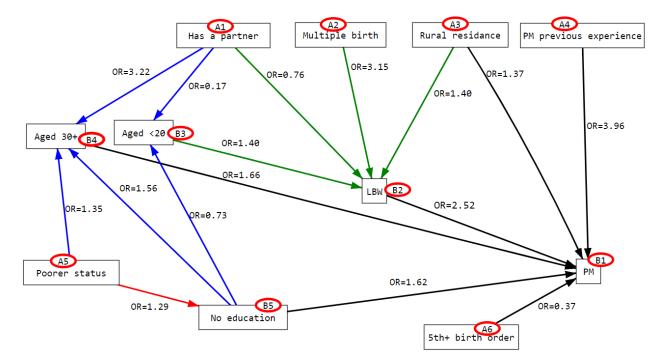
## The perinatal and neonatal mortality pathways

There is a paucity of evidence on how low birth weight (LBW) or preterm birth (PB) may lead to stillbirth and how both including neonatal mortality could be associated with maternal morbidity's experience. Further, there is a dearth of evidence on how health facility interventions, particularly in Sub-Saharan Africa (SSA), control the effect maternal and newborn life-threatening signs such as LBW. To understand the new-born survival pathways, we analyse the birth event history data collected between 2011-2015 and 2005-2015 by Iganga-Mayuge health demographics and surveillance site in eastern Uganda. We analysed data in Stata using structural equation modelling with four logistic regression models. 67% of perinatal mortality occurred on day 0 and 64% of the neonatal mortality occurred within 24 hours. Maternal morbidities' experience was significantly associated with increased risk of PB, stillbirth and death within 24 hours. LBW, adolescence and advanced (30+) age and education level were significant perinatal mortality mediating factors. Multiple births and prior perinatal mortality experience increased the likelihood of perinatal mortality indirectly via LBW and directly respectively, and the dyad had a continued effect on the later age. Health facilities delivery was not significant in reducing the effect of LBW/prematurity and obstetric conditions. Our analysis suggests for interventions that reduce low birth weight, adolescence and advanced age pregnancies if perinatal mortality is to be reduced. Also, the health facility services should be strengthened in order to control the effect of major perinatal mortality causes such as low birth weight. This therefore suggests for a multisectoral interventions within the health system.



## Perinatal Mortality Pathway