

## Post-mortem evaluation of unexplained full-term stillbirths in a South Indian public sector hospital: A feasibility study

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### Aims and objectives

To examine the potential cause of death, and risk factors for full-term still births in a middle income country public sector hospital

### Cross disciplinary

The project includes experts in neonatal medicine, fetal medicine, pathology, post-mortem radiology, and bio-statistics

### Methods

Institute of Maternal and Child Health at Calicut Medical College (IMCH) is one of the largest maternity units in Asia, with approximately 30,000 deliveries per year. Every month, 50-60 babies are either born dead, or die shortly after birth (60% of these occurring at term).

We will conduct a prospective observational study on all full-term still births, over a six month period at IMCH, between October 2012 and March 2013.

Multiple pregnancies and fetuses with visible major malformations will be excluded. Detailed antenatal and intra-partum clinical history, and syphilis serology will be collected.

Placentas will be sampled at four quadrants, and analysed by Prof Neil Sebire – this will include analysis for evidence of malaria, syphilis and tuberculosis.

All fetuses will have detailed external examination, anthropometry, and post-mortem radiology where possible. Gestational age will be verified by femur length and ossification centres by Dr Amaka Offiah. Full autopsy will be undertaken if parental consent is obtained (expected consent rate 20%); reasons for refusal of autopsy will also be collected.



Institute of Maternal and Child Health at Calicut Medical College, Kerala

### Activities

The study protocol has been developed. Ethics and research approvals from UCL, and Calicut Medical College are expected to be obtained by August 2012. The study will start recruitment by October 2012.



Neonatal unit at Calicut Medical College

### Outputs and impacts

This work will provide an estimate of the major causes of unexplained stillbirths, in particular the contribution of infection and ischaemia to intra-partum mortality.

A larger grant application to examine the impact of infection and ischaemia on intra-partum stillbirths, and neonatal mortality/morbidity in low- and -middle income countries will be submitted based on this data.

