

## Evidence Assessment: Summary of a Systematic Review

### Who is this summary for?

This evidence assessment is for health personnel, health facility administrators and the stakeholders involved in mother and child health.

# Immediate postpartum insertion of intrauterine device for contraception

## Key findings

- Changing intrauterine contraception design did not seem to affect intrauterine contraception stayed or whether it was used later on.
- Inserting intrauterine contraception by hand or with a holding instrument does not seem to make a difference.
- The use of intrauterine contraception at six months was more likely with insertion right after childbirth than weeks later.

## Background

Women who want to start intrauterine contraception (IUC) during the postpartum period might benefit from IUC insertion immediately after delivery. Beginning IUC use right after childbirth and before hospital discharge can be good for many reasons. The woman knows she is not pregnant, and the time and place are convenient for starting a method that works well. However, it is uncertain if this approach should be taken to scale.

## Question

What are the outcomes of intrauterine contraception insertion immediately after placenta delivery (within 10 minutes), when compared with insertion at other postpartum times?

**Immediate postpartum insertion of intrauterine device for contraception in Cameroon:** The rate of use of modern contraceptive methods of 14%. The use of modern contraceptive methods in the immediate postpartum period is being tested in Cameroon since the beginning of 2015. This intervention could improve the use of modern contraceptive in Cameroon.

**Table 1: Summary of the systematic review**

	<b>What the review authors searched for</b>	<b>What the review authors found</b>
<b>Studies</b>	Randomized controlled trials	Fifteen randomized controlled trials met the inclusion criteria.
<b>Participants</b>	Postpartum women of any age	Postpartum women of any age
<b>Interventions</b>	Trials were eligible if they examined insertion of any type of intrauterine contraception within 10 minutes of placental delivery, either vaginal or cesarean.	Two trials examined immediate insertion (within 10 minutes post placental delivery) versus early postpartum insertion (10 minutes to 48 hours including both vaginal and cesarean delivery). Four trials compared immediate versus standard insertion (4 to 12 weeks postpartum). One trial examined immediate, early, and standard (after six weeks) insertion of the levonorgestrel-releasing intrauterine system after vaginal delivery. Two early trials focused on progesterone-releasing copper-containing intrauterine devices. Two trials, investigators modified a Nova T device to have two flexible arms, 2 cm in length, added to the base of the vertical stem; the arms pointed superiorly at a 45-degree angle.
<b>Controls</b>	<ul style="list-style-type: none"> <li>• Different devices or different insertion techniques.</li> <li>• Immediate postplacental insertion (within 10 minutes of placenta delivery) versus early postpartum insertion (10 minutes to hospital discharge).</li> <li>• Immediate postplacental insertion (within 10 minutes of placenta delivery) versus standard insertion (during a postpartum visit after hospital discharge), often referred to as delayed or interval insertion.</li> </ul>	Early insertion (10 minutes to 48 hours post-delivery). Standard insertion (at postpartum visit)
<b>Outcomes</b>	<p><b>Primary outcomes</b> Successful placement (insertion), subsequent expulsion, and method use at study assessment</p> <p><b>Secondary outcomes</b> Pregnancy, perforation, infection, and other adverse events.</p>	<p>The outcomes reported were:</p> <ul style="list-style-type: none"> <li>• Pregnancy;</li> <li>• Successful placement;</li> <li>• Subsequent expulsion;</li> <li>• Infection;</li> <li>• Adverse events.</li> </ul>
<b>Date of the most recent search:</b> 1 April 2015.		
<b>Limitations:</b> This is a high quality systematic review, <b>AMSTAR =10/11</b>		
<b>Citation:</b> Lopez LM, Bernholc A, Hubacher D, Stuart G, Van Vliet HAAM. <b>Immediate postpartum insertion of intrauterine device for contraception.</b> Cochrane Database of Systematic Reviews 2015, Issue 6. Art. No.: CD003036. DOI: 10.1002/14651858.CD003036.pub3.		

**Table 2: Summary of findings**

<b>Immediate insertion compared with early insertion for postpartum intrauterine contraception</b>			
<b>Population:</b> postpartum women with desire for contraceptive			
<b>Setting:</b> hospital or clinic			
<b>Intervention:</b> immediate postplacental insertion (within 10 minutes)			
<b>Comparison:</b> early insertion (10 minutes to 48 hours post-delivery)			
<b>Outcomes</b>	<b>Relative effect (95% CI)</b>	<b>No of Participants (studies)</b>	<b>Quality of the evidence (GRADE)</b>
Expulsion by 6 months	1.00 [0.20-5.04]	30 (1)	Moderate

intrauterine contraception use at 6 months	0.46 [0.04-5.75]	30 (1)	Moderate
<b>Immediate insertion compared with standard insertion for postpartum intrauterine contraception</b>			
<b>Patient or population:</b> postpartum women with desire for contraceptive			
<b>Setting:</b> hospital or clinic			
<b>Intervention:</b> immediate postplacental insertion (within 10 minutes)			
<b>Comparison:</b> standard insertion (at postpartum visit)			
<b>Outcomes</b>	<b>Relative effect (95% CI)</b>	<b>No of Participants (studies)</b>	<b>Quality of the evidence (GRADE)</b>
<b>Placement per protocol</b>	4.07 [0.54-30.40]	243 (4)	Moderate
<b>Expulsion by 6 months</b>	4.89 [1.47-16.32]	210 (4)	Moderate
<b>Intrauterine contraception use at 6 months</b>	2.04 [1.01-4.09]	243 (4)	Moderate

## Applicability

Of the 15 studies, four were conducted in the USA, two were carried out in India, one in Uganda, one in Malawi, one in Turkey, one in Philippines, one in Turkey and one in Chile, one in Belgium and one in China. These interventions may be applied in other low resources settings such as Cameroon.

## Conclusions

Compared to standard insertion, immediate insertion of a contraceptive led to higher contraception use at 6 months but higher expulsion of device at 6 months. The benefit of effective contraception immediately after delivery may outweigh the disadvantage of increased risk for expulsion. Prenatal visits during the third trimester provide the opportunity to discuss effective contraceptive methods and desired timing for initiation.

### Prepared by

M. Vouking, C.D. Evina, L. Mbuagbaw, P. Ongolo-Zogo: Centre for the Development of Best Practices in Health, Yaoundé, Cameroon. Available at [www.cdbph.org](http://www.cdbph.org)

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