

## Nurses' Perceptions of Deep Breathing Therapy for Angina Pectoris Patients at RSUD Umar Wirahadikusumah: A Phenomenological Study

Prinsesa Mutiara Adam<sup>1</sup>, Diding Kelana Setiadi<sup>1</sup>, Ayu Prameswari Kusuma Astuti<sup>1</sup>  
<sup>1</sup>Universitas Pendidikan Indonesia, Sumedang, Indonesia

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### Article Info

#### Keywords :

Nurse Perception, Deep Breath Therapy, Angina Pectoris

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#### Corresponding Author :

Prinsesa Mutiara Adam

E-mail :

[prinsesamutiaraadam@upi.edu](mailto:prinsesamutiaraadam@upi.edu)

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### ABSTRACT

Angina pectoris is a common clinical manifestation of coronary heart disease that causes chest pain and discomfort, requiring comprehensive nursing management. Deep breathing therapy is a non-pharmacological nursing intervention that may help reduce pain and improve patient comfort. This study aimed to explore nurses' perceptions regarding the application of deep breathing therapy in patients with angina pectoris. A qualitative study with a transcendental phenomenological approach was conducted in the High Care Cardiac Unit of a regional public hospital in Indonesia. Five nurses were recruited as participants using a snowball sampling technique. Data were collected through face-to-face, in-depth interviews guided by semi-structured questions. All interviews were audio-recorded, transcribed verbatim, and analyzed using Creswell's spiral data analysis combined with Moustakas' phenomenological analysis steps to identify meaningful themes. The findings indicated that nurses perceived deep breathing therapy as a simple, safe, and independent nursing intervention that could be flexibly applied according to patients' clinical conditions. The therapy was mainly used for patients with mild to moderate chest pain and was perceived to promote relaxation, reduce anxiety, and enhance patient comfort. However, nurses also reported several limitations, including reduced effectiveness in patients with severe pain, unstable

hemodynamic conditions, heavy nursing workload, and the absence of specific clinical guidelines. In conclusion, deep breathing therapy is perceived by nurses as a beneficial supportive intervention in the management of angina pectoris, highlighting the need for the development of standardized guidelines and further strengthening of non-pharmacological nursing practices in cardiovascular care.

DOI: <https://doi.org/10.56359/igj.v5i2.1009>



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## Introduction

Cardiovascular disease is still one of the main causes of death in many countries, including Indonesia. Data from the Indonesian Health Survey (Survei Kesehatan Indonesia/SKI) in 2023 showed that 0.85% of the population had been diagnosed with heart disease by a physician. This indicates that cardiovascular disease remains a serious health problem that needs attention (Kementerian Kesehatan Indonesia, 2023). One common clinical symptom experienced by patients with coronary heart disease is angina pectoris, which is chest pain caused by an imbalance between the heart's oxygen needs and the blood supply to the coronary arteries (Afifah & Andriani, 2022).

Chest pain experienced by patients with angina pectoris often causes discomfort, fear, and anxiety, which can interfere with daily activities. As a result, many patients seek immediate medical treatment when symptoms appear. The management of angina pectoris does not only focus on pharmacological therapy, but also includes non-pharmacological interventions to help relieve symptoms. One of the interventions commonly used is deep breathing therapy, which is known to help patients relax, improve oxygen intake, and reduce anxiety (Laborde et al., 2022; Liu et al., 2020).

Based on medical record data at RSUD Umar Wirahadikusumah during the period of 2023 to 2025, there were 486 cases of angina pectoris, with an increasing number of cases each year. This condition shows the importance of supportive nursing interventions that can improve patient comfort, including the use of deep breathing therapy. However, a preliminary study conducted in October 2025 found that the implementation of deep breathing therapy in the cardiac care unit had not been carried out optimally. Although nurses were aware of the benefits of this therapy, its application was not consistent due to the lack of structured routines and habituation in daily nursing care.

Several previous studies have reported that deep breathing therapy is effective in reducing pain and anxiety in patients with heart disease and other chronic conditions (Rezaei et al., 2024; Nurhusna et al., 2024; Yunus & Magaribu, 2023). Most of these studies, however, focused more on patient outcomes and paid little attention to the experiences of nurses who directly implement the intervention. In practice, nurses play an important role in determining whether an intervention is applied consistently. Nurses' perceptions, including their understanding, beliefs, and attitudes, can influence how they provide care and make clinical decisions (Aliyu et al., 2020; Schunk et al., 2022).

Therefore, exploring nurses' experiences in implementing deep breathing therapy is important to understand how this intervention is carried out in real clinical settings. This study uses a qualitative phenomenological approach to explore nurses' lived experiences and to understand how they perceive and apply deep breathing therapy when caring for patients with angina pectoris (Creswell & Poth, 2021). A phenomenological approach is considered appropriate because it allows researchers to capture experiences and meanings based on nurses' direct interactions with patients.

Overall, this condition emphasizes the importance of strengthening non-pharmacological nursing interventions to help relieve chest pain in patients with angina pectoris, as nurses' perceptions and daily practices play a key role in ensuring consistent implementation (Aliyu et al., 2020; Nurhusna et al., 2024). Therefore, this study aims to explore nurses' experiences at RSUD Umar Wirahadikusumah in implementing deep breathing therapy for patients with angina pectoris. The findings are expected to contribute practical insights for improving nursing practice, particularly in supporting evidence-based and patient-centered care.

### **Objective**

This study aimed to explore and gain a deeper understanding of nurses' perceptions and lived experiences in implementing deep breathing therapy for patients with angina pectoris at RSUD Umar Wirahadikusumah.

### **Method**

This study used a qualitative research approach with a phenomenological design to examine nurses' perceptions and lived experiences in implementing deep breathing therapy for patients with angina pectoris. A phenomenological approach was selected because it is suitable for gaining a deep understanding of participants' subjective experiences and the meanings they attach to a phenomenon encountered in everyday clinical practice.

The study population consisted of nurses working in the cardiac care unit at RSUD Umar Wirahadikusumah who were directly involved in caring for patients with angina pectoris. Participants were recruited using a purposive sampling technique. The inclusion criteria were registered nurses who had experience providing nursing care to patients with angina pectoris and who had implemented or were familiar with deep breathing therapy in their clinical practice. The number of participants was determined based on data saturation, which was reached when no new themes or relevant information emerged from subsequent interviews.

Data collection was conducted through in-depth, semi-structured interviews to allow participants to openly express their perceptions and experiences. An interview guide was used to maintain consistency across interviews while still providing flexibility to explore issues that arose during the interview process. All interviews were conducted face-to-face, audio-recorded with participants' consent, and transcribed verbatim to ensure the accuracy of the data.

Data analysis followed a phenomenological analysis process, which involved repeatedly reading the interview transcripts, identifying significant statements, formulating meanings, grouping similar meanings into themes, and developing a comprehensive description of the phenomenon. This analytical process enabled the researchers to capture the essence of nurses' experiences in implementing deep breathing therapy. The findings were presented in narrative form and supported by

direct quotations from participants to enhance credibility and provide contextual richness.

The study was conducted at RSUD Umar Wirahadikusumah, with data collection carried out during the research period in 2025. Ethical considerations were carefully addressed throughout the study, including obtaining institutional permission, securing informed consent from all participants, ensuring confidentiality, and maintaining participants' anonymity.

## Results

The findings of this study are presented in five main themes and several subthemes, as outlined in Table 1.

**TABLE 1.** Themes and Subthemes of Nurses' Experiences in Implementing Deep Breathing Therapy

Main Theme	Subthemes
Meaning and professional authority of nurses in deep breathing therapy	<ul style="list-style-type: none"> <li>• Deep breathing therapy as nurses' professional responsibility</li> <li>• Nurses' autonomy in clinical decision-making</li> </ul>
Deep breathing therapy as an initial nursing intervention	<ul style="list-style-type: none"> <li>• Deep breathing therapy as an initial non-pharmacological intervention</li> <li>• Nursing response to chest pain</li> </ul>
Barriers to implementing deep breathing therapy	<ul style="list-style-type: none"> <li>• Physical and psychological barriers of patients</li> <li>• Environmental and resource-related barriers</li> </ul>
Strategies and modifications in implementing deep breathing therapy	<ul style="list-style-type: none"> <li>• Adjustment of deep breathing therapy based on patient condition</li> <li>• Modification and combination of therapies to enhance effectiveness</li> </ul>
Effectiveness and benefits of deep breathing therapy	<ul style="list-style-type: none"> <li>• Psychological benefits and patient comfort</li> <li>• Reduction of pain intensity without complete elimination</li> </ul>

The findings of this study show five main themes that describe how nurses perceive and experience the implementation of deep breathing therapy for patients with angina pectoris at RSUD Umar Wirahadikusumah. The first theme, meaning and professional authority of nurses in deep breathing therapy, describes nurses' views of this intervention as part of their professional responsibility. Nurses considered educating patients about deep breathing therapy as a basic nursing task. They explained that guiding patients to perform the therapy is clearly within the nursing role. Participants also stated that they have the authority to assess patients' conditions independently before deciding to apply the therapy. Based on this assessment, nurses determined whether deep breathing therapy was appropriate. They also mentioned that patients could perform the therapy on their own after receiving proper guidance, which reflects nurses' independence in clinical decision-making.

The second theme, deep breathing therapy as an initial nursing intervention, describes how nurses use this therapy as an early response to chest pain. Participants reported that deep breathing therapy was often applied before giving pain medication or before more invasive medical procedures. Nurses viewed the therapy as a form of initial nursing action when patients first complained of chest pain. They also described providing deep breathing instruction before procedures such as pre-PCI and applying the therapy immediately when chest pain appeared, depending on the patient's condition at the time.

The third theme, barriers to implementing deep breathing therapy, explains the difficulties nurses faced in practice. Nurses reported that severe chest pain made it hard for patients to follow breathing instructions, as patients often could not focus due to the intensity of the pain. Anxiety and restlessness were also mentioned as factors that reduced patient cooperation. In addition, older patients were considered more difficult to guide because they sometimes had trouble understanding instructions. Environmental conditions and limited staffing were also identified as challenges that affected the consistency of therapy implementation.

The fourth theme, strategies and modifications in implementing deep breathing therapy, describes how nurses adjusted the therapy to suit patients' conditions. Participants emphasized the importance of assessing pain levels before starting the therapy. Demonstration was commonly used to help patients better understand how to perform the breathing technique. Nurses also reported combining deep breathing therapy with spiritual activities, such as recitation, or with calming sounds to help patients relax. Involving family members to assist and encourage patients was another strategy used to improve patient cooperation.

The fifth theme, effectiveness and benefits of deep breathing therapy, reflects nurses' observations of patient responses after the intervention. According to participants, patients appeared calmer, more relaxed, and more comfortable after performing deep breathing therapy. Nurses observed that shortness of breath decreased and patients seemed more at ease. Although the therapy did not completely relieve chest pain, nurses felt that it helped reduce pain intensity and provided psychological comfort, making it easier for patients to cope with their symptoms.

## **Discussion**

This study explored nurses' perceptions and lived experiences in implementing deep breathing therapy for patients with angina pectoris at RSUD Umar Wirahadikusumah using a phenomenological approach. The findings identified five main themes that describe how nurses understand the role of deep breathing therapy, apply it in daily practice, encounter various obstacles, adjust their strategies, and perceive the outcomes of the intervention. Overall, these findings provide a clear picture of nurses' roles in supporting non-pharmacological pain management in a cardiac care setting.

The first theme relates to the meaning and professional authority of nurses in implementing deep breathing therapy. Nurses viewed this intervention as part of their professional responsibility, particularly in providing education and guidance to patients. This perception reflects nurses' independence in assessing patients' conditions and determining appropriate nursing actions based on clinical judgment. These findings are in line with Aliyu et al. (2020), who stated that nurses' perceptions influence how consistently non-pharmacological interventions are applied in practice. When nurses consider an intervention as an essential part of nursing care rather than an additional task, it is more likely to be implemented routinely.

The second theme shows that deep breathing therapy is commonly used as an initial nursing intervention to manage chest pain. Nurses often applied the therapy before administering analgesics or before patients underwent more advanced medical procedures. This finding supports previous studies that describe deep breathing relaxation as an early supportive intervention to help reduce pain and anxiety in patients with cardiovascular conditions (Yunus & Magaribu, 2023; Nurhusna et al.,

2024). The use of deep breathing therapy as a first response reflects nurses' proactive efforts to reduce patient discomfort while waiting for further medical treatment.

Although nurses had positive views about the therapy, the third theme highlights several barriers that affected its implementation. Patient-related factors such as severe pain, anxiety, restlessness, and older age were reported to limit patients' ability to follow instructions. These findings are consistent with Rezaei et al. (2024), who noted that intense pain and psychological distress can reduce patients' responsiveness to breathing-based interventions. In addition, environmental conditions and limited staffing were also identified as challenges that made it difficult to apply the therapy consistently. This indicates that successful implementation is influenced not only by nurses' perceptions but also by organizational and environmental support.

The fourth theme describes the strategies used by nurses to adapt deep breathing therapy to patients' conditions. Nurses adjusted the intervention based on pain intensity, provided direct demonstrations, and combined breathing exercises with spiritual practices or calming sounds to help patients relax. Involving family members was also considered helpful in encouraging patient cooperation. These approaches show nurses' flexibility and creativity in providing care and suggest that personalized and culturally relevant strategies may improve the acceptance and effectiveness of non-pharmacological interventions.

The fifth theme focuses on the perceived benefits of deep breathing therapy. Nurses observed that patients became calmer, more relaxed, and more comfortable after the therapy. Although the intervention did not completely eliminate chest pain, nurses felt that it helped reduce pain intensity and supported patients psychologically. This finding is consistent with previous studies showing that deep breathing therapy contributes to symptom relief and emotional comfort, even when pain is not fully resolved (Nurhusna et al., 2024; Yunus & Magaribu, 2023). This suggests that the main value of deep breathing therapy lies in its supportive role alongside pharmacological treatment.

Overall, the findings indicate that nurses' perceptions play an important role in the implementation of deep breathing therapy. Professional autonomy, positive attitudes, and adaptive strategies support its use, while patient-related factors and organizational constraints may limit its consistent application. The phenomenological design allowed for an in-depth exploration of nurses' lived experiences in real clinical settings, providing meaningful insights into everyday nursing practice.

Several limitations should be acknowledged. This study involved a small number of participants from a single hospital, which may limit the transferability of the findings to other settings. In addition, the use of self-reported interview data may be influenced by recall or social desirability bias. Despite these limitations, the consistency of themes and the depth of participants' narratives support the credibility of the findings. Overall, this study provides valuable insight into nurses' experiences and highlights the need for stronger institutional support, ongoing training, and clear guidelines to optimize the implementation of deep breathing therapy in nursing care for patients with angina pectoris.

## **Conclusion**

This study concludes that nurses view deep breathing therapy as an important and meaningful part of nursing care for patients with angina pectoris. The therapy is

not only seen as a supportive measure, but also as part of nurses' professional responsibility and clinical authority. Nurses have a key role in assessing patients' conditions, providing education, and deciding when deep breathing therapy is appropriate based on individual patient needs.

In practice, deep breathing therapy is often used as an initial non-pharmacological intervention when patients experience chest pain, particularly before pharmacological treatment or invasive procedures are carried out. Nurses perceive this therapy as a simple and accessible approach to help reduce discomfort and promote a sense of calm in patients. However, the implementation of deep breathing therapy is influenced by several barriers, including patients' physical and psychological conditions, environmental factors, and limited human resources. Despite these challenges, nurses demonstrate flexibility by adapting the intervention through direct demonstration, combining it with spiritual or supportive approaches, and involving family members to improve patient cooperation.

Overall, deep breathing therapy is perceived to provide psychological comfort and contribute to a reduction in pain intensity, although it does not completely relieve chest pain. These findings emphasize the importance of nurses' perceptions, professional autonomy, and clinical judgment in integrating non-pharmacological interventions into daily nursing practice. Strengthening institutional support, developing clear guidelines, and providing ongoing training may help improve the consistency and effectiveness of deep breathing therapy implementation in cardiac care settings.

Future research is recommended to explore nurses' perceptions and experiences related to deep breathing therapy in different clinical settings and healthcare institutions, in order to improve the transferability of the findings. Further studies may also focus on evaluating the impact of structured training programs or standardized protocols on nurses' confidence and consistency in applying the therapy. In addition, quantitative or mixed-methods studies are suggested to assess the effectiveness of deep breathing therapy on clinical outcomes such as pain intensity, anxiety levels, and patient satisfaction, as a complement to the qualitative findings of this study.

### Acknowledgement

The authors would like to thank the management of RSUD Umar Wirahadikusumah for granting permission to conduct this study. The authors also extend their appreciation to all nurses who participated and willingly shared their experiences and insights, which made this study possible.

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