

# **Risk of Preterm birth and Low Birth Weight births by Maternal Age in Selected Health Facilities in Migori County, Kenya.**

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## **Background**

Maternal age has been vastly suggested to have an effect on pregnancy outcome and hence might also affect pregnancy duration. However, the association between prematurity and maternal age remains controversial. Preterm birth is the most important factor determining neonatal morbidity and mortality, and has a major impact on it. We aim to profile the risk of preterm births and low birth weight (LBW) births by maternal age within selected health facilities in Migori County Kenya where the Preterm Birth Initiative is ongoing.

## **Methods**

This was a retrospective review study using data among preterm and low birth weight babies from June 2016 to November 2017. The data was collected from maternity registers in 17 health facilities under the Preterm Birth Initiative study in Migori County. Descriptive analysis and measure of association was conducted to determine risk of preterm and low birth weight birth. We included infants born <37 weeks gestational age and babies with weight <2500 grams.

## **Results**

Out of 16244 deliveries, 1669(10.3%) were preterm and low birth weight births. The proportion of female and male preterm babies was 53.3% and 46.8% respectively. 1665(99.7%) had maternal age recorded median age 21(18, 27) years. Of these, 835(50.2%) were born to mothers with age  $\leq 21$  years, 627(37.7%) to mothers with  $22 \leq \text{age} \leq 30$  and 203(12.2%) to mothers with age  $\geq 31$ . Out of the 835 babies born to mothers with age  $\leq 21$ , 155(18.6%) and 680(81.4%) were low birth weight and preterm's respectively, 627(110 LBW and 517 preterm's) and 203(36 LBW and 167 preterm's). Majority of the preterm births 680(44.5%) were for mothers aged  $\leq 21$ . The odds (1.2) for a preterm birth was greatest for mothers with age  $\leq 21$  and lowest (0.8) for mothers of  $22 \leq \text{age} \leq 30$ .

## **Conclusion**

The odds of prematurity stratified by maternal age group followed a "U" shaped distribution with odds of 1.2 for maternal age  $\leq 21$  years, and 0.9 for maternal age  $\geq 31$  years.