

## Introduction

The partogram prevents prolonged labour and improves maternal and perinatal outcomes. Use of the modified WHO partograph is recommended by various organisations. The Paperless Partogram, pioneered by Dr. Debidas in 2008, requires 2 times- alert Estimated Time of Delivery (ETD) and action ETD to be mentally calculated using Friedman's formula for rate of cervical dilatation (1cm/hour). Thus, 6 hours are added to the time at which the parturient becomes 4 cm dilated to find the alert ETD and 4 hours are added to the alert ETD to calculate the action ETD. These are written down on the case sheet at the time of the first vaginal examination, instead of plotting the partograph.

## Objectives

To study and compare the modified WHO Partogram and Paperless Partogram in the effective management of labour on the basis of:

- Ease of use
- Efficacy
- Ability to detect problems during labour
- Interventions during labour

## Methodology

- Type of study- Observational comparative study, done over 18 months
- Sample size- 200
- Inclusion criteria- Term, uncomplicated, singleton pregnancy with vertex presentation in labour, admitted for delivery.
- The same patient was monitored using both, the Modified WHO and Paperless Partogram, from a cervical dilatation of 4 cm and both the partograms were compared. All interventions were made based on the Modified WHO partogram, as per hospital protocol.

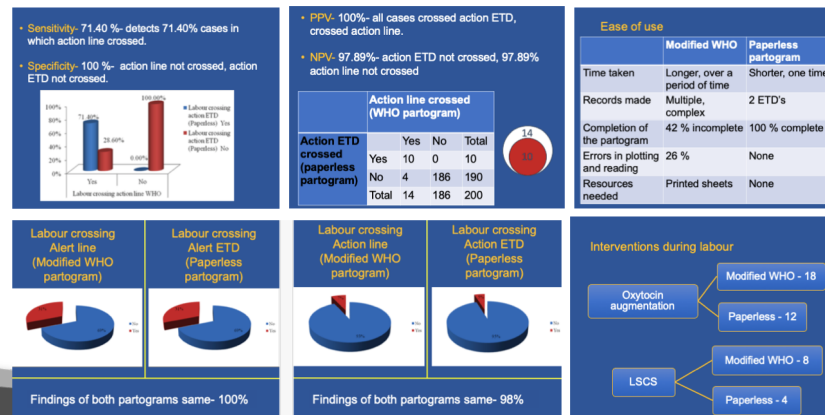
# The Paperless Partogram- A novel method for labour monitoring

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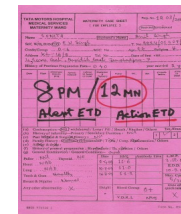
## Results

- The sensitivity, specificity, positive and negative predictive value of the paperless partogram with respect to the modified WHO partogram were 71.43%, 100%, 100% and 97.89% respectively.
- Time taken using the paperless partogram was much less (few seconds), compared to the modified WHO partogram.
- The number of records made and the resources needed were also fewer.
- Findings of both partograms agreed with each other with respect to labour crossing alert line/ ETD in 100% and action line/ ETD in 98% of the cases.
- The ability to detect problems in labour were comparable, except that protraction disorders were detected sooner on the WHO partogram.
- Using the paperless partogram, the number of interventions made would have been fewer, or even if the same, they would have been done at a later time.



## Conclusion

- The paperless partogram is a quicker, easier and effective alternative to the modified WHO partogram for monitoring labour, especially in developing countries- in a busy understaffed obstetric unit, or in low resource settings.



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