

i. Cervical dilatation patterns in women with normal perinatal outcomes – nulliparous women

Source: Oladapo OT, Diaz V, Bonet M, Abalos E, Thwin SS, Souza H, et al. Cervical dilatation patterns of “low-risk” women with spontaneous labour and normal perinatal outcomes: a systematic review. BJOG. 2017. doi:10.1111/1471-0528.14930.

No. of studies	Study design	Quality assessment					No. of participants	Pooled estimate	Certainty (GRADE)	Importance
		Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations		Median (95% CI)		
Time (in hours) to progress from 2-3 cm										
3	observational studies ^a	serious ^b	serious ^c	not serious ^d	not serious ^e	none ^f	4622	median 5.28 (5.07-5.46)	⊕⊕○○ LOW	critical
Time (in hours) to progress from 3-4 cm										
6	observational studies ^a	not serious ^g	not serious ^h	not serious ^d	not serious ⁱ	none ^f	42 648	median 2.00 (1.89-2.11)	⊕⊕⊕⊕ HIGH	critical
Time (in hours) to progress from 4-5 cm										
6	observational studies ^a	not serious ^g	not serious ^h	not serious ^d	not serious ⁱ	none ^f	42 648	median 1.46 (1.39-1.52)	⊕⊕⊕⊕ HIGH	critical
Time (in hours) to progress from 5-6 cm										
6	observational studies ^a	not serious ^g	not serious ^h	not serious ^d	not serious ⁱ	none ^f	42 648	median 0.92 (0.89 to 0.96)	⊕⊕⊕⊕ HIGH	critical
Time (in hours) to progress from 6-7 cm										
6	observational studies ^a	not serious ^g	not serious ^h	not serious ^d	not serious ⁱ	none ^f	42 648	median 0.70 (0.68-0.73)	⊕⊕⊕⊕ HIGH	critical
Time (in hours) to progress from 7-8 cm										
6	observational studies ^a	not serious ^g	not serious ^h	not serious ^d	not serious ⁱ	none ^f	42 648	median 0.55 (0.53-0.57)	⊕⊕⊕⊕ HIGH	critical
Time (in hours) to progress from 8-9 cm										
5	observational studies ^a	not serious ^j	not serious ^k	not serious ^d	not serious ⁱ	none ^f	40 482	median 0.52 (0.50-0.53)	⊕⊕⊕⊕ HIGH	critical

Quality assessment							No. of participants	Pooled estimate	Certainty (GRADE)	Importance
No. of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations		Median (95% CI)		
Time (in hours) to progress from 9-10 cm										
5	observational studies ^a	not serious ^j	not serious ^k	not serious ^d	not serious ⁱ	none ^f	40 482	median 0.49 (0.48-0.51)	⊕⊕⊕⊕ HIGH	critical

- ^a Observational studies reporting on labour assessments of cervical dilatation patterns over time are considered as being of high quality.
- ^b Two studies providing data for 76% of the participants in the three studies included were at moderate risk of bias. Risk of bias was assessed using the following domains specifically developed for the systematic review: primary intent of the study research question; representativeness of the study population; ascertainment and temporality of observations; adequacy of data points for valid assessment of cervical dilatation patterns for each study participant; use of a valid and robust approach for analysis of labour progression and construction of labour curve.
- ^c The magnitude of the medians was consistent in two studies. However, the third study with inconsistent median had over 50% of the participants contributing data to the pooled estimate.
- ^d The women, the method of cervical dilatation assessment and the statistical analytical approach for labour progression in the three studies all provide direct evidence against the question at hand.
- ^e The lower and upper confidence bounds are both within 0.2 hours of the pooled median time. The total number of women in each study was more than 1000.
- ^f We did not strongly suspect publication bias because the search for the studies was comprehensive.
- ^g Four out of the six studies with over 90% of study participants contributing data to the pooled median were at low risk of bias.
- ^h The magnitude of the medians was consistent in five out of the six studies. The outlier presents 5.6% of the total number of participants contributing to the pooled median.
- ⁱ The lower and upper confidence bounds are both within 0.1 hour of the pooled median time. The total number of women in each study was more than 1000.
- ^j Three out of five studies with 86% of the total number of participants contributing to the pooled median were at low risk of bias.
- ^k The magnitude of the median was consistent in all five studies contributing to the pooled estimate.