

Screening for mental health risk factors and disorders in postpartum women in a rural district of South Africa

April 2023

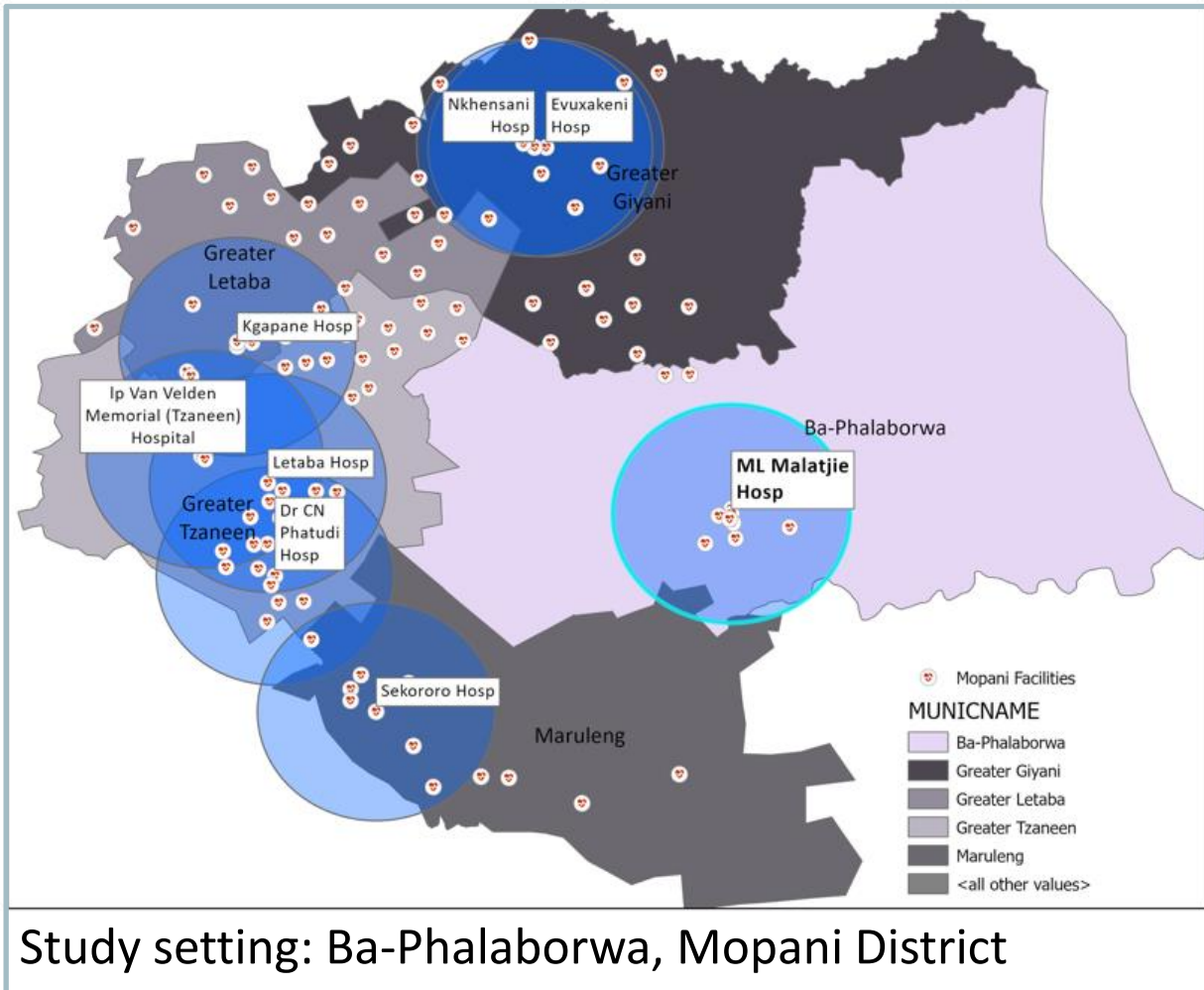


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Background



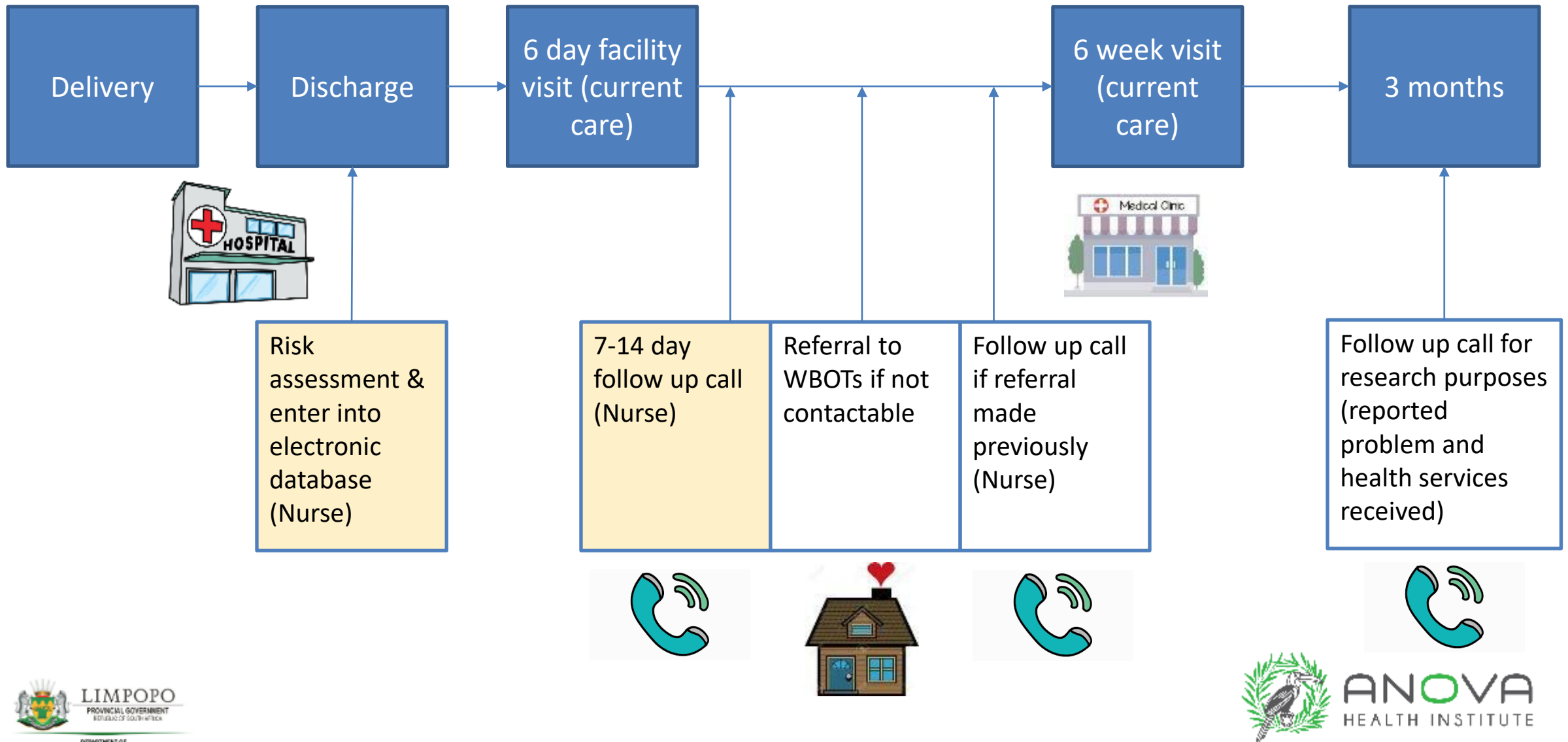
- The **postnatal period** (6 weeks following childbirth) is a critical one for mother and baby
- It has been neglected in South Africa, despite evidence that postnatal care reduces neonatal mortality
- We tested a model providing an additional postnatal contact at 7-14 days to high risk MIPs

- At the time of discharge from Maphutha L Malatjie District Hospital, all mothers were asked a set of questions to examine their postnatal risk
- They were called by a research nurse between 7-14 days after delivery

Mental health component:

- Screening for mental health risk at discharge
- Screening for mental health disorders during call

Intervention Timeline



Characteristics

		Number	Percentage	95% CI
Demographic characteristics				
Age	Under 18 years	21	2.4	1.6; 3.6
	18-34 years	691	78.3	75.5; 80.9
	35 years and older	170	19.3	16.8; 22.0
Education	Completed Gr 12	354	40.2	37.1; 43.5
	Did not complete Gr 12	527	59.8	56.5; 62.9
Income	Social grant	396	44.9	41.6; 48.2
	Employed	105	11.9	9.9; 14.2
	Family income	426	48.3	45.0; 51.6
	Informal work	11	1.2	0.7; 2.2
	No income	20	2.3	1.5; 3.5

60% did not complete Grade 12

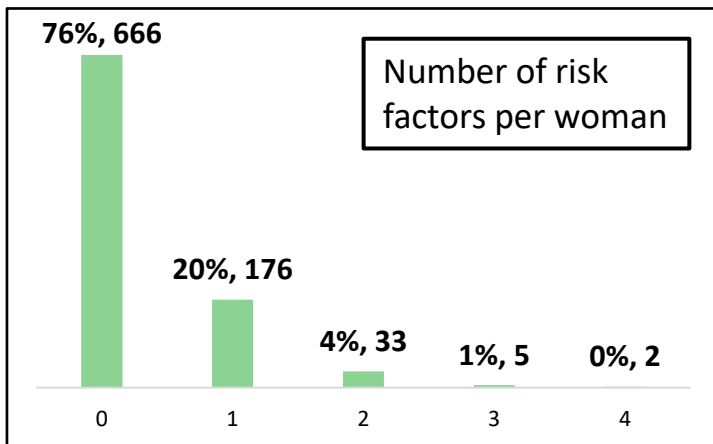
12% were employed

- 22.8% were living with HIV
- 2.3% had chronic hypertension
- 1 had a diagnosed pre-existing mental health disorder
- 1 had pre-existing substance use disorder



Mental health risk screen

Question (N=882)	Number	%	95% CI
Feel pleased about having a new baby (answer: no)	2	0.2	0.0; 0.1
Had difficult things happen in the last year	12	1.4	0.1; 2.4
Not together with partner	56	6.3	4.9; 8.2
Partner doesn't care about me	1	0.0	0.0; 0.1
Someone in household sometimes violent towards me	5	0.6	0.2; 1.4
Family and friends don't care about how I feel	2	0.2	0.0; 0.9
Past experience of abuse	6	0.7	0.3; 1.5
Family and friends help in practical ways (answer: no)	3	0.3	0.1; 10.5
Don't have a good relationship with mother	57	6.5	5.0; 8.3
Experienced miscarriage, stillbirth or death of a child	112	12.7	10.7; 15.1
Experience of serious depression, panic attacks or anxiety	9	1.0	0.5; 2.0



Participants more likely to answer risk questions

Mental health risk screen: any risk question

	Number	OR crude	p-value	OR adjusted	p-value
No income	12	4.8 (2.1; 12.0)	0.01	4.6 (1.8; 11.7)	0.01
No grade 12	142	1.4 (1.0; 1.9)	0.04	1.2 (0.9; 1.7)	0.25
Unbooked	13	2.8 (1.3; 5.9)	0.01	2.4 (1.1; 5.3)	0.03
HIV positive	75	2.3 (1.6; 3.2)	<0.001	2.2 (1.5; 3.1)	<0.001
High maternal age	52	1.5 (1.0; 2.1)	0.04	1.2 (0.8; 1.8)	0.42
RPR	2	-	-	-	-
Any HPT*	24	1.7 (1.0; 2.8)	0.05	1.7 (1.0; 2.9)	0.06

People with:

- No income
- Unbooked
- Living with HIV
- HPT

Were more likely to answer one of the risk questions in the affirmative

* HPT- hypertension

Adjusted model includes no income, no grade 12, unbooked, HIV positive, high maternal age and any hypertension

Our participants were at risk for postpartum mental disorders:

- Low matric completion
- Low employment rates
- Risk factors according to PMHP risk screening tool
- Participants with chronic diseases, no income, and older women had more risk according to the tool

3–6-day facility visit

We asked mothers about this visit when we called them 7-14 days after birth

- 94% of mothers reported attending their 3-6 day postnatal health check
- Self-report of breastfeeding enquiry was at 98%
- **Only 5% reported being asked about their mood/ how they were feeling**

Mother	N (%)
Did the mother attend the 3-6-day visit at their health facility?	390 (94%)
Was the mother satisfied with the 3-6-day facility visit?	387 (99%)
Were vital signs done at the visit? (blood pressure)	345 (88%)
Was the mother examined at the visit?	356 (91%)
Did they ask about vaginal bleeding and discharge at the visit?	345 (88%)
Was the Caesarean / perineal wound checked? *	216 (82%)
Were the breasts and breastfeeding asked about?	384 (98%)
Did they ask the mother about her mood?	20 (5%)



Screening during 7-14-day call

Mother problems identified (N=416)	Freq	%
Breastfeeding problems	5	1.2%
Breast pain	2	0.5%
Insufficient milk supply	3	0.7%
Urine problems	0	0.0%
Abdomen or bowel function problems	4	1.0%
Constipation	2	0.5%
Pain	2	0.5%
Perineal problems	1	0.2%
Poor healing	1	0.2%
Perineal problems	1	0.2%
Covid symptoms	0	0.0%
Other problems	9	2.2%
Mental health problems		
Worrying	1	0.2%
Depression	2	0.5%

Despite this, using a validated four question screening tool, we only identified 3 people at risk for postpartum depression/ anxiety at 7-14 days, out of 416 women.

Abrahams et al. BMC Psychology (2019) 7:77

Validation of a brief mental health screening tool for pregnant women in a low socio-economic setting

<https://doi.org/10.1186/s40359-019-0355-3>

7–14-day call - Patient perceptions of call

Do you feel the 7–14-day call helped



99% of people said that the call was helpful.
Does this indicate an unmet need for support?

- The advice helped
- Referral helped
- Soemthing else about the call helped
- It didn't help

Why did we not pick up women with postnatal depression?

- Cultural differences in interpretation of the constructs of the screening tool?
- Lack of specific mental health training?
- Telephonic nature of the screening?
- Timing of the screening?

To support the integration of mental health services into primary care and postnatal care, a better understanding of minimum training requirements and the applicability of tools to multiple settings is needed.

Mental health services are increasingly recognised as critical to chronic disease programmes. How can the mental health community support DoH/ implementing partners and others to take advantage of this?



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