

# USE OF THE PARTOGRAPH AND OBSTETRIC OUTCOMES IN KAJIADO DISTRICT HOSPITAL.

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## ABSTRACT

**Background:** One of the key challenges in the health care provision in Kenya today is the high maternal and perinatal morbidity and mortality. The partograph – document used to monitor individual woman's labor is promoted internationally as a means for improving quality of care by helping providers take appropriate and timely decisions based on the progress of labor, maternal condition and fetal condition at every stage. Studies so far have shown a generally low level of utilization of the partograph and a marked regional and hospital to hospital variation in the use of the partograph.

**Objective:** The main objective of this study was to assess the quality of intrapartum care and obstetric outcomes in Kajiado district hospital.

**Design:** A retrospective cohort study was conducted comparing the quality of intrapartum care and obstetric outcomes in women managed by use of the partograph (exposed) and those who were managed without its use (unexposed).

**Setting:** Medical records department, Kajiado district hospital.

**Results:** A total of 207 files were reviewed beginning 1<sup>st</sup> July, 07 to 20 October 2007. Out of this 74 (37%) of the women were managed by partograph and 116 (55%) were managed without. Another 17 (8.2%) of the files were excluded. The socio-demographic as well as maternal condition at admission revealed that the groups were well matched with no significant differences. However there were more teenage women delivering i.e. 29% which is higher than the national average which stands at 23 % (5). The frequency of monitoring of maternal condition was significantly different – with 82.3% of the exposed group having blood pressure measured as opposed to 58.2% among the unexposed ( $P=0.05$ ). Measurements of maternal pulse revealed a significant variation between the groups. Among the exposed 89% had pulse measurements recorded once or more compared to 11.3% of the unexposed ( $P=0.00$ ).

Fetal heart rate was assessed half hourly in 22.9% among the exposed as compared to 1.2% of the unexposed (RR3.1, 95% C.I. 2.2-4.2, P=0.000). For similar duration of labor fetal heart rate was measured 6.8 times among the exposed and only 2.8 times in the unexposed group. Assessment of strength and number of uterine contraction was done in 70 (94.5%) of the exposed compared to none among the unexposed (PP=000).Urinalysis, maternal pulse and state of liquor were the least recorded parameters.

The rate of augmentation remained similar in both groups at 22% (exposed) and 19% (unexposed). However when the tracing crossed the action line in the exposed group, intervention by caesarean section went up threefold, from 8.1% to 25% (RR2.8, 95%C.I.1-4, P=0.049). Duration of labor at the hospital was comparable with a mean of 6.1 and 6.8 hours among exposed and unexposed women respectively (Chi-sq0.339, P=0.952). Prolonged labor (>18hrs) was twice more likely to occur in unexposed (3.7%) than exposed (1.3%) but this was not statistically significant. Modes of delivery in both groups were comparable with the rate of caesarian at 14.4% and 11.4% among the exposed and unexposed respectively (Chi-sq1.07, P=0.591). Use of oxytocics in 3<sup>rd</sup> stage stood at 63.5% and 45.5% among exposed and unexposed respectively (RR 1.9, 95%C.I.1.0-3.4, P=0.026). Outcomes of labor were favorable for the majority of the women and their infants with no significant differences between the two groups.

## **CONCLUSION**

There is low utilization of partograph at Kajiado district hospital. Accurate recording of the parameters to monitor the mother, the fetus and progress of labor as recommended were mostly not done. Whenever it was used the partograph significantly influenced the frequency of monitoring of maternal and fetal condition as well as progress of labor.

## **RECOMMENDATION**

There is need for continuous medical education and on job training of all those involved in management of labor with a view to ensuring universal use of partograph for women in labor.