Nearly 40% of women living in poverty in South Africa experience mental health problems during or after pregnancy. Most people are familiar with post-natal depression, yet both depression and anxiety are highly prevalent during pregnancy. Studies in KwaZulu-Natal and Cape Town reported rates of 47% and 39% for antenatal depression respectively. Depression during pregnancy is a strong predictor of postnatal depression and affects three times more women in developing than in developed countries. The Perinatal Mental Health Project (PMHP) was started in 2002 to address the crisis of maternal mental illness among economically disadvantaged women.

The impact of Maternal Mental Illness
Maternal mental illness has been found to have a detrimental impact on health-seeking behaviour in mothers. It may also impact on a mother's ability to care optimally for her child. Mothers suffering from mental illness may be less likely to access antenatal care and PMTCT, respond in time to diarrhoeal episodes in their infants or to complete immunisation schedules. Children of depressed mothers are more likely to be malnourished and experience more gastro-intestinal problems. Consequences therefore include higher rates of infectious illness and hospital admissions as well as loss of developmental potential in children younger than five years.

Psychological distress in mothers is associated with a higher incidence of miscarriage, bleeding during pregnancy, higher rates of Caesarean-section delivery, pre-term delivery and prolonged labour, while antenatal depression has also been associated with low birth weight - the primary cause of infant mortality and morbidity. After birth, distressed mothers are more likely to delay or discontinue breastfeeding early, which is associated with early neonatal mortality, more diarrhoeal episodes and hospital admissions, and impaired mother-infant bonding which is critical for the development of key brain regions in the newborn.

Untreated maternal anxiety may cause hormonal alterations in the intrauterine environment that have implications for cognitive development of the child affecting the rest of their lives. These children might also develop asthma in later childhood and have a genetic vulnerability for the development of alcoholism and decreased motor skills.

The emotional and psychological development of the child is also significantly impacted with strong links existing between maternal mental illness and conduct problems, inattention-hyperactivity, Attention Deficit Hyperactivity Disorder, anxiety symptoms and child antisocial personality traits. Research shows that later in life, children of depressed mothers are also more likely to be abused, to perform poorly at school and to develop mental illness themselves.

With respect to mothers’ well-being, studies show an increased likelihood of mothers ‘self-medicating’ with alcohol or drugs, reduced sleep and appetite, poor antenatal weight gain and an increased likelihood of maternal mortality. Studies in developed countries have shown that suicide is a leading cause of maternal mortality, with higher rates of suicide found in women who are under 20 and in their first pregnancy. Left undiagnosed and untreated, mental illness can increase women's risk of HIV infection, violence and abuse, economic insecurity, early sexual debut and unintended pregnancy. This contributes to a vicious cycle in which vulnerable women are unable to rise out of poverty – further aggravating their mental condition.
If we address this challenge...

Maternal mental health interventions are likely to have significant impact on Millennium Development Goals to reduce under-five mortality, improve maternal health and combat major diseases such as HIV/AIDS. Positive mental health amongst mothers promotes positive labour outcomes, breastfeeding, bonding, family cohesion, ability to identify and optimally use social support, adherence to ARV and TB treatment, and completion of infant immunizations. This has direct implications for decreasing maternal and child mortality, which is one of the strategic objectives highlighted in the Minister of Health's Public Health Care Reengineering Plan.

The rationale for preventing and treating maternal mental illness is to provide the meaningful support necessary to empower and enhance the resilience of mothers living in difficult circumstances. This is especially relevant in a country affected by poverty, unequal access to services and high levels of gender inequality. A mother who feels supported and has positive self-esteem, will be better able to work towards a better future, negotiate the hardships in her life and optimally nurture the development of her children. Interventions during pregnancy also constitute ‘upstream’, preventative interventions into early childhood development at a time when children are most likely to benefit.

Our strategy

The Perinatal Mental Health Project (PMHP) is a mental health service integrated, on-site, into primary maternity care facilities at Mowbray Maternity Hospital, False Bay Hospital and Retreat Midwife Obstetric Unit. The PMHP does not intend to duplicate services that should be available in the public sector. Rather, it strives to support and advocate for the development and roll-out of universal maternal mental health services in accordance with South Africa’s Mental Health Act (2002) stating that mental health care should be routinely provided within the general health environment. However, no formal policy has been implemented yet to provide mental health care to pregnant and postpartum women.

The PMHP envisions its role as an incubator to develop a package of evidence-based health care components for agencies capable of delivering this intervention to scale. The Project has developed a model for providing screening, counselling and psychiatric services during pregnancy. Central to this model is a task-shifting partnership with maternity staff to offer mental health screening, and an on-site, dedicated mental health officer to provide counselling and manage the mental health service. Service beneficiaries are pregnant women and girls from some of the most economically disadvantaged communities. The beneficiary profile of the programme is: 62% black; 36% coloured; 2% white. Operating at three different obstetric facilities presents different demographic profiles, diverse social contexts and varying clinical routines, which has allowed the PMHP to develop a flexible, responsive model.

Summary of Programme objectives

**Service:** Develop, evaluate and optimise maternal mental health systems through service provision toward providing an evidence-based, integrated and adaptable model for use at scale.

**Training and Teaching:** Capacitate the health environment towards integrating maternal mental health services by: providing professional development and in-service training for 400 health workers annually; adapting existing health worker curricula; and partnering with existing train-the-trainer programs.

**Research:** Address the knowledge gap pertaining to integrated maternal mental health care in low-resource service settings by: generating lessons from routine PMHP service monitoring and evaluation; conducting targeted research to refine components of the PMHP model; informing and supporting research design and implementation in collaboration with regional mental health care providers.
Advocacy and Policy Development:
Advance evidence-based policy development and implementation of maternal mental health services by: Informing and supporting key public health stakeholders; raising PMHP’s profile as a thought leader and resource (regionally and internationally); and empowering service users and civil society to contribute actively towards maternal mental health service delivery.

Our progress
PMHP has grown from a small service at the Mowbray Maternity Hospital in 2002- initiated by Director and Founder, Dr Simone Honikman as part of her post as Principal Medical Officer- to a recognised organisation and formal unit of the University of Cape Town servicing three sites with a team of ten full time staff by the end of 2011. Over the years PMHP has built multi-stakeholder partnerships, most critically with the Department of Health (DOH), has become a recognised expert in its field, and frequently consults to local and international stakeholders, such as the World Health Organisation (WHO).

Since inception, the PMHP has: screened 12 200 women; provided therapeutic, one-on-one counselling for 2 200 women; provided psychiatric services for 120 women; trained 1 050 health providers; and developed a variety of tools and resources in various languages. The significance of the PMHP’s work has been officially recognised by organisations such as USAID AIDSTAR (2010); the World Health Organisation/World Federation for Mental Health (2005) and the Impumelelo Innovations Trust (2005). The PMHP has also contributed its expertise in a range of lobbying activities such as the Draft Mental Health Policy (2009); the Community Health Worker Policy Framework (2010) and the Western Cape Emergency Summit on Baby Abandonment (2010) to name a few.

Sharing our lessons learned in implementing a maternal mental health intervention

1. Prepare the environment
Liaison work must first be undertaken with facility staff and health workers, at all levels within the hierarchy. The integration of services into primary health care requires the full support and buy-in from health workers. Maternal mental health interventions require screening, which is ideally undertaken by maternity staff during routine antenatal care. Therefore, the second step in preparing the environment would be to equip health workers with the necessary skills to deliver the new intervention efficiently. Rapport and respect is very important, especially in low-resource, busy clinical settings where health workers may already feel over-burdened. Effective communication campaigns and training programmes aimed at service providers is required to ensure that they understand the need for the intervention, how to implement the intervention, and ultimately, that they become advocates for the intervention.

The third step is to ensure that referral pathways are in place. Ideally, this would be a dedicated, on-site mental health counsellor. Where this is not possible, maternity staff may be supported in identifying and consolidating links with resources and organisations in their communities that offer support to pregnant women and girls. Screening for mental illness alone is not sufficient as an intervention. It is unethical to diagnose emotional distress that cannot be adequately contained and treated. The counsellor, or facility, must also be prepared and trained to refer a client onward to psychiatric services, social services or other support services where appropriate.

2. Pilot! Pilot! Pilot!
The public health environment is varied and diverse. Each health facility presents challenges and opportunities specific to its context. Particular consideration should be given to economic and social demographics as well as staffing profiles. When we decided to test our maternal mental health model in other settings, time was allocated to ‘pilot’ the new service sites. The service was operational in each site for several months before
delivery targets were set or implementation protocols finalised. It is of particular ethical importance in the mental health environment not to set up expectations of support without being able to commit to a programme of delivery.

3. Care for the carers
Providing mental health services can be emotionally taxing on the service providers. Settings of poverty also equate to higher levels of need and more severe pathologies. Adequate emotional support and routine supervision for counselling staff is fundamental to ensuring a sustainable, quality maternal mental health service. The PMHP protocol requires all counsellors to receive weekly, individual supervision from a clinical supervisor, attend a clinical meeting every two weeks to debrief as a group, support each other and receive guidance from the Clinical Services Coordinator.

In terms of maternity staff, our experience validates other findings that nurses are overwhelmed, stressed and traumatised. Nurses have little recourse to supportive services or debriefing opportunities and often report feeling ‘ill-equipped’ to handle many of the social and emotional problems presented by their clients. Our training programme allows them to develop insight into their feelings whilst simultaneously gaining an awareness of and approach to dealing with the emotional state of the women in their care. By caring for health workers, we have found that, despite being located in busy, low-resource facilities, nurses are able to provide quality, compassionate care.

4. Identify complementary strategies that will help achieve overall vision and mission
We have identified three complementary strategies to support integrated maternal mental health care. This is vital in a health infrastructure with competing priorities and limited resources.

- **Train** for task shifting to equip the people who will be providing the service.
- **Research** to develop and improve the health care package, and to inform the training and teaching programmes.
- **Advocacy** to convince health planners and policy makers that maternal mental health is not a competing priority, but a feasible solution that cuts across multiple sectors and serves key health priorities.