

# Evidence Update

Maternal Health Series

February 2005

Should women deliver upright or on their side (compared with standard practice of lying on their backs or in stirrups)?

Trials are of insufficient quality to make conclusions about best delivery position.

## Inclusion criteria

### Studies:

Randomized and quasi-randomized controlled trials.

### Participants:

Women in the second stage of labour.

### Intervention:

Upright or lateral position compared with supine or lithotomy positions. Secondary comparisons with different upright positions and the lateral position were made.

### Outcomes:

Maternal outcomes included pain during delivery, duration of labour, mode of delivery, trauma to the birth canal that required suturing, blood loss greater than 500 ml; fetal outcomes were also described, including admission to intensive care unit and perinatal death.

## Results

Nineteen trials (n=5764) included; nine were adequately concealed. Overall quality was mixed.

Upright or lateral positions appeared to be associated with:

- Shorter labour (weighted mean difference 4.29 minutes, 95% confidence interval 2.95 to 5.64), but the size of the effect was different between trials.
- Fewer assisted deliveries (relative risk 0.84, 95% CI 0.73 to 0.98) and fewer episiotomies (RR 0.84, 95% CI 0.79 to 0.91).
- Fewer women with severe pain at birth (RR 0.73, 95% CI 0.60 to 0.90), and fewer abnormal fetal heart rate patterns (RR 0.28, 95% CI 0.08 to 0.98).
- Increased second-degree perineal tears (RR 1.23, 95% CI 1.09 to 1.39) and greater blood loss (RR 1.68, 95% CI 1.32 to 2.15).

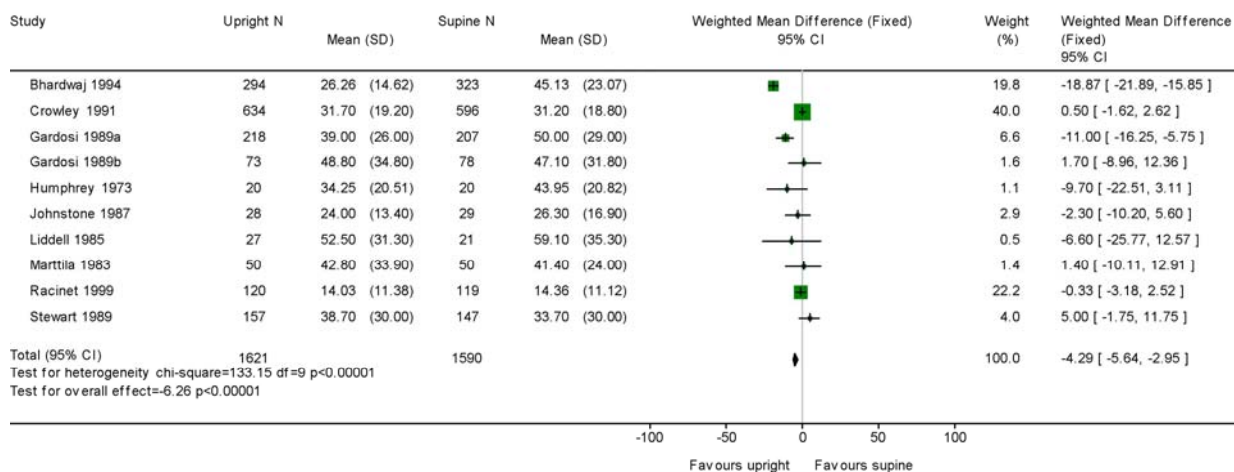


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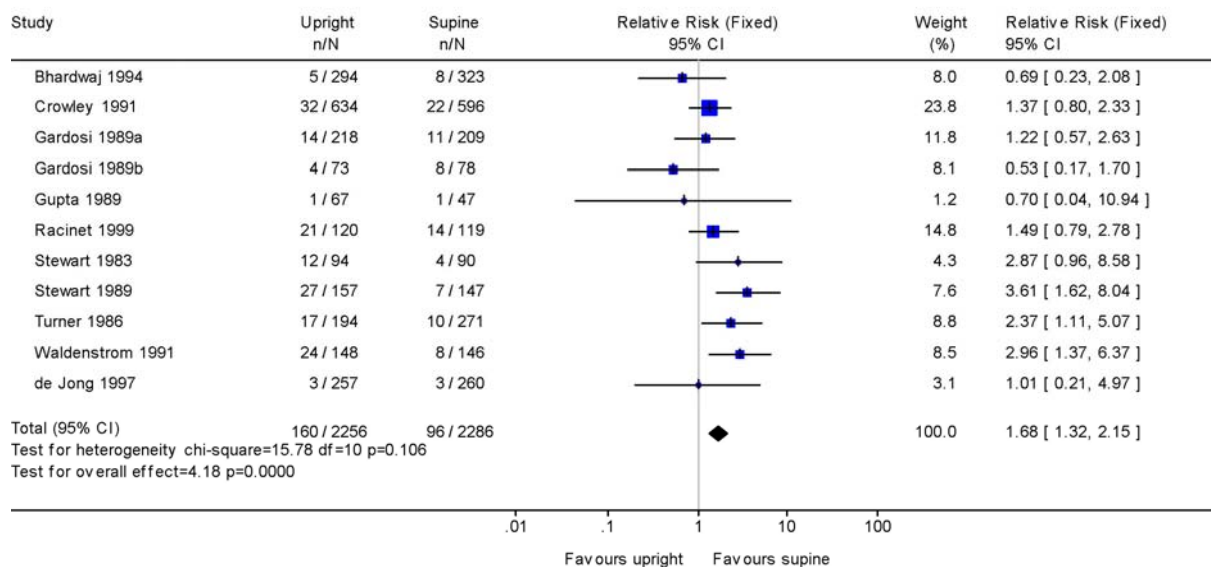
Adapted from Gupta JK, Hofmeyr GJ. Position for women during second stage of labour. *The Cochrane Database of Systematic Reviews* 2003, Issue 3. Art. No.: CD002006.pub2. DOI: 10.1002/14651858.CD002006.pub2.

Produced by the Effective Health Care Alliance Programme ([www.liv.ac.uk/evidence](http://www.liv.ac.uk/evidence)), Liverpool School of Tropical Medicine, supported by the Department for International Development UK; and the Australasian Cochrane Centre.

Review: Position in the second stage of labour for women without epidural anaesthesia  
 Comparison: 01 Any upright or lateral position versus supine position/lithotomy  
 Outcome: 10 Duration of second stage of labour (minutes): all women



Review: Position in the second stage of labour for women without epidural anaesthesia  
 Comparison: 01 Any upright or lateral position versus supine position/lithotomy  
 Outcome: 15 Blood loss > 500 ml



## Authors' conclusions

### Implications for practice:

Evidence on the effectiveness of various delivery positions is inconclusive because of the mixed quality of trials. The upright posture may offer some benefits but may increase risk of blood loss.

### Implications for research:

Rigorously conducted randomized controlled trials with uniform outcome classification and measurement are needed.