

PubMed

Zhang Ob&amp;Gyn 2010. 116: 1281-7

Display Settings: Abstract

**See 1 article found using an alternative search:**[Obstet Gynecol. 2010 Dec;116\(6\):1281-7.](#)**Contemporary patterns of spontaneous labor with normal neonatal outcomes.**

[Zhang J](#), [Landy HJ](#), [Branch DW](#), [Burkman R](#), [Haberman S](#), [Gregory KD](#), [Hatjis CG](#), [Ramirez MM](#), [Bailit JL](#), [Gonzalez-Quintero VH](#), [Hibbard JU](#), [Hoffman MK](#), [Kominiarek M](#), [Learman LA](#), [Van Veldhuisen P](#), [Troendle J](#), [Reddy UM](#); Consortium on Safe Labor.

Eunice Kennedy Shriver National Institute of Child Health and Human Development, National Institutes of Health, Bethesda, Maryland 20892, USA. zhangj@mail.nih.gov

**Abstract**

**OBJECTIVE:** To use contemporary labor data to examine the labor patterns in a large, modern obstetric population in the United States.

**METHODS:** Data were from the Consortium on Safe Labor, a multicenter retrospective study that abstracted detailed labor and delivery information from electronic medical records in 19 hospitals across the United States. A total of 62,415 parturients were selected who had a singleton term gestation, spontaneous onset of labor, vertex presentation, vaginal delivery, and a normal perinatal outcome. A repeated-measures analysis was used to construct average labor curves by parity. An interval-censored regression was used to estimate duration of labor, stratified by cervical dilation at admission and centimeter by centimeter.

**RESULTS:** Labor may take more than 6 hours to progress from 4 to 5 cm and more than 3 hours to progress from 5 to 6 cm of dilation. Nulliparous and multiparous women appeared to progress at a similar pace before 6 cm. However, after 6 cm, labor accelerated much faster in multiparous than in nulliparous women. The 95 percentiles of the second stage of labor in nulliparous women with and without epidural analgesia were 3.6 and 2.8 hours, respectively. A partogram for nulliparous women is proposed.

**CONCLUSION:** In a large, contemporary population, the rate of cervical dilation accelerated after 6 cm, and progress from 4 cm to 6 cm was far slower than previously described. Allowing labor to continue for a longer period before 6 cm of cervical dilation may reduce the rate of intrapartum and subsequent repeat cesarean deliveries in the United States.

PMID:21099592[PubMed - indexed for MEDLINE]

**Publication Types, MeSH Terms, Grant Support****LinkOut - more resources**