

# INPLASY

## Outpatient Induction of Labour, A Meta-analysis

INPLASY202450091

doi: 10.37766/inplasy2024.5.0091

Received: 19 May 2024

Published: 19 May 2024

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### ADMINISTRATIVE INFORMATION

**Support** - None, personal funds.

**Review Stage at time of this submission** - Piloting of the study selection process.

**Conflicts of interest** - None declared.

**INPLASY registration number:** INPLASY202450091

**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 19 May 2024 and was last updated on 19 May 2024.

### INTRODUCTION

**Review question / Objective** To evaluate the effectiveness and safety of outpatient induction using mechanical and hormonal methods compared to inpatient induction. 2. To compare the maternal and neonatal outcomes in terms of achieving vaginal delivery, caesarean section and operative vaginal delivery rates in women who undergo outpatient and inpatient induction of labour.

**Rationale** Induction of labour has become a common practice in obstetrics, leading to an increase in antenatal admissions, operative vaginal deliveries, and cesarean sections. However, maternal satisfaction is higher when induction is performed as an outpatient. Studies have shown that outpatient labour induction is effective and safe compared to inpatient induction. Although few agents are used for this purpose, this review aims to explore the available options and their effectiveness.

**Condition being studied** Outpatient Induction of labour using either hormonal or mechanical methods, compared to either outpatient methods or inpatient IOL.

### METHODS

**Search strategy** Searching for randomized control trials in cochrane, PubMed, CINHALL, EMBASE, Google Scholar, and CNKI from 2010.

**Participant or population** Pregnant women at term, low-risk, their bishop score less than 6, singleton pregnancy.

**Intervention** Intervention: Outpatient Induction of labour, Folley Catherter, Dinoprostine Insert, Osmotic Hegar dilator, Misoprostol.

**Comparator** Control: Inpatient Induction of labour, Folley Catherter, Dinoprostine Insert, Dinoprostine Gel, Osmotic Hegar dilators, Misoprostol

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Outpatient Induction of labour, Folley Catherter, Dinoprostine Insert, Osmotic Hegar dilator, Misoprostol.

**Study designs to be included** Randomized control Trials.

**Eligibility criteria** The selected studies for this review should be randomized trials comparing the induction of labour (IOL) in an outpatient and inpatient or outpatient settings, using any mechanical or hormonal agents. The mechanical methods include the Foley catheter and Hegar's dilator, while the hormonal methods include Dinoprostine gel/insert, mifepristone, and misoprostol. Participants in the studies should be pregnant women who are more than 37 weeks and are at low risk for IOL with bishops score < than 6. For women who are offered IOL as an outpatient, the method used and the time interval from insertion to presentation should be mentioned. The selected studies should be randomized, and the methods of blind allocation and randomization should be mentioned. Two authors will critically appraise the studies for their validity. An Expert will solve any dispute in reviewing the risk of bias in selected studies. Studies with similar research keywords, but not randomized will be excluded, also studies that not examining the IOL in outpatient will be excluded.

**Information sources** Electronic search.

**Main outcome(s)** Primary Outcome: Successful vaginal delivery rate, Caesarean section rate  
Secondary outcome: SCBU admission, maternal satisfaction, induction to amniotomy Interval, Induction to delivery Interval, use of oxytocin, intrapartum fever, Induction to SROM, tachysystole, operative vaginal delivery, vaginal delivery within 24 hours, Postpartum Haemorrhage, Additional usage of another induction agent and failed Induction.

**Data management** Data will be recoded and analysed using RevMan Web and SPSS version 28.

**Quality assessment / Risk of bias analysis** Risk of bias will be assessed using ROB2 tool for assessment of randomized trials.

**Strategy of data synthesis** Data will be analysed using RevMan web and SPSS version 28.

**Subgroup analysis** Revman web.

**Sensitivity analysis** Revman web.

**Language restriction** No language restriction.

**Country(ies) involved** Sudan, Ireland.

**Keywords** outpatient induction of labour, Induction of labour, mechanical induction of labour, Home induction of labour.

**Contributions of each author**

Author 1 - Mohammed Mustafa - Searching for studies, assessment of the selected studies, data entry and conducting the analysis of the result and final revision.

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