standard deviation of 7.37 and also their average work experience is about 7.43 years with the standard deviation of 5.48% in which 57.8% of the subjects had not participated in the workshop. This means that nurses need training to improve their attitudes.

The results showed that the 52.7% of subjects had positive attitude while 47.3% had no idea. It should be noted that this study did not have a negative attitude and attitude towards pain management is a positive attitude that can raise the level of nursing services.

**Table 1. The frequency of the participants units in 2015**

Characteristics	Frequency	Average
Age		
Less than 25 years	11.2	33.81
25 to 35 years	50.8	
35 to 45 years	31.0	
More than 45 years	7.1	

Gender		
Male	39.4	193 persons
Female	60.6	
Working area		200 persons
Torfeh hospital	34.8	
Modares hospital	65.2	
Education		192 persons
BS	90.1	
master degree	9.9	
Work Experience		10.43
5 years or less	32.3	
5 to 10 years	26.3	
10 to 15 years	14.6	
More than 15 years	26.8	
Years of service		7.43
5 years or less	48.4	
5 to 10 years	27.6	
10 to 15 years	14.1	
More than 15 years	9.9	
Employment Type		199 persons
Official	48.7	
Contractual	13.6	
Projective	13.6	
Contractual	24.1	192 persons
Workshop		
Yes	42.2	
No	57.8	

Table 2. determination of the nurses attitude about pain management in patients with myocardial infarction

Attitude	Frequency	Percent
No idea	95	47.3
Positive	106	52.7
Sum	201	100
Average±SD	69.86±8.66	

## DISCUSSION

In this study, it was found that the nurses attitude about the pain management in patients with myocardial infarction is positive. Basically attitude of nurses in the nursing profession is an very important issue. nursing itself is full of tension and emotional excitement, especially in CCU where patients complain about a heart painand nurses are sometimes confronted with mortality that this issue will strengthen the despair feeling in nurses [10]. Because pain management is the right of all patients, the proper treatment is possible when the nurses properly assess the patient. Therefore, it is necessary to identify and

relieve the pain in the early stage, in the meantime, it is important to identify barriers to effective pain relief and be removed using appropriate measure [11]. Studies show that nurses who establish their actions on the basis of scientific evidence have been able to make better decisions, take care of higher quality, bring cost-effectiveness for patients and hospitals. Also, the nurses have been able to professionally meet the client's opinion and also have more confident and have a stronger professional identity [12].Appropriate treatment is only possible if the nurse be able to accurately estimate the patient's pain, but because of the

subjective evaluation of pain is difficult for the nurse and the problem is the deadliest for helping patients that prevent the pain management and depends on knowledge and attitude of health care in which nurses play a major role.

Patients express their pain with symptoms and react in this way [13]. Nurses' actions in relation to various issues, including attention to pain, is influenced by various factors such as beliefs, values, customs, and economic conditions generally society culture and the factors cause different attitudes to agree or disagree with an issue and since different factors are effective in stabilizing or changing such attitudes, so knowledge of the nurses attitude to pain can bring effective agents of change or consolidation to provide the desired attitude. But because the attitude is the first principles of personality structure, its changing is very difficult and it would be better to change behavior to effect the attitudes [14].

Nurses' attitudes and opinions about pain effect on the type of their examination and treatment of patients. Performance of the most people is influenced by beliefs rooted in culture, education and previous experience. The application of the nursing process will lead to systematic pain management and control. The nurse must examine the patient, ask the level and

intensity of pain, the expression of pain and its quality is done by the patient. The type of pain, onset and duration of pain, location of pain and its quality as well as the pain pattern and symptoms associated of increasing or decreasing pain should be examined too. Treatment and planning should be appropriate to the nature and type of pain. The pain could be relieved by administration of anti-pain drugs or using methods such as self-control methods and then use the non-pharmacological methods of pain control [15].

Knowledge of nurses attitude may help in stabilizing or changing factors in the making of arbitrary attitude. English researchers supports the conclusion that the improved nurses attitude about pain and its treatment is an important priority of Nursing [16], but because the attitude is the first principles of personality structure, and it would be very difficult to change it, attitudes can be affected by trying to change behavior, [17] According to research conducted in the United States Pain Society's attitude it concluded that higher level of attitude may lead to faster patient treatment process. To raise the attitude towards pain is very effective to provide training workshop about pain management for nurses. Although nurses due to their experience and length of service in CCU can manage patients pain, but

attendance and gaining advanced skills is necessary [18].

Researchers have proposed to increase the knowledge and attitudes of nurses in care of the pain, especially in CCU, the need for in-service training courses as well as the appropriate use of experienced nurses with higher education is necessary to prevent forgetfulness of content, resulting in fewer errors and ultimately reduce irreparable damage to the help-seekers. Providing necessary facilities, equipment and manpower can also increase the positive attitude of nurses and increase the nursing services [19].

## CONCLUSION

The results of this study showed that the majority attitude of nurses about the pain of patients with myocardial infarction is positive attitude that leads the quality increase of nursing care and the level of satisfaction of pain relief in patients because pain is a serious problem in patients and nurses in this study had a positive attitude, so it is recommended that this research is performed in other health centers and be compared with this study results. It also suggested that after a training workshop about pain management, nurses current attitude be compared with prior ones. This study could be a starting point for further research in

other fields of medical science in palliative patients.

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