



NURSING CARE OF ACUTE PAIN IN CLIENTS WITH ACUTE MYOCARDIAL INFARCTION IN THE ICCU ROOM, DR. SOEGIRI HOSPITALS LAMONGAN

Qurorin'in¹

¹RSUD Dr. Soegiri Lamongan

Case Study

ABSTRACT

Introduction: Severe pain in the center of the chest is found in acute myocardial infarction (AMI) clients. Chest pain is described as pressing, usually radiating to the jaw or teeth, shoulders, arms, and/or back. The case study on nursing care of clients with acute pain in AMI clients in the ICCU Room of Dr. Soegiri Hospitals Lamongan.

Methods: research using case studies. The sample used was one IMA client with acute pain. Data collection was obtained through interviews, observations, physical examinations and documentation studies. **Results:** the case shows that there are several gaps between the client's facts and the literature review. For the assessment of AMI clients in general there is no gap, nursing diagnoses lead to a priority, namely acute pain, with priority nursing actions taken, namely providing analgesic therapy and advising clients to perform distraction and relaxation techniques. Evaluation of the nursing diagnosis of acute pain, the problem was partially resolved on the third day. **Conclusion:** AMI clients in their care must be more careful in assessing and prioritizing patient needs, seriousness in implementation to avoid complications that may occur.

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*Correspondence:
Qurorin'in

*Email:
qurorinin04@gmail.com

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INTRODUCTION

Severe pain in the center of the chest is found in clients with acute myocardial infarction (AMI). The most common causes are atherosclerosis, coronary artery spasm, coronary thrombosis, and decreased blood supply to the myocardium which causes heart muscle cell death (Budiman et al., 2017). So far, the efforts made to treat pain are still limited to the provision of pharmacological therapy, including morphine sulfate, nitrate, and beta-blockers (Muttaqin, 2014). So far, the description of acute pain nursing care for acute myocardial infarction clients has not been explained (Putri et al., 2020).

Data from the World Health Organization (WHO) in 2015, stated that as many as 7,200,000 (12.2%) deaths occurred due to acute myocardial disease worldwide (WHO, 2015). In 2013, the number of AMI patients in Indonesia was 478,000 people with the prevalence of STEMI increasing from 25% to 40% based on the presentation of myocardial infarction (MOH, 2013). Based on Basic Health Research data, in East Java in 2013 the number of AMI patients in East Java was 375,127 people (1.3%) (Trijayanti Idris et al., 2018). While

the data in the ICCU Room Dr. Soegiri Hospitals Lamongan the number of clients in 2016, 2017, as many as 4 of 54 clients (7.4%), 6 of 87 clients (6.8%) (RSUD Dr Soegiri, 2018).

AMI often occurs in people who have one or more risk factors such as obesity, smoking, hypertension, and others. These factors are accompanied by a chemical process of lipoprotein formation in the tunica intima which can cause fibrin and platelet interactions, causing endothelial injury of coronary blood vessels (Alves et al., 2016). Plaque deposits cause complicated lesions that can put pressure on blood vessels and if ruptured, a thrombus can occur (Verulava et al., 2017). Thrombus that clogs blood vessels causes reduced blood flow, so that the supply of O₂ transported by blood to the myocardial tissue is reduced causing anaerobic metabolism which results in the accumulation of lactic acid. As a result there is a change in the conduction system of the heart so that it experiences dysrhythmias. Ischemia that lasts more than 30 minutes causes irreversible heart muscle damage and heart muscle death (Muttaqin, 2014).

The role of nurses in improving the quality of nursing care for AMI patients who experience pain can be done by conducting counseling whose contents provide information about pain, such as the cause of pain, how long it will last, and anticipation of discomfort due to the procedure (Junehag et al., 2014). In addition, it also teaches the use of non-pharmacological techniques in collaborative efforts, namely managing early postoperative pain with scheduled medication administration (for example, every 4 hours for 36 hours), using pain control measures before the pain becomes more severe, and reporting to the doctor if action is not taken. Successful (Kriswiastiny et al., 2016).

MATERIALS AND METHODS

The research design used in this research is case study research. Case study research is research by conducting an intensive investigation of individuals, and or social units that is carried out in-depth by finding all important variables about the development of the individual or social unit under study, in this research it is possible to find unexpected things (Budiman et al., 2015). Data collection methods used in this case study are interviews and observation. the instruments used are interview guide formats and field notes. This case study explores the problem of nursing care in clients who experience AMI with acute pain in the ICCU Room of Dr. Soegiri Hospitals Lamongan.

RESULTS

Assessment

The assessment of the client's identity found no discrepancy between the case review and the literature review. In the case review, it was found that Mr. "P" is a 60-year-old male with AMI cases. This is following the literature review from Boden (2013) which states that the identity of clients with AMI disease can attack men aged over 45 years and women over 55 years, but it occurs more often at the age above 40 years, and men are more at risk of suffering from AMI disease than men and woman (Boden et al., 2013). The review of the chief complaint did not reveal any discrepancies between the case review and the literature review. In the case review, there were complaints of chest pain. This is in accordance with the literature review according to Muttaqin (2014), which states that the main complaint in AMI clients is chest pain.

The current medical history study found no discrepancy between the case review and the literature review. In the case review, the client complained of chest pain since 6 days ago, pain in the middle, feels heavy and feels like pressure, radiates to the left back, the pain feels more severe during activity and at rest. This is following the literature review according to Muttaqin (2014), which states that the main complaint in AMI clients is chest pain, which generally occurs in front of the

left chest, in the breastbone (sternum) and spreads to the stomach cavity (epigastrium). breathe, and faint. The previous history study did not find any discrepancy between the case review and the literature review. In the case review, there was a history of diabetes mellitus 2 years ago. This is in accordance with the literature review according to Muttaqin (2014), which states that the previous medical history of AMI clients is hypertension, diabetes mellitus, and hyperlipidemia. Family medical history found no gap between case review and literature review. In the case review, it was found that the client's family said that in his family there was a history of heart disease and diabetes mellitus. This is in accordance with the literature review according to Muttaqin (2014), which states that one of the risk factors that cause AMI is diabetes mellitus.

Physical examination found no discrepancy between the case review and literature review. The case review found chest pain, elevated blood pressure, and a feeling of difficulty in breathing. This is in accordance with the literature review according to Muttaqin (2014), which states that in AMI clients the main complaint is chest pain which generally occurs in front of the chest, in the breastbone (sternum) and spreads to the stomach cavity (epigastrium), feeling difficult to breathe, and fainted. Follow-up examination found a gap between the case review and the literature review. In the case review, it was found that Mr. "P" is carried out with laboratory tests, X-rays, cardiac enzymes and ECG. This is not following the other literature review, which states that the supporting examinations are ECG, cardiac enzymes, laboratory tests, X-rays and echocardiography or cardiac ultrasound (Jakovljevic, 2018). The provision of therapy was not found to be a gap between the case review and the literature review (Rosjidi, 2020). In the case review, it was found that the therapy given was oxygen, analgesics, antibiotics, sublingual nitroglycerin and cedocard. This is in accordance with the literature review according to Muttaqin (2014), therapy in AMI patients is by giving aspirin, oxygen, anticoagulants, sublingual nitroglycerin, analgesics.

Nursing diagnosis

Nursing diagnoses found a gap between case review and literature review. In the case review, 1 diagnosis was found, namely, acute pain. This is not following the literature review according to Muttaqin (2014) in theory, there are 8 nursing diagnoses including 1) Acute pain, 2) Actual / high risk of decreased cardiac output, 3) Actual / high risk of ineffective breathing patterns, 4) Actual / high risk of impaired peripheral perfusion, 5) Activity intolerance, 6) Anxiety, 7) Ineffective individual coping, 8) Risk of non-adherence to therapeutic rules. Because not all of these diagnoses are on the

client. The diagnoses that are not listed are 1) Actual/high risk of decreased cardiac output, 2) Actual/high risk of ineffective breathing pattern, 3) Actual/high risk of peripheral perfusion disorders, 4) Activity intolerance, 5) Anxiety, 6) Individual coping is not effective, 7) Risk of non-compliance with therapeutic rules. This can happen because the client does not find data that supports the six diagnoses, the complaint felt by the client at this time is pain.

DISCUSSION

Nursing Interventions

Nursing planning found no gaps between case review and literature review. In the case review, it was found that the client was given an explanation to the client and family about the causes and ways of dealing with pain, observing the characteristics, location, time, and course of the pain instructing the client to report pain immediately, adjusting the physiological position (semi-fowler), teach distraction and relaxation techniques, collaborate in providing pharmacological therapy, monitor the ECG, observe TTV every 1 hour. This is in accordance with the literature review according to Muttaqin (2014), which states about the nursing plan that is carried out, namely, note the characteristics of pain, location, duration, and distribution, instruct the client to report pain immediately, adjust the physiological position, rest the client, give additional oxygen (Muttaqin, 2014). As indicated, teach distraction and relaxation techniques, and collaborate in providing pharmacological therapy. The intervention provided was in accordance with the OMEK rules. And adapted to the facilities owned by the hospital (Rosjidi, 2020).

Nursing Implementation

In the implementation of nursing implementation, there was no gap between the case review and literature review. In the case review, it was found that the authors carried out nursing care by the plans that had been made in the intervention, namely the IMA medical diagnosis. This is in accordance with the literature review according to Muttaqin (2014), which states about the implementation of nursing performed on clients in accordance with the interventions made. Nursing implementation has been carried out by the plan (Muttaqin, 2014).

Nursing Evaluation

The nursing evaluation found no gap between case review and literature review. Evaluation is mentioned as the result of research on whether or not the goals of nursing care are successful. Nursing actions that have been carried out by nurses are documented and then evaluated by determining the problem is resolved, partially resolved, or not resolved by comparing SOAP/SOAPIE/SOAPIER.

Nursalam (2015), who said that nursing evaluation is the last step of the nursing process by identifying whether the goals of the nursing plan are achieved or not. In the case that appeared on Mr. "P" the problem was partially resolved, while the problem was acute pain and the nursing evaluation was the problem was partially resolved. This is because until the last day the pain has not been resolved, the CKMB value is high, and the ECG results are still ST-Elevation (Nursalam, 2015).

CONCLUSIONS

Nursing problems of acute pain in patients with myocardial infarction can be given nursing implementation in the form of pharmacological therapy, distraction techniques, relaxation, music therapy, aromatherapy can reduce the intensity of patient pain. It is hoped that it can provide health services and maintain good collaboration between the health team and with patients so that the nursing care provided can support recovery patients and especially in the management of pain problems in AMI.

REFERENCES

- Alves, A. J., Viana, J. L., Cavalcante, S. L., Oliveira, N. L., Duarte, J. A., Mota, J., Oliveira, J., & Ribeiro, F. (2016). Physical activity in primary and secondary prevention of cardiovascular disease: Overview updated. *World Journal of Cardiology*, 8(10), 575. <https://doi.org/10.4330/wjc.v8.i10.575>
- Boden, W. E., Franklin, B. A., & Wenger, N. K. (2013). Physical Activity and Structured Exercise for Patients With Stable Ischemic Heart Disease. *JAMA*, 309(2), 143. <https://doi.org/10.1001/jama.2012.128367>
- Budiman, B., Sihombing, R., & Pradina, P. (2017). HUBUNGAN DISLIPIDEMIA, HIPERTENSI DAN DIABETES MELITUS DENGAN KEJADIAN INFARK MIOKARD AKUT. *Jurnal Kesehatan Masyarakat Andalas*, 10(1), 32. <https://doi.org/10.24893/jkma.v10i1.160>
- Budiman, Mulyadi, N., & Lolong, J. (2015). Faktor-Faktor Yang Berhubungan Dengan Tingkat Kecemasan Pada Pasien Infark Miokard Akut Di Ruang Cvcu Rsup Prof. Dr. R. D. Kandou Manado. *Jurnal Keperawatan UNSRAT*, 3(3), 109084.
- Jakovljevic, D. G. (2018). Physical activity and cardiovascular aging: Physiological and molecular insights. *Experimental Gerontology*, 109, 67–74. <https://doi.org/10.1016/j.exger.2017.05.016>
- Junehag, L., Asplund, K., & Svedlund, M. (2014). Perceptions of illness, lifestyle and support after an acute myocardial infarction. *Scandinavian Journal of Caring Sciences*, 28(2), 289–296.

- <https://doi.org/10.1111/scs.12058>
- Kriswiastiny, R., Mandala, Z., & Efendy, M. (2016). Hubungan Infark Miokard Akut (Ima) Yang Dirawat Inap Dengan Hipertensi Di Rsud Dr. H. Abdulmoeloek Provinsi Lampung Tahun 2014 & 2015. *Kedokteran Universitas Malahayati Lampung*, 1–10.
- Muttaqin, A. (2014). *Asuhan Keperawatan Klien dengan Gangguan Sistem kardiovaskular dan Hematologi*. salemba medika.
- Nursalam. (2015). *Manajemen Keperawatan*. salemba medika.
- Putri, M., Hasan, R., & Rahmad Isnanta. (2020). Correlation of Platelet Distribution Width (PDW) and Troponin I in Acute Myocardial Infarction. *Journal of Endocrinology, Tropical Medicine, and Infectious Disease (JETROMI)*, 2(3), 124–132. <https://doi.org/10.32734/jetromi.v2i3.4287>
- Rosjidi, C. H. (2020). Early Home Care Errors and the Impact on Delay in Hospital for Patients with Coronary Heart Disease. *Jurnal Keperawatan*, 11(1), 1. <https://doi.org/10.22219/jk.v11i1.9752>
- RSUD Dr Soegiri. (2018). *Rekam Medik RSUD Dr. Soegiri Lamongan Rawat Inap ICCU: Jumlah Kasus IMA Bulan Januari-Maret 2018*.
- Trijayanti Idris, D. N., Dewi, A., & Sari, N. K. (2018). Tingkat Kenyamanan Pasien Acute Myocardial Infarction Dengan Rehabilitasi Jantung Fase 1 Di Ipi Rumah Sakit Bapris Kediri. *Jurnal Penelitian Keperawatan*, 4(1). <https://doi.org/10.32660/jurnal.v4i1.343>
- Verulava, T., Maglakelidze, T., & Jorbenadze, R. (2017). Hospitalization Timeliness of Patients with Myocardial Infarction. *Eastern Journal Of Medicine*, 22(3), 103–109. <https://doi.org/10.5505/ejm.2017.36854>
- WHO. (2015). *Global Journal Of Medical Research*.