

## REDEFINING ACTIVE PHASE LABOUR: A RANDOMIZED CONTROLLED STUDY OF NULLIPARAE AT TERM

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### ABSTRACT

#### BACKGROUND

After decades of clinical practice and research, much is now known about labour. Hitherto, active phase labour has been defined from 4cm of cervical os dilatation. Recently, this 4cm landmark has been criticized, with suggestion that active phase labour should be diagnosed from 6cm instead.

#### AIM

To determine whether or not 6 cm is a better cervical dilatation threshold for the onset of active phase labour compared to 4 cm in a low risk nulliparous population of parturients in spontaneous labour at term.

#### METHODS

In this randomized controlled study, 88 nulliparous parturients with low risk pregnancy in spontaneous labour at term with 4 cm of cervical dilatation were randomized into two groups. Those in the control group (A) had active management of labour (AML) instituted at admission according to departmental protocol while those in the study group (B) were considered to be in latent phase labour and had 1-2 hourly vaginal examination until 6cm of cervical dilatation was achieved at which point active phase labour was diagnosed and AML instituted. All data were entered into a Proforma and analysis was done using the IBM SPSS for Windows version 20.

**RESULTS:** Four of the 88 women recruited for the study were later stepped down from the study. The mean age of parturents and the mean gestational age were 27.77±4.689 years and 38.98±0.931 weeks respectively. 97.5% of women in the study group and 75% of those in the control group had spontaneous vaginal delivery (RR=6.50; 95% CI=0.983-42.962; p=0.003). Twenty-five percent of the controls had caesarean delivery. There was no Caesarean delivery in the study group (p=0.001). The mean cervical dilatation rate for the study group was 1.06±0.232 cm/hour compared to 0.80±0.457 cm/hour for the control group (p=0.002). 65% of the study group had an average cervical dilatation rate of ≥1 cm/hour compared to 29.5% in the control group (p=0.001). 70.5% of controls had their labour augmented compared to 29.5% of the study group, and all the Caesarean sections were done in women who had labour augmentation (p=0.001). Ninety-five percent of the study group had babies with good APGAR scores compared to 72.7% of controls (p=0.006). Four (9%) of the controls had primary postpartum haemorrhage. There was none in the study group.

**CONCLUSION:** This study has established the whole idea of redefining active phase labour, vis a vis changing the cervical dilatation threshold for onset of active phase labour from 4cm to 6cm, as plausible. However, a larger number of low risk nulliparous women in spontaneous labour should be studied possibly in a multicentre randomized controlled trial to come to a more robust conclusion about the whole issue of a redefinition of active phase labour in terms of threshold cervical dilatation.