

**“INVESTIGATING THE KNOWLEDGE, PRACTICE AND
APPROACH OF ABDOMINAL EFFLEURAGE AMONG
OBSTETRIC NURSING CAREGIVERS, IN SELECTED HOSPITALS AT
KANPUR, UP
: A CROSS-SECTIONAL SURVEY”**

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ABSTRACT

Abdominal effleurage is a non-pharmacological pain relief technique widely used in obstetric care to enhance maternal comfort during labor. Despite its benefits, there is limited awareness and inconsistent practice among obstetric nursing caregivers, which can impact the quality of maternal care. This cross-sectional survey investigated the knowledge, practice, and approach of abdominal effleurage among 100 obstetric nursing caregivers in selected hospitals in Kanpur, Uttar Pradesh. Data were collected using a structured questionnaire and analysed using descriptive and inferential statistics. The findings revealed that 55% of caregivers had inadequate knowledge, 35% had moderately adequate knowledge, and only 10% had adequate knowledge. A significant association was found between knowledge levels and age ($\chi^2 = 14.23$, $p < 0.05$), years of experience ($\chi^2 = 12.89$, $p < 0.05$), and area of practice ($\chi^2 = 9.23$, $p < 0.05$), while the highest level of education ($\chi^2 = 10.45$, $p > 0.05$) and familiarity with abdominal effleurage ($\chi^2 = 3.67$, $p > 0.05$) showed no significant association. The results highlight the need for structured training programs and continuing education to improve caregivers' knowledge and practice of abdominal effleurage, ultimately enhancing maternal care.

Keywords: Knowledge, obstetric nursing caregivers, abdominal effleurage, non-pharmacological pain relief, maternal care.

INTRODUCTION

Abdominal effleurage is a widely recognized non-pharmacological pain relief technique used in obstetric care, involving rhythmic, gentle stroking of the abdomen to enhance maternal comfort and relaxation during labor. Despite its proven benefits

in reducing labor pain and anxiety, its practice and implementation among obstetric nursing caregivers remain inconsistent due to varying levels of knowledge, training, and institutional support. Recent studies highlight that while non-pharmacological interventions are crucial in maternity care, their integration into routine clinical practice is often limited by inadequate awareness and skill gaps among healthcare providers. In India, where maternal health remains a public health priority, ensuring that obstetric nurses are well-equipped with evidence-based pain management strategies is essential for improving childbirth experiences and maternal outcomes. However, research suggests that many nursing professionals are either unfamiliar with abdominal effleurage or lack the confidence to apply it effectively, leading to suboptimal use of this technique in labor wards.

Given the increasing emphasis on holistic and patient-centred care, there is a pressing need to assess the current knowledge, practice, and approach of obstetric nursing caregivers regarding abdominal effleurage. This study aims to bridge this knowledge gap by evaluating the level of awareness, identifying barriers to implementation, and exploring factors that influence its practice in selected hospitals in Kanpur, Uttar Pradesh. Findings from this research will provide valuable insights for designing targeted educational programs and policy interventions to enhance the application of abdominal effleurage, ultimately contributing to improved maternal care services.

NEED FOR THE STUDY

Abdominal effleurage, a non-pharmacological pain relief technique involving gentle, circular stroking of the abdomen, has been shown to effectively reduce labor pain and anxiety. Despite its benefits, recent studies indicate a significant gap in knowledge and practice among obstetric nursing caregivers. For instance, a study assessing the effectiveness of effleurage massage by husbands during the first active phase of labor found that 56.25% of participants experienced severe pain before the massage, which reduced to 37.50% experiencing mild discomfort after the intervention. Similarly, research on evidence-based intrapartum care practices among obstetric care providers revealed that only 63.7% adhered to recommended practices,

highlighting the need for improved training and awareness. Addressing these gaps through structured training programs is crucial to ensure the effective application of abdominal effleurage, thereby enhancing maternal comfort and childbirth experiences

STATEMENT OF THE PROBLEM

“Investigating the knowledge, practice and approach of Abdominal Effleurage among Obstetric Nursing Caregivers in selected hospitals at Kanpur, UP: A Cross-Sectional Survey”

OBJECTIVES

1. To determine the percentage distribution of socio demographic variables such as age, highest level of education, years of experience, area of practice, and familiarity with the term abdominal effleurage among obstetric nursing caregivers.
2. To assess the knowledge, practice and approach of obstetric nursing caregivers regarding abdominal effleurage.
3. To analyse the association between knowledge of obstetric nursing caregivers regarding abdominal effleurage with the selected socio-demographic variables such as age, highest level of education, years of experience, area of practice, and familiarity with the term abdominal effleurage.

HYPOTHESIS

H1: There will be a significant association between knowledge levels of obstetric nursing caregivers regarding abdominal effleurage with selected socio-demographic variables.

METHODS AND MATERIALS

Research Approach:

In the present study, descriptive approach was used.

Research Design:

The research design used in this study was descriptive research design.

VARIABLES

Dependent Variable:

In this study, dependent variable is the knowledge, practice and approach among obstetric nursing caregivers regarding abdominal effleurage.

Demographic Variables:

The demographic variables under this study are age, highest level of education, years of experience, area of practice, and familiarity with the term abdominal effleurage.

POPULATION

The population for this study comprises of obstetric nursing caregivers.

Target Population:

In this study, the target population was Obstetric nursing caregivers working in selected hospitals at Kanpur, UP.

SAMPLE

The sample for the present study comprises of Obstetric nursing caregivers who met the inclusion and exclusion criteria.

SAMPLE SIZE

The sample size for the present study consists of 100 obstetric nursing caregivers from selected hospitals of Kanpur, UP.

SAMPLING TECHNIQUE

In the present study, Convenient sampling technique has been used for selection of Obstetric nursing caregivers.

SAMPLING CRITERIA

Inclusion Criteria:

- Obstetric nursing caregivers working in labor wards, maternity units, or delivery rooms.
- Willing to participate in the study.

- Able to understand English or the local language.

Exclusion Criteria:

- Caregivers unwilling to participate in the study.
- Caregivers not available at the time of data collection.

METHOD OF DATA COLLECTION:

Assessment of knowledge, practice and approach regarding abdominal effleurage among obstetric nursing caregivers was measured by administering research tool.

DEVELOPMENT OF RESEARCH TOOL

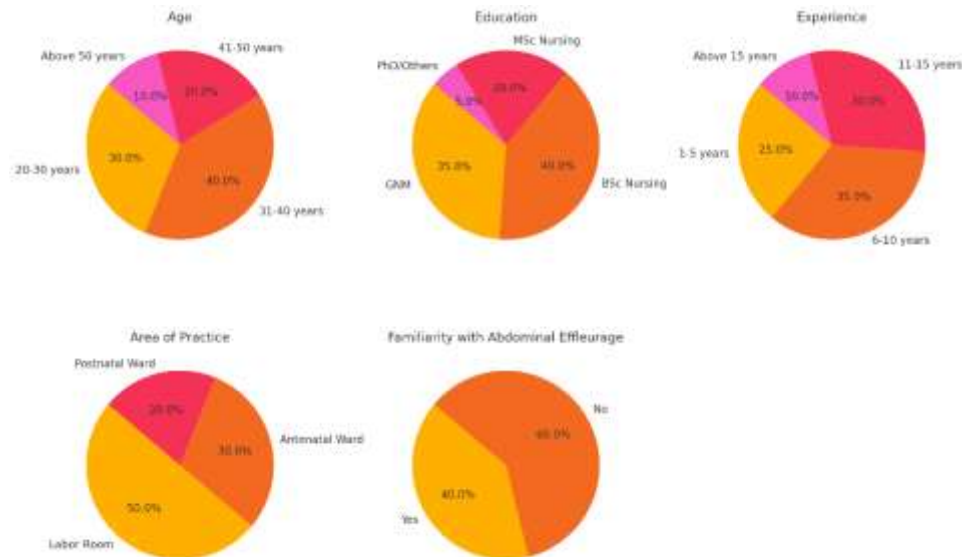
On the basis of research approach and design, to achieve the objectives of the study, a self -structured questionnaire was prepared to assess the knowledge, practice and approach on abdominal effleurage among obstetric nursing caregivers.

DESCRIPTION OF THE TOOL

Section A: A self-structured questionnaire was used to collect socio-demographic data.

Section B: A self-structured questionnaire was used to assess the knowledge, practice and approach on abdominal effleurage among obstetric nursing caregivers.

RESULTS AND FINDINGS**Section A:****Findings related to the socio demographic variables**



- The majority of respondents fall within the 31-40 years age group (40%).
- Most participants hold a BSc in Nursing (40%) as their highest level of education.
- In terms of experience, the largest group has 6-10 years (35%) of work experience.
- The primary area of practice is the Labor Room (50%).
- Lastly, a significant majority (60%) are unfamiliar with Abdominal Effleurage.

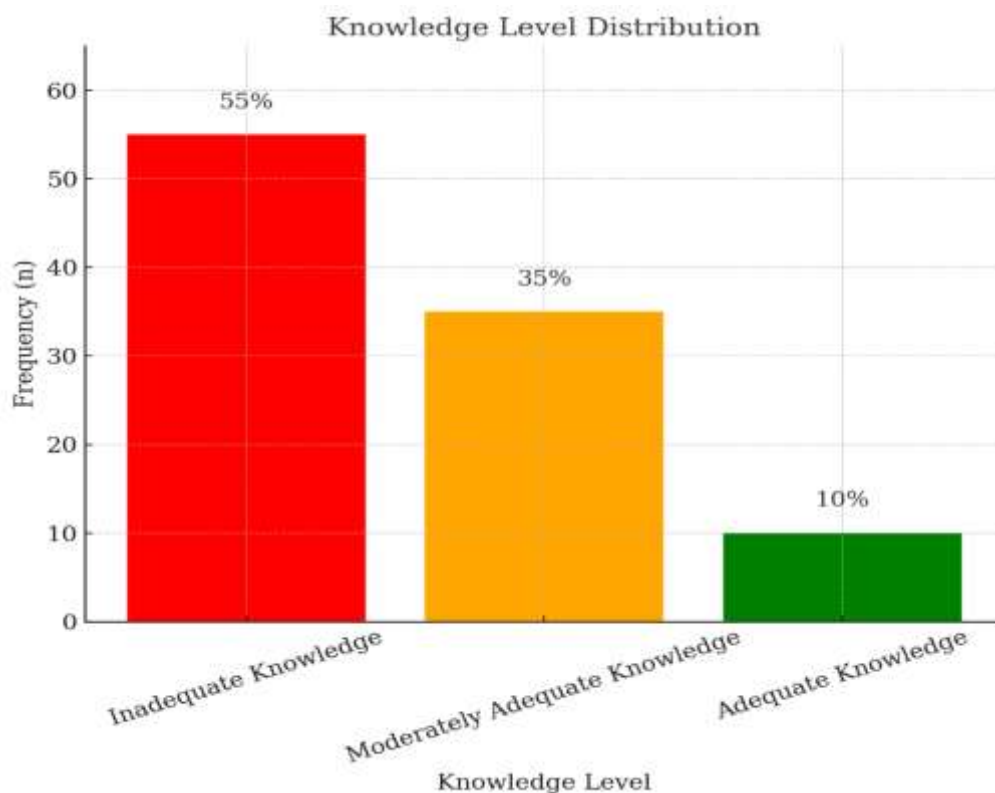
Section B:

Findings related to the knowledge, practice and approach of Obstetric nursing caregivers regarding abdominal effleurage.

Knowledge Level	Frequency (n)	Percentage (%)
Inadequate Knowledge	55	55%
Moderately Adequate Knowledge	35	35%
Adequate Knowledge	10	10%

The table represents the distribution of knowledge levels among obstetric nursing care givers:

The majority, 55%, have inadequate knowledge, while 35% possess moderately adequate knowledge. Only 10% demonstrate adequate knowledge on the subject. This indicates a need for further education and training to enhance knowledge levels among participants.



Section C:

The association between the knowledge ,practice and approach score and selected demographic variables.

Demographic Variable	Chi-Square Value (χ^2)	Degree of Freedom (df)	Tabulated Value	Level of Significance (p)
Age	14.23	3	7.81	< 0.05 (Significant)
Highest Level of Education	10.45	3	7.81	> 0.05 (Not Significant)
Years of Experience	12.89	3	7.81	< 0.05 (Significant)
Area of Practice	9.23	2	5.99	< 0.05 (Significant)
Familiarity with Abdominal Effleurage	3.67	2	5.99	> 0.05 (Not Significant)

Findings reveal that age, years of experience, and area of practice have statistically significant associations, while education level and familiarity with abdominal effleurage do not

NURSING IMPLICATIONS

The investigator has derived the following implications from the present study, which are of relevant concern in the field of nursing practice, nursing education, nursing administration and nursing research.

- **Nursing Practice:**

The findings of this study highlight several important nursing implications in obstetric care, particularly in the practice of abdominal effleurage:

Abdominal effleurage is a simple, non-invasive technique that can be integrated into routine maternal care. Standardizing the practice of abdominal effleurage in labor and delivery units can improve maternal outcomes. Since the study identified gaps in knowledge among caregivers, periodic training sessions should be conducted to enhance awareness and skill development. The study emphasizes the need for nurses to rely on evidence-based interventions. Encouraging the use of abdominal effleurage can reduce reliance on pharmacological pain relief methods, decreasing potential side effects and medical interventions. This aligns with global trends advocating for non-invasive maternal care techniques.

- **Nursing Education:**

The study highlights the need for improvements in nursing education to enhance knowledge and practice regarding abdominal effleurage. Abdominal effleurage should be incorporated into obstetric and maternal health nursing courses. Both undergraduate (B.Sc. Nursing, GNM) and postgraduate (M.Sc. Nursing, Ph.D.) curricula should include theoretical and practical training on non-pharmacological pain management techniques. Nursing students should be trained through simulation-based education using mannequins and role-playing scenarios. This method enhances confidence and skill acquisition before clinical application. Nursing students should be given opportunities to practice abdominal effleurage

under supervision in labor and delivery units. Practical demonstrations and bedside teaching should be emphasized to bridge the gap between theory and practice.

- **Nursing Administration**

Nursing administration plays a crucial role in ensuring the effective implementation of evidence-based practices like abdominal effleurage in obstetric care. One of the primary responsibilities of nursing administrators is to develop and implement policies that support the integration of non-pharmacological pain management techniques. Institutional policies should mandate the inclusion of abdominal effleurage in obstetric care protocols, ensuring that standard operating procedures (SOPs) are in place for uniformity across healthcare facilities. Patient-centred care should be emphasized as a core component of nursing administration. Nurses should be encouraged to educate laboring mothers on the benefits of abdominal effleurage and its proper application. By fostering a culture of patient education and empowerment, nursing administrators can contribute to improved maternal comfort and overall childbirth experiences.

- **Nursing Research:**

Nursing research plays a vital role in advancing knowledge and improving evidence-based practices related to non-pharmacological pain management techniques, including abdominal effleurage. This study highlights the need for further research to evaluate the effectiveness of abdominal effleurage in different maternal care settings and its impact on labor outcomes. Future studies can focus on assessing the physiological and psychological benefits of this technique, such as its influence on maternal stress, pain perception, and fetal well-being. By sharing research findings and best practices, nurses can contribute to a broader understanding of abdominal effleurage and its role in improving maternal care. Strengthening the research culture within nursing will ultimately enhance patient outcomes, improve obstetric nursing education, and foster professional growth within the field.

LIMITATIONS

- The study was limited to 100 participants, which may not fully represent the broader population of obstetric nursing caregivers.

- The research was conducted in selected hospitals, limiting the generalizability of findings to other healthcare settings.
- Responses were based on self-assessment, which may introduce response bias.
- The study did not evaluate the long-term impact of training on knowledge retention and practice improvement.

RECOMMENDATIONS

- Future studies should include a larger and more diverse sample of obstetric nursing caregivers across multiple healthcare institutions.
- Hospitals should encourage hands-on workshops and regular skill assessments to ensure effective application of abdominal effleurage.
- Future research should assess the long-term impact of training on caregivers' knowledge and practice of abdominal effleurage.
- Nursing administrators should develop policies that mandate non-pharmacological pain management techniques as part of routine obstetric care.

CONCLUSION

The study highlights a considerable gap in the knowledge and practice of abdominal effleurage among obstetric nursing caregivers in selected hospitals at Kanpur, UP. The findings indicate that 55% of caregivers had inadequate knowledge, 35% had moderately adequate knowledge, and only 10% had adequate knowledge. Statistical analysis showed significant associations between knowledge levels and factors such as age ($\chi^2 = 14.23$, $p < 0.05$), years of experience ($\chi^2 = 12.89$, $p < 0.05$), and area of practice ($\chi^2 = 9.23$, $p < 0.05$), while education level ($\chi^2 = 10.45$, $p > 0.05$) and familiarity with the term abdominal effleurage ($\chi^2 = 3.67$, $p > 0.05$) were not significantly associated. These findings emphasize the need for structured training programs and awareness initiatives to enhance the understanding and implementation of abdominal effleurage in maternal care. Strengthening educational interventions and integrating effleurage techniques into obstetric practice can improve pain management strategies and maternal outcomes.

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