Perinatal Mental Health Project

Caring for Mothers

Caring for the Future

Clinical Services Outcomes

Reporting period

July 2015 - December 2017

1. Introduction

In South Africa, governmental departments are responsible for providing public health services by executing policies mandated by legislation. In order for policies to be evidence-based, strengthening the bridge between research and policy has to be prioritised. The mission of the Perinatal Mental Health Project (PMHP) is to develop and advocate for accessible maternal mental health care that can be delivered effectively at low scale in low resource settings.

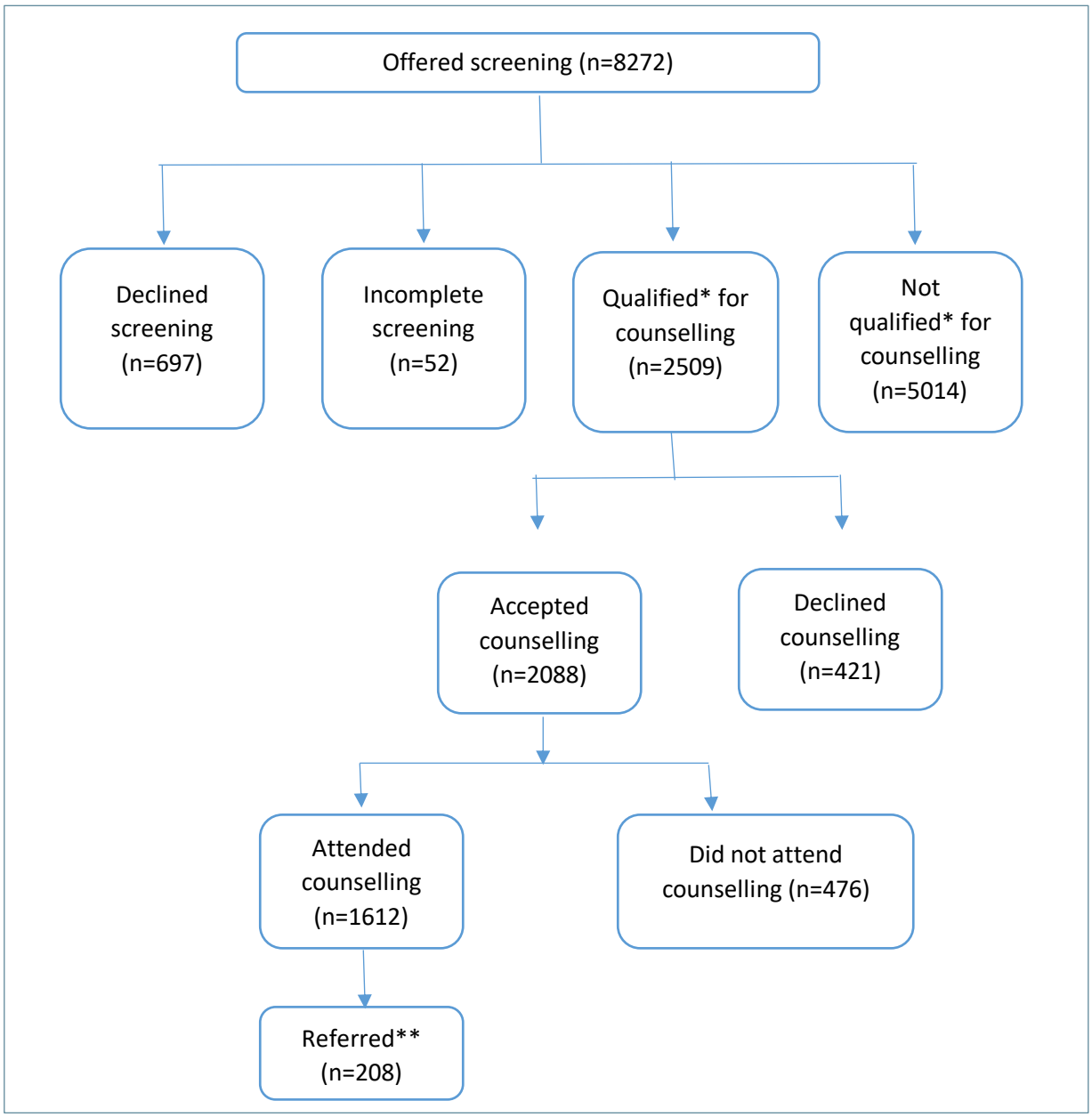
The PMHP envisions mental health support for all mothers to promote their well-being, and that of their children and communities. To achieve this vision, we are committed to demonstrating that our model is effective and efficient. In addition, we are involved in the ongoing monitoring and evaluation of our work that allows us to refine the elements of our model. This document describes the outcomes data for the PMHP Clinical Services Programme from July 2015 to December 2017.

2. Antenatal screening assessment

During the 30 month period, 8267 women attending three antenatal clinics [Liesbeek Midwife Obstetric Unit at Mowbray Maternity Hospital (MMH), False Bay Hospital (FBH) and Hanover Park Midwife Obstetric Unit (HP MOU)] in Cape Town, were offered screening for common mental illnesses, or risk thereof, at their first clinic visit. The screening questionnaire was administered by a counsellor or screener, in private, and took approximately 10 minutes to complete. Three screening questionnaires (the 10-item Edinburgh Postnatal Depression Scale (EPDS), the 11-item Risk Factor Assessment (RFA) and the 3-item Whooley) were used at MMH and FBH, while only the RFA and Whooley were used at HP MOU. Women qualified for counselling if they scored 13 or more in the EPDS, or 3 or more in the RFA, or 2 out of 3 in the Whooley, or based on the counsellors' discretion.

Of those women who were offered screening (**Figure 1**), 697 (8%) did not consent to the screening, 52 (<1%) did not complete the screening, 5014 (61%) were not experiencing emotional difficulties that required counselling at the time of assessment, and 2509 (30%) qualified for counselling. Of those who qualified for counselling, 421 (17%) declined to be counselled and 2088 (83%) accepted the offer of counselling. Of those women who accepted the offer of counselling 1612 women (77%) attended at least one counselling session, while 476 women (23%) cancelled or did not arrive for their counselling appointment despite counsellors attempting to contact them three times. 208 women were referred to outside organisations for additional assistance after at least one counselling session.

Figure 1. Diagram of women who were offered screening by PMHP at the three antenatal sites



*Assessed using the EPDS, RFA, Whooley or at the counsellors discretion
**To an outside organisation for additional assistance

Of those women who were screened, more than 50% were in their twenties, while 4-13% were teenagers (**Table 1**). The majority of women who classified themselves as 'coloured' (57%) were screened at HP MOU, while the majority of women who classified themselves as foreign nationals (40%) were screened at MMH. When asked whether they were currently working, almost half the women screened at FBH (46%) and MMH (49%) reported being employed, while the majority of women at HP MOU (53%) reported being unemployed. 34% of women screened were experiencing their first pregnancy and 33% were pregnant for the second time.

Table 1. Demographic characteristics of women screened

	MMH [n=2226]	**FBH [n=2162]**	**HP MOU [n=3879]**
Age			
<20 years	4%	10%	13%
20-29 years	59%	53%	55%
30-39 years	35%	34%	29%
40+ years	2%	3%	4%
Population			
Black South African	26%	31%	31%
Black Foreign National	40%	32%	9%
'Coloured'	30%	31%	57%
Other	4%	6%	3%
Screening Language			
English	90%	98%	96%
Afrikaans	<1%	1%	3%
French	10%	1%	<1%
Employment status			
Employed	39%	47%	40%
Studying	12%	7%	7%
Unemployed	49%	46%	53%

3. Antenatal counselling sessions

Between July 2015 and December 2017, 5212 counselling sessions were provided across the three antenatal sites. The majority of counselling sessions occurred during pregnancy – 4330 counselling sessions were provided to 1612 women. Postnatally, 882 counselling sessions were provided to 483 women.

Of those women who were eligible for antenatal counselling, 1612 women attended at least one counselling session, 1081 (67%) attended at least 2 counselling sessions and 675 (42%) attended at least three counselling sessions. Counselling was offered in English and Afrikaans at HP MOU and FBH, with the addition of Swahili, Lingala or French being offered at MMH.

Of those women who accepted counselling, 53% were in their twenties, while 19% were teenagers. When asked whether they were currently working, 38% reported being employed, 46% reported being unemployed, while 16% reported being students. 49% of women had never been pregnant before.

Table 2 illustrates the most frequently reported problems among women at the first counselling session with the PMHP. Women could report multiple problems in the same category as well as problems across multiple categories. When the three antenatal sites were combined, *poor primary support* [unsupportive primary relationships, including but not limited to lack of practical, financial or emotional support being provided by partners or close family members] was the most commonly reported problem category (1288 problems reported by 788 women), followed by *lifecycle transition problems* [transitions related to adolescence, motherhood, marriage, changes in responsibility or caregiving roles] (913 problems reported by 635 women) and *psychiatric disorders* [for example, anxiety, depression, substance use disorder] (935 problems reported by 618 women). Counselling is provided on an individual basis, or with partners, mothers and families, and is carried out face-to-face or telephonically.

Table 2: Number of problems reported by women in each category at counselling

Categories of Problems	Number of women	Number of problems
Primary support	788	1288
Social environment	548	778
Health/Medical	391	651
Lifecycle transition	635	913
Psychiatric problems	618	935

Table 3 illustrates the 5 interventions most frequently used to address problems during counselling. The majority of antenatal interventions used containment (90%), psycho-education (77%), problem solving (45%), cognitive behavioural therapy (42%) and relationship counselling (31%).

Table 3. Most frequently used interventions

Intervention	Description	Percentage
Containment	Listening, reflecting, empathy, positive regard, genuineness	90%
Psycho-education and counselling around health information	Postnatal depression, substance misuse, mental health information, HIV, breastfeeding, labour and birth, parenting	77%
Problem solving	Prioritising problems and working together towards solutions	45%
Cognitive behavioural therapy	Dealing with the connection between thinking, feelings and behaviour	42%
Relationship counselling	Counselling an individual regarding a significant relationship that is problematic/dysfunctional	31%

4. Postnatal assessments

The PMHP conducts routine follow-up assessments with counselled women at 6-12 weeks post-birth. This session is a comprehensive, structured assessment of the following factors: (1) self-reported problem resolution, (2) perceptions of their birth experience, (3) attachment with their infant, (4) symptoms of depression, (5) symptoms of anxiety, (6) general perceptions of current life experience and (7) perceptions of the PMHP service.

Assessing for response bias

As the same counsellor that provides the service conducts the follow-up assessment, PMHP enlisted the services of an independent researcher to evaluate whether clients feel pressured to give positive responses regarding their wellbeing and impressions of our service. We felt this may be a possibility as we had provided a free service to a vulnerable group of women who may feel obliged to give the counsellors favourable responses to the assessment (response bias).

Between June and September 2017, the independent researcher called a random number of clients from all three sites and asked them the same questions they'd been asked by their counsellors at the 6-week postnatal session. We statistically analysed the differences between the responses given to the independent researcher compared to those given to the counsellors. We were able to show substantial agreement between the two: the responses were very similar. We thus concluded that clients were not biased in the responses given at the 6-week follow-up session.

For those women who were screened between July 2015 and December 2017, postnatal assessments were completed for 444 counselled women from MMH, 341 for FBH and 176 at HP MOU (total=961). According to the PMHP protocol, attempts for postnatal contact are to be made three times telephonically or face-to-face, after which, the file is closed. Not all counselled women could be contacted for their postnatal assessment due to their contact numbers being discontinued or invalid or their not replying to left messages after three attempts. MMH has the most success at contacting women for their postnatal follow-up sessions, as the population is predominantly foreign nationals who have reliable cellular phones and telephone numbers.

4.1 Self-reported problem resolution

At the postnatal assessment, the counsellors rate women's self-reported degree of resolution of their initial, presenting problems. The rating for this is a five-option scale: 'much worse', 'worse', 'unchanged', 'much improved', 'resolved'. **Table 4** represents the analysis for the proportion of women whose presenting problems are 'much improved' and 'resolved'.

Table 4: Proportions of improvement in presenting problems - 'much improved' or 'resolved'

Presenting problems*	Number of problems	Problem resolution**
Primary support	806	401 (50%)
Social environment	589	193 (33%)
Health/Medical	523	382 (73%)
Lifecycle transition	681	553 (81%)
Psychiatric problems	678	507 (75%)

*Refers to the group of women who received postnatal assessments, and not all women who received counselling
**Refers to presenting problems that are 'much improved' and 'resolved'

4.2 Perceptions of their birth experience

Impact on birth experiences generally falls beyond the scope of the services provided by PMHP. However, of the women who reported negative birth experiences, more than 89% reported positive and successful bonding with their infants at the postpartum follow-up assessment. The birth and parenting outcomes are summarized in Table 5, and stratified by the three MOUs.

Table 5: Birth and parenting outcomes*

Postnatal outcomes	MMH (n=444)	FBH (n=341)	HP MOU (n=176)
Negative experience of birth	18%	39%	26%
Bonding with the baby	95%	88%	90%

*The outcomes are from the group of women who received postnatal assessments, and not from all women who received counselling

4.3 Attachment with their infant

Breastfeeding is being used as a proxy indicator for positive attachment. Across the three antenatal sites, of the women who had negative birth experiences, over half (73%) were breastfeeding 6-12 weeks after delivery.

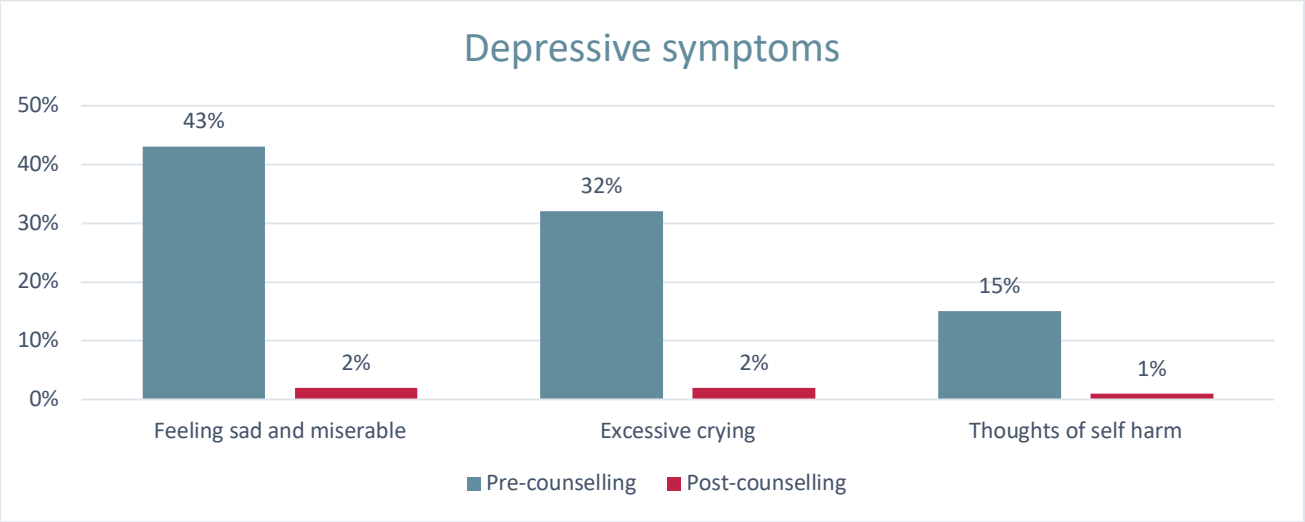
4.4 Symptoms of Depression

There were statistically significant improvements in depressive symptoms at all antenatal sites after the counselling intervention.

For MMH and FBH, depressive symptoms are assessed using three questions. These include reports of excessive crying, feeling sad and miserable, and thoughts of self-harm or suicide. Women that experienced any of these symptoms 'quite a lot' and 'most of the time' were considered to have depressive symptoms.

Figure 2 shows a decline in the percentage of women reporting symptoms of depression from before counselling to the postnatal assessment. Out of the 785 women at MMH and FBH, 43% reported feeling sad and miserable, 32% reported excessive crying, and 15% reported having thoughts of self-harm at the pre-counselling session. At the postnatal follow-up session, feeling sad and miserable had reduced to 2%, experiencing excessive crying had reduced to 2%, and having thoughts of self-harm had reduced to less than 1%.

Figure 2: Percentage of women reporting depressive symptoms at MMH and FBH

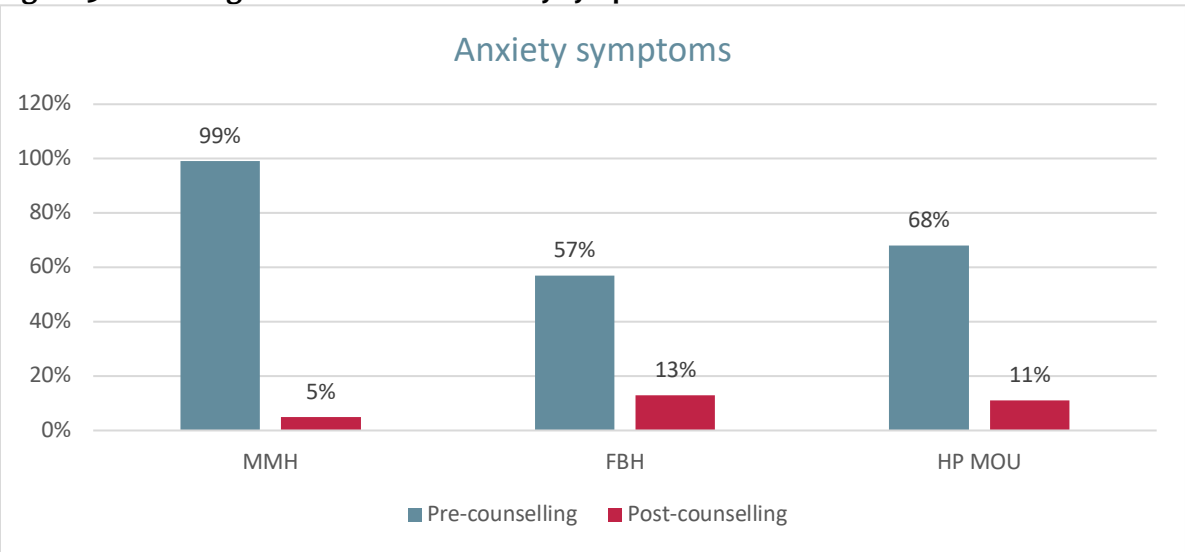


At HP MOU, a different, briefer 2-item depression screen is used which assesses feelings of prolonged sadness and little interest or pleasure in doing things. Women who answered 'yes' to experiencing any of these symptoms were considered to have depressive symptoms. At the initial screening, 81% of women were considered to have depressive symptoms, and this number decreased to 47% at the postnatal follow-up.

4.5 Symptoms of anxiety

As part of the counselling services provided, anxiety symptoms were assessed and noted. Symptoms assessed included (1) nervousness and anxiousness and (2) persistent uncontrollable worrying. Women who experienced these symptoms between half of each day to all day long for either or both items, were considered to have anxiety symptoms. **Figure 3** shows a decline in the number of women reporting anxiety symptoms after the counselling intervention.

Figure 3. Percentage of women with anxiety symptoms for the three antenatal sites



All sites showed a reduction in the percentage of women with symptoms of anxiety by the 6 week postnatal session. MMH showed the greatest reduction - of the women who had both pre- and postnatal assessment for anxiety, the percentage with anxiety symptoms decreased from 99% to 5%.

4.6 General perceptions of current life experience

At the postnatal follow-up session, 961 women were asked about how they perceived their life experience. 88% of the women reported experiencing a negative view of their life around the time of their first antenatal visit, while only 2% of women still felt negative about their life experience 6-12 weeks after delivery.

4.7 Perceptions of the PMHP service

A scale with positive, neutral and negative possible response options was used to assess women's impression of PMHP services. Between 96% and 99% of women counselled at the 3 sites reported having a positive experience of PMHP's counselling service. The same person counsellor who counselled them, asked about their impression of their counselling experience.

5. Conclusion

The 2015 -2017 data strongly suggests, in line with previous outcome reports, that the PMHP service intervention has positive outcomes for women and their children. The counselling, which focuses on containing women's distress, empowering them and improving their assertiveness has a beneficial impact on depression and anxiety symptoms, coping, and parenting. The PMHP counselling intervention also recommends that mental health care may promote resilience and provide the necessary support to enable vulnerable women to identify resources and personal capabilities. We conclude that integrated maternal mental health care may act as a strategic intervention for capability formation and sustainable development.