Maternal and child health

**PO - (8592) - WHY, WHEN AND WHERE DO NEWBORNS NOT ONLY GET SICK BUT ALSO DIE IN SÃO TOME PRÍNCIPE? A CASE-CONTROL STUDY**

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**Background:** Neonatal deaths in São Tomé and Príncipe account for about 43% of all under-5 deaths, but major gaps exist in its understanding.

**Objectives:** To identify ante-intra-postpartum risk factors and to analyse characteristics of neonatal morbi-mortality.

**Methodology:** stillbirths and sick newborns (NB) with ≥32 week’s gestation or ≥1500g were eligible cases, while controls were healthy newborns ≥28 days. The study is still underway and more data will be available. Results presented here are from a questionnaire applied by the investigator and from mothers' and NB medical records. POC tests were used to screen for syphilis, HIV and Hepatitis B. The SPSS 23 statistical program was used for data analysis. Informed consent was obtained from every mother included in the study.

**Results:** One hundred and thirty two in 675 mothers, corresponding to 134 NB (2 twins) were enrolled. Thirty five cases and 41 controls NB were followed-up. Pregnant women medium age was 26 years, 23% being adolescents and 23% without antenatal care. Primary education was attended by 57%, secondary by 63%, 7% never attended school. Syphilis – One/96 reactive test. HIV or malaria not detected, 3 infected with HBV. Newborns morbi-mortality: 10 preterm, 12 birth asphyxia, 30 risk of neonatal and 8 invasive infections, 8 fetal growth restriction, 5 microcephaly, 4 minor congenital anomalies and one death in the first 24h of life (congenital lung anomaly). Low birth-weight (<2500g), meconium and caesarean section were statistically significant with respect to morbidity (p<0.05). No deaths were verified in the 76 babies’ followed-up.

**Conclusions:** In this study, morbidity of NB was high (59%). More conclusions will be taken when a higher number of participants is included and analysed. As a result and at the completion of this study we hope to be able to design an intervention algorithm in order to achieve peri-neonatal morbi-mortality reduction.