

Review article

Nursing Approaches to Pain Management in Labor for Mothers in Hospitals Across Asia

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Abstract

Effective pain management during childbirth is crucial for ensuring the well-being of both mother and child. In Asia, diverse approaches to managing labor pain are applied in hospital settings, combining both pharmacological and non-pharmacological strategies. Cultural values, resource availability, and healthcare systems significantly influence the approaches used. This review explores nursing approaches to labor pain management across different countries in Asia, highlighting common methods, their effectiveness, and the challenges encountered.

INTRODUCTION

Pain during labor is a universal experience for women, but its management varies widely across regions and healthcare settings. In Asia, nursing practices for managing labor pain are influenced by a combination of traditional beliefs, cultural perceptions, and the healthcare infrastructure available in each country. While pharmacological methods, such as epidural analgesia, are common in more developed nations, non-pharmacological approaches such as massage, breathing exercises, and acupuncture are widely used in regions with limited medical resources.

Studies have shown that pain management during labor is a critical component of maternal care that influences the overall birth experience and maternal outcomes.¹ In developed countries such as Japan and

South Korea, epidurals and other pharmacological pain relief methods are increasingly common, while in developing nations, non-pharmacological techniques dominate due to a lack of medical resources and different cultural attitudes towards childbirth.² Non-pharmacological interventions are often led by nurses, who play a pivotal role in providing holistic care to women during labor.³

Ensuring effective pain management in childbirth is essential to improving maternal satisfaction and reducing complications such as prolonged labor and maternal distress. However, in many parts of Asia, the resources required for pharmacological interventions are limited, necessitating the use of non-pharmacological strategies. This review aims to explore the nursing approaches used for labor pain management in Asian

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hospitals, focusing on the effectiveness and challenges of these methods.

The primary objective of this review is to provide an overview of nursing approaches to labor pain management in Asian hospital settings, with an emphasis on comparing the use of pharmacological and non-pharmacological methods across countries with varying healthcare resources.

METHODS

Search Strategy

A systematic review was conducted using electronic databases such as PubMed, Scopus, and Google Scholar. The search focused on articles published between 2018 and 2022, using keywords such as "labor pain management," "nursing approaches," "Asia," "pharmacological interventions," and "non-pharmacological interventions." Both qualitative and quantitative studies were included to provide a comprehensive overview of the topic.

Inclusion and Exclusion Criteria

Articles were included if they discussed pain management during childbirth in an Asian hospital setting, focused on nursing interventions, and were published within the last five years. Studies were excluded if they did not explicitly address pain management in childbirth or were conducted outside of the Asian region.

Data Extraction and Synthesis

The data extracted included the types of pain management strategies used, the role of nurses in implementing these strategies, and the outcomes reported for both mothers and healthcare providers. The findings were synthesized into a comparative analysis of pharmacological and non-pharmacological approaches.

RESULTS

Pharmacological Methods

Pharmacological methods, such as epidural analgesia and the use of opioids, are available in many hospitals across Asia, particularly in more developed countries like Japan, South Korea, and Singapore. Epidurals are widely regarded as one of the most effective forms of labor pain relief, with a high rate of maternal satisfaction.⁴ However, their availability is often limited in developing countries due to a lack of trained anesthetists and medical equipment.⁵ Table 1 provides an overview of pharmacological methods used in selected Asian countries.

Table 1
Pharmacological methods used in selected Asian countries

Country	Pharmacological Methods	Availability
Japan	Epidurals, opioids	High in urban hospitals, lower in rural areas
South Korea	Epidurals, nitrous oxide	Widely available
India	Limited epidural use, opioids	Low in rural hospitals
Indonesia	Opioids, minimal epidural availability	Limited, especially outside major cities

Non-Pharmacological Methods

Non-pharmacological pain management techniques are widely used in Asian hospitals, particularly in low-resource settings. These methods include breathing exercises, massage, water immersion, and acupuncture. Nurses play a key role in providing these interventions, often teaching and guiding mothers through the techniques.⁶ While these methods are generally less effective in eliminating pain than pharmacological options, they are valued for their ability to provide some level of comfort and control to mothers.⁷

Table 2
Non-Pharmacological methods used in selected Asian countries.

Non-Pharmacological Methods	Countries Using This Approach	Effectiveness
Breathing exercises	India, China, Indonesia	Moderately effective in reducing discomfort
Acupuncture	China, Taiwan	Effective in mild pain reduction
Massage	Thailand, Malaysia	Provides comfort, but less effective
Water immersion	Singapore, Thailand, Vietnam	Moderately effective, gaining popularity

DISCUSSION

Pharmacological Pain Management

In more developed Asian countries, pharmacological interventions are often the first line of pain management during labor. Epidurals are commonly used in urban hospitals, particularly in Japan and South Korea, where healthcare infrastructure supports the administration of these interventions.⁴ However, despite their effectiveness, epidurals are not always available in rural or low-resource settings, where shortages of trained personnel and medical equipment pose significant barriers.⁵

Non-Pharmacological Methods and Nursing Roles

Non-pharmacological techniques are widely practiced in many parts of Asia, especially where access to pharmacological pain relief is limited. Nurses play a central role in administering these methods, providing not only physical pain relief through techniques such as massage and hydrotherapy but also emotional support to mothers.⁶ In countries like India and Indonesia, where resources are more limited, nurses often rely heavily on these

techniques to help women cope with labor pain.⁷

Cultural Influences on Pain Management

Cultural attitudes towards pain and childbirth have a profound influence on the methods chosen for pain management in Asia. In many cultures, enduring labor pain is seen as a natural and even necessary part of the childbirth experience.⁸ This belief can lead to a preference for non-pharmacological methods, even in settings where pharmacological options are available.³ For example, in countries like China and Taiwan, acupuncture is frequently used as a culturally accepted form of pain relief.⁹

Challenges and Recommendations

One of the primary challenges in managing labor pain in Asia is the disparity in access to effective pain relief methods between urban and rural hospitals. Rural areas often lack the resources needed for pharmacological interventions, leading to a reliance on less effective non-pharmacological methods.⁷ To address this issue, it is recommended that more training be provided to healthcare professionals in rural areas to administer pharmacological interventions safely and effectively. Additionally, further research into the effectiveness of non-pharmacological methods in low-resource settings is needed to improve maternal outcomes.⁵

CONCLUSION

Nursing approaches to pain management during labor in Asia vary widely depending on the availability of resources, cultural perceptions of pain, and the healthcare infrastructure in place. While pharmacological interventions such as epidurals are highly effective, their availability is often limited in low-resource settings, necessitating the use of non-pharmacological methods. Nurses play a

crucial role in managing labor pain, particularly through the use of non-pharmacological techniques. However, disparities in access to effective pain relief remain a significant challenge, highlighting the need for continued efforts to improve maternal healthcare in the region.

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