



# EFFECTIVENESS OF SELECTIVE NURSING INTERVENTION REGARDING POSITIVE MATERNAL EXPERIENCE AFTER POST CESAREAN SECTION AT SELECTED HOSPITALS: A NARRATIVE REVIEW

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Article DOI: <https://doi.org/10.36713/epra26406>

DOI No: 10.36713/epra26406

## ABSTRACT

**BACKGROUND:** This study emphasis on effectiveness of various non-pharmacological methods and nursing interventional care and its evaluation among post-caesarean women in selected hospitals in India and other countries. Nursing intervention basically refers to standard post-operative care delivered to women undergone lower segment caesarean section to plummet post-surgery complications, reduce negative experience of the mother, and improve outcome of C-section post operation care and speedy healing of the women.

**OBJECTIVE:** To identify studies regarding rate and incidence of C-sections and to identify studies which had included standard nursing interventional care and their effectiveness in the maternal outcome among post caesarean women at selected hospitals.

**METHODS:** Online database browsed from PubMed, Google scholar, Sodhganga, Medline, research gate, Scopus, WoS by using keywords rate of caesarean section, post -operative care, nursing intervention, maternal outcome after C-section.

**RESULT:** 12 articles were included in this review study reflecting maternal recovery regarding non-pharmacological interventions delivered to post- caesarean mothers. Difference in maternal and foetal outcome between routine nursing care and planned interventional nursing care. Significant recovery has been recorded in all therapeutic studies with positive maternal and foetal outcome.

**CONCLUSION:** To summarise the review study that unveiled the positive maternal outcome which can be attained after caesarean section, by implementing various nursing interventional approaches among post-caesarean women that includes standardized post-operative outcome evaluation.

**KEYWORDS:** Rate and incidence of C-section, post-operative care, caesarean mother, nursing intervention, early ambulation.

## INTRODUCTION

One of the beautiful phases of a woman's life is her pregnancy; which brings additional demand on the female's body with physiological and psychological changes. A baby in a lap is an overwhelming experience. However, pregnancy of a woman does not end into vaginal birth and it turns out into caesarean section an operative procedure through abdominal incision and taking out baby for the sake of wellbeing of both mother and newborn.

(Atuhaire, Knowledge and Practices of Post Cesarean Section Mothers Towards Self-Care After delivery at Mbarara Regional Referral Hospital, 2021) Termination of pregnancy could be either vaginal delivery or surgical procedure by C-section. In addition to this C-section can also be either elective or emergency procedure. In some cases, planned operation is performed where vaginal delivery is not safe due to present or past obstetric, medicinal, or family history, whereas others are intervened as emergency C-section delivery by surgical technique is one of the commonest methods adapted in many developed and developing countries as it is a safe alternative to complicated delivery.

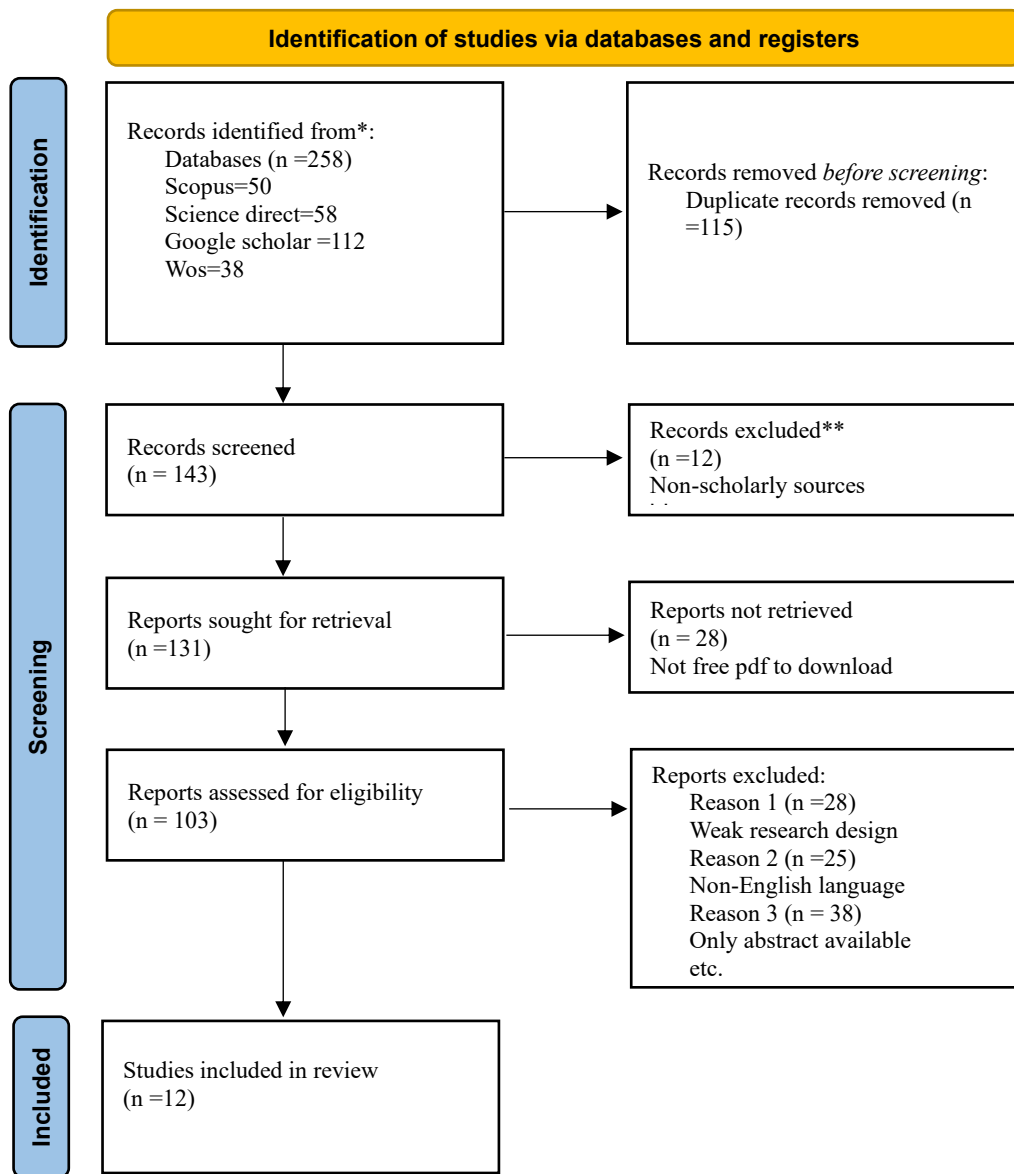
## METHODS

An online database search of 258 published articles with the study period of 2015-2025 are considered in the review. Research articles are included from different electronic records such as Google scholar, PubMed, Science direct, Medline, research gate by using keywords, 'post-caesarean section care,' 'Nursing intervention of post-operative women,' 'early ambulation,' 'pain management,' 'alternative methods of post-operative care. 115 articles were excluded because of duplication and 143 records are screened in. During screening 12 articles are excluded due to incomplete records, not aligned with core research theme, title/ abstract not available. Now records for retrieval are 131 and 28 records are not able to download. Now records remained for assessment of eligibility are 103 and out of these 28 articles have methodological issues (e.g. weak research design), 25 articles are in non-English language and 38 articles do not meet inclusion criteria after full text review. Finally, 12 studies are finally included for review. Eligibility Criteria for study inclusion are:

- i. Research studies relevant to the topic of the article.
- ii. Full pdf texted articles available free.
- iii. Time range between 2015-2025.
- iv. Online published articles only.



### PRISMA 2020 flow diagram for new systematic reviews which included searches of databases and registers only



\*Consider, if feasible to do so, reporting the number of records identified from each database or register searched (rather than the total number across all databases/registers).

\*\*If automation tools were used, indicate how many records were excluded by a human and how many were excluded by automation tools.

Source: Page MJ, et al. BMJ 2021;372:n71. doi: 10.1136/bmj.n71

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**Table. 1:**

Author name/Year	Aim of the study	Study Design	Study setting	Sample size	Duration of intervention	Study period	Tool used in study	Conclusion	recommendations
Malik N, Kapoor Singh & et.al (2024)	To study c-section trends and associated factors at tertiary care centre in India	Retrospective analysis	Tertiary care Hospitals Uttar Pradesh (Gorakhpur Baba Raghav Das Medical College)	9775 deliveries	10 yrs	Jan 2011- Dec 2021	Case record's	The rate of CS increased from 39.6 % to 52.4% common indications or LSCS were oligohydramnios, IUGR, malpresentation, CPD	No Recommendations
Sharma N, Jhawar A (2018)	To study incidence trends and determinants of C-section in tertiary care hospitals of Jhalawar, Rajasthan, India	Retrospective observational study	Tertiary hospital Jhalawar, Rajasthan	4636 deliveries	6 months	Oct 2018- Mar 2019	Observation for records	Incidence of LSCS was 31.1% out of these 91% belonged to age group 20-29 years ,7.1% emergency cs and 66.5% planned cs. Indications for LSCS– foetal distress, breech presentation, oligohydramnios, pre-eclampsia	No Recommendations
Pereire M, Silva D, Carvalho F & et.al (2025)	To analyse the management and impacts of acute postpartum pain following caesarean section among post-partum women in the immediate post-operative period.	Cross-sectional & analytical study	Philanthropic Maternity hospital, Northeast Brazil.	321 puerperal women	4 months	March & July 2023	Questionnaire & documentary analysis	Inadequate management of acute post-partum pain following caesarean section was associate with prev. painful child birth experience and negatively impacted will being and daily activities of post-partum women.	No Recommendations
Rusti A, Latifan A (2025)	To enhance recovery outcomes by investigative effect of implementing non-pharmacological interventions on post-caesarean pain management.	RCT	Selected hospitals Indonesia	100 post-caesarean women	Within 24 hours of elective/emergency c-section every 12 hours till 48 hours.	2018	VAS visual analogue scale for pain levels	Participants in the intervention group experienced significantly lower pain level than control group received only pharmacological treatment	To explore the optimal combinations of intervention and their applicability across diverse patient populations.
Yangchen T, Smitha MV, Sethi P(2024)	To evaluate the effectiveness of scheduled ambulation on maternal outcomes	Quasi experimental post-test only	Tertiary hospital Eastern India	142	1 <sup>st</sup> and 4 <sup>th</sup> day	1 Aug 2020 to 20 Feb 2021	Numerical rating scale	The pain score reduction was significantly lower in experimental group (67%) compared to control group (56.3%) from day 1 to day 4.	Similar long term effectiveness f post operative exercises on the functional status of post cs women can be



	amongst post caesarean women								done through follow up studies.
Chen Y, Fu Shuini, Luo L & et.al(2020)	Aimed to explore effect of high-quality nursing care on post caesarean section women	Retrospective study	Haikon Hospital China	105 post caesarean women	24 hours 48 hours 72 hours	2020	VAS self-rating scale (SAS) self-depression scale (SDS)	VAS score of experimental groups was much lower than control group immediately after operation at 24 hours, 48 hours, 72 hours after operation. The lactation yield of experimental group was much more than control group. Hospital stays post operative urination time, exhaust time and leaving bed.	Not specified
Banita R,Jyoti, Nilavansa B. (2019)	Aim to the study is to enhance the post operative recovery in women with CS delivery	Quasi experimental	Civil hospital Jalandhar, Punjab	60	2 <sup>nd</sup> ,3 <sup>rd</sup> ,4 <sup>th</sup> and 5 <sup>th</sup> day	2019	Numerical pain rating scale, checklist for maternal outcome	Pre-test mean maternal outcome and pain level in both groups were approx. same. However, mean post-test maternal outcome and pain level on 2 <sup>nd</sup> , 3 <sup>rd</sup> ,4 <sup>th</sup> and 5 <sup>th</sup> day in experimental group depicted tremendous outcome and decrease in pain level and outcome and high level of pain.	No specific
Mohamady S, Araby W, NageedS & et.al (2022)	Aimed to see how Benson's relaxation technique effectively decreased pain and tension in post-caesarean section mothers.	Quasi experiment design	Benha University Hospital Post partum recovery unit Egypt	170 mothers	3 months	2022	VAS perceived stress scale, structured interventional questionnaire	Application of Benson's relaxation technique the two groups had statically significant difference in their pain intensity or perceived stress scale rating.	Perform similar research in large representative probability sampling technique is highly recommended in various maternity facilities.
Hepp P, Hagenbeck C, Gilles J &et.al (2018)	Aim is to investigates the influence of music during caesarean on anxiety and stress of the expectant mothers	RCT	Heinrich Heine University in Dusseldorf Germany	304 patients	March 2015 to Aug 2017	2 and half year	VAS for anxiety	Low level of anxiety during surgery and after 2 hours of surgery the measured VAS for anxiety was still significantly lower (P=0.018). In addition, 89.7% that music made situation more enjoyable and calmed them (73.4%)	No specific



Kharat A, Rant M, Salvi R & et.al (2022)	To analyse the rate and indications for c-section and associated maternal morbidity and mortality	True experimental Pré-post test	Dr. Patil college of nursing Pimpri, Pune	60 post-natal mothers	Started after 6 weeks of delivery and VAS on 15 th day	March 2021	VAS for pain and yoga exercise	The study reveals that level of pain among postnatal mother with LSCS reduced significantly Yoga therapy.	Similar study in large sample investigates alternative and complimentary therapy on low back pain postnatal mothers.
Atuhaire S (2020)	To assess knowledge and practices of post caesarean section mothers towards self-care after delivery at Mbarara Regional Referral hospital	Descriptive cross-sectional study	Mbarara Regional Referral Hospital Uganda	150 mothers	Postnatal women	2020	Semi-structural questionnaire	Knowledge of post caesarean self-care among postpartum women at MRRH was poor as the majority of the participants 60% reported to have ever heard about care while only 40% reported to heard about it. only 22% of women perform PCS.	Conduct similar study in different region of Uganda
Gupta M, Garg V (2017)	To analyse the rate and indications for c-section and associated maternal morbidity and mortality	Retrospective study	Dept OBG, RUHS Jaipur	2959 women	1 <sup>st</sup> Jan 2016 and dec2016	1 year	Records and statistical analysis	31.46% overall caesarean delivery;36.52% pre=LSCS,13.65%obs labour, CPD 12.03%,fetal distress- 11.82%,breech- 7.52%,oligo- 5.16% failed induction of labour-3.54%, complication=11.60%	No specific



## RESULT

Among all these studies, six studies were done in India, whereas other studies were conducted in 1 Brazil, 1 in Indonesia, 1 China, 1 Egypt, 1 Germany, 1 Uganda. Summary characteristics of all conducted studies are various places and their results, recommendations, design, sample size, aim of the study, name of author. Tools used, duration of intervention or time of intervention and study period are shown in table 1.

Effect of implementing non-pharmacological interventions on post-caesarean pain management indicates a significant reduction in pain levels and improved emotional satisfaction among participants who engaged in these interventions. The study underscores the importance of integrating non-pharmacological strategies into clinical practice, advocating for a more holistic approach to pain management that prioritizes patient comfort and satisfaction. (Aisyah Eldina Rusti, 2025)

## DISCUSSION

In this study, it showed that enormous ways are to curb post-caesarean section pain by reading and involving some scientific research papers and they evidently display significant decrease in pain and improvement in maternal outcome.

In country like India, a developing nation, where cost and health benefits are kept priority, it is pivotal to provide comprehensive post-operative care in a planned manner. Hence early ambulation is essential to regain maximum strength of muscles as soon as possible and therefore overall health of mother after surgery is improved and reduce many complications associated with surgery.

A multifaceted approached study conducted in China, aimed to alleviate pain level and its symptoms with reduction in discomfort following operation. Implemented traditional Chinese medicine principles, including auricular pressure point therapy, emotional regulations, lactation promotion, dietary adjustment and pain management by various techniques. This study management used VAS pain score in the study group ( $1.68 \pm 0.78$ ;  $p < 0.05$ ) (Y, 2020)

## LIMITATION

This study may not include all pharmacological and non-pharmacological methods and includes only free online database published studies. In addition, this is study included articles published in English language only and between time frame of 2016-2025.

## CONCLUSION

The finding indicates that when interventions are implemented a significant reduction in pain levels are recorded, furthermore, it contributes in a positive emotion and overall satisfaction with their care. This study adds to the growing body of literature supporting the integration of holistic, non-pharmacological methods alongside conventional pharmacological interventions, supporting for a more comprehensive approach to pain management after surgery.

## RECOMMENDATIONS

Several recommendations were stated in all these studies, soe of them are:

- Study could be replicated on large scale of subjects, different settings and with different aspects of health status. (Ashwini Ashok Kharat M. R., 2022)
- Training all staff nurses in the obstetrics department to apply BRT for each woman after a caesarean section. (Shaimaa Hassan Mohamady S. O., 2022)
- Further studies can be carried to explore the women's and family member's perspectives on scheduled early ambulation by qualitative approaches. (Tanzin Yangchen M. V., 2024)

**CONSENT:** Not applicable

**ETHICAL APPROVAL:** It is not applicable.

**COMPETING INTEREST:** Authors have declared that no competing interest exists.

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