Cochrane Database Syst Rev. 2010 Sep 8;9:CD000012.

## Alternative versus conventional institutional settings for birth.

## Hodnett ED, Downe S, Walsh D, Weston J.

Lawrence S. Bloomberg Faculty of Nursing, University of Toronto, 155 College Street, Suite 130, Toronto, Ontario, Canada, M5T 1P8.

## Abstract

**BACKGROUND:** Alternative institutional settings have been established for the care of pregnant women who prefer and require little or no medical intervention. The settings may offer care throughout pregnancy and birth, or only during labour; they may be part of hospitals or freestanding entities. Specially designed labour rooms include bedroom-like rooms, ambient rooms, and Snoezelen rooms.

**OBJECTIVES:** Primary: to assess the effects of care in an alternative institutional birth environment compared to care in a conventional institutional setting. Secondary: to determine if the effects of birth settings are influenced by staffing, architectural features, organizational models or geographical location.

**SEARCH STRATEGY:** We searched the Cochrane Pregnancy and Childbirth Group's Trials Register (31 May 2010). **SELECTION CRITERIA:** All randomized or quasi-randomized controlled trials which compared the effects of an alternative institutional maternity care setting to conventional hospital care.

**DATA COLLECTION AND ANALYSIS:** We used standard methods of the Cochrane Collaboration Pregnancy and Childbirth Group. Two review authors evaluated methodological quality. We performed double data entry and have presented results using risk ratios (RR) and 95% confidence intervals (CI).

**MAIN RESULTS:** Nine trials involving 10684 women met the inclusion criteria. We found no trials of freestanding birth centres or Snoezelen rooms. Allocation to an alternative setting increased the likelihood of: no intrapartum analgesia/anaesthesia (five trials, n = 7842; RR 1.17, 95% CI 1.01 to 1.35); spontaneous vaginal birth (eight trials; n = 10,218; RR 1.04, 95% CI 1.02 to 1.06); breastfeeding at six to eight weeks (one trial, n = 1147; RR 1.04, 95% CI 1.02 to 1.06); and very positive views of care (two trials, n = 1207; RR 1.96, 95% CI 1.78 to 2.15). Allocation to an alternative setting decreased the likelihood of epidural analgesia (seven trials, n = 9820; RR 0.82, 95% CI 0.75 to 0.89); oxytocin augmentation of labour (seven trials, n = 10,020; RR 0.78, 95% CI 0.66 to 0.91); and episiotomy (seven trials, n = 9944; RR 0.83, 95% CI 0.77 to 0.90). There was no apparent effect on serious perinatal or maternal morbidity/mortality, other adverse neonatal outcomes, or postpartum hemorrhage. No firm conclusions could be drawn regarding the effects of variations in staffing, organizational models, or architectural characteristics of the alternative settings.

**AUTHORS' CONCLUSIONS:** When compared to conventional settings, hospital-based alternative birth settings are associated with increased likelihood of spontaneous vaginal birth, reduced medical interventions and increased maternal satisfaction.

PMID: 20824824 [PubMed - in process]