

## MRC Maternal and Infant Health Care Strategies Research Unit

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The Medical Research Council Maternal and Infant Health Care Strategies Research unit was established in partnership with the University of Pretoria in 1997 under the directorship of Professor Bob Pattinson. Although most of the original research team has moved to new positions often in other countries, new researchers have joined and the research mandate upon which the unit was built has remained the same.

Our research mandate has been to develop health strategies at primary and secondary care levels for mothers and infants by **seeking saleable solutions**. By **seeking** we mean performing research; by **saleable** we mean solutions that are acceptable to all namely women, health care workers and health administrators; and by **solutions** we mean health strategies that have been developed to solve the problems identified.

The unit has established two national survey systems in perinatal care and child care and has developed the database and does the analysis of the data for the Confidential Enquiry into Maternal Deaths in South Africa. The three national survey reports (*Saving Mothers, Saving Babies* and *Saving Children*) have clearly identified the major diseases causing maternal, perinatal and child deaths and also the major health system failures. The unit has also developed a maternal near miss audit system, the basis of which is being used in the WHO Global survey of maternal morbidity in 27 countries throughout the world. A neonatal near miss audit system developed by the unit is currently being tested.

Initially the unit was involved in performing multicentre randomized trials on common problems such as preterm labour, pre-eclampsia and eclampsia and managing normal term labour, to develop effec-



Bob Pattinson at work



tive guidelines suitable for South Africa. However, as the health problems have become more apparent due to information provided by the survey systems, the unit has concentrated firstly on designing and implementing effective interventions and now more recently in developing mechanisms to take the interventions to scale. An example of this has been the developing Kangaroo Mother Care (KMC) implementations programme, testing it by running cluster randomized trials in three provinces, then implementing it nationally. There has been a significant impact of the programme; the perinatal survey system has demonstrated a thirty percent reduction in neonatal deaths of babies between 1.0-1.99kg in sites after the introduction of KMC to those sites. The KMC implementation training package has been adapted for and used in Ghana, Malawi, Tanzania, and Indonesia. The unit has developed and tested other quality improvement packages namely Basic Antenatal Care, Basic Intrapartum care, Essential

Postnatal Care, Essential Steps in Managing Obstetric Emergencies, and Neonatal Resuscitation and Care of the Neonate. These packages have been integrated and are being tested in Mpumalanga Province with the use of a specially developed information file for pregnant women and their families. Currently the unit is developing a maternal, perinatal and child health care situational leadership development programme to empower the health care providers in district hospitals to implement appropriate interventions.

Health strategies researched in this manner have been implemented directly by the National and Provincial Departments of Health as guidelines for primary and secondary health levels in their areas. In this way, workable, affordable solutions to essential national health problems in the field of maternal, perinatal and child health have resulted in benefit for women and children.