Use of SMS text for Maternal and Child Health Surveillance in resource constrain setting

**Abstract**

**Background** Department of Paediatrics and Child Health, Aga Khan University, Karachi, conducts active demographic surveillance system (DSS) for maternal and child health at a peri urban site of Karachi, covering an area of 8.1 sq. miles and having a population of around 275,000. The maternal mortality rate (MMR) is around 200 per 100,000 live births. There are around 300 neonatal and 150 post neonatal deaths in the study catchment area. We introduced a two way SMS based pregnancy and birth registration system in the surveillance catchment area.

**Method** Community health workers (CHWs) visit household on quarterly bases in the study catchment area to identify new pregnancies and follow the pregnant woman until their pregnancy outcome. As soon as CHW identifies a pregnant woman, she sends a SMS message to the server. Based on this registration, system generates follow up details of each pregnant woman; giving priority to third trimester. Once live birth identified CHW sends a SMS to the server which alerts the team to examine the neonate.

**Results** This system helps in early identification and monitoring of pregnant woman and newborns. Also by sending unique structure identifier through SMS to the server, our CHWs and study staff can get desired information of the pregnant woman and children less than 5 years of age in the study surveillance area.

**Conclusion** Through SMS registration we have an extra layer for identifying maternal death and pregnancy outcome. Identifying a woman / child information through SMS is also quite helpful.