MONASH University

# Implementing perinatal mental health screening for women of refugee background: an evaluation

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# Abstract

**Background:** Perinatal depression and anxiety affect up to 20% of all women. National guidelines recommending mental health screening in pregnancy have not been well implemented in routine maternity care. Women of refugee background are at even greater risk for perinatal mental health conditions due to refugee experiences, including trauma and resettlement stressors. Additionally, they experience difficulties in accessing mental health care including stigma, and cultural and language barriers. This perinatal mental health screening program engaged with stakeholders to co-design a screening program in early pregnancy with appropriate referral pathways and health professional education to address these barriers.

**Methods:** A perinatal mental health screening program was implemented at an antenatal clinic in the south-eastern suburbs of Melbourne, Australia. In total, 274 women participated in the screening program; 119 (43%) women of refugee background and 155 (57%) women of non-refugee background. This research was conducted in four stages. Stage one: a survey with health professionals assessed their professional development needs in regard to perinatal mental health. In stage two, a mixed methods study, guided by the Normalization Process Theory, evaluated the feasibility and acceptability of the screening program from the perspective of health professionals, using an online survey (n=38), focus groups (n=2; 13 participants) and semi-structured interviews (n=8; 11 participants). Stage three used qualitative methods to determine the acceptability and feasibility of the program from the perspective of women. One focus group (5 participants) and 17 semi-structured telephone interviews were conducted with participating women from four communities. Finally, a quantitative evaluation by health records audit was undertaken (n=308) to determine if the screening program identified more women of refugee background as risk positive for depression and anxiety than women of non-refugee background. To assess whether the screening program identified more women likely to be experiencing mental health disorders than routine care, the health records of 34 randomly selected women of refugee background attending other antenatal clinics were audited.

**Discussion:** This evaluation found screening in pregnancy enabled better detection of depression and anxiety symptoms in women of refugee background compared to women attending routine

care. There was no statistically significant difference in depression and anxiety symptoms in women of refugee background compared to women of non-refugee background. The program enabled more referral for mental health issues for women of refugee background who received screening. Women and health professionals considered the perinatal mental health screening program to be acceptable and feasible. This evaluation identified four key strategies for systematic and sustainable integration of mental health screening into routine maternity care: effective referral pathways; redesign health services whereby mental health care can be integrated into maternity practice in parity with physical health care; improving professional development for health professionals, and improving co-ordination between hospital and community-based services.

**Conclusion:** This screening program addressed an evidence-practice gap. In women of refugee background, the research confirmed that screening is more likely to identify women at risk of mental health disorders than routine care. It provides evidence for how to successfully scale up the program to the broader maternity service.

# Thesis including published works declaration

I hereby declare that this thesis contains no material which has been accepted for the award of any other degree or diploma at any university or equivalent institution and that, to the best of my knowledge and belief, this thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

This thesis includes four original papers published in peer-reviewed journals and four submitted publications. The core theme of the thesis is an evaluation of a perinatal mental health screening for women of refugee background. The ideas, development and writing up of all the papers in the thesis were the principal responsibility of myself, the student, working within the Monash Centre for Health Research and Implementation under the supervision of Associate Professor Jacqueline Boyle.

The inclusion of co-authors reflects the fact that the work came from active collaboration between researchers and acknowledges input into team-based research.

In the case of Chapters 3, 4 and 5 my contribution to the work involved the following:

| **Thesis Chapter** | **Publication Title** | **Status** *(published, in press, accepted or returned for revision, submitted)* | **Nature and % of student contribution** | **Co-author name(s) Nature and % of Co-author's contribution*** | **Co-author(s), Monash student Y/N*** |
|---|---|---|---|---|---|
| 3 | Improving mental health in pregnancy for refugee women: protocol for the implementation and evaluation of a screening program in Melbourne, Australia. | Published | 25% Study design; manuscript drafting and revisions | 1) Jacqueline Boyle and Melanie Gibson-Helm 50% primary responsibility for study design and development, manuscript drafting.<br>2) Rebecca Blackmore, manuscript drafting; study design 15%<br><br>3) The following authors contributed with input into manuscript and study design 10%<br>Christine East<br>Jacqueline McBride<br>Kylie Gray<br>Glenn Melvin<br>Rebecca Fradkin<br>Natahl Ball<br>Nicole Highet | Yes |

| | | | | | |
|---|---|---|---|---|---|
| 4 | What are the professional development needs for GPs and midwives associated with the new perinatal mental health guidelines? | Published | 60%: primary responsibility for study conception and design, data analysis and interpretation and manuscript drafting. | Co-authors 25%<br>1) Melanie Gibson-Helm and Jacqueline Boyle, study design, interpretation of data and input into manuscript<br>Co-authors 15%<br>2) Nicole Highet, input into manuscript<br>3) Rebecca Fradkin, data collection and input into manuscript | No |
| 4 | Implementing innovative evidence-based perinatal mental health screening for women of refugee background | Published | 70%: primary responsibility for study conception and design, data analysis and interpretation and manuscript drafting. | Co-authors 20%<br>1) Melanie Gibson-Helm and Jacqueline Boyle, study concept and design, interpretation of data and input into manuscript<br>2) Nadia Khan, data analysis and interpretation, input into manuscript<br>Co-authors 10%<br>3) Tracy Finch, study methodology, input into manuscript<br>4) Christine East and Leanne Boyd, input into manuscript | No |
| 5 | "If you don't ask …you don't tell": Refugee women's perspectives on perinatal mental health screening | Returned for revisions | 75%: primary responsibility for study conception and design, data collection, analysis and interpretation and manuscript drafting. | Co-authors 15%<br>1) Rebecca Blackmore: data analysis and interpretation, input into manuscript<br>2) Jacqueline Boyle and Melanie Gibson-Helm: study concept and design, input into manuscript<br>Co-authors 10%<br>3) Jacqueline McBride: study design, input into manuscript<br>4) Leanne Boyd and Razia Ali: input into manuscript | Yes |
| 5 | The impact of a perinatal mental health screening program for women of refugee and migrant background | Submitted | 65%: primary responsibility for study conception and design, developing audit tools, conducting the audit, data analysis and | Co-authors 25%<br>1) Melanie Gibson-Helm and Jacqueline Boyle study concept and design, data analysis and input into manuscript<br>2) Rebecca Blackmore, study design, data collection and input into manuscript | Yes |

| | | | | | |
|---|---|---|---|---|---|
| | | | interpretation and manuscript drafting. | Co-authors 10%<br>3) Chris East, Kylie Gray, Glenn Melvin, Jacqueline McBride, Nicole Highet and Natahl Ball study concept and design, input into manuscript<br>4) Liyasha Goonetilleke, data collection, input into manuscript<br>5) Leanne Boyd input into manuscript | |

I have renumbered sections of submitted or published papers in order to generate a consistent presentation within the thesis.

**Student signature:** **Date:** 24/08/2019

The undersigned hereby certify that the above declaration correctly reflects the nature and extent of the student's and co-authors' contributions to this work. In instances where I am not the responsible author I have consulted with the responsible author to agree on the respective contributions of the authors.

**Main Supervisor signature:** **Date:** 24/08/2019

## Thesis by publication and my PhD journey

At Monash University doctoral students are permitted to submit a thesis by publication, which includes papers that have been published, accepted, or submitted for publication. The papers can be inserted in their published format and may have more than one author. The thesis must reflect a sustained and cohesive theme, and concise framing or linking text is generally required to introduce and link the chapters and manuscripts.

This thesis contains 7 chapters and 5 manuscripts. Three manuscripts have been published, one has been returned for secondary review and the remaining one has been submitted and under consideration. These manuscripts make up most of chapters 3 to 5. A further three published manuscripts completed during candidature which are relevant but not vital to the theme of the thesis, are included in chapter 7 and appendix 6.

Prior to commencing my PhD I had extensive clinical experience as a Midwife, Maternal and Child Health Nurse and from 2006, as a Refugee Health Nurse. Throughout the years I worked in a clinical role, I studied at the tertiary level focussing on advancing my clinical knowledge and skills, eventually completing a Master of Nursing (Nurse Practitioner) degree in 2011. I commenced employment at Monash University as a lecturer in the School of Nursing & Midwifery in 2011 to develop and teach the Refugee Health & Wellbeing stream in the Master of Nursing as well teach into the undergraduate nursing and midwifery curriculum. Working at Monash University provided me the impetus to consider PhD studies.

Since working in the vibrant refugee health sector, I have become acutely aware of the health inequities that exist for women of refugee background and their families. For many women, there are a number of barriers in accessing health care and when having a baby in a

new country, lack of social support from key female relatives and community results in women feeling alone and isolated. Understanding the many challenges these women faced when having a baby in Australia, I was particularly keen to explore the mental health of women of refugee background in the perinatal period and from a midwifery perspective. With this desire to improve the health outcomes for women of refugee background and their families, I was supported to pursue research in this area and was awarded a Monash University Peninsula/Berwick campus seeding grant in 2014 to lead a qualitative research project on Maternal and Child Health Nurses working in regional centres across Victoria and their perspectives of working with families from a refugee background. One publication resulted from this work (Appendix 6). This research and publication fulfilled the criteria required for me to enrol into fulltime PhD studies in 2016.

During my candidature, I have built on my previous experience and exponentially enhanced my research skills and knowledge. I undertook a three day Q*ualitative research methods for public health short course* which incorporated a half day on mixed methods research. This course built on my skill and knowledge of qualitative research methods. With limited previous exposure and little knowledge on how to conduct quantitative research, I have gained a greater understanding of this method during my PhD studies. This new learning was assisted by undertaking the two compulsory units within the Master of Public Health; *Introduction to Biostatistics* and *Introduction to Epidemiology*, as well as applying these new skills when conducting the quantitative evaluation of the perinatal mental health program.

Implementing a new clinical practice into midwifery care and in a complex clinical environment has been a key component of this PhD. I have been involved in all aspects of the implementation and evaluation including ethics amendments; developing appropriate

referral pathways for women who screen positively; education for midwives and other staff at the refugee antenatal clinic; providing feedback of results to clinic staff; liaising with midwifery managers, relevant hospital departments and services and stakeholders; recruitment of women; data collection, analysis and interpretation; storage of data; development and use of Access and REDCaps databases; scheduling, organising agendas, taking minutes and co-chairing the project's steering committee and community advisory committee; writing for publication in peer-reviewed journals and presenting at national and international conferences. I have developed expertise in evaluating a public health program through my involvement with this project as well as through undertaking the elective unit, *Evaluating Public Health Programs.*

This thesis reflects my progression in evaluation and mixed methods research which is demonstrated in the publications presented.

**Implementing perinatal mental health screening for women of refugee background: Study protocol**

**Chapter 3** is introduced with detail on the process, impact, outcome evaluation framework and mixed methods methodology used for this study. A project steering committee comprising key stakeholders and a community advisory committee guided each phase of the program. Their involvement has helped in consolidating my skills in incorporating stakeholder and community views in research design across implementation and evaluation. Details of their involvement and the study protocol are contained within this chapter. The study protocol provides detail on various aspects of the program I have been involved with including weekly attendance at the refugee antenatal clinic for recruitment and obtaining

consent from women; the iCOPE digital platform and screening measures used, and referral pathways developed for the program.

**Health professionals and perinatal mental screening: from identifying health professionals' knowledge and needs, to evaluating health professionals experience of using a newly implemented screening program in routine care.**

**Chapter 4** presents my work on the knowledge and experiences of health professionals when implementing perinatal mental health screening. In the first study, I surveyed health professionals on their knowledge and professional development needs in relation to perinatal mental health screening and management. I was primarily responsible for the ethics, developing the survey tool and distributing the survey at a one off evening seminar on perinatal mental health. I then collated results, drafted the manuscript and presented findings as descriptive statistics in a published article. Identifying health professionals want more supportive education relating to perinatal mental health alerted me to be available to provide 'on the job training' as well as regularly attend team meetings. This enabled me to provide education to health professionals throughout the implementation of the screening program. I also notified health professionals of professional development opportunities that arose, such as the online training by COPE.

The second study evaluated the implementation of the perinatal mental health screening program from the perspective of health professionals. This mixed methods study was guided by the Normalization Process Theory (NPT) and adapted NoMAD survey I gained experience in the use of NPT through collaboration with an international developer of the theory. I was responsible for obtaining ethics approval and adapting both the NoMAD survey to address our specific needs and the NPT for our perinatal mental health screening

program. I also developed and distributed the survey, scheduled and conducted all focus groups and interviews and undertook data analysis and interpretation.

**The impact of implementing perinatal mental health screening: Qualitative and quantitative evaluation research**

**Chapter 5** is the work I have conducted in evaluating the perinatal mental health screening program which includes assessing the women's perspectives, and, the results of the screening and referral processes.

The first study presents the qualitative findings from a focus group and interviews I did with women who participated in the screening program. For this study, I had primary responsibility for obtaining ethics approval, developing the interview schedule, scheduling the focus group and interviews (using an interpreter when required), thematic data analysis, drafting and preparing a manuscript for publication and presenting results at national conferences. The second study presented in this chapter is the quantitative evaluation of the program. For this study I have had primary responsibility for obtaining ethics approval, developing a series of health record audit tools, conducting an extensive health records audit of Monash Health databases and developing a REDCaps database for data entry. I used statistical tests, Chi-squared test for independence and Wilcoxon Signed Rank Tests, to determine the prevalence of depression and anxiety symptoms for women of refugee and non-refugee background; referrals made for support and management for women who screened risk positive and the impact of the program compared to routine care.

**Knowledge translation**

Reporting and disseminating findings from this PhD research has been a major area of growth and development throughout my candidature. I have drafted and published manuscripts and presented results at both national and international conferences. This evaluation has led to a commitment to scale up and embed the perinatal mental health screening program across all maternity services at Monash Health and this work is underway. Throughout my candidature I was an Australian College of Nursing (ACN) representative on the Migrant and Refugee Women's Health Partnership. The perinatal mental health screening program is a quality and safety health care activity and can be aligned to two key Australian standards: i) The National Safety and Quality Health Service Standards developed by the Australian Commission on Safety and Quality in Healthcare and, ii) the Competency Standards Framework for Clinicians developed by the Migrant and Refugee Women's Health Partnership. Detail of how the screening program is aligned to these two standards is described in **chapter 7**. I have also been involved in other projects relating to, but not directly involved with, the perinatal mental health screening program. These activities include a rapid review of the evidence on the health needs of refugees and migrants: a report for the World Health Organization (for which I was the lead author for the section titled: Protecting and improving the health and well-being of women and girls)**;** two published articles and one book chapter in a mental health nursing text. The articles are included in chapter 7 and appendix 6.

# Acknowledgements

This research was supported by a Cabrini Foundation PhD Scholarship.

**Professional**
To my three supervisors Associate Professor Jacqueline Boyle, Dr Melanie Gibson-Helm and Professor Leanne Boyd, thank you. You have inspired me and taught me so much about research and being a good researcher. It has been a privilege and absolute pleasure to work with you as a student and I feel extremely fortunate to have had this opportunity. I will be forever grateful for the ongoing support and understanding each of you have provided.

I wish to acknowledge and thank all the members of the projects' steering committee and thank you for your wisdom and advice, all of which has helped this research develop into a program that will be scaled-up across the broader health service, and shows with collaboration, commitment and energy anything is possible. To all the members of the community advisory committee, in particular, Razia Ali, thank you. Each of you has guided this project with such generosity and always been so happy to attend meetings and share your insights, stories and experiences.

To all the MCHRI staff who offer their support and fellow PhD students who provide an empathetic ear or some light relief. In particular, I thank Rebecca Blackmore who has shared this PhD journey with me. I appreciate your support and encouragement, our collaboration on this research and the friendship that has developed over the past few years.

To all my colleagues in the Monash University School of Nursing & Midwifery who have provided endless amounts of encouragement and the time needed to study fulltime.

I also wish to acknowledge and pay my deepest gratitude to all the health professionals from the Rose Quartz team at Dandenong Hospital, Allison Deering and Kerrie Papacostas. Without your support for this project, we would not have had the successes we have had. Finally, to the women who agreed to participate and gave their time to be interviewed. I have had the privilege to work with women of refugee background for a number of years and despite the many challenges and struggles faced by many, I continue to be astounded by your amazing stories that are so full of strength, resilience and courage.

**Personal**
To my friends and family who nourish me every day, keep me going and remind me of what is truly important in life. Thank you to my Mum, Dad and Lynne, my sister Carolynne and Henk, Nick and Stefan, my brother Stuart and Lachlan and Oscar. To Emma & Richie and all my extended family, thank you for being here and providing me with your constant encouragement and much needed 'Willey' humour.

Thank you to my two beautiful children, Molly & Lewis. I am so very proud of both of you, and for many reasons the two of you have given the purpose and determination to undertake PhD study. I know we have had a few laughs about that, but I hope me doing this helps you to both realise that when you set your mind to do something, you can do it.

My partner Sergio, thank you from the bottom of my heart. You have kept me going when times were good and also when times were difficult. I am forever grateful for your constant support, encouragement and love and look forward to what comes next for us; I think that might be me listening to you play double bass to your hearts content!

# Abbreviations

| | |
|---|---|
| CALD | Culturally and Linguistically Diverse |
| COPE | Centre of Perinatal Excellence |
| EPDS | Edinburgh Postnatal Depression Scale |
| GP | General Practitioner |
| HP | Health professional |
| MCH | Maternal and Child Health |
| MCHN | Maternal and Child Health Nurse |
| MH | Monash Health |
| MH RH&WS | Monash Health Refugee Health and Wellbeing Service |
| NPT | Normalization Process Theory |
| PMH | Perinatal mental health |
| RHNL | Refugee Health Nurse Liaison |

# Publications

## Publications included in this thesis

1. Boyle JA, **Willey S,** Blackmore R, East C, McBride J, Gray K, Melvin G, Fradkin R, Ball N, Highet N, Gibson-Helm M. (2019). Improving mental health in pregnancy for refugee women: protocol for the implementation and evaluation of a screening program in Melbourne, Australia. *JMIR Res Protoc* doi:10.2196/13271 [Chapter 3]

2. **Willey, S.,** Fradkin, R., Gibson-Helm, M., Highet, N. & Boyle, JA. (2018). What are the professional development needs for GPs and midwives associated with the new perinatal mental health guidelines? *Australian Journal of Primary Health*, *24*, 99–100. doi:10.1071/PY17170 (ranked 86/94 within Health Care Sciences & Services and 157/181 within Public, Environmental & Occupational Health, Q4, IF: 0.935) [Chapter 4]

3. **Willey, S.,** Gibson-Helm, M., Finch, T., East, C., Khan, N., Boyd, L & Boyle, JA Implementing innovative evidence-based perinatal mental health screening for women of refugee background. *Women & Birth* In Press doi.org/10.1016/j.wombi.2019.05.007 (ranked 20/118 within Nursing, Q1 IF:1.822) [Chapter 4]

4. **Willey, S.,** Blackmore, R., Gibson-Helm, M., Ali, R., Boyd, L., McBride, J. & Boyle, J.A. "If you don't ask it; you don't tell": Perinatal mental health screening for women of refugee background. Submitted: *Women & Birth* 01/04/2019, returned for secondary review (ranked 20/118 within Nursing, Q1 IF:1.822) [Chapter 5]

5. **Willey, S.,** Gibson-Helm, M., Blackmore, R., McBride, J., Highet, N., Ball, N., Gray, K., Melvin, G., Boyd, L., East, C. & Boyle, J. The impact of a perinatal mental health screening program for women of refugee and migrant background. Submitted: *PLoS Medicine: Special Issue Refugee and Migrant Health* 25/08/2019 (ranked 8/160 within Medicine, General and Internal, Q1 IF:11.675) [Chapter 5]

## Additional publications produced during candidature

1. Cheng IH, Advocat J, Vasi S, Enticott JC, **Willey S,** Wahidi S, Crock B, Raghavan A, Vandenberg BE, Gunatillaka N, Wong VHL, Girdwood A, Rottler A, Blackmore R, Gibson-Helm M, Boyle JA. A rapid review of evidence-based information, best practices and lessons learned in addressing the health needs of refugees and migrants: report to the World Health Organization. Melbourne; 2018.
   Lead author for Topic 7: **Willey S,** Gibson-Helm M, Blackmore R, Boyle JA. Sexual and reproductive health for refugee and migrant women.

2. Boyle J, **Willey S,** Abbasova G. Supporting better outcomes for migrant and refugee women, *O&G magazine,* 2018; *20*(1): p1. [Invited article]

3. **Willey SM,** Cant RP, Williams A, McIntyre M. Maternal and child health nurses work with refugee families: Perspectives from regional Victoria, Australia. *J Clin Nurs* 2018; 27(17-18): 1–10. https://doi.org/10.1111/jocn.14277

4. Gorman D, Cross W & **Willey S.** Chapter 22: Cultural and Linguistic Diversity. In Edward K-L, Munro IL, Welch AJ, Cross W, editors. Mental health nursing: dimensions of praxis. 3rd ed: South Melbourne: Oxford University Press; 2018. P. 469-497.

5. Singh C, Crawford K, **Willey S,** Hall H, Harder K, Plummer V, Williams AF. Medication adherence among people of Indian ethnicity living with chronic diseases following migration to Australia *Collegian* (Accepted/In press)

6. Walker R, Hill B, **Willey S,** Olander EK, Skouteris H. Weight management across pregnancy and postpartum care: and the need for inter-professional education and collaboration *Nurse Education in Practice* (submitted June 2019, under review).

7. Yelland J, Mensah F, McDonald E, Riggs E, Szwarc J, Dawson W, Vanpraag D, Casey S, East C, Biro MA, Teale G, **Willey S,** Brown SJ. 'Bridging the Gap': Evaluation of systems reform in Victorian public hospitals to improve access to antenatal care for women of refugee background *Implement Sci* (submitted July 2019, under review)

### Published conference abstracts during candidature

1. **Willey S,** Gibson-Helm M, Finch T, East C, Khan N, Boyd L, Boyle JA. Implementing innovative evidence-based perinatal mental health screening for women of refugee background *Women and Birth*, October 2018, Vol.31, pp.S8-S8 (published abstract)

2. **Willey S,** Blackmore R, Gibson-Helm M, Ali R, Boyd L, McBride J, Boyle JA. 'If they Don't ask; I Won't tell': Perinatal Mental Health Screening for Women of Refugee Background, *Australian & New Zealand Journal Of Obstetrics & Gynaecology*, 2018 Sep, Vol.58 Suppl 1, pp.37-38 (published abstract)

# Conference presentations

## Conference presentations regarding research included in this thesis

The presenting author's name is highlighted.

**Invited oral presentations**

1. Strengthening the Village conference, Melbourne August 2018. [Chapter 6]
2. Supporting Perinatal Wellbeing in a Diverse and Changing Society, Melbourne, February 2019 [Chapter 6]

**Workshop selected from abstract**

**Boyle, JA. Willey, S. Blackmore, R. & Ali, R.** Leaving no one behind – implementing evidence-based screening and support for mental health in pregnancy in women of refugee background, *Nth American Refugee Health conference,* Portland, Oregon. June 2018 [Chapter 3]

**Oral presentations selected from abstract**

15th World Public Health Congress, Melbourne, April 2017

**Willey S**, Gibson-Helm M, East C, McBride J, Highet N, Boyle JA. Implementing innovative evidence-based perinatal mental health screening for refugee women [Chapter 3]

North American Refugee Health conference, Portland, Oregon, June 2018

**Willey, S.,** Gibson-Helm, M., Finch, T., East, C., Khan, N., Boyd, L & Boyle, JA. Implementing innovative evidence-based perinatal mental health screening for women of refugee background [Chapter 4]

Australian College of Midwives conference, Perth, October 2018

**Willey, S.,** Gibson-Helm, M., Finch, T., East, C., Khan, N., Boyd, L & Boyle, JA. Implementing innovative evidence-based perinatal mental health screening for women of refugee background [Chapter 4]

**Poster presentations**

Implementing innovative evidence-based perinatal mental health screening for women of refugee background, *5th Annual NHMRC Symposium on Research Translation*, November 2016 [Chapter 4 and 5]

Implementing innovative evidence-based perinatal mental health screening for women of refugee background, *Monash Health Translation Precinct Research Symposium*, November 2017[Chapter 4 and 5]

Willey, S., Blackmore, R., Gibson-Helm, M., Ali, R., Boyd, L., McBride, J. & **Boyle, J.A.** 'If they Don't ask; I Won't tell': Perinatal Mental Health Screening for Women of Refugee Background, RANZCOG Scientific meeting, Adelaide, September 2018 [Chapter 5]

# Scholarships and funding

| Year | Scholarship or Award |
|---|---|
| 2016 - 2019 | Cabrini Foundation PhD scholarship |
| 2018 | School of Public Health and Preventive Medicine Postgraduate travel grant |

# Coursework and short courses

| Year | Course |
|---|---|
| Semester 1 2016 | MPH6041 Introduction to Biostatistics |
| Semester 1 2016 | Library Focus series: Doing the literature review, How to use the library to find information, Writing a critical appraisal, Endnote |
| April 2016 | MGRO: Editing your writing |
| Semester 2 2016 | HSC5002 Evaluating public health programs |
| May 2016 | MCHRI Systematic review training |
| 7th July 2016 | Ethics and Good Research Practice |
| 8th July 2016 | Research Integrity Online module |
| 22nd 23rd and 25th August 2016 | Qualitative Research methods for Public Health short course |
| Semester 2 2017 | MPH6040: Introductory epidemiology |
| November 2018 | MGRO: Preparing a thesis for examination |

# Statement of Aims

**Chapter 2: Literature review**

This chapter presents a review of the literature and in order to inform the iterative improvement of the screening and management program aims to

1. Investigate the health seeking behaviours and preferences for management for women of Culturally and Linguistically Diverse [CALD] migrant, refugee and asylum seeking background who experience a perinatal mental health condition when living in a high-income Organisation for Economic Co-operation and Development [OECD] country.

**Chapter 3: Methodology and study protocol**

This chapter describes the process, impact and outcome evaluation framework and the use and benefits of mixed methods research design in public health programs. Included in this chapter is the overall study protocol which provides comprehensive detail of the aims, objectives and research questions of the evaluation.

**Chapter 4: Cross-sectional survey and mixed methods evaluation of health professionals' practice when implementing perinatal mental health screening**

This chapter focuses on the process of implementing perinatal mental health screening program from the perspectives of health professionals and aims to

2. Assess health professionals' knowledge and skill in providing appropriate perinatal mental health care and timely referral for women.
3. Investigate health care professionals' perspectives on the feasibility and acceptability of the screening program and subsequent management, based on their experiences implementing the screening program.

**Chapter 5: A qualitative and a quantitative evaluation of the perinatal mental health screening program which aims to**

4. Investigate women's perspectives on the feasibility and acceptability of the screening program and subsequent management, based on their experiences with the screening program.
5. Compare the prevalence of anxiety and depression symptoms in the women of refugee background attending the Monash Health refugee antenatal clinic with:
    a. women of refugee background attending other antenatal clinics at the Monash Health [MH] maternity service who do not receive screening.
    b. women of non-refugee background attending the MH refugee antenatal clinic who also receive screening.
6. Determine if the perinatal mental health screening program affected referrals made for support and management when compared to women of refugee background attending routine care.

# Thesis overview

This PhD research has evaluated the implementation of a perinatal mental health screening program. The findings will be used to refine the program and to inform the introduction of universal screening for all women (as nationally recommended) across maternity services at Monash Health. The findings will also be of value to other Australian and international health services who provide pregnancy and/ or mental health care to refugee communities. This PhD is a part of a larger research program regarding perinatal mental health. My role was to conduct the evaluation of the mental health screening program for women of refugee background at a dedicated refugee antenatal clinic at Dandenong Hospital, Monash Health (Appendix 1: evaluation plan).

This thesis has seven chapters with five publications; three of which relate directly to the evaluation of the perinatal mental health screening program, one detailing the broader study's protocol and one reports results from a survey conducted with GPs and midwives, informing professional development needs.

In chapter 1, an overview of this thesis is provided with background information on why it is important to focus on women of refugee background, the perinatal mental health screening program, the project hypothesis, aims of this PhD and the primary and secondary research questions.

Chapter 2 addresses aim one and reviews the literature investigating health seeking behaviours and preferences for management for women of CALD migrant background who experience a perinatal mental health disorder when living in a high-income OECD country.

Chapter 3, manuscript 1, reports the protocol for the implementation and evaluation of the perinatal mental health screening program.

Chapter 4 presents two manuscripts that report the results of health professional practice when implementing perinatal mental health screening. Manuscript 2 addresses aim two and the research question: What are the professional development needs for GPs and midwives associated with the new perinatal mental health guidelines?, and reports the results from a cross-sectional survey conducted at a one-off seminar for health professionals. Manuscript 3

addresses aim three and the research question: Is perinatal mental health screening in pregnancy, using an electronic platform, acceptable and feasible to health professionals? This part of the evaluation was guided by the Normalization Process Theory (NPT) and used survey, focus groups and interview.

Chapter 5 includes two manuscripts that describe the impact of perinatal mental health screening on women of refugee background. Here manuscript 4 addresses aim four and reports the phenomenological study exploring the feasibility and acceptability of perinatal mental health screening from the perspective of women. This manuscript addresses the research question: Is perinatal mental health screening in pregnancy using an electronic platform, acceptable and feasible to women of refugee background? Manuscript 5 addresses aims five and six and reports the results of the quantitative evaluation of the program through a health record audit. It aimed to answer the two primary research questions: 'Are women of refugee background more likely to screen risk positive for depression and anxiety on the EPDS than women of non-refugee background?', and 'Does screening in pregnancy using the EPDS enable better detection of symptoms of depression and anxiety in women of refugee background compared to current routine care?' It also addresses the research question: 'Has the perinatal mental health screening program resulted in more referrals for support and management for women of refugee background compared to routine care?'

Chapter 6 presents the discussion, recommendations and conclusion of the evaluation of the perinatal mental health screening program. This evaluation identified a number of effective strategies for planning and implementing perinatal mental health screening for women of refugee background and the implication of the research findings are discussed in detail. Chapter 6 also discusses what worked well during implementation and recommendation for integrating perinatal mental health into routine pregnancy care. Key strategies identified for integration include supporting mental health screening in pregnancy with women-centred and culturally appropriate referral pathways; redesigning health services to enable the integration of mental health care to be in parity with physical health care; professional development for health professionals that strengthen assessment skills

and treatment options, and improving service co-ordination between hospital and community based services.

Chapter 7 reports the translational activities associated with this research. A commitment by Monash Health to implement the perinatal mental health screening across all maternity services is a direct and important result of this evaluation. Working parties have been established across hospital maternity, psychiatry and social work departments as well as GP liaison, community health and primary health networks for the broader implementation of perinatal mental health screening with clear referral and management pathways. This will impact >9000 women birthing each year. There have also been two publications during my candidature of relevance to this project and focused on the health and healthcare of women of refugee background. These articles discuss identifying healthcare needs, and provision of culturally responsive care.

# Chapter 1: Introduction

## 1.1 Background

The perinatal period (pregnancy and the first year post-birth) is a time of increased vulnerability for the recurrence or development of mental health disorders (such as depression and anxiety). Affecting between 12-20% of women (1, 2), perinatal mental health disorders cost up to $281 million per year in Australia (2). Suicide is a leading indirect cause of maternal mortality in Australia (3). Maternal mental health disorders adversely affects family relationships and the child's future behaviour and development (1).

Routine, standardised screening in pregnancy for depression and anxiety is recommended by the current and previous Australian perinatal mental health guidelines (1, 4). However, screening is variable across the states and territories of Australia. In New South Wales screening is conducted universally due to a statewide policy for the public sector (5). Screening also occurs in public maternity services in the Australian Capital Territory, South Australia and Western Australia, and is variable in its implementation in Queensland and Victoria. It is not known if screening occurs in Tasmania and it is not conducted in the Northern Territory (personal communication, Nicole Highet, 2019). Of those states and territories who do screen in the antenatal period, screening is done with pen and paper only, except in New South Wales where screening is conducted in the presence of a midwife who enters responses to questions onto a desktop computer (5). Difficulties in knowing rates and outcomes of screening are apparent when screening is conducted using pen and paper and uncertainties arise as to whether translated versions of the Edinburgh Postnatal Depression Scale are provided, or interpreters used for women who speak another language than English. The latter is of particular importance for women of refugee, asylum seeking and migrant background as screening may not be meeting their needs. As such the

Australian perinatal mental health guidelines have variable levels of implementation into routine pregnancy services, due to both system level and individual barriers (1, 6-10). This represents a vital gap, and a lost opportunity, with women and families bearing the impact of missed diagnosis and care.

The Australian Clinical Practice Guideline (CPG) (1) recommends universal routine screening using a psychosocial risk factor screening measure (the Antenatal Risk Questionnaire [ANRQ]) and the Edinburgh Postnatal depression Scale (EPDS). This updated the previous version from 2011 (4) which also recommended using the EPDS and a psychosocial assessment but did not specify a recommended psychosocial risk measure. As the perinatal mental health screening program commenced in 2016, it was based on the 2011 guidelines. For this reason, this screening program implemented the EPDS and the locally developed psychosocial screening measure (Appendix 2).

At the start of the study, current routine practice at Monash Health (MH) Maternity Services was to screen for psychosocial risk factors using this locally developed measure, administered by a midwife at the first antenatal visit and repeated either in late pregnancy or the early postnatal period. No screening for depression and anxiety using a validated measure was conducted. This lack of screening for symptoms of depression and anxiety may contribute to the low reported prevalence of anxiety and depression and the likelihood women with depression and anxiety symptoms are missing out on early identification and support.

In 2015, significant stakeholder engagement and formative research was undertaken by the team at Monash Centre for Health Research and Implementation (MCHRI). In collaboration with MH, Monash Health Refugee Health and Wellbeing Service (MH RH&W), the Centre for

Perinatal Excellence (COPE), Monash University Centre for Developmental Psychiatry and Psychology (CDPP) and community women, barriers and enablers to effective program implementation were identified. These findings were incorporated in the co-development of a screening program and referral service, which commenced in 2016 at the MH dedicated refugee antenatal service.

**1.2 Why focus on women of refugee background?**

Women of refugee background are likely to be at a higher risk of perinatal mental health disorders than women not of refugee background due to the nature and experience of being a refugee. A refugee is defined as 'any person who owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his/her nationality and is unable, or owing to such fear, is unwilling to avail himself/herself of the protection of that country' (11). People seeking asylum are those who have sought protection as a refugee, but whose claim for refugee status has not yet been assessed (12). At some stage, all refugees have been asylum seekers and for this reason, the term 'women of refugee background' will be used throughout this thesis to refer to all women whether they have been granted refugee status or are seeking asylum.

People of refugee background have experienced disruption to health and basic resources and may experience a number of physical and emotional health concerns upon resettlement, including infectious diseases (tuberculosis; malaria; parasitic and sexually transmitted infections); poor dental health; disabilities; nutritional deficiencies and the psychological effects of torture and trauma (13-15). The refugee experience may place

women in a position of vulnerability to gender based violence, sexual and reproductive health issues and exposure to torture and trauma (14). This may result in mental health issues and, with limited access to health care in refugee situations, these are often untreated and unresolved. With already compromised mental health and further stressors upon resettlement such as separation from loved ones, financial insecurity, adaptation to a new culture and language barriers women's health can be further compromised and potentially result in long-term mental health disorders (13, 16-18). Pregnancy is not only a time when mental health disorders may be exacerbated (14) but is also a time when women are in frequent contact with the health system (8) and therefore can be an opportune time to screen women for mental health disorders.

There is substantial research into the maternal and infant physical outcomes for refugee, asylum seeking and migrant women when living outside their country of origin. However, less in known about the mental health of refugee, asylum seeking and migrant women in the perinatal period and its association with migration (19). In addition, few studies differentiate between women who are of refugee, asylum seeker backgrounds, with most grouping all migrant women as one homogenous population group (16). A study by Stewart in Canada did differentiate between refugees, asylum seekers and migrant women, and found that all three groups were significantly more likely to have an EPDS score >10 in the antenatal period, than women who were Canadian born (20). Due to small sample sizes, further analysis was not conducted to compare refugee, asylum seeker and migrant women (20). Similarly, another Canadian study by Gagnon and colleagues conducted in the postnatal period found a significant risk of postnatal depression in women of refugee, asylum seeking and migrant background (21). However, as for the previous study, this study

did not conduct further analysis to compare between women of refugee, asylum seeking and migrant background (21). Therefore this PhD research aims to add to the literature by providing evidence on the perinatal mental health of women of refugee and asylum seeking background and women not of refugee background who are predominately of migrant background. This research will also inform health professionals and health services on how to implement a perinatal mental health screening program that is feasible and acceptable to health professionals and women of refugee, asylum seeking and migrant background.

### *1.2.1 Perinatal mental health screening for women of migrant background*

A large number of women of migrant background attended this clinic which was not anticipated. The majority of these women were from India, Vietnam and Cambodia. We suspect the presence of a Vietnamese and a Cambodian bi-cultural worker in the clinic influenced the number of women from each of these communities attending the clinic. Whilst these women are not from a refugee background, it was considered important to ascertain their views of perinatal mental health screening. For this reason, this thesis will also focus on women of migrant background.

## 1.3 The genesis of the perinatal mental health screening program

The perinatal mental health screening program had its origins in previous research which identified an evidence practice gap in the mental health care for women during pregnancy. From 2012-2014, the Women's Public Health and Health Equity Research team at the Monash Centre for Health Research and Implementation (MCHRI) analysed routine maternity service data from MH pertaining to women of refugee and non-refugee

background (22-24). Mental health disorders were outcomes of interest but could not be investigated due to a lack of screening in routine pregnancy care.

This led to stakeholder consultation and in 2015, formative research was conducted to determine the barriers and enablers to implementing perinatal mental health screening for women of refugee background in pregnancy at MH. Both HPs (n=28) and women of refugee background (n=9) were interviewed with results identifying perinatal mental health screening was necessary; translated version of screening measures were essential and inter-disciplinary approaches to implementation required (9).

A collaboration was formed between MCHRI, Monash University, MH maternity and refugee health and wellbeing services, non-government organizations and community women to co-design a perinatal mental health screening program with refugee-appropriate referral pathways. The program received funding from a MH strategic grant and the Cabrini Foundation and commenced in 2016.

Monash Health is one of Australia's largest maternity services and situated in the South-eastern suburbs of Melbourne. This region is home to one of the largest refugee populations in Australia (25). MH has a strong research collaboration with MCHRI and Monash University, and through the MH Refugee Health and Wellbeing services provides specialist and community-based health care to people of refugee background. In chapter 3, a study protocol provides in-depth detail on the perinatal mental health screening program.

### *1.3.1 Translation and validation of the Edinburgh Postnatal Depression Scale (EPDS)*

Before implementing the screening program, the most common languages spoken by women of refugee background at the refugee antenatal clinic were ascertained. The maternity service also provides care to a high proportion of women of migrant background and as such, the team sourced translated versions of the EPDS for these women also. Previously translated versions of the EPDS: Arabic, Dari, Dinka, Farsi, Vietnamese were available for use before the project commenced. Of these, the Arabic and Vietnamese version had been previously validated (26). All other versions of the EPDS used in the screening program: Burmese, Hazaragi, Pashto, Tamil were translated, back-translated and focus group tested by the research team and before use in the screening program. These new versions of the EPDS are available for usage in other health services.

Of the limited studies available on using the EPDS to screen women of refugee, asylum seeking and migrant background in the perinatal period, translated questionnaires have been made available to women (20, 21), but have been conducted in the presence of a registered nurse and an interpreter if needed (21). In the latter instance, conflicts can arise due to the presence of an interpreter; the interpreter may be known to the women which can result in women being reluctant to disclose information on their mental health concerns (27). To address these concerns, this perinatal mental health screening program is designed to offer screening to all women via the digital platform iCOPE (28). Using an iPad, women complete screening in the waiting room before their first antenatal appointment with a midwife. The digital platform iCOPE generates immediate clinical reports for health professionals, thus reduces reporting error and assists in evaluating rates and outcomes of perinatal mental health screening. Additionally, digital screening using translated versions of

the EPDS reduces the reliance on interpreters, thus increasing privacy for women when disclosing sensitive information.

### 1.4 Project hypothesis

We hypothesise that implementing a co-designed culturally appropriate model of screening for mental health in pregnancy using a novel electronic platform will improve detection and management of symptoms of anxiety and depression in women of refugee background and will be acceptable to women and health providers. Therefore we also hypothesise women of refugee background are more likely to screen risk positive for depression and anxiety symptoms on the EPDS than women of non-refugee background.

### 1.5 Research questions

The primary research questions are:

1. Does screening in pregnancy using the EPDS enable better detection of symptoms of depression and anxiety in women of refugee background compared to current routine care?
2. Are women of refugee background more likely to screen risk positive for depression and anxiety on the EPDS than women of non-refugee background?

The secondary research questions are:

1. Is perinatal mental health screening in pregnancy using an electronic platform, acceptable and feasible to health professionals and women of refugee background?
2. What are the professional development needs for GPs and midwives associated with the new perinatal mental health guidelines?
3. Has the perinatal mental health screening program resulted in more referrals for support and management for women of refugee background compared to routine care?

### 1.6 Summary of chapter

Perinatal mental health disorders affect between 12-20% of all women and have serious consequences for families. Women of refugee background are likely to be at higher risk for perinatal mental health disorders due to the nature and experiences of being a refugee. Routine screening is poorly implemented into maternity care. Previous research into barriers and enablers to implementing perinatal mental health screening and extensive stakeholder engagement resulted in the planning, implementation and evaluation of a perinatal mental health screening program for women of refugee background at Monash Health, Melbourne. This PhD research details the evaluation of the screening program.

# Chapter 2: Mental health seeking behaviour and preferences for women of refugee, asylum seeking and migrant background: A review of the literature

*"If you ask any Syrian person why a woman is depressed, they would say "being away from her family, alienation"" (Afnan in Ahmed et al., 2017)*

## 2.1 Chapter introduction

This chapter is a review of the literature investigating the experience of mental health disorders, health seeking behaviours and preferences for management for women of refugee, asylum seeking and migrant background clinically diagnosed with a perinatal mental health disorder identified by screening or diagnostic tool when living in a high-income OECD country. The purpose of the literature review is to inform health service provision for women attending an antenatal service who were diagnosed with a perinatal mental health disorder, rather than women who do not engage with health services. This encompasses the majority of women who birth at Monash Health. Previous research conducted at Monash Health on antenatal attendance by women from humanitarian source countries found 2.9% of these women experienced poor/no pregnancy care attendance (defined as two or more booked hospital pregnancy care visits missed), suggesting most women of refugee, asylum seeking and migrant background who attend Monash Health do access antenatal care and most women who birthed had a booking visit before 20 weeks (24).

The evidence from the literature will inform how health professionals can provide culturally appropriate perinatal mental health care to women of refugee, asylum seeking and migrant background. This will form the basis for health professional education during the

implementation phase of the screening program, which is a key component of my PhD research. Topics include how to frame discussions on mental health; where women are more likely to seek help and why, the challenges women face as a result of migration, and the barriers to accessing mental health care when referral is offered.

Studies were included if they comprised women from the major population groups participating in the perinatal mental health screening program; Afghanistan, Burma, Cambodia, India, Pakistan, Sri Lanka, Sudan, Syria and Vietnam, or spoke the languages Arabic, Burmese, Dari, Dinka, Farsi, Hindi, Khmer, Pashto, Punjabi, Rohingyan, Tamil and Vietnamese. For this review, the perinatal period was defined as from confirmation of pregnancy to the first twelve months post birth. Women must have had been screened for perinatal depression and anxiety using a validated measure and/or diagnosed with perinatal depression and/or anxiety. A systematic search resulted in nine articles discussed under the main themes *"Women's perceptions of mental health within the context of culture"*, *"Mental health seeking behaviours"* and *"Barriers and facilitators to mental health care in a new country"*. Implications for practice conclude this review.

**2.2 Search strategy**

A systematic search of the literature was undertaken on 8th August 2016 and updated on 7th December 2018 using the Monash University library databases Medline, Medline in-process, EMBASE, All EBM Reviews, PsycINFO, PILOTS and CINAHL. The MeSH terms and text words 'perinatal', 'pregnancy', 'prenatal', 'peripartum', 'pregnancy trimesters', 'parity', 'women's health', 'maternal health', AND 'immigrant women', 'mothers', 'vulnerable populations', 'ethnic groups', 'Emigrants/ and Immigrants', 'transients/ and migrants', 'refugees', 'human

migration', AND 'mental health', 'Anxiety Disorders', 'anxiety', 'Depressive Disorder', 'depression', 'Trauma/ and Stressor Related Disorders', limited between 1986-current, were used. 22,029 articles were retrieved in the first search, 11,563 articles retrieved in the second. Limits on year of publication from 1986 was due to an increase in mental health screening and diagnostic tools since this time. All languages were included. The grey literature databases were searched and over 30 000 articles found. Due to the large number of grey literature articles retrieved, this search was not included in the final review of articles. A systematic approach to screening title and abstract followed by screening of full-text articles resulted in eight full text articles included in the findings of this review. See Figure 2.1: PRISMA flowchart.

The primary outcome was to assess any intervention women accessed, including medical/nursing/health professional treatment and therapies, psychosocial therapies, or complementary and alternative therapies in order to inform the screening and management of the program Both quantitative and qualitative studies were included. In the eight articles included, women originated from Afghanistan (n=1); India (n=1); Pakistan (n=1); Sri Lanka (n=1); Syria (n=1); and Vietnam (n=1), or spoke Arabic (n=1) and Punjabi (n=1). Table 2.1 provides further detail of these studies and is presented at the end of this chapter.

**2.3 Background**

Perinatal mental health disorders are a major public health concern (29), affecting up to 20% of all women (30, 31). Previous research indicates women of refugee, asylum seeking and migrant background living in Western countries experience higher rates of both antenatal depression (up to 30% of all immigrant women compared to 12.4% of Western women) (32, 33), and postnatal depression (up to 42% of migrant women compared to 10–

15% of Western women) (16). Perinatal mental health disorders are associated with a number of negative consequences for mothers and infants including disrupted maternal-infant attachment (10, 34), and long-term cognitive and developmental concerns in the child (35, 36).

Following migration, women from women of refugee, asylum seeking and migrant background are often separated from family and friends, in particular female kin (37), and experience a sense of loss and grief, loneliness and social isolation (18, 38). This leaves women of refugee, asylum seeking and migrant background at a greater risk of perinatal mental health illness, however many underutilise mental health services (39), or encounter barriers to seeking support and management (40). A systematic search of the literature was undertaken to investigate the health seeking behaviours and preferences for management for women of refugee, asylum seeking and migrant background who experience a perinatal mental health disorder when living in a high-income OECD country. This aimed to assess what individual and organisational facilitators and barriers exist for women of refugee, asylum seeking and migrant background when accessing mental health services. Key topics of interest included how to frame discussions on mental health; where and how women are more likely to seek help and why; the challenges women face as a result of migration and the barriers and facilitators to accessing mental health care when referral is offered. By focusing on those from the main cultural groups attending MH maternity we aimed to use this to inform health service provision and health professional education needs when implementing mental health screening in pregnancy at MH. It is also important to recognise women of refugee, asylum seeking and migrant background are not a homogenous group and this literature review does not attempt to create this view. The literature review and implications for practice are presented in the following sections.

*Definition of a high-income OECD country*

According to the World Bank, a high-income country has a gross national income of over $US 12,235 per capita per year (41). The Organisation for Economic Co-operation and Development (OECD) provides a forum for governments to work together and promotes policies that will improve the economic and social well-being of people around the world (42). Currently there are 36 member countries of the OECD, and of these 34 are also high-income including countries such as Australia, United Kingdom, United States of America and Canada (41).

## 2.4 Findings from the literature review

### *2.4.1 Women's perceptions of mental health within the context of culture*

The most significant factor associated with mental health disorders in the perinatal period for women of refugee, asylum seeking and migrant background is the separation from culture, traditions and separation from loved ones, particularly female relatives. Women may express their feelings in metaphors or can normalise feelings, not recognising depression and anxiety as an illness. The stigma associated with mental health disorders is apparent and can result in women internalising feelings. The literature review helped to explain why women may experience perinatal depression and anxiety.

#### *2.4.1.1 The effects of migration*

The most significant factor associated with migration is the loss of family support at a time women are likely to need it most. It can leave women feeling socially isolated and lonely in the perinatal period (38). Furthermore, celebrations and rituals associated with the birth of a baby and other special family events are occasions that only a few relatives can attend

(34). The absence of female relatives is challenging for women. In the study by Ahmed and colleagues, Syrian women of refugee background living in Canada and separated from female relatives express how this causes depression (43). The women in this study acknowledge the importance of having female relatives with them during labour, and before migrating liked being able to visit family as they all lived nearby. Women appreciated the support they received from female relatives with other children, general household duties and a new baby (43). After migration, the cause of depression was directly related to the separation from loved ones, with women describing this separation as feeling imprisoned like a bird in a cage (43). When away from culture and in the absence of emotional support from family in the first month post-birth, women may feel sad or depressed due to perceptions of having too much work to do, stress and lack of support (39). With research indicating migrant women could have up to a nine-fold increased risk of postnatal depression (44), many women are at increased risk for mental health disorders in the perinatal period.

Separation from family, results in many migrant women relying on their husband as the primary support in the perinatal period; a role men are not necessarily prepared for, nor familiar with (45). Whilst adjusting to a new culture, men may also have the added demands associated with finding employment or working long hours to support the family (45); unstable visa status (in the case of those seeking asylum) (38), and the unfamiliar role of needing to be the main physical and emotional support to their female partner (43).

*2.4.1.2 Women's expression of mental health*

Women may not use language and terms such as depression when describing how they feel. For instance, women may use terms such as bored or tired and have misconceptions about

the meaning and severity of symptoms (43). It is common for women to express feelings of depression and anxiety in metaphors and culturally specific terms, or may talk about their experience from social and contextual factors such as describing feelings of anger, irritability and anxiety, and the feeling something bad was going to happen (45). Whilst others normalise feelings not recognising they are feeling of depression and anxiety and an illness (45). When developing support programs or when speaking with women about emotional health, it is best to not directly refer to depression but rather wellness (43).

*2.4.1.3 Postnatal practices, rituals and mental health*

Three articles discussed some common traditions and rituals associated with the postnatal period and the importance of these on mental health and wellbeing. Two of these articles focused on the Indian community and one on the Vietnamese community. As traditional practices are different for each community, these have been discussed separately.

It is common within the Indian community that in the postnatal period women are the first line of support for the new mother, and the father plays a secondary role to female relatives (45). The new mother will rest for the first 30 – 40 days after birth and be cared for by female relatives who massage, wash and feed her to promote healing and wellbeing (34). These ritual enhance the mother's recovery, create both psychological and emotional balance, and provide protection for both mother and baby against evil spirits (34). They are considered key components in reducing psychological vulnerability and preventing depression (34, 45).

Cultural traditions are also important for Vietnamese women and are a way to maintain cultural identity, yet when separated from family many women experience isolation from their heritage (39). Traditional practices in the first 30 days after birth include staying warm, food restrictions or a special diet, and limiting certain physical activities (39). Women believe this will bring them good health when they are older (39). However, due to the small sample size in this research, the authors were unable to conclude if there was an association between women practicing postnatal cultural tradition and postnatal depression (39).

*2.4.1.4 Preferences in gender*

The gender of the baby can be of considerable significance to women, and the pressure to have a male baby is particularly relevant for women who have previously given birth to a female baby (45). Syrian women expressed how depression can develop when they are expecting a boy baby, but instead give birth to a girl (43).

*2.4.1.5 Rituals associated with the newborn*

The birth of a baby is celebrated in many cultures and families and women desire the presence of family in these events (34). The connection to culture is important in maintaining strong cultural values and heritage (39), and isolation from culture can effect women's social and emotional wellbeing. Two studies explored traditional practices that are important in the Indian and Vietnamese culture.

In Vietnamese culture, celebrating the baby's birth occurs when the baby is one month old (39) with celebrations including an important family tradition of participating in worship and giving an offering to the gods/ancestors (39). For Indian families, ceremonies and

celebrations occur at the time of naming the new baby (28 days) and at the introduction of solid foods (between 6-12 months) where the family will take the baby to the temple (34).

### *2.4.2 Mental health seeking behaviours*

A number of mental health seeking behaviours were identified in the studies identified. Indian women describe preferences for dealing with mental health issues such as talking with friends and the use of complementary and alternative therapies (34). Seeking professional help was a last resort and only if sadness or depression was severe enough (34). This same finding was echoed in the study with Vietnamese women (39). There was an overall reluctance to talk with health professionals and instead women relied on family (39), and deferred the decision on help seeking to their spouse or close elder family members (34, 43). Syrian women spoke about how husbands may prevent them from seeking help or disclosing symptoms (43), whilst Indian women expressed how elders might see mental health seeking behaviour as a weakness or the woman's fault (34). Furthermore, women spoke about feelings of personal failure for needing mental health care (34).

### *2.4.3 Barriers and facilitators to mental health care in a new country*

When implementing the perinatal mental health screening program it was considered important health professionals understood there are many barriers and facilitators for women of refugee, asylum seeking and migrant face seeking care for their mental health disorder. The following section provides a discussion on women's behaviours when seeking help for mental health disorders and the role of health professionals.

For women, stigma and the how the family views mental health concerns are significant in whether they seek help for a mental health concerns or not. Other barriers for women include unfamiliarity with the health system and not wanting to take medication. When seeking help for mental health concerns, women find the attitudes and behaviours of health professionals will impact on how comfortable they feel in discussing their mental health concerns. Health professionals who provide culturally appropriate care; are kind, nice and a good listener, will help to improve women's access to mental health care. Group therapy sessions facilitated by community members can assist women to seek help for their mental health concerns, with these session helping in reducing social isolation and improving women's self-confidence.

*2.4.3.1 Stigma*

Many of the studies highlight how stigma is a significant contributing factor to women not seeking help for perinatal mental health issues (34, 39, 43). Being identified with a mental health disorder could cause fear and embarrassment for women or concern they would be viewed as an unfit mother (44). Women feared that if community members were to find out she was seeking help, for instance from a psychiatrist, the woman would be labelled as '*crazy*' even if she was only accessing help due to the need to talk through problems (43). However, others felt strong enough to seek help despite community gossip, recognising that to help oneself is to help your family to live comfortably (43).

Husbands may be a barrier or supportive in mental health issues their wives may experience. Husbands may prevent women seeking help for mental health issues or prevent them from disclosing mental health issues because of the associated stigma (43). However,

some women express when husbands are supportive, women feel more emotionally stable and able to manage stressful life events (38).

*2.4.3.2 Other common barriers to seeking mental health care*

Further barriers for migrant women when seeking mental health services include language in the absence of interpreting services, unfamiliarity with health services and lack of knowledge of what health services are able to provide (44). Financial concerns, denial, and hopelessness about their sadness and depression were other key issues (39).

*2.4.3.3 Medication use and preferences for alternative therapies*

Concerns over being prescribed medication was seen as a barrier to women accessing professional help (45). Many women expressed concerns over taking anti-depressant medication for fear of harming baby (44); feared side-effects (39) and believed medication should be avoided other than in very severe cases to help get some sleep (43). When prescribed medication, new mothers needed to negotiate generational differences in beliefs around its effects, with older women believing the prescribed medication would only make the condition worse (45). Alternative therapies such as talking with friends, non-prescription supplements, Ayurveda or homeopathic therapies were considered better options than anti-depressant medication (34, 45), as were attending church and engaging in physical activities to distract oneself (39).

*2.4.3.4 The role of health professionals*

The behaviours and attitudes of health professionals have an impact on how comfortable women feel when discussing mental health concerns. Both can create barriers or facilitate discussion. Barriers to disclosing mental health concerns occur when women believe mental

health is not the role of the health professionals, or the health professional appears busy and not able to enter into a meaningful conversation. Other factors may include health professionals normalising feelings or not providing culturally appropriate care. In contrast, conversations on mental health can be facilitated by a health professional who has an understanding of the woman's culture, is kind, nice and a good listener.

Not feeling comfortable talking about mental health issues with a health professional is a common reason why Afghan and Indian women do not seek help (38, 45). Many women believed GPs and nurses/midwives only have a role in physical health care (44) and would not deal with emotional issues (38), or they were too rushed to have meaningful discussions (44). The attitudes and behaviours of primary health care providers, (such as GPs and Maternal and Child Health Nurses [MCHN]), have an important impact on women seeking mental health care (38, 44). However, studies indicate primary health care providers are significantly less likely to ask women born overseas about depressive symptoms, emotional well-being or relationship problems compared to Australian-born mothers (44). Furthermore, some health professionals downplay women's symptoms and normalise feelings (44). In addition, health services are not readily accessible to many, are considered unfriendly (44), are not culturally appropriate in their approach with women of migrant background (39) or are unfamiliar and prevent women accessing care for their mental health (44).

However, women did identify that when there was a need to discuss mental health concerns community health nurses were a suitable option, with the family doctor seen as a less likely option for support (45). If women did seek help, a mental health professional (such as a psychologist) who had an understanding of the woman's culture was important

(34). The gender of the health professional was also important with women describing a reluctance to talk about mental health if the health professional was male (38). Of the few who did seek help and were satisfied with the help received, they described feeling comfortable talking to a health professional who is kind, nice and a good listener (38).

*2.4.3.5 Group therapy sessions*

Group therapy sessions which take into consideration the sociocultural needs of the community they are designed for, can be an acceptable option for facilitating the uptake of mental health care (29). Culturally specific groups can improve participant's self-confidence and reduce social isolation, all of which can help with improving mental health in the perinatal period (29, 46). The inclusion of two studies that evaluated group therapy session for women diagnosed with perinatal depression was therefore deemed significant given women of refugee, asylum seeking and migrant background may be reluctant to attend individual treatment with a mental health professional due to barriers discussed such as services not being sensitive to the cultural needs of women of refugee, asylum seeking and migrant background (29) and women's preference for social support groups facilitated by someone from within their community (46). These community groups are seen as beneficial when the focus is on providing support and advice to new mothers and include discussion on traditional cultural practices within the context of the current situation (46). Women often experience social isolation and group sessions offer an acceptable alternative to individual therapies. One study focused on women from Iraq (46), the other with women from India and Pakistan (29). Both studies utilised group facilitators who spoke the same language as the women, which enabled improved communication and cultural understanding.

Group sessions were positively received by participants (29, 46). In particular, women were motivated to participate as they viewed the sessions as a way to develop a better understanding of mental health issues (29), liked being able to discuss their concerns about parenting and worry for family still in Iraq as well as gain information on the different supports available (46). Women reported facilitators who were non-judging, empathetic and encouraging, enabled honest discussion (29). Women appreciated meeting other women in a similar situation and sharing experiences, which enhanced their confidence and helped overcome loneliness (29). Group sessions provided the opportunity to express feelings in a safe environment although there were some concerns about confidentiality (29). In this instance, storytelling activities rather than discussing issues directly helped to maintain confidentiality (29).

However, there were barriers to some women accessing sessions. Some husbands were not told about the group for fear they would not allow their wife to attend (29). Childcare, transport issues and domestic responsibilities were further barriers. In consideration of women needing to attend to daily chores, sessions were conducted in the morning (29).

Results indicate the group sessions facilitated an overall feeling of improved wellbeing, self-esteem and improved ability to manage stress (29). The intervention with Iraqi women found a significant decrease in women's EPDS scores across time in the study and the program was socially and culturally acceptable (46).

## 2.5 Practice Implications

This literature review has investigated the health seeking behaviours and preferences for management for women of refugee, asylum seeking and migrant background from eight different backgrounds who experience a perinatal mental health disorder when living in a high-income OECD country. Three key themes identified from the literature were: "*Women's perceptions of mental health within the context of culture", "Mental health seeking behaviours"* and *"Barriers and facilitators to mental health care in a new country"*. This review found women of refugee, asylum seeking and migrant background, experience many barriers when accessing mental health care in the perinatal period, which is often influenced by culture and the effects of migration.

Findings from this review indicate woman may not directly express how they feel, as there may be no way to describe feelings or they are concerned about stigma when disclosing emotional health concerns. When accessing health services, women of refugee, asylum seeking and migrant background can be reluctant to speak with health professionals about their emotional health, or do not view health professionals as the most appropriate person to discuss such issues. In addition, language barriers, unfamiliarity with health services and a preference for non-prescription therapies were found to hinder women seeking help for mental health disorders in pregnancy. In contrast, health professionals who displayed kindness, were non-judging, empathetic, encouraging, a good listener and female were elements that contribute to having conversations on mental health when women accessed care. Group therapy sessions when facilitated by a person who speaks the same language as the participating women, improved communication and cultural understanding and were acceptable to women. In particular, women developed greater understanding about mental

health, were able to share concerns and worries with others which reduced feelings of loneliness.

This review informs the implementation of the perinatal mental health screening program and provides evidence for how health professionals and health services can implement a new and culturally appropriate clinical practice. This information will also guide the health professional education needs during the implementation phase of the screening program.

*2.5.1 Health professional education and perinatal mental health care*

Midwives, General Practitioners (GP) and MCHN are key health professionals in screening, assessing and managing women with perinatal mental health disorders (6, 36). The *Mental Health Care in the Perinatal Period: Australian clinical practice guidelines* recommend all health professionals providing care in the perinatal period should receive training in woman-centred communication skills, psychosocial assessment and culturally safe care (1). In view of implementing a perinatal mental health screening program at a public hospital antenatal clinic where midwives are a key health professional to the implementation of the program, this review is timely in informing education needs for midwives and other staff at the clinic. Previous research highlights midwives may not feel well equipped with the skill and knowledge required to manage mental health issues in pregnancy (36, 47, 48), therefore it is imperative midwives are offered professional development opportunities in relation to perinatal mental health.

Health professionals who understand the cultural nuances and expressions women may use in relation to mental health, and then apply that knowledge to clinical practice, begin to support discussion with women that may otherwise be lost in a busy clinic environments. However, many do not feel equipped to provide this support. Previous research suggest

women describe health professionals normalise feelings, pay cursory attention to how they feel (10), perceive women are reluctant to seek help (49) or do not recognise symptoms of depression in pregnancy (6). Furthermore, surveys conducted with Australian midwives indicate many require further education to be competent in providing effective perinatal mental health care (36, 48, 49). Thus, education focused on incorporating ways to approach and acknowledge women's needs within their cultural context; understanding the experiences and effects of migration; offering empathy and sensitive, non-judgemental questioning, how to provide a safe environment that facilitates the initiation of discussions with women on mental health (50). For the purposes of the screening program, the use of screening tools and the digital platform is also needed. Such strategies foster more holistic health care and support both women and health professionals in improving access to mental health care (50).

Recognising women of refugee, asylum seeking and migrant background face many challenges post-migration including separation from loved ones, social isolation and, specifically in relation to pregnancy, a disconnect from cultural practices, as well as an increased risk of depression and anxiety, organisations must also be equipped to support both women and health professionals with perinatal mental health care. However, organisations face a number of challenges that often result in barriers for women accessing mental health care, and health professionals in providing appropriate care. Issues such as a lack of appropriate referral pathways (6, 10), time constraints in appointments (49), and educational resources for health professionals (6) reduce the capacity for improvements in how mental health care is managed in clinical practice. Identifying the barriers experienced by all women when accessing mental health care in the maternity setting, a literature review by Byatt and colleagues suggested an integrated approach could overcome these

barriers and aimed to propose specific strategies and innovative program models for addressing perinatal depression in the outpatient maternity setting (10). Given the findings from this present review, the approaches suggested by Byatt and colleagues are relevant and appropriate for women of refugee, asylum seeking and migrant background. Strategies suggested include combining screening and education whereby women would be engaged in a conversation about depression and anxiety and the health risks associated with these conditions (10). Offering wellness interventions, language-specific local support groups and community resources can help to reduce feelings of social isolation by connecting women with their community (51), and may encourage women to develop understanding and address their depression (10). Although these recommendations from the research are substantial, they will not be a focus of the evaluation of the perinatal mental health screening program and are options for exploration in future research. Medication was another option provided (10), however, given the reluctance for women of refugee, asylum seeking and migrant background to take medication; in situations where appropriate, health professionals may initially explore alternative strategies in conjunction with education on prescribed medication.

Whilst women describe barriers to seeking help with mental health, formative research conducted to inform the implementation of the perinatal mental health screening program at Monash Health, identified perinatal mental health screening was overwhelmingly supported by health professionals and community-based women of refugee and migrant background (9). A number of strategies were considered necessary to successfully implement such a program to include, staff training, inter-disciplinary roles to support referral (for instance, bi-cultural workers and refugee health nurses) and clearly communicated referral pathways (9). Furthermore, women stipulated the need for

continuity of care, female health professionals and interpreters, appropriate social support and follow-up care, translated versions of screening measures (for instance, the EPDS) and responsive maternity services in regard to time and capacity to address culture aspects of care (9).

This literature review has only included studies on the population groups who attended the health service where the perinatal mental health screening program was implemented and evaluated for this PhD research. However, the findings from the studies included in this review are consistent with the broader literature on women of refugee, asylum seeking and migrant background and their experiences of migration and accessing mental health care (37, 52-54). Previous research focussed on women of refugee, asylum seeking and migrant background (but not necessarily in the perinatal period), and their experiences of emotional health in a high-income OECD country report similar findings with this review (55, 56).

**2.6 Summary of chapter**

This review informs health professional education needs on the cultural and social context of women of refugee, asylum seeking and migrant background when accessing health services for perinatal mental health assessment and management. The analysis of literature provided in this review is important given the Australian national guidelines recommendation of screening for depression and anxiety for all women during the perinatal period and implementation of screening in pregnancy is currently underway in a number of health services across Australia. Health professional education that incorporates holistic approaches to care, is culturally responsive, explores options for mental health management that embrace the woman's cultural context and acknowledges the effects of

migration at the time of having a baby in a new country are necessary in reducing barriers to mental health care for women of refugee, asylum seeking and migrant background.

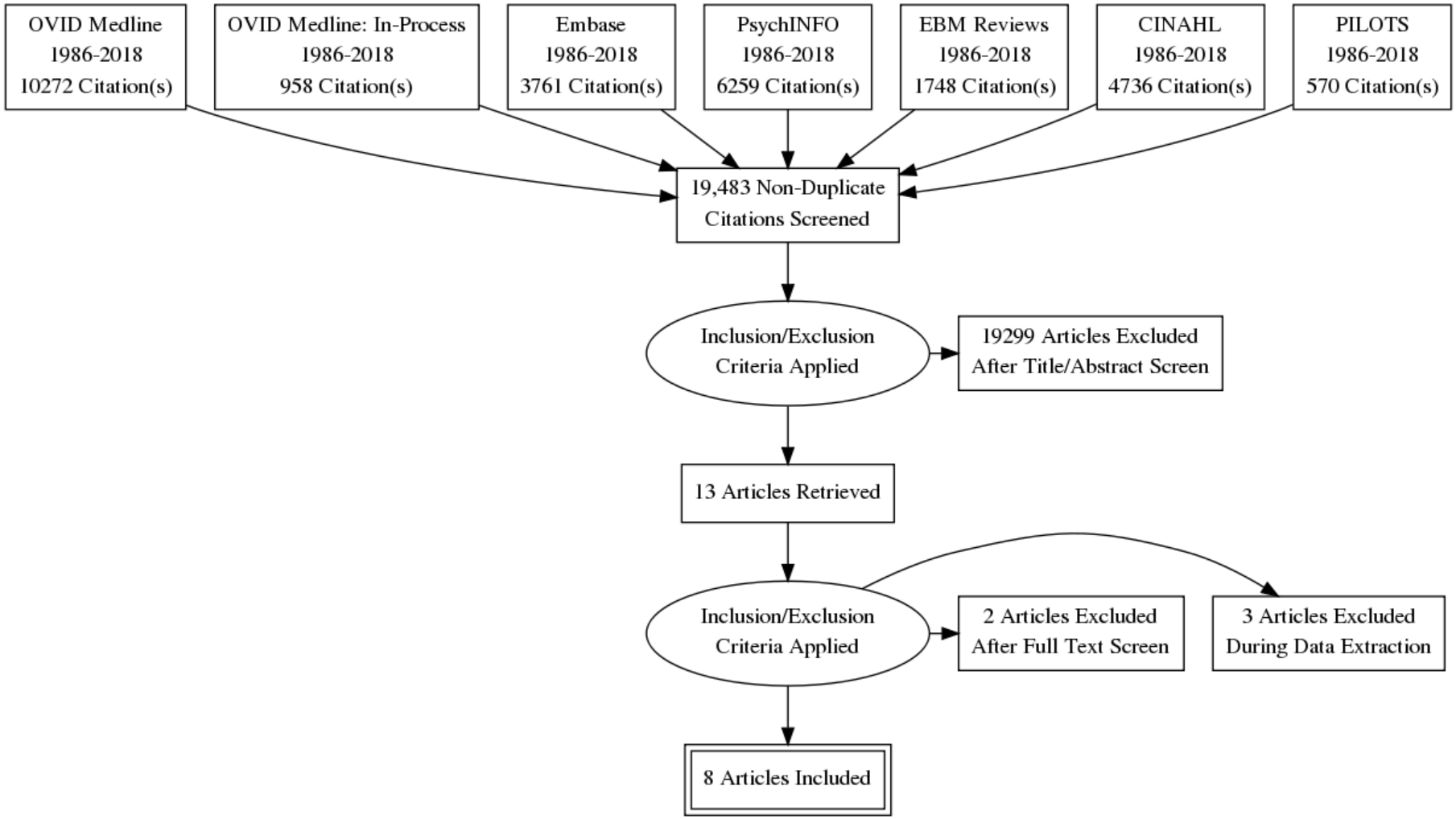


**Figure 2. 1 PRISMA flow diagram**

**Table 2. 1 Summary of studies on the health seeking behaviours and preferences for management for women of CALD migrant backgrounds who experience a perinatal mental health disorders when living in a high-income OECD country.**

| Study/Country/Focus | Study type/recruitment | Sample/sampling method/data collection | Standarised data sources/additional data measures | Limitations of study | Main findings |
|---|---|---|---|---|---|
| Ahmed et al., (2017)<br><br>Explore how Arabic or English speaking Syrian women of refugee background living in Canada<br>1. Perceive and understand maternal depression,<br>2. Their social supports needs, challenges and expectations<br>3. Barriers to access mental health care | Mixed methods<br><br>Local outreach programs and resettlement agencies; maternity wards; religious organisations; doctor's offices | n=12<br><br>Pregnant to one year postpartum<br><br>Purposeful sampling<br><br>Qualitative data Focus group (n=1)<br><br>Quantitative data – questionnaire including demographic detail and mental health history | EPDS for depression and anxiety<br><br>Primary Care PTSD screening tool<br><br>Focus group - Open-ended questions; conducted in Arabic | Generalisability, preliminary study, small sample, one region in Canada<br>Presence of interpreter | Understanding of maternal depression: use of terms; misconceptions about meaning and severity<br><br>Protective factors for mental health: social support from family and friends; spirituality; program that refer to wellness; avoidance of medication use<br>Barriers to mental health services: stigma; husband may prevent women seeking help; privacy |
| Goyal et al., (2015)<br><br>Explore Asian Indian mother's perspective on PND and mental health seeking behaviour in North Carolina, US | Exploratory qualitative<br><br>Flyers placed in public places and social media | n=12<br><br>Convenience sampling<br><br>Face-to-face semi-structured interview | EPDS<br><br>Semi-structured interview guide | One region in USA<br>Well educated women<br>EPDS completed in the presence of the interviewer | Mental health seeking behaviours: severe and only as last resort; defer decision to spouse or close family; seen as weakness to seek help; attention-seeking; find culturally appropriate care |

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| First year postpartum<br>Given birth to healthy baby | | | | | Health professionals: prefer alternative therapies – talking with friends; non-medication supplements<br>Stigma; fear of being identified |
| Masood et al., (2015)<br><br>To assess the acceptability and overall experience of the Positive Health Programme (which utilised a Cognitive Behaviour Model, adapted to meet the needs of British Pakistani women) for British (Manchester and Lancashire) South Asian mothers | Nested qualitative as part of an exploratory RCT<br><br>General Practices<br>Children Centres | n=17<br>Mostly Pakistani women<br><br>Women randomly allocated into intervention arm<br><br>In-depth interviews | Guide for in-depth interviews conducted in Urdu<br><br>Clinical Interview Schedule-Revised (CISR) to confirm diagnosis of depression<br><br>Groups sessions using the Cognitive Behaviour Model which was adapted to meet the cultural needs of British Pakistani women | Results not generalisable as conducted in one region in North West England.<br><br>No data on the women who dropped out and did not attend sessions | Group facilitators of South Asian origin enabled improved communication and cultural understanding.<br><br>Facilitator: non-judging, empathetic; encouraging enabled honest discussion.<br>Motivators to participate: overcoming depression, better understanding of mental health issues; enhances confidence; meeting other women in similar situation; sharing experiences<br><br>Barriers to attendance: restrictions from husbands; husbands not told about group for fear women would not be able to attend; no childcare; transport; domestic responsibilities; morning sessions - women could be home to attend to domestic and daily chores<br><br>Group sessions: opportunity to express emotions and feelings in a safe environment; very well |

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| | | | | | received; storytelling activities rather than discussing issues directly; concerns about confidentiality; felt they were able to manage daily life more easily<br><br>Suggested improvements: follow up sessions; the need for health professionals to attend culture-specific training |
| Morrow et al., (2008)<br><br>Explores the experiences of depression after childbirth and kinds of supports sought by women for Punjabi, Cantonese and Mandarin speaking women in Vancouver, Canada | Qualitative Ethnographic narrative approach<br><br>General practitioners; Reproductive Mental Health Program; community-based organizations and agencies; community nurses | n=5 Punjabi speaking women<br><br>Semi structured open-ended interviews with first generation women<br><br>Interviews conducted in the woman's first language | Women self-identified or had been diagnosed as having depression in the perinatal period | Small sample<br>One region in Canada | Women's experiences and expressions of postnatal depression: talk about experiences from social and contextual factors: loss of support from mother (Raj); feelings of anger, irritability and anxiety (Deepa); normalising feelings and not recognising depression and anxiety as disease (Parm)<br>Psychosocial stresses: the migration experience; adherence to gendered roles, the roles of mothers in society and conflicts with family members; the desire for boy babies<br><br>The role of family, community and social support and help seeking: health care professionals not necessarily an appropriate source of support especially GPs |

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| | | | | | (doctors); community nurses a source of support<br><br>Concerns about taking medication |
| Nilaweera et al., (2014)<br><br>To evaluate the prevalence, nature and determinants of postpartum mental health problems among South Asian migrant mothers living in high-income countries<br><br>Includes women from Sri Lanka; Pakistan; India | Systematic review<br><br>Hospitals, public health centres; private obstetric clinics; pubic hospitals | n=15 studies; 5459 South Asian women<br><br>Six months to 5 years postpartum<br><br>Qualitative studies (n=5) – semi-structured and in-depth interviews; focus group conducted in participants first language<br><br>Quantitative studies (n=10)<br>- Cross-sectional (n=5)<br>- Prospective cohort studies (n=3)<br>- Secondary data analysis (n=2)<br>All included women from birth | Physician diagnosis of postnatal depression<br><br>Documentation of anti-depressant medication prescribed | No meta-analysis due to the heterogeneity of studies<br>Minimal evidence on anxiety disorders and the use of self-reported measures | Determinants of postpartum mental health: social isolation; gender of baby (Indian women in one study); physical changes and self-esteem<br><br>Barriers and enablers to health care access: language; culture and traditions; stigma/fear/embarrassment/being seen as an unfit mother; unfamiliarity with health services; health professionals only have a role in physical health; not comfortable to talk to health providers; attitudes, behaviours and role of health providers; concerns medication will harm baby |

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| | | to one year postpartum | | | |
| Rooney et al., (2014)<br><br>Iraqi women in Perth, Australia<br><br>Pilot and evaluation of a support group in the first year postpartum<br>Aimed to evaluate the social validity and cultural sensitivity of the program | Mixed methods<br><br>Convenience sampling using community based child health nurses | n=12<br><br>Qualitative – 5 open ended statements<br><br>Quantitative – 15 different statements on a 5-point Likert scale | EPDS pre- and post-test<br><br>Norbeck Social support Questionnaire<br><br>Student Process Evaluation Form<br><br>Facilitator logbook | Small sample size; lack of control group<br>Effect of social desirability of responses<br>Low return rates | Program well received: women like discussing concerns about parenting and worry for family still in Iraq; gaining information on differences in supports available in Australia; program socially and culturally acceptable<br><br>Significant decrease in EPDS score<br><br>NSSQ results not collated due to low return rate<br><br>Improvements: incorporate English language classes |
| Shafiei et al., (2015)<br><br>Investigate Afghan women in Melbourne, Australia emotional wellbeing and experiences of PND and use of health services<br><br>First year postpartum | Mixed methods<br><br>Hospital antenatal clinics or postnatal wards | n=39<br><br>Qualitative - Semi-structured interviews; follow up in-depth interview (n=10) in English, Persian or Dari<br><br>Quantitative – demographic data | EPDS<br><br>Semi-structured interview guide | Small sample size limits generalisability and limited further data analysis on risk factors for depression | Feeling alone and lack of support<br><br>Feeling overwhelmed: being a new mother; stressful life events (finances; unstable visa situation; marital conflict); different responsibilities; caring for baby; lack of time to work or study<br><br>Seeking help from health professionals: women assessed as likely depressed were less likely to talk with a health professional; reluctant to talk; health |

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| | | | | | professionals can't help; wouldn't want to deal with emotional issues<br><br>Women who did talk to health professionals were satisfied with the help received |
| Ta Park et al., (2015)<br><br>Explore Vietnamese women in California, US perceptions and experiences with PND and mental health seeking behaviour<br><br>Had given birth within the past year | Mixed methods<br><br>Community centres; grocery stores<br><br>Obstetric and paediatric waiting rooms<br><br>Referral from community partners | n=15<br><br>Convenience and snowballing sampling<br><br>Qualitative – semi-structured interviews<br><br>Quantitative – demographic survey | Demographic survey<br><br>Mental health services questionnaire<br>EPDS<br><br>Semi-structure interview guide conducted in English or Vietnamese | Small sample size | Cultural identity and traditions<br><br>Lived experiences of depression and help-seeking: family would play a significant role; only if sadness severe enough and as last resort<br><br>Barriers: stigma; lack of culturally appropriate care; financial resources; shame/embarrassment; options for mental health care; fear of medication side effects; denial; hopelessness |

# Chapter 3: Study protocol and methodology

## 3.1. Introduction

This chapter will discuss how public health programs can be evaluated. In addition, the importance of developing culturally responsive programs that meet the needs of the community is described. The process, impact outcome evaluation framework and mixed methods methodology used in my PhD research will be examined. This chapter includes the protocol for the perinatal mental health program and its evaluation (manuscript 1 of this thesis).

## 3.2. Evaluation research for public health programs

Evaluation is a systematic enquiry that describes, explains and makes sense of the programs' operation, impact and long term effect (57, 58). Its primary purpose is to facilitate learning and improve the program, and it does this by collecting and summarising evidence to establish the value, merit, significance or quality of the initiative (59). Evaluation adds great value and benefit to programs and determines if the program goals and objectives were met (60). Preferably, planning for evaluation occurs from the beginning of any program, and is collaborative and inclusive of stakeholders. This approach adds strength to the program design and implementation (60, 61). Evaluation allows for constructive and iterative recommendations that aim to enhance the effectiveness and sustainability of the program (59, 60).

### *3.2.1 Process, Impact, Outcome evaluation framework*

This PhD used the process, impact, outcome framework predominately due to its acceptability and adaptability in public health research (62). This framework provides the means to measure the activities and quality of the program; the immediate effects of the program (the process); identify if these effects are meeting the objectives (the impact) and the longer-term effects of the program (the outcome) (58) (see Appendix 2: Evaluation plan).

#### *3.2.1.1 Process evaluation*

Process evaluation aims to understand how the program worked, what happened and how health professionals reacted to the program (58, 61). It is a set of activities designed to describe and explain what happened once the program started, including the contextual and environmental factors of the implementation and were the appropriate stakeholders and partners engaged in the program. It examines how and why various elements of the program worked, program effectiveness (61), program acceptability (60) and program reach (58, 61, 63).

#### *3.2.1.2 Impact evaluation*

Impact evaluation measures the short-term effects of the program and is associated with the program objectives (58). It is concerned with changes in the intermediate health outcomes such as behaviours and seeks to explore what the immediate effects of the program has been for participants (60). In other words, impact evaluation determines if a change has occurred because of the program (64). Establishing change has occurred is the challenge for many evaluators; however, is possible when stakeholders are engaged from

the outset of the program. Doing so enables a common vision to be developed and planning for how the measurement of program goals and objective will be achieved (65).

*3.2.1.3 Outcome evaluation*

Outcome evaluation is similar to impact evaluation in that it involves the assessment of the program effect; however, outcome evaluation is more concerned with the longer-term effects and is generally associated with the program goal (58). It determines if the program has been successful and demonstrates the long term changes in health status of the population (61, 64). Outcome evaluation occurs at the time the program is considered stable or mature, in other words, is no longer requiring adaptation or adjustment (59). To assess population outcomes takes many years, large scale efforts and mortality data (59) which is out of the scope of this PhD. For this reason, the PhD has focussed on process and impact evaluation of the perinatal mental health screening program only.

*3.2.2 Culturally responsive evaluation*

I acknowledge that many women taking part in the screening program have a history of marginalisation and inequitable access to health care and for this reason I have aimed to provide balance and equity in the evaluation process (59, 66). Cultural responsiveness seeks to improve quality, safety, equity and access in health care through approaches that allow for the cultural and diverse background of all people (67). To neglect culture is to create barriers to the advancement in health care (68), therefore aligning this evaluation to the principles of cultural responsiveness (60, 66), has been a key element of this PhD. Establishing a Community Advisory Committee (CAC) from the projects' beginning has enabled an ongoing consultative process with women of refugee and migrant background,

which has  facilitated discussion on, and allowed for iterative refinements to, the screening program throughout implementation, evaluation and translation.

Each member of the CAC was a women of refugee, asylum seeking or migrant background who originated from Afghanistan, Egypt, Iran, Myanmar (Burma), Pakistan, Sri Lanka or Syria. All but one had children. Six meetings were conducted throughout project implementation, with each themed to provide feedback on the implementation and evaluation of the screening program. This consultative approach enabled the research team to incorporate a number of culturally appropriate practices into the program. The CAC informed the research team about how to discuss mental health with CALD women. For example, instead of using the term “mental health” the term “emotional health” was viewed as more acceptable and reduces stigma associated with mental health disorders. Other meetings provided feedback on the focus group/interview question schedule for the qualitative evaluation; women’s preferences and beliefs on referral and treatment options; managing misinterpretations associated with the EPDS and advice on developing the audio version of the screening measures. Each meeting was co-facilitated by a female Afghan bi-cultural worker whose primary language was Hazaragi, but was also fluent in a number of other languages including English and Dari. We used a mixture of group activities and roundtable discussion to stimulate conversation. All women received a $50 store voucher after each meeting to thank them for their time and contribution.

### 3.3. Mixed methods methodology

Mixed methods methodology has been described as a synergistic approach whereby combining two different methods (quantitative and qualitative) results in a fuller understanding and more holistic view of the evaluation problem (69, 70). In addition, a mixed methods approach can provide a detailed understanding of the cultural contexts in which the program is situated (60, 70), and multi-dimensional indicators to measure project process, impact and outcome (71). An advantage to this approach is its ability to counteract the weaknesses of using one method only. For instance, in quantitative research the context and settings in which people live is not heard, and qualitative research is often criticized for its small samples sizes and subjectivity when interpreting data (70). Mixed methods is free to use all methods that fit best in answering the research question (70). The decision on the extent to which more quantitative or more qualitative data collection and methods are used should be guided by the questions the evaluation seeks to answer and the intended audience for the work (66).

#### *3.3.1 Paradigm position*

Given quantitative methods are traditionally a positivist paradigm and qualitative methods a constructivist or interpretive paradigm, many suggest these two incompatible and mutually exclusive theoretical and philosophical views (72), are neither possible nor sensible to mix (73). However, mixed methods researchers reject this view. They suggest the criteria for selecting which method to use for evaluation should be based on the evaluation question rather than a relying on fixed and pre-set theoretical views, as evaluation is a fluid process aiming to understand an array of contexts in which the program is being implemented (73,

74). Pragmatism is the paradigm position most associated with mixed methods research, and one is free to move within inductive and deductive processes during the course of the research (72). It is diverse and orientated to real world practice (70). Pragmatism draws on many ideas, valuing both subjective and objective knowledge (70).

A number of philosophical elements underpin the paradigm of pragmatism, all have implications for practice when conducting mixed methods research. Firstly, the philosophical element of epistemology or what is the relationship between the researcher and what is being researched (70), or how we know what we know (75) is one of practicality whereby the researchers collect data for what works, thus frame the research to the intended consequences and what they hope to achieve (76). Secondly, the philosophical element of ontology, or the nature of reality (75) is both singular or multiple, meaning researchers will test hypotheses and provide multiple perspectives (70) and enable researchers to draw realities from both the quantitative and qualitative assumptions in the work (76). Thirdly, axiology allows for multiple stances on values (75) whereby researchers hold both biased and unbiased perspectives (70). Fourthly, the philosophical element of the methodology, whereby the combining of both qualitative and quantitative research and mixing them is the process of research (70), because together these two methods provide the best answer to the research question (76). Lastly, Creswell and Plano-Clark describe the fifth philosophical element as rhetoric, whereby the researchers may adopt formal and informal language or styles of writing (70).

*3.3.2 Methodology adopted for each of the three evaluation studies*

For study one, evaluating the implementation of perinatal mental health screening program with health professionals, I used an explanatory sequential mixed methods methodology guided by the NoMAD survey and NPT toolkit (interviews and focus groups). The decision to use a mixed methods approach was to obtain a broad, in-depth and holistic view of how health professionals perceived the screening program in a complex environment. The quantitative results informed the qualitative aspect of the evaluation and provided the opportunity to fully explore the barriers and enablers experienced by health professionals when implementing the screening program.

Study two used a qualitative approach underpinned by the theoretical assumption of phenomenology to evaluate the implementation of the perinatal mental health screening program from the perspective of women. The decision to use this method was to capture the lived experience and personal accounts of women who received screening.

In study three, a quantitative evaluation of the perinatal mental health screening program by health record audit was conducted. This PhD evaluation aimed to determine if the screening program for mental health in pregnancy identified more women of refugee background as risk positive for depression and anxiety than women of non-refugee background, and women of refugee background who received routine care with no screening. To assess these outcomes, quantitative methods and descriptive statistics were used.

### *3.3.3 Trustworthiness in qualitative research*

Based on the sentinel work by Lincoln & Guba in 1985, four broad categories are the gold standard in assessing trustworthiness or validity in qualitative research (77): credibility (truth in findings), auditability (dependability), fittingness (transferability) and confirmability (findings reflect implementation of the other three criteria) (70, 77, 78). There have been a number of strategies implemented within this study to address each of these categories, and further detail is available in the prepared manuscripts within this thesis (manuscript 3 and 4). In summary, this study has utilised peer debriefing (credibility); the inclusion of an external researcher to assist with analysis and interpretation of data (auditability/dependability); reflexivity as a means to remain objective (confirmability), and detailed accounts of participants perceptions to enable application and transferability of the program to other settings (fittingness/transferability) (77, 78).

### *3.3.4 Validity and reliability in quantitative research*

Validity refers to two criteria for assessing the credibility and dependability of a study: internal validity (credibility) and external validity (generalisability) (78, 79). Referring to the degree of which the results are free from bias and confounding, internal validity is of key concern when planning the design of a study (78, 79). If confounding factors are not controlled for or minimised, results are threatened and cannot be applied to anyone (78, 79). An advantage of prospective cohort studies is the ability to factor in confounding variables by collecting data on potential confounders and planning to control for these in the analysis (79).

This study applied these concepts to reduce bias through attempting to recruit every woman attending the MH refugee antenatal clinic in a given time frame, thus minimising selection bias (79). A health records audit rather than self-report aims to minimise recall bias whereby participants may over or under estimate their symptoms (79). Power calculations were conducted with a statistician to ensure an adequate sample size in women receiving screening and women of refugee background attending routine care without screening in other clinics at the same maternity service. This calculation is an important step in ensuring there is enough power in the study to detect a true association with sufficient accuracy (79). In addition, to minimise selection bias, the latter group were randomly selected from those undertaking routine care over the same time period as the perinatal mental health screening program.

Generalisability refers to the extent the study results can be applied to other populations or settings (78, 79), or, how representative the study population is to the broader population (79). This research in a population of women of refugee, asylum seeking and migrant background addresses some of the major refugee and migrant population groups in Australia (25, 80), and whilst we have not addressed all complexities and intricacies of each refugee, asylum seeking and migrant population groups and each individual group difference, my thesis will demonstrate there are some similarities between women of refugee, asylum seeking and migrant background which can be broadly applied to other maternity services.

Reliability relates to the consistency and stability of the measures used and the results obtained (81). Further discussion on the measures used for this study is found in the prepared manuscripts throughout this thesis.

*3.3.5 Data Triangulation*

Triangulation seeks to converge and corroborate findings through comparing results (70), and uses a variety of data sources to obtain a greater sense of the whole (78). This process adds greater confidence and worth to the results and inference made, in other words validates results, and justifies why mixing research methods, concepts and approaches is recognised as a third method in research (70, 71, 78, 82). Additionally, valuable answers to research questions can be obtained, and greater understanding and explanation to problems achieved (71).

The three phases of this PhD study have used both the sequential explanatory research design whereby the collection and analysis of quantitative data informed the qualitative phase of the same study (chapter 4, manuscript 3), and the convergent design (70). The convergent design is a four-step process and is the design used for the overall study. Firstly, the concurrent, complementary and separate collection of data occurred and was followed by step two, whereby the appropriate statistical and thematic analysis is conducted (70). Step three involved the merging and mixing of data and finally step four, the interpretation of results (70) (see Figure 3.1).

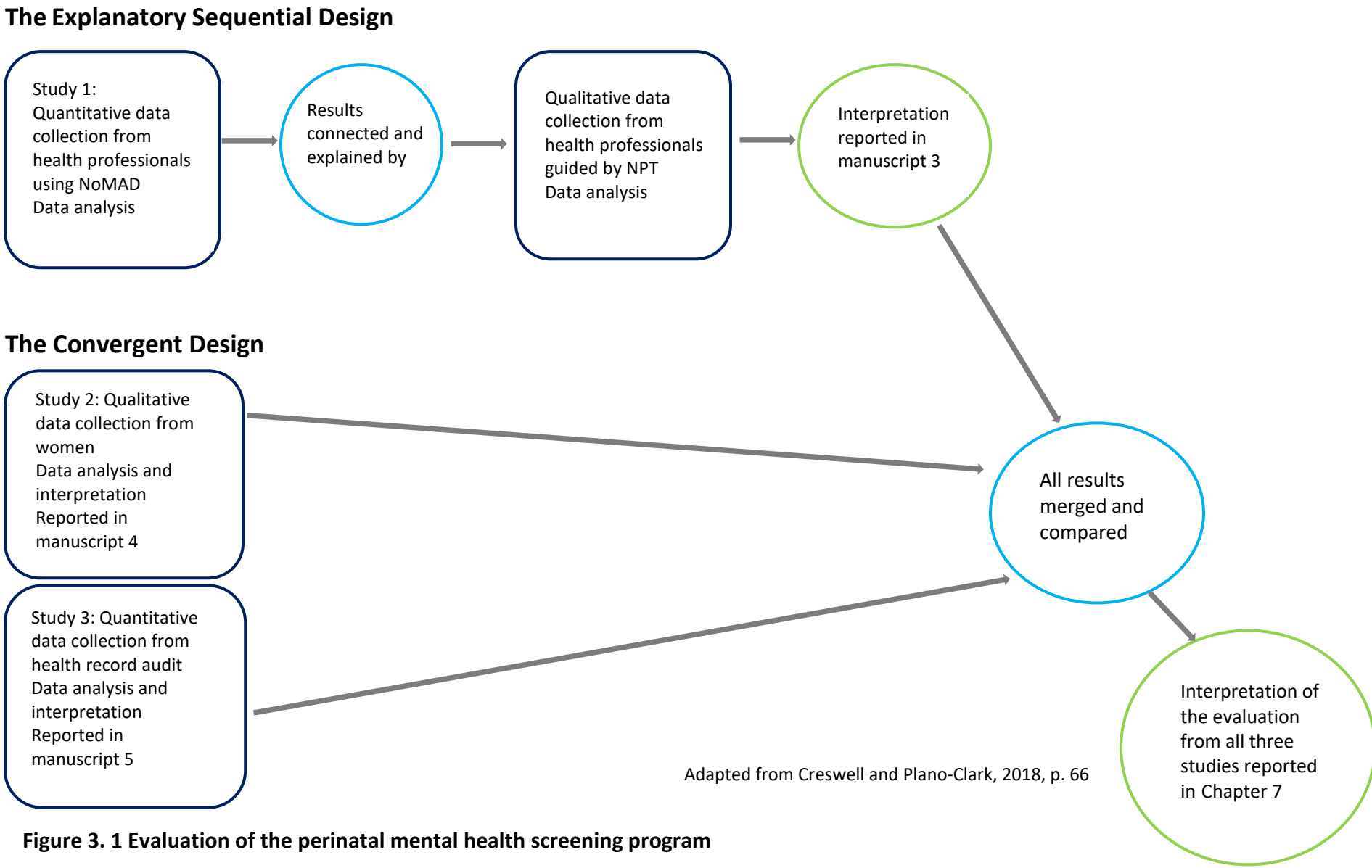


**Figure 3. 1 Evaluation of the perinatal mental health screening program**

### 3.4 Summary of chapter

Evaluating public health programs facilitates learning and improves the program through collecting and summarising evidence to establish the value, merit, significance or quality of the initiative. This PhD has utilised the process, impact, outcome evaluation framework due to its acceptability and adaptability to public health research. Importantly, the community advisory committee guided this research to ensure a culturally responsive evaluation occurred. A synergistic approach to evaluation is achieved when designing evaluation using a mixed methods methodology. This method provides a deeper understanding and more holistic view of the evaluation problem, with findings validated through data triangulation which is explored in chapter 6.

### 3.5 Perinatal mental health screening program: study protocol

The study protocol provides in-depth detail on the perinatal mental health screening program. In summary, the perinatal mental health screening program began in August 2016 at a designated refugee antenatal clinic at MH using the MH psychosocial assessment and the EPDS. The program team sourced and/or translated the EPDS into the most common refugee languages (Arabic, Burmese, Dari, Farsi, Hazagari, Pashto and Tamil). Translated audio versions of the EPDS are in development.

All women attending the refugee antenatal clinic were offered mental health screening at their first antenatal visit and in the third trimester. The screening used an innovative electronic platform (iCOPE). Translated version of the EPDS and Monash Health psychosocial

screening measure were uploaded onto the system. Women undertook the screening using an iPad and the iCOPE system and before their first antenatal visit with a midwife. The iCOPE system generated an immediate screening score (reducing administrative error) and a report with recommendations for both the midwife and woman.

Direct referral pathways for women of refugee background to MH RH&W were developed in collaboration with stakeholders. Women of non-refugee background were referred to their GP. Any women at immediate risk were referred directly to acute mental health services (see Appendix 3: referral pathways).

*Comparison Group*

Women of refugee background also attend the other maternity clinics at MH. Women attending the routine clinics have routine care that includes the psychosocial assessment only (no EPDS), completed with the midwife and routine referral systems.

The following is the study protocol manuscript detailing the implementation and evaluation of the perinatal mental health screening program for women of refugee background.

Manuscript 1: Boyle JA, Willey S, Blackmore R, East C, McBride J, Gray K, Melvin G, Fradkin R, Ball N, Highet N, Gibson-Helm M. (2019) Improving mental health in pregnancy for refugee women: protocol for the implementation and evaluation of a screening program in Melbourne, Australia. *JMIR Res Protoc* (published). doi:10.2196/13271

**Manuscript 1: Improving mental health in pregnancy for refugee women: protocol for the implementation and evaluation of a screening program in Melbourne, Australia.**

Protocol

# Improving Mental Health in Pregnancy for Refugee Women: Protocol for the Implementation and Evaluation of a Screening Program in Melbourne, Australia

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## Abstract

**Background:** Identifying mental health disorders in migrant and refugee women during pregnancy provides an opportunity for interventions that may benefit women and their families. Evidence suggests that perinatal mental health disorders impact mother-infant attachment at critical times, which can affect child development. Postnatal depression resulting in suicide is the leading cause of maternal morbidity postpartum. Routine screening of perinatal mental health is recommended to improve the identification of depression and anxiety and to facilitate early management. However, screening is poorly implemented into routine practice. This study is the first to investigate routine screening for perinatal mental health in a maternity setting designed for refugee women. This study will determine whether symptoms of depression and anxiety are more likely to be detected by the screening program compared with routine care and will evaluate the screening program's feasibility and acceptability to women and health care providers (HCPs).

**Objective:** The objectives of this study are (1) to assess if refugee women are more likely to screen risk-positive for depression and anxiety than nonrefugee women, using the Edinburgh Postnatal Depression Scale (EPDS); (2) to assess if screening in pregnancy using the EPDS enables better detection of symptoms of depression and anxiety in refugee women than current routine care; (3) to determine if a screening program for perinatal mental health in a maternity setting designed for refugee women is acceptable to women; and (4) to evaluate the feasibility and acceptability of the perinatal mental health screening program from the perspective of HCPs (including the barriers and enablers to implementation).

**Methods:** This study uses an internationally recommended screening measure, the EPDS, and a locally developed psychosocial questionnaire, both administered in early pregnancy and again in the third trimester. These measures have been translated into the most common languages used by the women attending the clinic and are administered via an electronic platform (iCOPE). This platform automatically calculates the EPDS score and generates reports for the HCP and woman. A total of 119 refugee women and 155 nonrefugee women have been recruited to evaluate the screening program's ability to detect depression and

anxiety symptoms and will be compared with 34 refugee women receiving routine care. A subsample of women will participate in a qualitative assessment of the screening program's acceptability and feasibility. Health service staff have been recruited to evaluate the integration of screening into maternity care.

**Results:** The recruitment is complete, and data collection and analysis are underway.

**Conclusions:** It is anticipated that screening will increase the identification and management of depression and anxiety symptoms in pregnancy. New information will be generated on how to implement such a program in feasible and acceptable ways that will improve health outcomes for refugee women.

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**KEYWORDS**

mental health; refugees; transients and migrants; pregnancy; prenatal care; mass screening

# Introduction

## Background

The perinatal period (from conception to 12 months following birth) is a time of increased vulnerability for the onset or recurrence of mental health disorders [1]. Perinatal depression and anxiety [2] affect up to 20% of all women and are recognized by the World Health Organization as major public health issues [3].

Perinatal mental health disorders have direct effects on women, their children, and families [4], including disrupted attachment between mother and infant [5] and elevated risk of maternal suicide. The latter is one of the leading causes of maternal death in high-income countries [6,7]. There is a substantial financial burden of maternal perinatal depression to individuals, private health insurance, governments, and the economy. For example, within the Australian economy, this was estimated at Aus $433.52 million in 2012 [8], and 8.1 billion pounds in the United Kingdom in 2014 [9]. Many factors contribute to a woman's risk of developing perinatal mental health disorders. These include a history of mental health disorders, low socioeconomic status, intimate partner violence, isolation, previous trauma, and stressful life events [4,7,10-12].

Routine, standardized screening in pregnancy for mental health disorders is recommended in high-income countries, including the United Kingdom [13], the United States [14], and Australia [1]. Implementation of such processes requires consideration of each setting [15]. In Australia, these recommendations have not been well implemented because of significant barriers at both the level of the service and the individual. This represents a critical gap, and a lost opportunity, with women and families bearing the impact of missed diagnosis, early management, and support. Addressing these barriers is key to improving health care for women at increased risk.

## Refugee Women

The impact of the refugee experience on women cannot be underestimated. Women who are refugees have experienced one or more acts of violence related to war, persecution, gender-based violence, protracted situations of uncertainty for the future, and discrimination [7]. High rates of psychological disorders are evident and exacerbated by resettlement stressors such as language barriers, separation from or loss of family, cultural barriers, and marginalization [7,16,17]. The prevalence of mental health disorders in conflict-affected populations (men and women combined) is estimated to be 31% [18]. A recent systematic review of perinatal mental health of migrant women from low- and middle-income countries reported a pooled prevalence of 31% for any depressive disorder and 17% for a major depressive disorder [16]. Data specifically on mental health disorders in pregnancy for refugee women are lacking.

Screening may not be offered in routine care owing to a number of reasons: lack of validated screening tools in languages other than English; lack of interpreters; and lack of health professional skills and knowledge [1]. Previous research indicates that perinatal mental health screening is an acceptable practice in the maternity setting [19-21]. However, there is a paucity of published research focusing on women from culturally and linguistically diverse (CALD) backgrounds. To our knowledge, this is the first study that focuses on refugee women living in a resettlement and high-income country. Given the magnitude of the current global refugee crisis and migration patterns resulting in many CALD women living in high-income countries, our study will provide contemporary evidence on the acceptability and feasibility of perinatal mental health screening for this population.

## Context

### *Australia's Multicultural Community*

In 2016, Australia's population was 23.4 million, of whom approximately 6 million (26%) were born overseas. Nearly 1 in 5 (18%) migrants have arrived since 2012, and over 300 separately identified languages are spoken in Australian homes [22]. In 2015, 25% of women who birthed in Australia were born overseas [23]. People arrive in Australia through 2 main migration programs: the migrant program for skilled workers and family migrants or the humanitarian program for refugees and those in refugee-like situations [24]. In 2017-2018, Australia's total migration was 162,417, including 18,750 places allocated to the humanitarian stream [25,26].

### *Study Location*

This study is being conducted in a large public health service in the southeast suburbs of Victoria's capital city, Melbourne, in which perinatal mental health screening is not yet routine. It is one of Australia's largest maternity providers and is located in a major area of refugee resettlement. The state of Victoria

has the highest settlement of refugees in Australia, receiving approximately 33% of the national intake [27]. In the past 10 years (2008-2018), over 11,000 people from a refugee background have resettled in the southeast suburbs of Melbourne, the highest resettlement catchment in Victoria for refugees [28]. In addition, there are over 7000 people seeking asylum, who arrived without a valid visa, currently living in Victoria, representing about 40% of the national total [29]. Demographic trends for people of a refugee background show that most are aged under 35 years and approximately 50% are females [28]. Furthermore, this region of Melbourne is the most culturally diverse community in Australia, with residents from 157 birth places [30,31], 45% to 60% of women who birthed were born overseas. It is one of the most socially disadvantaged areas in Australia, meaning many people are on the lowest quintile for access to material and social resources and ability to participate in society [32]. As no mental health screening currently takes place in pregnancy at this health service, it is expected that the prevalence and burden of diagnoses of depression and anxiety disorders in refugee women will be underestimated. Given the current understanding of the prevalence of such disorders among pregnant women generally and the refugee population specifically, this suggests a major gap in pregnancy care.

### *Australia's Health Care System*

Funded by the federal government, Medicare is Australia's health care system which provides universal access to public hospital care, primary health care, and some allied health services [33]. Hospital care is free for a public patient at a public hospital with other services free or at a reduced cost. Eligibility for Medicare includes Australian citizenship, permanent residency, or having applied for permanent residency. A permanent protection visa, for people from a refugee background, also confers access to Medicare. For those seeking asylum, a number of factors, including Medicare eligibility, can influence access to universal health care. Successive Victorian state governments (where this study is based) have shown a commitment to optimizing health outcomes for people of a refugee background by investing in initiatives such as the Victorian Refugee Health Program and Refugee Fellow Program [34]. Furthermore, the Victorian Department of Health's *Guide to asylum seeker access to health and community services in Victoria 2011*, supports access to health care in a state-funded facility, regardless of Medicare status [35].

### *Pilot Work Informing the Program*

Significant stakeholder engagement and formative research identified barriers and enablers to implementing a perinatal mental health screening program. Stakeholder engagement was undertaken across the state and included refugee health services, academics, community and hospital health services, and mental health and maternity health services. Interviews with 28 health care providers (HCPs) and 9 community representatives from diverse ethnic backgrounds identified a number of needs such as staff training in mental health screening and safety planning for women at risk, robust referral pathways, and translated versions of the Edinburgh Postnatal Depression Scale (EPDS) [36]. Community representatives identified additional factors such as awareness of mental health, appropriateness of tools, and availability of interpreters [36]. Importantly, this research reported strong support from the community and HCPs to undertake screening, identify women at risk, and provide early support and assistance [36]. On the basis of this formative research and in collaboration with the maternity and refugee health services in Southeast Melbourne, community women, nongovernment organizations, and academics, the co-designed screening program with refugee-appropriate referral pathways commenced in 2016.

## Screening Tools

### *The Edinburgh Postnatal Depression Scale*

The EPDS is one of the most widely accepted screening measures for depression and anxiety symptoms in the perinatal period. It has been validated for use in pregnancy and the postpartum period [1] and has been validated in English as well as a number of other languages [37-39]. It is a 10-item, self-report questionnaire used to detect symptoms of emotional distress over the past 7 days [40]. The EPDS has been used internationally since its inception in 1987 and is available in many languages.

The English version of the EPDS performs with moderate sensitivity 0.83 (0.76-0.88) and high specificity 0.90 (0.88-0.92) in pregnancy [1]. The recommended cutoff score for use in general populations is 13 or above, indicating that depressive symptoms have been endorsed and signifying a high risk for probable depression which requires further clinical assessment. For women of CALD backgrounds, a lower cutoff score is recommended to balance psychometric performance with differences in cultural practices, beliefs, and degree of stigma [1]. Therefore, an EPDS cutoff score of ≥9 is used in this study, based on previous validations of EPDS translations with women of CALD backgrounds [41]. Although the EPDS was not designed to measure anxiety disorders, high scores on items 3, 4, and 5 have been found to be sensitive to symptoms of anxiety [42]. A score of ≥4 for the anxiety subscale is considered indicative of a high risk of anxiety symptoms and requires further assessment [42]. The final item (question 10) on the EPDS assesses the prevalence of suicidal ideation and risk of self-harm.

### *The Psychosocial Screening Tool*

The Monash Health psychosocial needs assessment is a 23-item, locally developed, self-report measure specific to the health service that asks questions about risk factors for perinatal mental health disorders such as past birthing experiences causing stress or anxiety, social factors (such as housing and financial stress), experience of violence and safety at home, and a history of mental health disorders. In routine care, women complete the measure themselves or with the midwife at their booking visit. Respondents are required to provide "yes" or "no" answers and 4 nested text questions allow free-text responses.

For this study, the EPDS and the Monash Health psychosocial needs assessment have been translated to 7 refugee languages common in Southeast Melbourne: Arabic, Burmese, Dari, Farsi, Hazaragi, Pashto, and Tamil.

### Research Questions

The primary research questions are as follows:

1. Are refugee women more likely to screen risk-positive for depression and anxiety on the EPDS than nonrefugee women?
2. Does screening in pregnancy using the EPDS enable better detection of symptoms of depression and anxiety in refugee women compared with current routine care?

### Secondary Research Questions

We will also explore the following secondary questions:

1. Is perinatal mental health screening in pregnancy using an electronic platform acceptable and feasible to refugee women?
2. What are the barriers and enablers to the screening being perceived as a feasible and acceptable part of the routine practice by maternity HCPs?

### Hypotheses

We hypothesize that a perinatal mental health screening program that addresses key concerns of women and HCPs can improve identification of symptoms of perinatal depression and anxiety in refugee women. We also hypothesize that co-designed screening can be implemented within a large and busy maternity service in a manner that is acceptable to both women and health service staff.

## Methods

### Setting

The study is being conducted at a refugee antenatal clinic (RAC) designed for refugee women in Southeast Melbourne, Australia. This clinic operates 1 day per week and is supported by a refugee health nurse liaison (RHNL) and 2 bicultural workers. On receipt of a general practitioner (GP) referral for maternity care, all women are allocated, by hospital clerical staff, to either the RAC or one of the other antenatal clinics on the basis of availability and preference. Therefore, refugee women also attend the other maternity clinics at the health service and nonrefugee women attend the RAC. On average, 13 women attend their first appointment with a midwife each week at the RAC. Approximately half of the women attending are from a refugee background or considered refugee-like, that is, arrived in Australia on a spousal visa from a refugee-source country, including Afghanistan, Myanmar, Iraq, the Republic of South Sudan, and Sri Lanka.

### Procedures

#### *Ethics Approval*

This project has been approved by the Monash Health Human Research and Ethics Committee number 14475L.

#### *Participants and Recruitment*

The day before the first appointment, a female Afghan bicultural worker (RA) or one of the researchers (RB) telephones women to remind them of their appointment and to explain the screening and recruitment process for the research. Interpreters are used for women who do not speak the same language as RA or RB. Researchers are present at the clinic on the day of the appointment and obtain written informed consent from each participating woman. Consent is requested to access data from their medical health records at the hospital, GP records, and Monash Health Refugee Health and Wellbeing (RH&W) service records. This will enable evaluation of the screening results, referrals, and subsequent diagnosis and management. Women are also invited to participate in the acceptability phase of the project.

All staff working in the RAC (clerical staff, midwifery, medical, bicultural workers, and RHNL) and at the RH&W (psychologists and counselors) are invited to participate in the evaluation of the feasibility of the program.

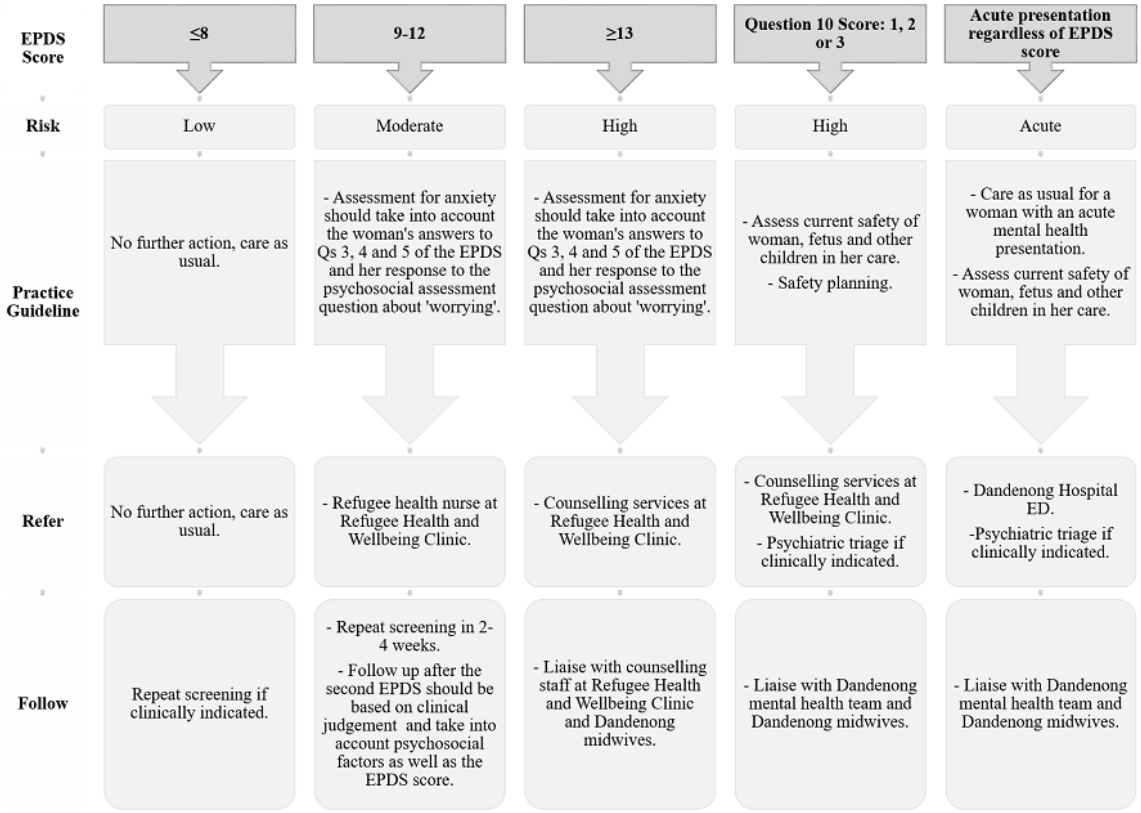
#### *Intervention*

On the day of the first appointment, all women attending the RAC are given an iPad to complete the screening (EPDS and Monash Health psychosocial needs assessment) using the digital platform iCOPE. iCOPE has been developed and piloted by the Centre of Perinatal Excellence (COPE, Australia) [43]. Women are able to complete the screening in their chosen language in the clinic waiting room and interpreters or bicultural workers are available to assist. Screening is repeated in the third trimester. It takes approximately 6 to 10 min for a woman to complete the screening on her own, or slightly longer if an interpreter is used. The iCOPE platform automatically calculates the overall EPDS score, the anxiety subscore (based on responses to question 3, 4, and 5), and highlights the response to question 10, which assesses risk of self-harm. Data are securely stored in compliance with industry regulations [43].

#### *Co-Designed Referral Pathways for Refugee Women*

During the appointment, the midwife discusses the result with the woman and initiates referral as appropriate. If the overall EPDS score is ≥9, the score for the anxiety subscale is ≥4, or the response to question 10 (self-harm) is positive, the RHNL is notified and further mental health and psychosocial assessment is undertaken. If the assessment by the RHNL indicates the woman is acutely ill, at risk of harming herself or others, an immediate referral to the hospital emergency department “and” or “or” psychiatric services is made. If the woman is not acutely unwell, the RHNL will refer to the RH&W counseling or to their GP, if preferred. If the result is between 9 to 12, a repeat screen in 2 to 4 weeks is recommended (see referral pathways, Figure 1). On completion of screening, women are provided a report in their chosen language that explains their results and a link to further resources and supports via email. A clinical report and management guide is also immediately generated for the midwifery appointment. If other factors are present, such as housing concerns or intimate partner violence, appropriate referrals are made as per usual care to services such as social work or legal services.

**Figure 1.** Referral pathway for women of refugee background. ED: emergency deparmtent; EPDS: Edinburgh Postnatal Depression Scale.




### *Comparison Group 1: Nonrefugee Women Attending the Refugee Antenatal Clinic*

Nonrefugee women who attend the RAC also complete screening of the EPDS and the Monash Health psychosocial needs assessment using the iCOPE platform. Referral options include referral to the hospital emergency or psychiatric services, if acutely unwell, or for those not acutely unwell, options include repeat screening in 2 weeks, allied health support such as social work, and referral to the woman's GP (see referral pathways for nonrefugee women, Figure 2).

### *Comparison Group 2: Refugee Women Attending Other Routine Antenatal Services at the Same Hospital*

Refugee women also attend other antenatal clinics at the health service. Routine care at these clinics include completing a paper-based Monash Health psychosocial needs assessment (no EPDS) with the midwife during the first antenatal appointment. Routine referral pathways are not proscriptive but may include the RHNL, GPs, and services such as social work.

## Evaluation of the Perinatal Mental Health Screening Program

### *Research Questions 1 and 2*

Medical records will be audited for women attending the RAC and participating in the research program (119 refugee women and 155 nonrefugee women) and for a random sample of refugee women attending routine maternity clinics (non-RAC) during the study period (n=34). Information collected will include demographic data (including factors such as age, country of birth, time since arrival in Australia, marital status, number of pregnancies and births, and need for an interpreter), medical history (eg, diabetes, hypertension, and smoking), and psychosocial needs assessment results.

For those attending the RAC, the additional information of the screening report, EPDS scores (total, anxiety subscore, and Question 10 score) are recorded.

For the refugee women attending the non-RAC clinic, who do not participate in the screening program, any diagnosis of past or present mental health disorders and any relevant referral or management are recorded.

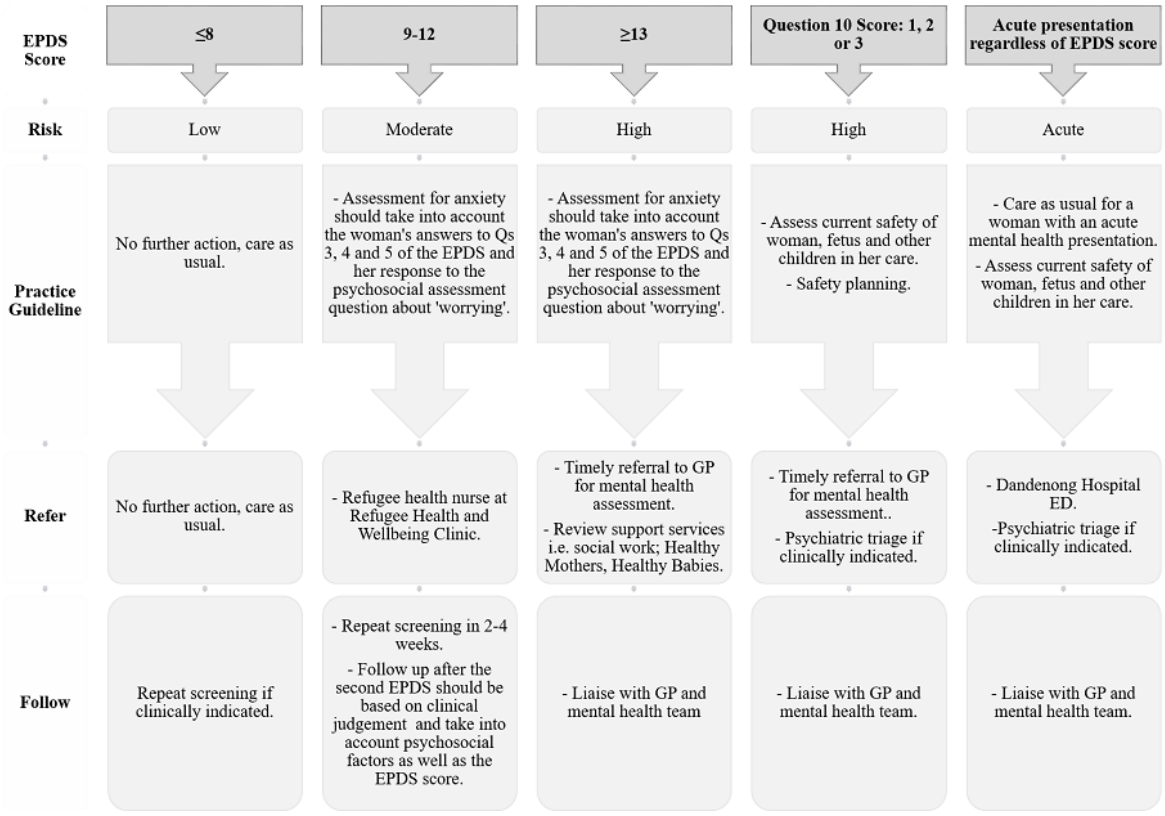
Data will be deidentified and entered into a REDCap database (Vanderbuilt, USA) [44] for collation and analysis. To address research question 1, the proportion of refugee women who screen positive on the EPDS for depression and anxiety will be compared with the proportion of nonrefugee women who screen positive.

To address research question 2, the proportion of refugee women who screen positive to depression or anxiety on the EPDS will be compared with the proportion of nonrefugee women attending routine maternity clinics who are identified with mental health disorders.

### *Research Question 3*

To evaluate the women's acceptability of the screening program, women from the majority population groups at the RAC (refugee: Afghan and Burmese; nonrefugee: Indian and Vietnamese) are invited to participate in either a focus group or an interview to discuss their experiences of screening and referral. Interpreters will be engaged to maximize inclusion. Focus groups "and" or "or" interviews will continue until data saturation of themes is achieved.

**Figure 2.** Referral pathways for women of nonrefugee background. ED: emergency department; EPDS: Edinburgh Postnatal Depression Scale; GP: general practitioner.




### *Research Question 4*

The Normalization Process Theory to Assess Health Care Providers' Views on Implementation:

All HCPs and clerical staff involved in the screening program (at the RAC and the RH&W) are invited to participate in an evaluation of implementation processes. This includes completion of the 23-item Normalization Measure And Development (NoMAD) online survey adapted for this study and participation in an interactive focus group or interview using the Normalization Process Theory (NPT) toolkit. The NoMAD was distributed through Qualtrics (Provo, Utah, USA). The NPT toolkit has been selected and adapted for this project [45] as it focuses on implementation and assesses 4 relevant constructs: (1) coherence (how do staff make sense of the program when operationalizing the new set of practices), (2) cognitive participation (what work are the staff required to do to build and sustain a community of practice around the program), (3) collective action (what operational work is required by the staff to enact the new practice), and (4) reflexive monitoring (appraisal by the staff in understanding how this new set of practices affects them and others around them) [45].

## Medical Records Audit

### *Women Attending the Refugee Antenatal Clinic*

The medical records audit already described notes referrals to primary care, allied health, counseling, psychiatry, emergency services, or others, within and outside the hospital, and referrals made following screening with the EPDS and psychosocial needs assessment or in response to other clinical indications. The number of women who attend appointments arising from these referrals within the hospital or at the RH&W will be recorded. When a referral has been made to a GP (external to the health service), the GP practice is contacted to ascertain whether the woman attended for a formal assessment and diagnosis, the outcome, and any subsequent management plan.

### *Women Attending the Nonrefugee Antenatal Clinic*

Similar data are collected about referrals made based on clinical assessment of need and subsequent attendance.

## Outcome Measures

### *Primary Outcomes*

The primary outcome is the proportion of women in 3 groups (refugee women screened, nonrefugee women screened, and refugee women receiving routine care) with symptoms of depression and/or anxiety.

### *Secondary Outcomes*

Secondary outcomes include identification of factors that will influence broader implementation of screening:

- Factors that facilitate acceptability of the program to women
- Factors impacting positively and negatively on the feasibility of program implementation at a systems level.

## Analysis Strategy (Sample Size Justification)

### *Research Question 1: Are Refugee Women More Likely to Screen Risk-Positive for Depression and Anxiety on*

### *the Edinburgh Postnatal Depression Scale Than Nonrefugee Women?*

It is estimated that 40% of refugee women [16] and 20% of nonrefugee women will have an overall EPDS score of ≥9 [1]. The number of women required to detect a difference of 20% between the 2 groups, with 90% power, is 119 per group.

Additional analyses will assess differences in the proportion who score positive for anxiety or at-risk on question 10 of the EPDS.

### *Research Question 2: Does Screening in Pregnancy Using the Edinburgh Postnatal Depression Scale Enable Better Detection of Symptoms of Depression and Anxiety in Refugee Women Compared With Current Routine Care?*

It is estimated that 40% of refugee women will have an overall EPDS score of ≥9 [7,16,46]. Current health service data indicate that less than 5% of women attending routine maternity care are recorded as having a mental health disorder. The number of women required to detect a difference of 20% between the 2 groups, with 80% power, is 34 per group.

### *Statistical Analysis for Research Questions 1 and 2*

Data will be assessed using Stata Statistical Software: Release 14 (StataCorp, College Station, TX, US) [47] and will use chi-square tests for proportions, Student *t* test for comparisons of means, Wilcoxon rank sum tests for comparison of medians, and paired *t* test to compare the EPDS and anxiety subscores between initial and third trimester screening. Univariable and multivariable logistic regression analyses will be used to assess the impact of demographic factors such as marital status, country of birth, time since arrival in country, age, and parity on the primary outcome (overall EPDS score of ≥9).

### *Research Question 3: Is Perinatal Mental Health Screening in Pregnancy Using an Electronic Platform Acceptable and Feasible to Refugee Women?*

Qualitative data will undergo thematic analysis to enable in-depth exploration of the data. Interviews will be audio recorded and transcribed verbatim. Transcripts will be read several times to obtain a sense of the whole before analysis. Overall, 2 researchers will independently conduct the initial narrative analysis using NVivo 11 (QSR International, Australia) qualitative data analysis software [48]. In the second phase, pieces of the data conveying the situation, the experiences, and the beliefs of participants will be identified and highlighted. A third phase involves the data being organized into patterns and emerging categories. Finally, a process of synthesis of the data will be undertaken that will result in the identification of major themes [49,50].

### *Research Question 4: What Are the Barriers and Enablers to the Screening Being Perceived as a Feasible and Acceptable Part of the Routine Practice by Maternity Health Care Providers?*

A similar process will be undertaken with the NPT-based interview and focus group transcripts with the HCPs. Separate analysis of the NoMAD quantitative data (online survey) will be undertaken to assess responses and assess any differences by factors such as HCP type, age, and years of practice. The qualitative and quantitative data will then be combined, and mixed-methods analytic techniques will be applied [50]. Merging and connecting data and finally interpreting the data enables the researcher to draw inferences on the overall mixed-methods analysis [50].

## Results

Recruitment of 119 refugee women and 155 nonrefugee women is complete. Data collection and analysis are underway. The cohort reflects the multicultural aspects of the community, with 248 of 274 (90.5%) women born overseas and 190 of 274 (69.3%) women arriving in Australia between 2008 and 2017.

## Discussion

Stakeholder engagement and governance are key components of this research program. This ongoing stakeholder involvement has enabled the program to be co-designed and to evolve to meet stakeholder needs. The steering committee comprises staff from key hospital departments, GP liaison, RH&W, the nongovernment organization COPE, and academic experts in psychology, midwifery, obstetrics, and public health. This committee has met fortnightly for 2 years to plan, implement, and evaluate the program. The committee addresses concerns of the research team or hospital staff as they arise and responds with practical solutions. A community advisory group comprising women from 8 different countries also meets bimonthly and has been instrumental in planning the implementation and evaluation such as recruitment strategies, resources, and facilitating an understanding of the cultural complexity of the women participating.

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## Authors' Contributions

The concept was initiated by JAB and MGH. The project plan has been jointly developed by all authors, and all authors have contributed to the manuscript.

## Conflicts of Interest

None declared.

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## Abbreviations

**CALD:** culturally and linguistically diverse
**COPE:** Centre of Perinatal Excellence
**EPDS:** Edinburgh Postnatal Depression Scale
**GP:** general practitioner
**HCP:** health care provider
**NoMAD:** Normalization Measure And Development
**NPT:** Normalization Process Theory
**RAC:** refugee antenatal clinic
**RH&W:** Monash Health Refugee Health and Wellbeing
**RHNL:** refugee health nurse liaison


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# Chapter 4: The process of implementing perinatal mental health screening from the perspective of health professionals

## 4.1 Introduction

Health professionals have a critical role in ensuring women receive screening and, as reported in the literature review (chapter 2), play an important role in how women experience screening and whether they access mental health care following screening. Therefore determining health professionals' knowledge, attitudes and behaviours in screening and management of mental health in pregnancy is crucial. This post-implementation process evaluation details what factors influence health professionals when incorporating screening into practice. This evaluation assesses the improvements needed, and the circumstances that facilitate successful program sustainability and scale up (61).

In this chapter, manuscript 2 reports the results from a survey that assessed the professional development needs of health professionals in the context of the launch of the *Mental Health Care in the Perinatal Period: Australian Clinical Practice Guideline* in 2017. This survey addresses the research question: What are the professional development needs for GPs and midwives associated with the new perinatal mental health guidelines? The survey was developed and conducted in collaboration with the Centre of Perinatal Excellence (COPE) and MH Maternity GP Liaison Department. We distributed the survey at the time of registration at an evening seminar for health professionals. I identified this session as an opportunity to investigate perinatal mental health professional development

needs in general, and inform education needs for staff at the MH refugee antenatal clinic during implementation. In consideration of the scale-up of the program, the results from this survey will also inform professional development needs of the broader health professional body at MH maternity services.

The second part to the chapter is the process evaluation conducted with health professionals involved in the perinatal mental health screening program at the refugee antenatal clinic. This evaluation uses the Normalisation Process theory (NPT) toolkit. The NPT proposes four constructs (coherence; cognitive participation; collective action and reflexive monitoring). These four constructs provide the basis for greater understanding of the different kinds of actions people take to implement a new and complex practice (83). These results are presented in manuscript 3 and address the research question: Is perinatal mental health screening in pregnancy using an electronic platform, acceptable and feasible to health professionals and women of refugee background? A plain English language statement for health professionals summarises this study and is found in Appendix 4.

Manuscript 2: Willey S, Fradkin R, Gibson-Helm M, Highet N, Boyle JA. What are the professional development needs for GPs and midwives associated with the new perinatal mental health guidelines? *Australian Journal of Primary Health* 2018;24:99–100. doi:10.1071/PY17170

Manuscript 3: Willey SM, Gibson-Helm ME, Finch TL, East CE, Khan NN, Boyd LM, Boyle JA. Implementing innovative evidence-based perinatal mental health screening for women of refugee background *Women & Birth* 2019; In Press. doi.org/10.1016/j.wombi.2019.05.007

**Manuscript 2: What are the professional development needs for GPs and midwives associated with the new perinatal mental health guidelines?**

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Letter to the Editors

# What are the professional development needs for GPs and midwives associated with the new perinatal mental health guidelines?

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Perinatal depression and anxiety are common mental health disorders in pregnancy and the first 12 months post-birth (Howard *et al*. 2014; Byatt *et al*. 2013). Perinatal depression affects between 10 and 17% of women (Austin 2014) and perinatal anxiety between 13 and 20% of women (Austin 2014; Austin *et al*. 2017). In many instances, depression and anxiety disorders co-exist (Austin 2014, Austin *et al*. 2017). Perinatal mental health disorders are associated with several adverse outcomes associated with birth, infant development (Byatt *et al*. 2013) and family function (Austin *et al*. 2017). The new *Mental Health Care in the Perinatal Period: Australian Clinical Practice Guideline* recommend all women receive psychosocial risk assessment and screening for symptoms of depressive and anxiety disorders in early and late pregnancy, and 6–12 weeks post-birth, with repeat assessment as clinically indicated (Austin *et al*. 2017). This is critical to providing women with early intervention, access to appropriate referral and ongoing support (Austin *et al*. 2017).

We conducted an anonymous survey of health professionals ($n = 52$) (General Practitioners (GPs), $n = 30$; midwives, $n = 20$; obstetrician, $n = 1$; undisclosed, $n = 1$) immediately before attending a perinatal mental health seminar in south-east Melbourne in April 2017. We aimed to examine health professionals' current practices in providing perinatal mental health screening with the view to refine or develop education programs and resources to facilitate implementation of the new guideline.

The majority of health professionals had 10 years or more in their current position (72%) and were aware of the high prevalence of perinatal mental health disorders (67%). Most usually screened women: in pregnancy (71%) and the postnatal period (87%). If needed, most offered women a referral to a psychologist (77%), and least commonly offered referral to another GP or managed women themselves (52%). Preferred professional development opportunities included seminars and structured professional development workshops (74%) or conferences (58%). Respondents indicated perinatal mental health screening would be best facilitated by more options for training or professional development (63%), more comprehensive referral options and support services (63%), and clear guidance on services available and referral pathways (60%).

GPs and midwives are trusted healthcare providers (Hardie and Critchley 2008) and likely to be the first health professionals a woman discloses her mental health concern to. Our survey suggests some still feel inadequately equipped to screen for and manage perinatal mental health, potentially resulting in evidence-practice gaps and barriers to women receiving timely care (Austin *et al*. 2017). Importantly, this survey also suggests potential opportunities for education and resources to better support health professionals. With the launch of the new guideline, it is timely to raise awareness of this critical issue to ensure all maternity care providers are well prepared to appropriately assess, manage or refer women with potential perinatal mental health disorders.

This survey was conducted to explore professional development needs in a small sample which may limit generalisability of the findings. Participating health professionals may have been more likely to have an interest in perinatal mental health resulting in potential selection bias, yet significant needs were still identified. We recommend further exploration to gain a wider understanding of GPs' and midwives' needs in assessment, management and referral for women with perinatal mental health disorders, and before the implementation of professional development programs. This survey highlights

professional development needs, and extensive action is required if all women are to have access to appropriate perinatal mental health care.

Supporting health professionals with professional development opportunities, more efficient approaches to screening and assessment, and comprehensive information about local referral options, will assist to embed mental health screening and follow-up in routine maternity care. Such action aligns with best-practice and is the way forward in reducing the barriers health professionals and women face regarding perinatal mental health care.

## Conflicts of interest

The authors declare that they have no conflicts of interest.

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**Manuscript 3: Implementing innovative evidence-based perinatal mental health screening for women of refugee background**

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# Implementing innovative evidence-based perinatal mental health screening for women of refugee background

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ABSTRACT

*Problem:* National guidelines recommend repeated screening for depression and anxiety for all women in the perinatal period. Routine screening in pregnancy is limited due to service, community and individual barriers.

*Background:* Perinatal depression and perinatal anxiety affect up to 20% of all women. Women of refugee background are at even greater risk for perinatal mental health conditions due to refugee experiences and resettlement stressors.

*Aim:* To evaluate the acceptability and feasibility of a perinatal mental health screening program for women of refugee background from the perspective of health professionals.

*Methods:* A mixed methods design guided by the Normalization Process Theory was used. Data were collected at a dedicated refugee antenatal clinic in the south-eastern suburbs of Melbourne, Australia. An online survey (n = 38), focus groups (n = 2; 13 participants) and semi-structured interviews (n = 8; 11 participants) with health professionals were conducted.

*Findings:* Under the four constructs of the Normalization Process Theory, health professionals reported improvements in identifying and referring women with mental health issues, more open and in-depth conversations with women about mental health and valued using an evidenced-based measure. Key issues included professional development, language barriers and time constraints.

*Discussion:* Implementing a perinatal mental health screening program has been positively received. Strategies for sustainability include professional development and the addition of audio versions of the measures.

*Conclusion:* This perinatal mental health screening program is acceptable and a feasible option for health professionals. Health professionals value providing more holistic care and have more open discussion with women about mental health.



## Statement of significance

### Problem or issue

Barriers to implementing perinatal mental health screening in pregnancy in Australia have resulted in limited screening in routine maternity care. Perinatal mental health conditions are a major public health issue. Women of refugee background are vulnerable to mental health issues in the perinatal period.

### What is already known

Perinatal depression and perinatal anxiety affects up to 20% of all women in pregnancy and the first twelve months post birth and can have debilitating effects on women, children and families.

### What this paper adds

From the perspective of health professionals, perinatal mental health screening in pregnancy enables holistic care, and is acceptable and feasible.

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;1;

## 1. Introduction

Worldwide, the number of people forcibly displaced from their homes increases each year, reaching an all-time high of 24.5 million refugees and 3.1 million asylum seekers in 2017.[1] People of refugee background experience a perilous journey which frequently includes experiences of torture and trauma, uncertainty for the future and limited access to basic health resources resulting in complex physical and mental health conditions.[2,3] The impact of resettlement for people of refugee background also cannot be underestimated, it is often stressful and requires enormous adjustment to a new culture and complex systems.[2,4]

Around 30% of Australia's humanitarian intake are women of childbearing age.[5] Inadequate care during previous pregnancies, traumatic birthing experiences, previous death of a baby or child, and missing, or separation from children are likely for many women of refugee background.[6,7] Women are often separated from loved ones and community, signifying loss of cultural rituals that accompany the birth of a newborn[6,8] and many have limited English language skills.[4] The combination of all these factors can lead to women feeling socially isolated, marginalised and vulnerable in pregnancy.

Defined as the period from conception to the first twelve months post birth, the perinatal period is a time of increased risk for the onset or recurrence of mental health disorders.[9] Affecting up to 20% of all women, perinatal depression and perinatal anxiety are major public health issues.[10] The *Mental Health Care in the Perinatal Period: Australian Clinical Practice Guidelines* recommend repeated screening for all women for depression and anxiety in the perinatal period.[9] Perinatal mental health [PMH] screening in the twelve months post birth commonly occurs in a community setting in Australia, yet screening in pregnancy has been limited in routine maternity care.[11] Additional barriers that may limit screening for women of refugee background include the requirement for longer appointment times, difficulties in using screening measures due to language or cultural factors, lack of health professionals' [HPs] knowledge and skill in addressing women's needs or concerns (especially in a culturally responsive manner), women normalising their emotional difficulties, stigma, feeling their HPs lack time for, or interest in, discussing mental health problems, and a lack of appropriate referral pathways.[9,12,13]

In response to these needs, we co-designed a PMH screening program for women of refugee background with stakeholders from the maternity service, community-based refugee health and wellbeing service [RH&WS], non-government organisations and community. The program aimed to address many of the above-mentioned barriers. Implementing this complex new program in routine maternity practice was multi-dimensional and involved many strategies to support the health service and those who work within the service.

Evaluation of the program needed to describe the intricate pathways necessary for embedding new healthcare practices, the subsequent improvements made in clinical practice, and how to apply the new knowledge into organisational structures and policies.[14] The Normalization Process Theory (NPT) was chosen as the theoretical framework to understand and explain the social processes required for enacting, organising and operationalising the new practice in the maternity setting.[15] The NPT provides researchers the opportunity to move beyond understanding the processes required for implementation but to also develop greater insights into the constructs that improve implementation and towards embedding into routine practice.[16] NPT has been used in a range of health care contexts, for instance, to understand changes to clinical practice[17] and the implementation of new guidelines.[18]

The PMH screening program for women of refugee background commenced in August 2016 in south-east Melbourne, Australia. The primary aim of the program was to improve detection of symptoms of depression and anxiety by using a validated measure. The study reported here aimed to use the NPT framework to evaluate the feasibility and acceptability of the PMH screening program from the perspective of health professionals.

## 2. Methods

### 2.1. Setting

The study was conducted in a dedicated refugee antenatal clinic in the south-eastern suburbs of Melbourne, Australia. This clinic at Monash Health (MH) operates one day per week and, on average, thirteen women attend their first pregnancy visit with a midwife each week. Approximately half of the women are from a refugee background or considered refugee-like, i.e. arrived in Australia on a spousal visa from a refugee-source country such as Afghanistan. The clinic is supported by bi-cultural workers and the attendance of a refugee health nurse liaison [RHNL] from the community-based [MH] RH&WS, which is part of the same larger organisation.

### 2.2. Screening program

Routine maternity care involved paper-based completion of a 19-item psychosocial questionnaire (the MH psychosocial questionnaire) with the midwife during the booking appointment. This was developed by the health services and has been used for many years. It does not specifically screen for mental health and has not been validated. The questionnaire asks women a range of questions relating to concerns about previous and current experiences regarding pregnancy and birth, breastfeeding, mental health, experiences of abuse or fear for other, financial or accommodation concerns, social support and involvement with any community services.

The national guidelines in place when this project commenced recommended a psychosocial assessment be used in addition to the Edinburgh Postnatal Depression Scale (EPDS) but did not recommend one specific tool. We elected to incorporate the routine use of the MH psychosocial questionnaire in this project while focussing on addressing the main evidence-practice gap by introducing mental health screening using the EPDS.

The EDPS is a widely-used, 10-item, Likert-style self-report measure validated for use in pregnancy and, when administered in English, shown to perform with moderate sensitivity 0.83 (0.76–0.88) and high specificity 0.90 (0.88–0.92).[9] Both measures were completed in the waiting room prior to seeing the midwife at the first pregnancy visit. Women undertook the screening using an iPad and the iCOPE system.[19] The iCOPE system generates an immediate screening score (reducing reporting error) and a report with recommendations for both the midwife and woman. The screening measures were translated into the most common languages of women seen at the clinic or were completed with an interpreter. Referral pathways were developed for women of refugee and non-refugee background. Based on previous validation of the EPDS with culturally and linguistically diverse women, we used a cut-off score of $\geq 9$[20] as a reference for further assessment of depression and anxiety. Therefore, women of refugee background who scored $\geq 9$ on the EPDS were referred to the RHNL for further assessment. Following this assessment women were offered referral to counselling service at the RH&WS or other appropriate services such as social work or their general practitioner. Referrals were also made based on the results from the psychosocial assessment, or a combination of both psychosocial assessment and EPDS score. As an example, the appropriate referral for a woman

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experiencing financial concerns requiring assistance with baby equipment, would likely be to a service such as Healthy Mothers; Healthy Babies. Women at immediate risk were referred to the hospital emergency department or psychiatric triage.

### 2.3. Primary outcome

Using the Normalization Process Theory, we aimed to evaluate the acceptability and feasibility of a perinatal mental health screening program for women of refugee background in pregnancy from the perspective of health professionals.

### 2.4. Evaluation participants

HPs (n = 42) directly involved with the implementation of the PMH screening program were invited to participate in its evaluation. Most were invited to complete an online survey (n = 38) and all were invited to take part in a focus group or interview: midwives (n = 26); clerical staff (n = 4); medical staff (n = 3); counselling staff (n = 3); bi-cultural workers (n = 3); midwifery managers (n = 2) and a RHNL (n = 1) from maternity services and the RH&WS. Additional staff were invited to participate in the qualitative phase of the evaluation, manager (n = 1) and counselling staff (n = 3) to gain a broader view of the program at a system level and referral outcomes from the screening program.

### 2.5. Evaluation study design

An explanatory sequential mixed methods methodology (survey, interview and focus groups)[21] was used to produce a holistic view of how health professionals perceived the implementation of PMH screening for women of refugee background in pregnancy. The reporting of this study was guided by the Standards for QUality Improvement Reporting Excellence (SQUIRE 2.0)

### 2.6. Normalization Process Theory

The Normalization Process Theory (NPT) toolkit was adapted for this project and uses four constructs: (i) coherence: the sense-making work people do, individually and collectively, when faced with operationalising the new practices, (ii) cognitive participation: the relational work people do to build and sustain a community of practice around the complex intervention (iii) collective action: the operational work people do to enact the new practices, and (iv) reflexive monitoring: the appraisal work people do to understand the ways the new practices affect them and others.[22] From the NPT toolkit we used the NoMAD survey and the interactive NPT toolkit interview questions.[16,22]

The 23-item NoMAD survey comprehensively covers the full set of issues identified by NPT as key to successful implementation, and is completed anonymously and independently by participants. In their validation of the NoMAD instrument, Finch et al. assessed the instrument to have good face validity, construct validity and internal consistency.[23] The NoMAD survey is divided into three-parts: Part A asks five demographic questions about the participant and their professional role, Part B includes three general questions to ascertain the participants overall perceptions of the program, and Part C contains a set of more detailed questions directly relating to the NPT constructs and the PMH screening program.

The interactive NPT toolkit interview questions are consistent with NoMAD in content and focus, but aid qualitative discussion, thus facilitating in-depth exploration of issues and identifying contrasting perspectives. This is important where the work of a health intervention is collaborative in nature. A number of studies utilising the NPT have adapted parts of the theory rather than use all components.[17,18,24,25] As we were aiming to develop a broad and in-depth understanding of the context in which we were implementing the new program we decided to use all of the NPT and NoMAD instruments.

### 2.7. Data collection and analysis

Quantitative data were collected through the online NoMAD survey, distributed using Qualtrics XM.[26] HPs employed in the refugee antenatal clinic and key staff from the RH&WS who were directly involved with the implementation of the program (n = 38) were invited to participate through their work email account in November and December 2017. The survey was sent to participants prior to the commencement of focus groups and interviews, thus initial responses helped to inform qualitative data collection.

Qualitative data were obtained by focus groups (n = 2; 13 participants) and semi-structured interviews (n = 8; 11 participants) and conducted in November and December 2017 using the interactive NPT toolkit interview questions. For example, a question under the construct coherence was ‘participants collectively agree about the purpose of the perinatal mental health screening program’. In addition, participants reached a consensus with each question using an interactive sliding bar along a scale ranging from ‘not at all’ to ‘completely’, enabling further insight into how participants evaluated the implementation. Focus groups and interviews also explored the barriers and enablers to implementing the screening program identified from the survey.

HPs were grouped according to their profession. Midwives and bi-cultural workers from the antenatal clinic participated in focus groups due to their larger numbers, whilst other health professionals were interviewed individually or in groups of two.

Informed consent was obtained prior to participation in focus groups and interviews. Consent was implied for the survey. All focus groups and interviews were conducted by author SW; audio recorded, transcribed verbatim and anonymised. The project had ethical approval from Monash University and Monash Health Human Research and Ethics Committees (14475L).

Quantitative data from the survey were collated and analysed using Microsoft Excel (2016) and IBM SPSS Statistics 25.[27] Descriptive statistics using frequencies were assigned and stacked bar graphs developed to represent the Likert scale responses of the NOMAD survey.

Focus group and interview transcripts were thematically analysed prior to data triangulation. Transcripts were read, re-read and coded independently by two researchers (SW; NNK). The two researchers met regularly to familiarise themselves with the data, refine and review codes to ensure consistency. In the next phase, open codes were reviewed under each NPT construct and patterns and themes were identified,[28] ensuring the predetermined NPT framework did not force the data under any one particular construct, a process used successfully in previous research.[25,29,30] Each theme was mapped to one of the four constructs (SW), and sub-themes identified and checked (NNK). All transcripts were coded using NVivo11 software.[31]

The two researchers (SW; NNK) grouped the responses from the interactive sliding bar for each of the ten focus groups and interviews and allocated an overall score for each response. Data were entered into the NPT website and radar charts created. Radar plots show the extent to which participants have collectively assigned a positive or negative response to each variable. Results further from the centre demonstrate an overall positive response, those closer to the centre demonstrate a negative response.

The final phase was data triangulation to obtain convergence or corroboration of findings.[32] Findings were reported to the project steering committee and HPs at the refugee antenatal clinic.

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## 3. Findings

### 3.1. Participant characteristics

Twenty-four HPs completed the online survey (response rate 63%) (Table 1), and twenty-four HPs participated in either a focus group (n = 2; 13 participants) or interview (n = 8; 11 participants). Seventeen HPs participated in both the survey and a focus group or interview. HPs were employed across all areas of implementation and included midwives, midwifery managers, bi-cultural workers and administrators at the maternity service; the RHNL, a bi-cultural worker and counsellors from the RH&WS.

### 3.2. Results from NoMAD survey and the NPT interactive toolkit

#### 3.2.1. Overall perceptions of the program

Three survey questions focussed on overall perceptions of the program and included familiarity with the program, current work and will it become normal work. In regard to familiarity of the program, 54% indicated the program was completely familiar, 33% somewhat familiar and 13% not at all familiar. Seventy five percent of HPs reported the program was completely a current part of normal work, 8% reported it was somewhat a part of normal work and 17% reported it was not at all a part of normal work. Furthermore, 66% indicated the program would completely become normal work, 21% indicated the program would somewhat become normal work, and 13% indicated the program would not at all become normal work. Clinical staff were more likely to report the program as a current part of their work and would become a normal part of their work.

### 3.3. Coherence

The sense-making work of operationalising the new program requires HPs to differentiate between the old and new practice and internalise the value, benefit and importance of the new practice. The survey identified that the HPs responded positively to the purpose and value of the program and acknowledged the difference between the old and new practice. Of the 17 midwives included in the survey, 9/17 (53%) answered yes to the option *agree or strongly agree* to all four questions (Fig. 1). Three main themes emerged from the qualitative data: 'Experiences for health professionals'; 'Women's experiences from the health professional perspective', with a sub-theme, '*language and communication*', and 'Referral pathways'.

#### 3.3.1. Experiences for health professionals

The differences between the new screening program and the previous paper-based psychosocial questionnaire were generally positive. Midwives indicated they liked the idea of using the iPad, with a number agreeing it was preferable to a paper-based form, and found the addition of the EPDS allowed for more focussed discussion around mental health. RH&WS staff appreciated the more comprehensive referral information, which added greater context to the woman's situation at the time of triage and initial contact. Furthermore, RH&WS staff noted improvements in midwives detecting mental health symptoms, initiating the assessment process and identifying women of refugee background earlier, all of which increased early referral.

> P1: '*I rarely got anything [i.e. referral information] on a mental health assessment . . . with the screening, the midwives were starting the assessment process from the beginning . . . I also feel the biggest thing . . . , is around the identification . . . , previously . . . [women were] rarely identified . . . , whether they actually were a refugee or asylum seeker or migrant. I think . . . the program has helped that . . . made it easier to make a referral, and . . . to make an assessment . . .*' [RH&WS staff, Interview 2]

Midwives discussed how the screening program opened up dialogue with women about anxiety symptoms, and enabled them to be more specific in these conversations, something they had not previously done.

> P1: '*. . . how we're asking it and the iPad . . . more . . . focus on the anxiety related questions. We don't really ask too much [about] anxiety . . .* [Midwives, FG1]

**Table 1**
NOMAD online survey demographic characteristics.

| Demographic characteristic | Overall n (%) |
|---|---|
| Profession n = 24 | |
| Midwife[a] | 17 (71) |
| Grade 2/clinical specialist | 11 (65) |
| Senior roles (Grade 3, 4, 5) | 6 (35) |
| Medical doctor | 0 |
| Bi-cultural worker | 3 (12) |
| Administration | 4 (17) |

| | Midwives n (%) | Bi-cultural workers n (%) | Administration staff n (%) |
|---|---|---|---|
| **Length of time working in profession (years)** | | | |
| ≤5 | 10 (59) | 1 (33) | 2 (50) |
| >5 | 7 (41) | 2 (66) | 2 (50) |
| **Length of time working in current role (years)** | | | |
| ≤5 | 10 (59) | 1 (33) | 2 (50) |
| >5 | 6 (35) | 1 (33) | 2 (50) |
| No response | 1 (6) | 1 (33) | |
| **Length of time working with women of refugee background (years)** | | | |
| ≤5 | 12 (71) | 0 | 2 (50) |
| >5 | 5 (29) | 3 (100) | 2 (50) |
| **Professional development training completed in past 5 years (all that are applicable)** | | | |
| Working with women/families from refugee background | 13 (76) | 3 (100) | 0 |
| Mental health training | 5 (29) | 2 (66) | 0 |
| Cultural competency training | 6 (35) | 2 (66) | 0 |
| Family violence | 14 (82) | 3 (100) | 0 |

[a] The RHNL was included in the section midwife as they were both a nurse and midwife at the service.

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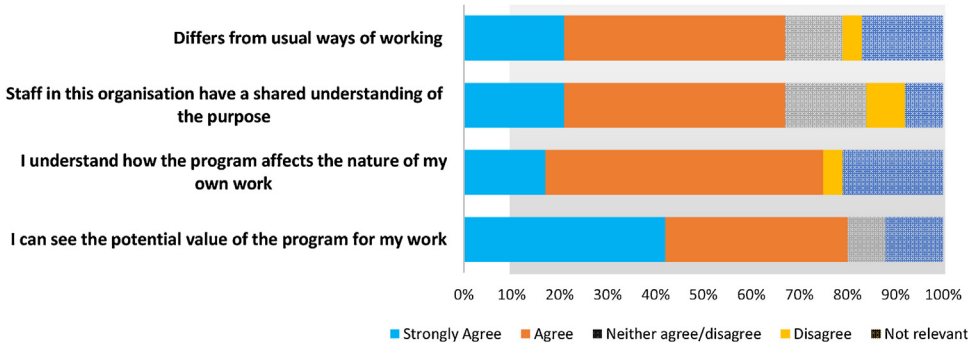


**Fig. 1.** NoMAD survey results: coherence — does the PMH screening program make sense to HPs? (n = 24).

P2: *It gives us a tool to know what to ask . . .* [Midwives, FG2]

In addition, using an evidence-based measure was acceptable to HPs and provided credibility for the program.

*'. . . Well I think the difference is, . . . we feel like we are doing more comprehensive screening now. We are asking questions on a validated tool and when we explain that to the women in terms of this has actually been proven to be protective . . . , we are able to say this is really evidence based now, which we weren't able to do before . . . I think that was a really important part of our early embedding of it. That helped to generate the buy in . . . , because we know we are not just doing screening for the sake of screening, we are doing it because we know it works.'* [Manager, Interview 8]

However, unfamiliarity with the screening program and the support required to conduct screening was challenging in a busy clinic, particularly for new staff members or midwives from other teams. Support in the form of logging into the website, interpreting screening results and discussing results with women were often areas new staff were required to learn 'on the job'. One manager recognised that as the program became embedded into routine practice, it was necessary for her to learn more about the program in order to support all staff members.

P1: '*there were difficulties . . . when staff from those other teams came through and didn't have any clue . . . other staff that don't use it as often . . .* [Manager, Interview 7].

Screening women who arrived late for appointments, particularly those who required an interpreter, proved difficult due to time constraints and sometimes HPs reverted to using the paper-based psychosocial questionnaire only.

### *3.3.2. Women's experiences from the perspective of health professionals*

HPs reported that women participating in the screening program acknowledged the benefits of screening, early detection and referral.

P1: *'people are . . . seeing the benefit . . . and the importance of it, which is very good . . . it's a good result and it's a value thing, woman know the importance, which they don't before.'* [RH&WS staff, Interview 5]

*3.3.2.1. Language and communication.* HPs raised a number of concerns relating to language and communication, in particular, women misinterpreting the EPDS questions and language barriers related to the use of interpreters, women's literacy levels and screening being completed by the women's husband.

Some EPDS questions were misinterpreted by women, particularly question ten: 'The thought of harming myself has occurred to me'.

P1: *'there is still some real barriers to comprehension around some women who just don't understand the context of questions. Especially the self-harm, It is commonly misinterpreted by women, commonly.'* [Manager, Interview 8]

Women misinterpreted the term 'harm' on numerous occasions. Midwives managed this situation by acknowledging it as a common occurrence requiring further discussion with women during their appointment. This required extra time, which frustrated midwives.

P4: *'if they scored high, which they keep doing and then I'll question the things they've scored high and then once they've answered they're like, oh no . . . maybe they were actually a bit confused. And then it's taking more time, because then you're going through the same stuff again.'* [Midwives, FG1]

On a number of occasions, HPs noted husbands were completing the screening on the iPad. Administrative staff would discourage this, but if an interpreter was unavailable and a woman was unable to read the script, this situation was unavoidable.

### *3.3.3. Referral pathways*

The referral pathways developed for the program were considered very useful, particularly referral to the RH&WS through the RHNL. Previously little support was offered to women as midwives were unsure of what was available. Midwives expressed how they were now making more referrals than before the screening program and more information was available at the point of referral because of screening. Furthermore, meeting the RHNL before a counselling referral and appointment meant women already had contact with the RH&WS allowing for the building of trust with the service.

P2: *'I think it has been beneficial, because we are getting more information about the client prior to seeing them . . . also because they have had that introduction by our colleagues that helps to engage them with the service.'* [RH&WS staff, interview 4].

### *3.4. Cognitive participation*

The relational work of building and sustaining a community of practice requires identifying key individuals who will drive the program forward and HPs organising, re-organising and contributing to the new practice. The survey results demonstrate most HPs see the program as a legitimate part of their work. Trust in the team to enact the new practice and supporting colleagues in new ways to use the program was strong. Support from management was adequate and most felt the program did not disrupt current working relationships. Eleven of the seventeen midwives (65%) agreed or strongly agreed to all four questions (Fig. 2).

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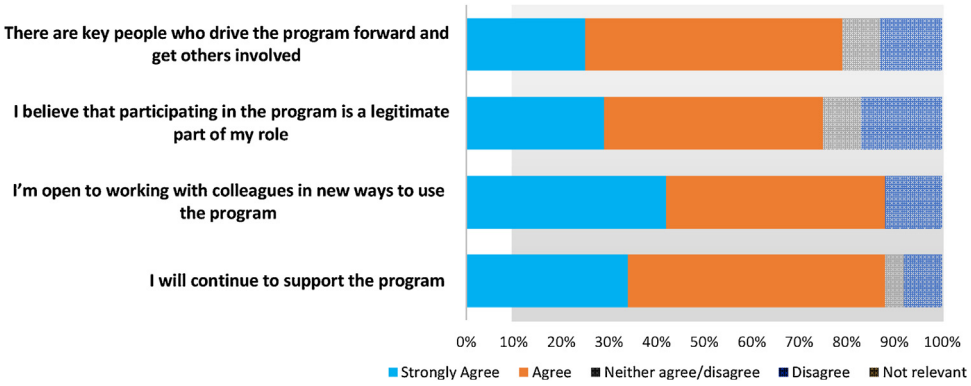


**Fig. 2.** NoMAD survey results: cognitive participation — do HPs buy-in to the PMH screening program? (n = 24).

From the qualitative data, the theme 'Program building and sustainability' emerged with three sub-themes: '*acceptability of the program*', '*key individuals*' and '*capacity*'.

### 3.4.1. Program building and sustainability

*3.4.1.1. Acceptability of the program.* Embedding the program into routine practice became easier with familiarity of the program. Midwives felt the program was acceptable to women and the use of an iPad contemporary. Furthermore, midwives perceived screening as beneficial in providing holistic care to women as it enabled more detailed discussion on depression and anxiety in pregnancy and with the inclusion of co-designed referral pathways, options for further management were available. Overcoming initial obstacles with the technology led to long-term benefits.

P2: '*I just think it's the initial getting used to . . . just even logging into it, and doing all of that was a hassle when I first started. It's, "Oh, this is all so hard." But it's so simple now, because we're used to it . . . it's like anything, . . . any tool that you use over and over again, it becomes more simple . . . it's a really good way to screen the ladies . . . I love the idea, because it's quite modern.*' [Midwives, FG2]

HPs acknowledged the benefits of more comprehensive screening, noting they were identifying issues that would previously have gone undetected.

P1: *Well I think the difference is . . . we feel like we are doing more comprehensive screening now. We are asking questions on a validated tool* [Manager, Interview 12].

*3.4.1.2. Key individuals.* The RHNL, bi-cultural workers and team manager were seen as the key individuals driving the screening program. Each of these HPs provided advocacy within the organisation and a link to community. The RHNL role enabled the link between hospital-based maternity services to community services. The bi-cultural workers were a point of contact for women within a complex health system and provided assistance with follow-up for HPs. All women referred to RH&WS counselling met with the RHNL, a vital step in building trust between women and health care services.

P1: '*I've felt the Liaison Nurse . . . her being a point of contact . . . made a big difference to my follow-up and action planning around the clients.*' [RH&WS staff, interview 4]

The refugee antenatal clinic staff expressed how the midwifery manager was instrumental in implementing the screening program, supporting the team throughout implementation, advocating for the program within the organisation, escalating concerns and resolving issues.

*3.4.1.3. Capacity.* PMH screening was considered an important part of routine practice and legitimate role for HPs, particularly midwives. However, time was considered a key barrier to program sustainability. Whilst the majority of women completed screening in less than ten minutes, the time needed by some women to complete screening and the need for midwives to clarify results with women were seen as issues requiring attention. The solutions midwives raised focussed on building capacity within the clinic allocations. Longer appointments and continuity of carer would enable women to build a relationship with one midwife and feel more comfortable with discussing sensitive issues. Another was to introduce audio versions of the screening measures for women with low literacy.

P1: '*What gets in the way of people feeling like they should be doing it is the time poorness . . . It's more of a pressure based situation . . . than any real lack of appreciation for the importance of peri-natal mental health . . . If it was available in audio and multiple languages then I think the time element would largely disappear.*' [Manager, Interview 8]

### 3.5. Collective action

The operational work of enacting a new practice requires interaction, trust and accountability between staff and for HPs to have the appropriate knowledge and resources. The survey results indicate management supported the program, but many HPs felt more resources, skill and training were required. Midwives responses to both of the questions asking if sufficient resources are available to support the program and if sufficient training is provided to enable staff to implement the program indicate 8/17 (47%) disagreed or neither agreed or disagreed (Fig. 3).

From the qualitative data the themes 'Enacting and embedding the new practice' with three sub-themes: '*Trust and expertise*'; '*Education and professional development*' and '*Technology*', and 'Organisational support' emerged.

### 3.5.1. Enacting and embedding the new practice

*3.5.1.1. Trust and expertise.* Trust and expertise in each other's ability to use the screening program existed across all HP groups. However, midwives had concerns that not all women were referred appropriately, but with support from one another, this situation was rectified.

P2: '*the referrals . . . they're not referring appropriately sometimes. So . . . that's the trust in each other's work . . . most people, are good; but not everybody . . . if someone finds that there's something that hasn't been enacted properly, then they would always do something about it.*' [Midwives, FG2]

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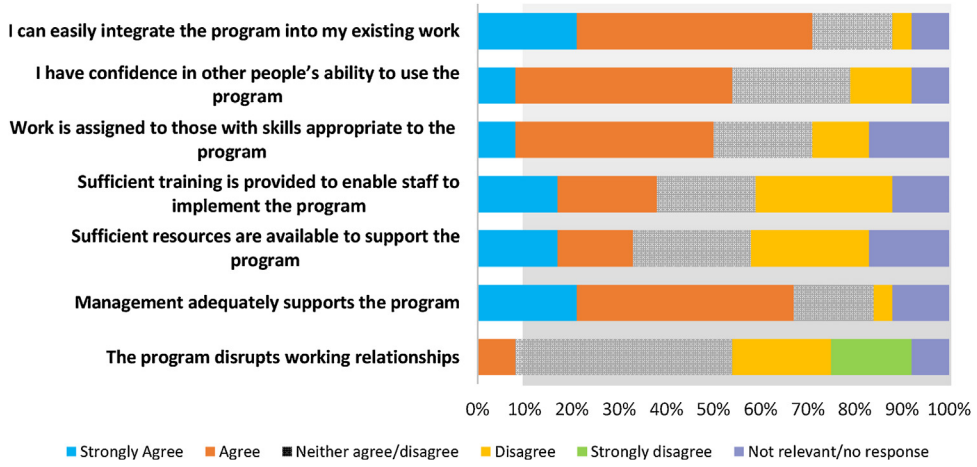


**Fig. 3.** NoMAD survey results: collective action — how have HPs embedded the PMH screening program into practice? (n = 24).

*3.5.1.2. Education and professional development.* Including the whole team from the beginning and the need for specific PMH training were emphasised. Administration staff felt they did not have a full understanding of the program and would have liked to be more included in the education sessions from the beginning, rather than only seeing their role as handing iPads to women. Counselling staff at the RH&WS indicated their expertise was not PMH and would have benefited from further training in this area. Some formal education sessions were held prior to the implementation of the program, however, one manager expressed how much of the training for midwives appeared to be 'on the job' as a result of the RHNL and researchers' presence in the clinic. When asked if midwives were provided the right support, education and training:

*P: 'No, . . . , I really think they did because [the researchers] were there . . . And if you weren't there [the RHNL] was there . . . '*

*Facilitator: 'So that training . . . was on the job . . . ?'*
*P: 'Oh very much so, yeah, yeah.'* [Manager, Interview 7]

Survey results indicate approximately one-third of participating midwives report they had training in mental health (29%), and cultural competency (35%) in the past five years. Administration staff had not received any training (Table 1).

*3.5.1.3. Technology.* Midwives expressed frustration with not being able to access and login into the website, and technical faults or timing out with the iPad. Often the administrative staff assisted, but midwives felt they wanted to fix problems themselves as they arose. It was felt that integrating the program in the health service's information technology support would be necessary for sustainability.

P1: *'there has to be resources available to embed.. in the IT networking of the hospital.'* [RH&WS staff, Interview 2]

*3.5.2. Organisational support*

HPs discussed organisational support from various perspectives. Some discussed the need for assistance from colleagues when busy and knowing management was readily available and supportive to help with the new program. Midwives felt their team manager was very supportive and involved in the program, but were unclear about the broader hospital management and their support. The co-ordinated and collaborative approach of providing care across two different services was viewed as a positive.

P1: *'I think that the organisation did support the process, on two levels. You've got the refugee health service in and you've got the maternity service in.'* [RH&WS staff, interview 2]

In addition, midwifery managers reported the support from hospital committees and more senior management was available. They also indicated their support for an ongoing program.

P1: *'I just hope . . . when you've done your evaluations . . . the organisation picks it up and takes it further.'* [Manager, Interview 7]

*3.6. Reflexive monitoring*

The appraisal work of assessing and understanding how the new practice affects both individuals and the collective and how HPs attempt to redefine, modify and reconfigure their new way of working. The survey results indicated many health professionals could modify their work to improve the program (midwives: 11/17 (65%) responded *agree* or *strongly agree*) and feedback was important for improving the program (midwives: 15/17 (88%) responded *agree* or *strongly agree*) (Fig. 4).

Two themes from the qualitative data emerged: 'Benefits for women from the perspective of health professionals' and 'Embracing change'.

*3.6.1. Benefits for women from the perspective of health professionals*

Great value was attributed to early identification, early referral and facilitating discussion. Having a conversation about PMH was a positive step in providing women the opportunity to disclose problems and offer information about available services in the area. Reducing unnecessary suffering provided HPs with the enthusiasm to continue using and expanding the screening program to another clinic.

*P1: 'they seem to really love it now . . . , and they love it so much they're asking for that second day.'(screening in another clinic)* [Manager, Interview 7]

Engaging women in conversation allowed for dialogue on other health matters and the opportunity to provide women with information on community-based resources. One RH&WS worker valued being able to discuss these options with women, particularly those not ready to engage with counselling, suggesting any conversation about mental health was not wasted, but rather planted a seed in the woman's mind for future reference.

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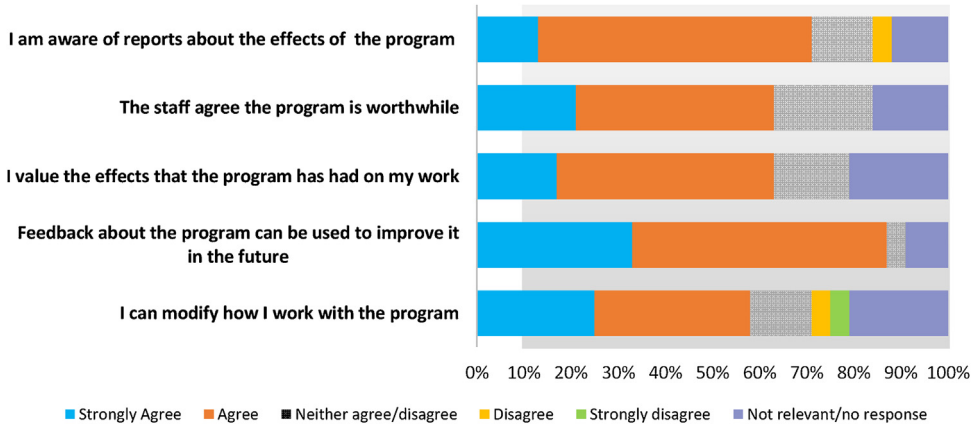


**Fig. 4.** NoMAD survey results: reflexive monitoring — how do HPs appraise the PMH screening program? (n = 24).

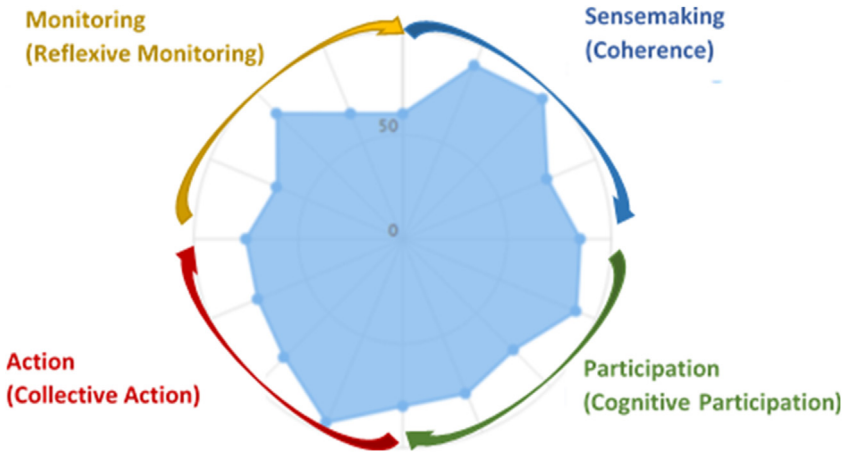


**Fig. 5.** NPT interactive sliding bar consensus results (n = 24).

*3.6.2. Embracing change*

Including the EPDS in PMH screening enabled more comprehensive and holistic health care for women of refugee background in this clinic. Midwives felt using an evidence-based measure gave them a framework to base detailed discussions on mental health with women.

*P1: '. . . I think it's very good . . . more details compared to the paper form . . . some women didn't realise that . . . they have something like depression, all sort of mental issues until they answered the questions.'* [Midwives, FG1]

Despite the increased workload associated with screening, midwives valued how the program helped identify women with PMH conditions.

P1: *'It hasn't made our workload any less, but it's changed . . . , for our women. The care that they're receiving now.'*

P3: *'And the importance of mental health in pregnancy, rather than just ticking the boxes on the other one, we're getting a more . . . '*
P4: *'Unified approach . . . '* [Midwives, FG2]

*3.7. Interactive sliding bar results*

The radar plots showed that most responses were positive, confirming the HPs acceptance of the PMH screening program (Fig. 5). Overall, there was consensus the program was valued; there was a collective agreement on the purpose and just over half agreed on distinguishing the screening program from previous practice (coherence). Furthermore, participants indicated buy-in and continued support for the PMH screening program (cognitive participation); they maintained trust in each other's work, and most felt the organisation was supportive and work was appropriately allocated (collective action). Finally, under the construct of reflexive monitoring, results indicate that individually and collectively HPs assess the program as worthwhile, with just over half indicating they would modify their work in response to the appraisal of the program.

## 4. Discussion

This research utilised the NPT toolkit to evaluate a PMH screening program for women of refugee background from the perspective of HPs directly involved in the program. Our findings show the program is acceptable to HPs and is a feasible option for providing PMH care for women of refugee background. The ability to identify and refer women early in pregnancy, have more open and in-depth conversations with women about mental health and the use of an evidenced-based measure were all valued components of the program.

The use of the NPT has been a novel way to describe the facilitators and barriers to embedding a PMH screening program into normal practice. This NPT framed study reports a number of positives on issues that others have found negative and disheartening (personal communication, T Finch, February 2019). Our findings under the construct *coherence* show the program has been well received and is a highly valued component in the provision of

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holistic maternity care. The development of co-designed referral pathways for the program and the co-ordinated approach of maternity services and RH&WS provided clinical staff referral options they did not have previously. Furthermore, knowing these options were available, midwives were more willing to screen and discuss mental health with women. The use of technology was preferable to the previous paper-based psychosocial questionnaire as was using an evidence-based measure.

The barriers and inequities of language and communication faced by women of refugee background when accessing health care are often cited.[4,9,33] Our study confirmed these concerns, with husbands/partners observed filling in the screening measures, lack of, or limited time for an interpreter to assist women in completing the measures, women's misinterpretation of questions and their variable literacy levels. Previous research has found similar issues regarding the misinterpretation of EPDS questions in women of refugee background, suggesting EPDS items may not be conceptually translatable, and found that staff and interpreters often reworded questions to find cultural meaning.[34] In addition, fear of disrupting spousal relations if a mental health issue was identified, or concerns regarding privacy and confidentiality when an interpreter is present, contribute to women's reluctance to disclose sensitive information.[34]

Building and sustaining a community of practice required HPs to operationalise a program that was initially unfamiliar. However, buy-in developed with time, and embedding the new practice was possible when midwives realised they were providing more comprehensive mental health assessment in pregnancy. This finding, under the construct *cognitive participation*, helped midwives to acknowledge PMH screening was a legitimate part of their role. Importantly, key individuals were imperative to driving the program forward, particularly the team manager, the RHNL and bi-cultural workers.

However, the capacity to conduct screening in a busy clinical environment was hindered by the time it took some women to complete screening and when midwives needed to clarify results. Strategies to overcome these barriers include the development of translated audio versions of the EPDS. Audio versions of health information enable women to obtain, understand and make informed choice regarding health care.[35] The development of audio versions of the measures is underway and will provide women with low literacy levels the option of completing screening in their own language and independence in completing screening, which aim to reduce the issues associated with language and communication barriers found in our study.

Under the finding of *collective action,* enacting and embedding the new practice relied on the trust between HPs in being able to fulfil their role adequately. This construct highlighted the importance of skill, training and resources when embedding a new program into practice. Knowing organisational support was readily available and a coordinated and collaborative approach to care were viewed as positive elements of the program. Working with women of refugee background often requires multidisciplinary and collaborative models of care to include midwifery and medical staff, social work and counselling, bi-cultural workers and specialty refugee health and wellbeing services to improve service co-ordination and provide a holistic model of care that incorporates emotional health and wellbeing.[5] The perspective of HPs indicates the development of the co-designed program has provided improvements in mental health referral pathways options for HPs and management and treatment for women.

Our findings from the NoMAD survey indicate health professional felt there was not sufficient skill, training and resources to implement and support the program. These issues were also raised in the focus groups and interviews. In regard to skill and training, our findings are consistent with research into midwives' professional development needs to conduct PMH screening. Midwives as core HPs at the forefront of PMH screening need the skill and knowledge to provide care that includes a comprehensive assessment of mental health in pregnancy. Yet, many do not feel well equipped to support women and require further information on mental health.[36] They may be less prepared to conduct PMH screening than a general practitioner (GP) or maternal and child health nurses (MCHNs) (a nurse and midwife with further qualifications in maternal, child and family health from birth to six years), and less likely to detect, assess, manage and refer a woman with a mental health problem.[12] They also self-report lower rates of skill and comfort in using the EPDS than GPs and MCHNs.[37] However, midwives acknowledge PMH screening is a component of their role and require skill, knowledge and attitudes consistent with evidence-based mental health practice.[38] In addition to PMH training, when working with women of refugee background, HPs are encouraged to have training, skill and knowledge on culturally competent practice, the refugee experience and trauma-informed approaches to care.[2]

Finally, the findings from *reflexive monitoring* provide insight into the value HPs placed on the program. Feedback from other team members was important in facilitating refinements and modifications to improve the program. HPs reflected on how the PMH program enabled women to disclose their concerns in pregnancy as HPs felt they were engaging women in conversation that allowed such dialogue. Furthermore, these conversations provided opportunities to discuss other important aspects of mental health care such as community-based resources. Evaluation and refinements to the program are dependent on active leadership, motivated and competent staff, which can be challenging in public health systems.[39] HPs involved in the implementation of the PMH screening program showed their enthusiasm by recognising how it had improved the provision of mental health care for women of refugee background and were requesting the program be expanded to another clinic on another day. The challenge is to maintain the enthusiasm for the program in an environment with regular staff turnover and managerial changes.

To date, there are few studies on the feasibility and acceptability of perinatal mental health screening from the perspectives of health professionals, and to the best of our knowledge, this study is the first with a focus on screening women of refugee background. In addition and to our knowledge, this has been the only study to use the NPT toolkit plus NoMAD survey to evaluate feasibility and acceptability of a complex health care intervention.[24] Consistent with the work of Tabb et al., our findings suggest health professionals require training to better conduct screening. Furthermore, health professionals raise concerns regarding the literacy and language barriers women face when screening is undertaken, the need for referral and follow up, stigma of depression, location and privacy of screening.[40] Further work is required to reduce misinterpretation of questions by women and to introduce an audio format to facilitate independent completion. Training, skill development and organisational support to include embedding the technology into the system, and a review of clinic allocations to include more time for screening may improve the sustainability of the program.

## 5. Limitations and strengths of the study

The study was located in one service with a small sample of health professional who had previous experience with working with women of refugee background. Additionally, medical staff did not participate in the evaluation, as they were not directly involved in the implementation of the screening program. However, as an integral HP in providing maternity care for women, their inclusion would be ideal in further research.

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This research however, is enriched by a mixed methods approach and the application of a theoretical framework for data collection and analysis. Within that, the application of thematic analysis has enabled specific issues key to the screening program to emerge. Furthermore, a diverse group of HPs have been involved in the evaluation to include 60% of all midwives; all bi-cultural workers; all managers and clerical staff and relevant RH&WS provider involved in the screening program.

## 6. Conclusion

Women of refugee background are a vulnerable population group and have a higher risk of perinatal mental health issues due to the refugee experience and resettlement stressors. Implementing a co-designed PMH screening program with refugee appropriate referral pathways in a dedicated refugee antenatal clinic has been positively received by health professionals. Using the NPT has been a novel approach in evaluating the PMH screening program. We have found there is consensus that health professionals value the new practice and are able to distinguish it from previous practice. There is buy-in and continued support for the PMH screening program, trust in each other's work, and organisational support. In addition, both individually and as a collective, HPs assess the program as worthwhile, acknowledging improvements in providing more holistic maternity care, more open discussion with women about emotional and psycho-social health and earlier identification and referral of women with mental health issues. The use of an evidence-based measure with the latest technology supports the implementation of this program.

Sustainability of the program is vital and key factors to achieve this include improved language and communication resources such as translated audio versions of the screening measures, organisational support for ongoing professional development opportunities, multidisciplinary health teams and clear referral and management pathways. Implementing PMH screening within routine pregnancy care for women of refugee background is acceptable and feasible to health professionals. Given the many vulnerabilities of this population group, it is argued that a PMH screening program for all women in all settings is also feasible and acceptable. Maternity health services are urged to act upon this very significant public health issue and consider these findings when implementing perinatal mental health screening programs in pregnancy.

## Ethical statement

This project had ethical approval from Monash University and Monash Health Human Research and Ethics Committees (14475L) on 03/03/2015.

## Conflict of interest

The authors declare that the article is their original work and it has not been published elsewhere and is not under consideration for publication elsewhere. The authors report no conflict of interest and abide by the copyright terms and conditions of Elsevier and the Australian College of Midwives.

## Author contributions

SW, MGH, JAB contributed to the study concept and design. SW was responsible for data collection and manuscript drafting. SW and NNK were responsible for data analysis and interpretation. TF contributed to the study methodology. All authors read and approved the final manuscript.

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# Chapter 5: The impact of perinatal mental health screening on women of refugee background

## 5.1 Introduction

The literature review conducted in chapter 2 identified women of refugee, asylum seeking and migrant backgrounds experience perinatal mental health issues when separated from culture and community. However, many of these women struggle to access appropriate support and management due to a number of factors such difference in the way mental health is expressed, viewed or managed in their culture, a limited ability to discuss concerns with health professionals, stigma and preferences for alternative and non-medical therapies.

In this chapter, the impact of the perinatal mental health screening program on participating women has been assessed. This evaluation aimed to ascertain the acceptability and feasibility of the program and what differences the program has made to the maternity care women received (65). These results are presented in manuscript 4 and address the research question: Is perinatal mental health screening in pregnancy using an electronic platform, acceptable and feasible to women of refugee background? A plain English language statement for women summarises this study and is found in Appendix 5.

To further assess the impact of the screening program, a quantitative evaluation (manuscript 5) in the form of an extensive health records audit was conducted to establish the proportion of anxiety and depression symptoms in participating women (refugee and non-refugee) and women of refugee background who did not receive screening. The audit

also aimed to assess if the perinatal mental health screening program resulted in more referrals for support and management compared to routine care.

This paper addresses the primary research questions:

1. Are women of refugee background more likely to screen risk positive for depression and anxiety on the EPDS than women of non-refugee background?
2. Does screening in pregnancy using the EPDS enable better detection of symptoms of depression and anxiety in women of refugee background compared to current routine care?

and the secondary research question:

3. Has the perinatal mental health screening program resulted in more referrals for support and management for women of refugee background compared to routine care?

Manuscript 4: Willey S, Blackmore R, Gibson-Helm M, Ali R, Boyd L, McBride J, Boyle JA. (2019). “If you don’t ask … you don’t tell”: Refugee women’s perspectives on perinatal mental health screening: Returned for secondary review to Women & Birth.

Manuscript 5: Willey S, Gibson-Helm M, Blackmore R, Goonetilleke L, McBride J, Highet N, Ball N, Gray K, Melvin G, Boyd L, East C, Boyle, JA. (2019). The impact of a perinatal mental health screening program for women of refugee and migrant background: a post-implementation evaluation: Submitted to PLoS Medicine: Special Issue Refugee and Migrant Health

## Manuscript 4: "If you don't ask … you don't tell": Refugee women's perspectives on perinatal mental health screening

**Authors: Willey, S., Blackmore, R., Gibson-Helm, M., Ali, R., Boyd, L., McBride, J. & A Boyle, J.A.**

**Abstract:**

**Problem**: National guidelines recommending mental health screening in pregnancy have not been implemented well in routine maternity care. Women of refugee background are likely to have experienced traumatic events and resettlement stressors, yet are not often identified with mental health issues in the perinatal period.

**Background**: Globally, perinatal mental health conditions affect up to 20% of women. Many difficulties in accessing mental health care in pregnancy exist for women of refugee background including stigma, and cultural and language barriers. Technology can provide an efficient and effective method to overcome some of these barriers.

**Aim**: To determine if a digital perinatal mental health screening program is feasible and acceptable for women of refugee background.

**Methods**: This qualitative evaluation study used focus group and semi-structured telephone interviews with refugee and migrant women from four communities. Interpreters were used with women who spoke little or no English. Data were analysed using both an inductive and deductive approach to thematic analysis.

**Findings**: Under the three key themes: 'Women's experiences of perinatal mental health screening in pregnancy'; 'Barriers and enablers to accessing ongoing mental health care' and 'Improvements to the program: the development of audio versions', women found the program feasible and acceptable.

**Discussion:** Screening using a mobile device offered women more privacy and opened up discussions with midwives on emotional health. Improvements in service coordination and access to further mental health management for women is required.

**Conclusion:** Perinatal mental health screening is an acceptable and feasible option for women of refugee background. Integrated models of care, case management, and patient navigators are options for improvements in uptake of referral and treatment services.

**Keywords:** Women, Refugee and asylum seeker, Perinatal mental health, Screening, Evaluation

**Statement of Significance**

**Problem or Issue**

In Australia, there has been limited implementation in routine maternity services of screening for mental health in pregnancy, as recommended by national guidelines. Women of refugee background are likely to have experienced traumatic events and resettlement stressors, yet are not well identified with mental health issues in the perinatal period.

**What is Already Known**

Perinatal depression and anxiety affects up to 20% of women in pregnancy and during the first twelve months post birth with debilitating effects on women, children, and families.

**What this Paper Adds**

From the perspective of women of refugee background, screening for mental health in pregnancy using a digital platform is acceptable and feasible.

## 1. Introduction

Globally, perinatal depression and anxiety affects up to 20% of all women[1,2] and women of refugee background are at increased risk due to experiences through both the asylum seeking and resettlement processes. Up to 50% of postnatal depression begins in pregnancy and early identification and management of mental health conditions is vital to improve maternal and neonatal outcomes[3]. The effects of perinatal mental health conditions have been associated with reduced attendance or lack of antenatal care, childbirth complications[4], and poor birth and neonatal outcomes[5]. Additionally, perinatal mental health conditions directly impact the child's behavioural, cognitive, social and emotional development[6] and disrupt maternal-infant attachment and family functioning[5]. Suicide is one of the leading causes of maternal death in the perinatal period[7].

For women, the consequences of migration can have long-term mental health and psychosocial effects[6,8], particularly those who have experienced any psychosocial adversities and low social support[2,9]. Women of refugee background experience significant additional stress as they are forced to leave their homes as a means of survival, are unable to return and resettlement is their only option[10]. Many people will live in uncertain situations for protracted periods of time, with limited access to health services[11]. They are exposed to war, persecution and social upheaval, and women are more vulnerable to sexual and gender-based violence[8,11]. As a result, women of refugee background are at an increased risk of perinatal depression and anxiety, which can be further exacerbated by resettlement stressors such as separation from family, cultural differences, language barriers, and navigating a complex health system[8,11,12]. For many, lack of knowledge of depression, anxiety and treatment options, or normalising feelings rather than recognise depressive symptoms results in women not seeking help for mental health issues[13]. They can also be ashamed to disclose mental health issues due to perceived community stigma[14].

When expressing mental health issues, women of refugee background are unlikely to use the term depression and instead use language that describes symptoms such as crying, worry, difficulty focussing, self-blame[15], bored or tired[16]. The use of metaphors and culturally-specific terms are common, for instance, women may describe a feeling that something bad is about to happen[17]. The impact from previous traumatic events may be described by women in the context of concerns for the baby or not sleeping, eating or taking medication[15].

Perinatal mental health conditions are under-diagnosed when relying on routine pregnancy care without the use of screening measures[3]. Screening for mental health conditions using validated measures in pregnancy improves diagnosis, and timely access to treatment, as well as reduces the prevalence of depression post-partum[2,5,18,19], and the sequelae of the many debilitating effects of perinatal depression and anxiety[20]. Furthermore, screening in pregnancy aligns with best practice, which recommends repeated assessment for depression, anxiety, and psychosocial risk in the perinatal period[18]. Women in the general population report mental health screening in pregnancy to be a feasible and acceptable option, reporting positive attitudes and indicating screening as a viable option for enquiring about mental health[3,4,21]; however, there is a paucity of literature around acceptability for women of refugee background. Formal screening for mental health can be difficult to incorporate into routine maternity care due to health professionals' lack of skill and knowledge[21], familiarity with, and comfort in using screening measures[14], the complexities in changing clinical protocol, cultural and language differences[22], minimal options for referral[23], and the need for longer appointment times[15,18].

Using a mobile digital device is an efficient and effective method for overcoming some of the barriers to mental health screening[3,24], with multiple benefits for both women and clinicians. Screening can be conducted in a waiting room, and provides the opportunity to complete a validated questionnaire before a health consultation, thereby improving the efficiency of the consultation and

the quality of care provided[25]. Moreover, it allows for focussed discussion of women's concerns because self-report can improve accuracy of response and confidentiality, and the use of validated measures ensures important questions are addressed[25]. Furthermore, access to results is rapid and convenient to health providers[26]. The ease, comfort of use, and increased privacy of digital screening are preferable to women when compared to paper-based screening[3]. In addition, people of refugee background find the use of translated digital communication resources reduces the need for an interpreter to be present, thus improves the feeling of privacy when addressing sensitive issues[27].

Given nearly one-third (31%) of refugee and conflict-affected populations globally report experiencing depression[28], a lack of mental health screening in pregnancy creates a significant lost opportunity for diagnosis and management. In response to this, a perinatal mental health screening program for women of refugee background was implemented in August 2016 in one of Australia's largest maternity services. The primary aims of this research was to evaluate if the screening program enabled better detection of symptoms of depression and anxiety compared to routine care and whether the program was acceptable to women and feasible to incorporate in routine maternity care. This paper reports the evaluation of the perinatal mental health screening program from the perspective of women, aiming to determine if the program is acceptable to them. The secondary aim was to determine if the use of an electronic platform was acceptable for women of refugee and migrant background.

## 2. Methods

### *2.1 The perinatal mental health screening program study*

The study was conducted at a weekly antenatal clinic in the south-eastern suburbs of Melbourne, Australia. This clinic focuses on providing maternity care to women of refugee and migrant background. Each week on average, thirteen new women attend their first booking appointment with a midwife. Approximately half of all the new women are from a refugee background or refugee-

like, i.e. arrived in Australia on a spousal visa from a refugee-source country such as Afghanistan. Many other women attending this clinic are recent migrants to Australia. A community-based refugee health and wellbeing service [RH&WS], refugee health nurse liaison [RHNL] and bi-cultural workers provide additional support to the clinic.

At the first antenatal visit with a midwife, women were provided with an iPad and asked to complete the Edinburgh Postnatal Depression Scale [EPDS] and the service developed psycho-social assessment on the digital platform iCOPE developed by the Centre of Perinatal Excellence [COPE][24]. The EPDS and psycho-social assessment were available in English as well as translated versions of the most common refugee and migrant languages of the clinic: Arabic, Burmese, Dari, Dinka, Farsi, Hazaragi, Khmer, Pashto, Tamil, and Vietnamese. However, due to complexities with the Burmese script, this translation was not compatible for use with the iPads. A female interpreter was available for women who required their assistance. In most instances, interpreters were employed by the health service and experienced in working in the clinic, hence familiar with the operations of the antenatal clinic and staff.

Upon completion of screening, the overall EPDS score, response to question ten (related to self-harm) and anxiety sub-score (based on responses to question three, four, and five) were calculated. Score-based, language appropriate information for women was immediately generated post-screening and contained links to further information in response to answers provided. This report was sent to women via email. A further feature of the program was the clinical management guides immediately available for midwives post-screening. Midwives accessed a clinical report via the secure iCOPE website during the antenatal visit, were then able to discuss results with the woman, and initiated referral based on co-designed referral pathways developed for the study.
In culturally linguistic and diverse women [CALD], a lower EPDS cut off score $\geq$9 is recommended to balance psychometric performance with differences in cultural practices, beliefs, and degree of

stigma[18]. High scores on EPDS items 3, 4 and 5 have been found to be sensitive to symptoms of anxiety[29]. A score of ≥4 for the anxiety subscale is considered to indicate high risk of anxiety symptoms and requires further assessment[29]. The final item (question 10) on the EPDS assesses the prevalence of suicidal ideation and risk of self-harm.

*2.2 Evaluating the screening program from the perspective of participating women*

This qualitative evaluation study was underpinned by the theoretical assumptions of phenomenology as a means to understand and explore the lived experience of the women[30]. Phenomenology enables in-depth exploration of an individuals' personal account of an event rather than attempting to produce an objective statement of the event[31]. The reporting of this study is guided by the Standards for Reporting Qualitative Research (SRQR).

The researchers acknowledge the importance of trustworthiness as a means to ensure quality and rigour in the qualitative research process[32]. All interviews and the focus group were facilitated by SW who has a clinical background as a midwife, maternal and child health nurse, and refugee health nurse in the health service. SW took notes after each interview as a means of reflection; SW and RB recorded all discussion during thematic analysis and reported results to the members of the project steering committee and community advisory committee. A plain English language statement detailing results will be sent to women and a report available on the Monash Centre for Health Research and Implementation (MCHRI) website.

*2.3 Participants and recruitment*

Overall, 120 women of refugee background and 155 women of non-refugee background participated in the broader study which included consenting to follow up contact in late pregnancy or postpartum. In order to ensure an appropriate interpreter was available for the planned focus groups the decision was made to focus on the 98 women from the two majority ethnic groups in the refugee group (Burmese and Dari speaking Afghan women) and non-refugee (Indian and Vietnamese women). From this subset, 76 women who had agreed to follow-up were contacted by telephone, with an interpreter if required (n= 40) and asked to participate in a focus group or interview.

Twenty-two women agreed to participate. Most indicated a preference to participate in a telephone interview due to time constraints and a limited ability to travel with a new baby (all but one woman had birthed). Women received a $20 gift voucher to thank them for participating.

*2.4 Data collection*

One focus group with Afghan women (n=5 women) and 17 semi-structured telephone interviews were conducted between April –July 2018. All interviews and the focus group were facilitated by SW. An accredited interpreter was present for all women who required one (n= 15), including at the focus group. Discussions were guided by an interview schedule which asked women about their experience using the screening program, post-screening discussions with midwives, referral options, receipt of a personalised report, and their recommendations to other women in their community (Box 1). The project's community advisory committee reviewed the interview schedule and their feedback was incorporated prior to data collection. Data were collected until thematic saturation was achieved.

*2.5 Data analysis*

A hybrid approach to thematic analysis was utilised[33]. The inductive approach enabled in-depth exploration of the phenomenon and ensured identified themes were strongly aligned to the data[34], whilst the deductive approach enabled analysis of the pre-determined research questions for the evaluation[33]. Semi-structured interviews and focus group audio-recorded narratives were transcribed verbatim by a commercial provider. Two researchers SW and RB independently conducted the initial narrative analysis using NVivo11 qualitative data analysis software[35]. Transcriptions were open coded to attribute nominal codes; data were then organized into patterns with the emergence of categories that identified and highlighted the acceptability of the program and experiences of the women. Throughout this process, the two researchers met on four occasions to refine and review codes to ensure consistency. Categories were developed and agreed upon by the two researchers. The final process of synthesising the data[34] resulted in the identification of the key themes.

*2.6 Ethics*

The project had ethical approval from Monash University and Monash Health Human Research and Ethics Committees (14475L). The ethical issues of voluntary participation, informed consent, confidentiality and withdrawal were all considered at each stage of the study.

**3. Findings**

*3.1 Participant characteristics*

Twenty-two women from a refugee background (n=17) and migrant (n=5) backgrounds participated in the study. Women of refugee background were recruited first; hence, there were a greater number of participants from this cohort. Saturation of themes was achieved after five interviews with the women from a migrant background as the themes identified were similar to those for women of refugee background. Table 1 outlines characteristics of participants.

*3.2 Focus group and interview findings*

The implementation of perinatal mental health screening in pregnancy was well-received by all women and in general, viewed as an important component of their first visit with the midwife. As this was an evaluation of the program, we were particularly interested in identifying aspects of the program women felt worked well and those that did not. As such, we chose to present the themes in three domains: 'Women's acceptance and experiences of perinatal mental health screening in pregnancy'; 'Barriers and enablers to accessing ongoing mental health care' and 'Improvements to the program: the development of audio versions'.

*3.3 Women's experiences of perinatal mental health screening in pregnancy*

The screening program was found to be acceptable to women because it made them feel cared for; encouraged them to talk about their feelings and helped them to understand normal changes that occur in early pregnancy. Women also said they would recommend it to people in their community. The translated measures on the iPad helped women to feel they had more privacy when answering questions, which allowed them to be truthful in their responses.

Overwhelmingly, women reported the screening was acceptable. Women described how they were very happy to be asked about emotional health and wellbeing, often suggesting this was the first time someone had asked these questions. Women were comfortable talking about sensitive issues with midwives, they felt cared for and supported, and indicated the screening was helpful. Many suggested screening helped them to open up and release feelings, and express feelings that otherwise would not have been discussed with health professionals.

*"if you don't ask it, you don't tell, … you don't open it up ... You … keep it inside and, build it up, like a solid something inside your body. And when you open it up maybe you might need help with something, …, when you have the chance to express people know what your needs are and then they might be able to help you and guide you and advice you. And I think it's really good."* [*Aung*]

*'… if someone sees your anxiety score they will try to ask some open-ended questions, like how I'm feeling. Then …, I expressed my feeling' [Janeesa]*

Midwives helped to clarify answers to questions and provided reassurance, which in turn, normalised feelings in pregnancy.

*'… I had the opportunity to talk to the midwives about my feeling you know from those questions and express it and tell the midwives, … [they] explained that those changing in your body when you are pregnant … before answering the questions I didn't know I'd changed, but after those questions that make me think. I thought yeah, and I understand it's the changes in the body from the pregnancy.' [Anh]*

Women indicated they would recommend the screening to other women in their community, suggesting screening provided the opportunity to share or express feelings or problems and if needed, links to support services would be offered.

*"I would definitely recommend …, because I had a really good experience from the screening*

*program … it's really good. I would definitely say the screening program is very good …" [Farzana]*

*"[To] women from my community, … I might say … you've been asked some question, just answer it. At least like you know, you can express your feeling …, and if you need help you might be able to get some support and help … Yeah, I would recommend them that they should do it." [Khine].*

Women valued completing the screening in their own language, suggesting it facilitated privacy and more truthful answers to sensitive questions. Screening in their own language was more convenient and women felt they could easily understand questions. Some women indicated that while they had a conversational understanding of English, having the screening in their own language allowed them to understand certain words that may have been difficult in English.

*"Being translated in Dari was … better. We were doing it ourselves quietly … we quickly could understand or easily understand the question."* [*Meena*]

Due to challenges in uploading the Burmese script onto the iPad, Burmese women were reliant on family or interpreters or their English language skills to complete the screening. This created a barrier to truthful answers.

*"It would be better because, … myself I can read Burmese, … if the questions were Burmese … - you had more privacy. You just read it by yourself and … you just tick, tick, tick, you can get a true answer … if you embarrassed or, they didn't want someone to know about it." [Hlaing]*

A preference for completing the screening by themselves was suggested by many women as this improved privacy and facilitated more truthful answers.

*"… going through with interpreter maybe some of the questions might be quite sensitive for them or challenging for them. Or, they might not be, comfortable with answering, to other or through others, … with their own script or own language I think that's better" [Aung].*

Questions about taboo subjects such as sexual abuse embarrassed women and when asked through an interpreter, women may not answer truthfully. Many favoured being asked sensitive questions in their primary or preferred language and the ability to complete screening on their own.

*"In the iPad the particular question that asking about in the past, you know, you've been sexually abused or something like that … when you ask that question I feel really embarrassed … and taboo … and I … answer no … I think other women might be the same." [Hlaing].*

*"And also other women, they feel embarrassed, answering back to someone, putting back in an iPad the answer, … they don't feel comfortable ... they might say because they feel embarrassed, they can't express their true feelings." [Aung]*

Most women felt rescreening later in pregnancy was repetitious and not necessary. Some women suggested screening in early pregnancy was good as they were often feeling physically unwell or were concerned about the pregnancy, but later in pregnancy the physical symptoms reduced and they were feeling more reassured about their pregnancy progress.

*"the first time when I was three month pregnant, … I wasn't feeling good, and I wasn't okay, that's why I really needed someone around myself, and to talk to them, to help. But the second time, at nine month, I was okay, and I was feeling okay, and all the question were like, repeating, and repeating." [Jamila]*

Women did indicate that emotional health and wellbeing screening was necessary in the postnatal period though.

*"… because after the baby you have lots of changes in your body and in your life and everything." [Rana]*

*"It's also good after the pregnancy …, because ladies have to look after the baby, some have like, depression …" [Barminder]*

A number of women spoke about needing to clarify the screening questions and found midwives were helpful, others found the interpreter was helpful and for one woman, front of house staff provided this assistance. Many women were unable to provide specific detail about which question or questions they found difficult; however, one woman described that she did not understand the word *'harm'* in question ten, and how the midwife was able to explain its meaning.

Time was a factor for many women, who felt rushed and unable to complete the screening prior to the appointment. A number indicated the midwife was happy for them to finish the screening in the consulting room. Others felt there was enough time and liked the idea of having something to do while waiting for their appointment. Some women described how they felt uncomfortable completing the screening in the waiting room, particularly if an interpreter was needed. These women felt there was a lack of privacy and were concerned women who spoke the same language would be listening to their answers.

> *"Actually, it's better to be in a place that's … face-to-face interview with one person. When they asked me, about how's your relationship with your husband, what are you feeling, then there are around me other Afghans women, and they are… they were looking at me, … what's my answer for this question."* [*Jamila*]

and,

> *"… when you answer the question because, you go through with interpreter … interpreter read the question and they explain it to you, you have to answer it back and … sometime … you might have around you … people who speak same language as you … Like when you answer it back you feel like embarrassed or a bit shy..."* [*Nilar*]

However, some women did suggest the presence of an interpreter as helpful. The interpreter was able to clarify the meaning of questions and provided support for women when speaking with health professionals.

*"… it was in English and, the questions which I was not sure about the meaning I just asked for the interpreter and then I answered that ... They just make me understand."* [*Maryam*]

*3.4 Barriers and enablers to accessing ongoing mental health care*

This evaluation found many women were accepting of a referral for mental health issues if needed; however, for some, barriers such as stigma and language existed. Some reported it was possible to talk about mental health issues with family, for others this was not possible, highlighting the need to check each woman's individual preference. We explored what options women thought would help to overcome barriers for further mental health assessment and management, and found women had individual needs with some preferring the family doctor, some preferring continuity of midwifery care, and others, a counselling service at the antenatal clinic.

Referral for further support was an acceptable outcome to women and were accepting of advice from midwives. Many suggested if a woman required help, she should get help, as further support would guide her through a difficult time.

*"… they [midwives] advise me and I did end up going back to GP … I think it is helpful because, … you know, what's going on and, how you feeling and that you can open it up and you can talk to someone. To me, only me and my children, I have no one near me, with me, … My husband is back in Thailand."* [*Thida*]

Although a referral was acceptable to many women; some women described reasons why they did not follow up a referral. Barriers associated with stigma, language, not wanting to accept help, ignoring problems, reluctance to share problems, and the feeling that a referral cannot solve your problems, were common reasons for not accepting further support.

*'… most of them feel embarrassed when they've been told like, "You have depression or anxiety, and you need to see a psychologist or counsellor." They avoid going because they think … it affect their dignity, …, that other people look down at them, that you are sick, or you have emotional problem, or psychological problem ..., most of women that I know … you can tell that they are depressed, but themselves, they don't accept it.'* [*Jamila*]

Individual nuances highlighted that some women felt they could talk about emotional health and wellbeing in the presence of, or with family, while others were not so able. Some women indicated talking with family, and particularly with their husband, helped to improve access to services. However, others were not so willing and suggested it is always best to check with each woman's preference. Discussing emotional health issues and referral in front of in-laws was generally not acceptable.

> *"…but some problem, … woman has this problem … You can't tell in front of the family member ... They can't … With like a doctor, they can talk … ask everything … information not go to anywhere ... [but] not tell your husband that you have problem" [Barminder].*

Women were asked about which health professional they would prefer to be referred to for further mental health assessment and management. Several women preferred the family doctor. A small number of women indicated they were already linked into The Victorian Foundation for Survivors of Torture [Foundation House] (a specialist torture and trauma services). Some women suggested continuity of midwife would help as they would feel more comfortable talking about emotional health to the same midwife, which in turn may make it easier to accept a referral. Additionally, a number of women discussed their preference for a counselling service within the antenatal clinic, suggesting it would be more convenient and thus they would be more likely to attend.

> *"It could be good to have it in the clinic, a psychologist … because sometimes the psychologist will help people to get rid of … emotional feelings which are some women they have during their pregnancy … it's good to have it there and in the clinic … Because … they can have appointment with the psychologist as well and they can do it - do both of them in the same time." [Rana]*

*3.5 Improvements to the program: the development of audio versions*

In light of next steps for the screening program, and addressing issues of privacy for women with low literacy, women were asked their opinion about using translated audio versions of the measures on the iPad. Overwhelmingly, this idea received full support. Women considered an audio version to be

an excellent idea, seeing it as a means to allow women with literacy difficulties to be independent and self-reliant and to reduce the issues around lack of privacy when interpreters were required to complete the screening. Again, women suggested responses would be more truthful.

*"… it would be good, … people who can't read, with the listening audio tape and starting … question[s] independently … much better ... in own language … audio script. … if the interpreter didn't turn up or anything, while we're waiting … just listen and then we can answer it on our own."* [*Aung*]

*"I think that's a good idea, because like us coming here, not everyone is fluent in English. So if it's provided in their own language it's much better, and audio if they're unable to read is better for them. So again you know English, we not perfect in English, in our language it's much better for everyone in the community." [Anh]*

**4. Discussion**

To our knowledge, this is the first study to implement and evaluate perinatal mental health screening using a digital platform with women of refugee and migrant background living in a high-income country. This qualitative study evaluated women's experiences of this innovative perinatal mental health screening program and our findings show the program is feasible and acceptable to women. Overwhelmingly, women indicated they were very happy to be asked about their emotional health and wellbeing. They found completing the screening facilitated a discussion with midwives that they may not have otherwise had. Women particularly liked the idea of completing screening on their own as it may offer more privacy and elicit more truthful answers. An audio version of the screening measures will be a welcome addition to the program. Some women still experience barriers to accepting mental health support.

Our findings demonstrate women are accepting of the screening program, are happy to discuss their emotional health issues with midwives, and would accept further assistance if needed. '*Opening up'* and '*releasing feelings'* was described by many women. Women felt cared for and liked being offered further support if needed. People of refugee background do not always have the words to describe emotional pain and keeping it inside rather than talking is common[36]. This is particularly so for those who have lived under oppressive regimes where many learn to not express their emotion and have "silent voices"[36]. Previous research suggests women of refugee background experience barriers to discussing mental health care that are associated with stigma, humiliation, and shame[37]. They may also believe talking does not help[36], have concerns with confidentiality and the use of interpreters[37]. In contrast, women in this current study were overwhelmingly positive about mental health screening in pregnancy and welcomed the discussion post-screening. This screening program has provided women the prompt to have discussions about mental health in pregnancy that may not have otherwise happened[3].

The use of a small group of trusted female interpreters who were experienced in working specifically in the antenatal clinic may have contributed to women feeling comfortable participating in the screening program. There was often consistency in interpreters for women across many of their appointments. Effective communication is imperative when working with women of refugee background. Despite the availability of translated measures in this study, interpreters were required to facilitate discussions on mental health between women and midwives. The skill of the interpreter is therefore vital to the interaction between health professional and woman and their role needs to be considered in the context of the woman's culture and the overall consultation. Engaging interpreters who are appropriately trained in mental health facilitates the development of a therapeutic relationship and assists in bridging the gap between two cultures[38]. An interpreter who is able to act as a 'cultural broker' assists in building rapport and trust between health professional

and woman which supports improved access to health care for women of refugee background[38].

Women in our study also valued privacy when completing the measures. Adding audio versions in a number of languages will enhance the program by enabling more privacy and independence when completing screening. Privacy and confidentiality are extremely important in the provision of mental healthcare for women of refugee and migrant background[27,37]. The technology used in this study enabled women to complete screening in their own language and be less reliant on interpreters, family members, and midwives. These factors help to increase the feeling of privacy and eliminate some of the barriers that exist when face-to-face screening occurs, such as feeling of being judged or poor attitudes from health professionals[3] and concerns that interpreters will leak confidential information to the community[37]. Conducting screening that promotes a feeling of privacy and confidentiality for women is likely to elicit more truthful answers and may facilitate improvements in mental health literacy for refugee and migrant women, which is a key national priority[39]. Additionally, it promotes a sense of empowerment for women[40]. In many instance women are unlikely to spontaneously disclose sensitive information and instead prefer to be invited and let clinicians take the lead in such discussions[3,4,21,37]. When an invitation occurs, such as mental health screening before an antenatal appointment, a shift in the balance of power occurs with the responsibility of the ongoing conversation resting with the clinician rather than the woman having to open up the conversation[37]. Clinicians who respond in this way provide women of refugee background a safe environment to disclose sensitive information, which in turn offers women the opportunity to restore their voice at a time they may otherwise feel vulnerable[36].

Women agreed that a referral for ongoing management of mental health conditions was acceptable, however, consistent with previous research a number of barriers were identified, including stigma, ignoring problems, language and cultural barriers, and social isolation[4,23,41]. Preferences for chosen health professional options for referral and management were varied, but underpinned by the

women's need to feel comfortable with opening up and discussing mental health issues. Therefore, strategies within maternity services that provide effective responses and minimise further marginalisation and isolation are paramount when working with women of refugee and migrant backgrounds[42], and can be achieved when culturally responsive practices and services aimed at destigmatising mental health are implemented[36]. Pregnancy is a time of relative frequent contact with health services[22], providing maternity care settings the unique opportunity to address the barriers inherent in women accessing perinatal mental health screening, management and treatment, using strategies that maximise referral and treatment options[23]. Various models of care provide strategies in developing maternity care to meet the needs of women and improve their engagement with perinatal mental health interventions[23]. For instance, integrated models of maternity care to include health professional education, mental health services, and other support services such as social work and community supports[43], improve collaboration between health professionals and bridge the gap often found between identification, referral and treatment[22]. In addition, integrated models of care improve women's access to care for mental health issues without raising community suspicion[41]. Alternatively, case management models delivered by nurses or other health professionals address the biopsychosocial aspects of care and have been shown to improve communication and coordinated care between health professionals, increase people of refugee backgrounds' access to preventative health services and provide easier transition from hospital to primary health care[12]. Likewise, patient navigators have also been shown to provide support and improve access to healthcare[44]. Patient navigators are trusted community members with the role of providing culturally specific support in both the hospital environment and community setting which aims to improve health disparities and overcome barriers when women access health care[44]. Similar in their role to the bi-cultural workers at the refugee antenatal clinic, patient navigators are trained healthcare workers who do not provide direct health care, but rather, facilitate linkage between people who are socially disadvantaged and the health care system[44].

**5. Strengths and Limitations of the study**

The study was located in one service with a small sample of women. Women who had a positive experience with the program or their maternity care may have been more likely to be participate in the evaluation. However, the women participating represented the majority of women who participated in the screening program by country of birth and have similar EPDS and sub-anxiety scores to women participating in the broader study. The authors acknowledge there are a number of strengths and limitations to conducting focus groups and semi-structured interviews. Focus group discussion enables the researcher to collect data from a number of people at one point in time rather than just one person[45] and provides a forum where exploration of the topic and lively discussion can take place which helps the researcher to make sense of nuances and cultural difference[45,46]. However, quieter members of the group may be reluctant to express their opinions and in the context of the focus group for this study, when discussing a sensitive topic, having trust the group would maintain privacy and confidentiality was imperative[45]. We found at the focus group for this study, most women knew each other or were willing to be supportive of each other. However, most women preferred a telephone interview due to concerns with privacy, a lack of confidence in attending a larger group and discussing personal problems with strangers[47]. Some had difficulties in attending a focus group due to needing to care for a newborn. Telephone interviews however may have reduced the level of rapport between researcher and participant that can be achieved in a face-to-face interview. Furthermore, telephone interviews do not enable some of the lively and supported discussion found at the focus group, thus reducing the researchers' ability to identify the subtleties of cultural nuances and differences. These barriers were minimized by the use of trusted female interpreters in both the focus group and telephone interviews, the researcher's previous experience as a midwife and working with people of refugee background and many women recalled previous contact with the researcher at the time of recruitment in the clinic.

It can be argued that the use of an interpreter can influence discussion, as one cannot always be certain the information translated and interpreted is accurate. However, without an interpreter

present the voice of women who do not speak English would otherwise have not been heard. We therefore consider the use of an interpreter imperative to this research and a strength of its design[43].

**6. Conclusion**

Perinatal mental health screening is an acceptable and feasible option for women of refugee and migrant background. The implementation of screening via a digital platform provides privacy and contributes to more truthful responses from women, when using this function on their own. The inclusion of an audio version in the near future will enhance the program and facilitate greater opportunities for improved mental health literacy and empowerment for some of the most socially disadvantaged women in our community. Models of maternity care that provide for the complex needs of socially disadvantaged women could improve uptake of referral and treatment services as could more personalised assistance through case management or patient navigators. By improving the identification and management of perinatal mental health in the community, better health outcomes for women, children and their families can be achieved.

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**Box 1**

Interview questions

1. Could you please describe your experience of using the iPad for doing emotional and social health screening?
2. What do you think worked well when using the iPad for the screening program?
3. What did not work well in the screening program?
4. How would you describe the emotional and social health and wellbeing screening program to your family/friend/other people in your community?
5. Could you please explain your experience of how the midwife discussed the results of your screening when you were at your first antenatal/pregnancy visit?
6. Did the midwife refer you to another service after the screening?
7. We would like to know a few details about the SMS or email report you received after screening? Would you mind indicating if you received either an SMS or email after doing the screening?
8. Do you have any other comments to make about the screening program we haven't talked about?

**Table 1: Participant characteristics**

| Participants | | Country of Birth | Overall EPDS score | Sub-anxiety score | Year of arrival in Australia | Parity | Interpreter present |
|---|---|---|---|---|---|---|---|
| Interview | 1 | Afghanistan | 9 | 4 | ≥2012 | Primigravida | N |
| | 2 | Afghanistan | 11 | 5 | ≥2012 | Multigravida | Y |
| | 3 | Afghanistan | 3 | 2 | ≥2012 | Multigravida | N |
| | 4 | Afghanistan | 2 | 2 | ≥2012 | Primigravida | N |
| | 5 | Burma | 10 | 6 | ≥2012 | Multigravida | Y |
| | 6 | Burma | 15 | 2 | ≥2012 | Multigravida | Y |
| | 7 | Afghanistan | 5 | 2 | ≥2012 | Multigravida | N |
| | 8 | Burma | 0 | 0 | ≤2011 | Multigravida | Y |
| | 9 | Burma | 11 | 5 | ≤2011 | Primigravida | Y |
| | 10 | Burma | 9 | 4 | ≥2012 | Multigravida | Y |
| | 11 | Burma | 14 | 5 | ≤2011 | Multigravida | Y |
| | 12 | Burma | 2 | 2 | ≥2012 | Primigravida | Y |
| | 13 | India | 10 | 5 | ≥2012 | Primigravida | N |
| | 14 | Vietnam | 7 | 5 | ≥2012 | Multigravida | Y |
| | 15 | Vietnam | 7 | 5 | ≤2011 | Multigravida | Y |
| | 16 | India | 9 | 4 | ≤2011 | Primigravida | N |
| | 17 | India | 3 | 3 | ≥2012 | Primigravida | N |
| Focus Group | 1 | Afghanistan | 3 | 0 | ≥2012 | Primigravida | Y |
| | 2 | Afghanistan | 1 | 0 | ≤2011 | Multigravida | Y |
| | 3 | Afghanistan | 8 | 1 | ≤2011 | Multigravida | Y |
| | 4 | Afghanistan | 20 | 9 | ≥2012 | Primigravida | Y |
| | 5 | Afghanistan | 0 | 0 | ≥2012 | Primigravida | Y |

## Manuscript 5: The impact of a perinatal mental health screening program for women of refugee and migrant background: a post-implementation evaluation

**Abstract**

**Background:** Perinatal mental health disorders affect up to 20% of all women. Women of refugee background are at increased risk due to previous exposure to conflict and trauma and resettlement stressors. We aimed to determine if a screening program for mental health in pregnancy identified a) more women of refugee background as risk positive for depression and anxiety than women of non-refugee background, and b) women of refugee background who received routine care with no screening.

**Methods:** This prospective cohort study was conducted at an antenatal clinic in the Melbourne, Australia. We implemented a perinatal mental health screening program in early pregnancy using a digital platform (iCOPE), comprising of translated versions of the Edinburgh Postnatal Depression Scale, and a psychosocial assessment. Women attending routine care completed the psychosocial assessment only.

**Results:** A total of 274 women participated in the program; 119 (43%) were women of refugee background. The proportion of women of refugee background experiencing symptoms of depression (47/119; 39%) or anxiety (58/119; 49%) was similar to women of non-refugee background. A comparison group was randomly selected from women of refugee background receiving routine care with no screening (n=34). Only one woman receiving routine care disclosed a previous mental health diagnosis (3%).

**Conclusion:** Perinatal mental health screening appears to facilitate the identification of women of refugee background who are at risk of depressive and anxiety disorders in early pregnancy. Many women reported depression and anxiety symptoms in early pregnancy, suggesting the screening program addresses a major gap in maternity care.

**Keywords:** refugee and migrant; women; perinatal mental health; screening; evaluation

## 1. Introduction

Affecting up to 20% of all women, depression and anxiety disorders in pregnancy and the first 12 months after birth [1, 2], directly impacts maternal, infant, and family wellbeing [3, 4]. Women of refugee background are likely to be at increased risk of perinatal depression and anxiety, due to previous exposure to conflict, trauma and resettlement stressors such as cultural barriers, and poverty. Often, the normal support structures of extended family post-resettlement are not present, resulting in many feeling isolated and sad in the perinatal period [5-7]. Many experience barriers to mental health care as a result of stigma, and difficulties navigating complex health system [8], a reluctance to discuss mental health issues with health professionals [6], or conversely, health professionals' hesitancy to initiate discussion regarding mental health issues [9]. Postnatal depression rates for women of refugee background are estimated to be up to 40% [10] but depression rates in pregnancy are unknown [10, 11].

Early pregnancy is an opportune time to screen women for depression and anxiety disorders [12]. Screening in early pregnancy using a validated measure is recommended in the US [13], the UK [14] and Canada [15]. Australia is acknowledged as a world leader in perinatal mental health screening (personal communication, Nicole Highet, December 2019) and has national evidence-based guidelines which recommend routine, universal assessment for depression, anxiety, and psychosocial risk in the perinatal period [16]. Current practice in Australia is to screen in the 12 months post-birth; this is routinely conducted in the primary health care setting [17-19]. However, similar to the US [20] and Canada [15] screening across all states and territories in Australia during pregnancy is not well implemented. Screening is predominantly by pen and paper only, thus making it difficult to determine the reach or outcomes of screening. For example, in New South Wales, all women are offered screening in the antenatal period; however, screening is by pen and paper or on a desktop computer with the midwife present. There are no reporting mechanisms built in and no availability of digital screening in other languages (personal communication, Nicole Highet,

December 2019). These discrepancies in screening create a significant gap in the early diagnosis and management of perinatal depression and anxiety in Australia.

To address this evidence-practice gap, we designed and implemented a perinatal mental health screening program whereby women were screened at the first antenatal visit using a digital version of the Edinburgh Postnatal Depression Scale [EPDS] and the psychosocial assessment previously developed by the service. We aimed to compare the proportion of women of refugee backgrounds with depression and anxiety symptoms with: i) women of non-refugee background who also received screening, and ii) women of refugee background attending other antenatal clinics who received routine care with no screening. A secondary aim was to assess if the perinatal mental health screening program resulted in more referrals for support and management compared to routine care.

## 2. Methods

### Study design and setting

This prospective cohort study was conducted between August 2016 to November 2017 at an antenatal clinic within one of Australia's largest maternity services, located in the south-eastern suburbs of Melbourne. Although this hospital-based clinic is dedicated to providing maternity care to women of refugee background, other women attend the clinic. The protocol for the evaluation has been described in detail previously [21]; the following is a summary of the study.

At the first antenatal visit with a midwife all women were offered mental health screening using the EPDS and the health service's psychosocial assessment. Both measures were completed using the iCOPE digital platform, developed by the Centre of Perinatal Excellence [COPE]. The iCOPE system generated an immediate screening score (reducing administrative error) and a report with recommendations for both the midwife and woman. Women were offered repeat screening in the

third trimester. The EPDS and psychosocial assessment were available in English as well as translated into the common refugee and migrant languages of the clinic: Arabic, Burmese, Dari, Dinka, Farsi, Hazaragi, Pashto, Tamil, and Vietnamese. A professional female interpreter was available for women who required their assistance. Referral pathways were developed in collaboration with stakeholders, and implemented for all women who screened risk positive. Women of refugee background who screened risk positive were referred to a Refugee Health Nurse Liaison [RHNL] based at the hospital where the antenatal clinic is situated. The RHNL conducted further mental health assessment and referral to counselling services at the health service's community-based refugee health and wellbeing service. Women of non-refugee background were referred to their family doctor (GP) with a copy of their report. Any women at immediate risk were referred directly to acute mental health services. All women who took part in the screening program were asked to provide consent to follow up contact and access to hospital, refugee health and wellbeing services, and GP health records.

Women of refugee background also attend other maternity clinics at the health service and received routine care that comprised paper-based, English language, psychosocial assessment only (no EPDS), and standard referral systems. Hospital maternity records for women of refugee background who attended one of these clinics during the period of the screening program were randomly selected using the last two digits of the hospital identification number [22]. Women of refugee background were identified by documentation of refugee status in the history. In the instance where refugee status was not recorded, the proxy measures of birth in a humanitarian source country [23] and primary language were used [24].

The reporting of this study is guided by the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) checklist.

**Variables**

**Proportions of depression and anxiety symptoms**

Our primary outcomes were the proportion of depression and anxiety symptoms in women of refugee background attending the refugee antenatal clinic compared to:

i) women of non-refugee background attending the refugee antenatal clinic who also received screening.

ii) women of refugee background attending another antenatal clinic at the health service who received routine care with no screening.

For women attending the refugee antenatal clinic, information on depression and anxiety symptoms was obtained from the woman's EPDS screening, which was accessible via the secure iCOPE website. For women attending another antenatal clinic, information on mental health was obtained from their maternity record (Birthing Outcomes System) and Scanned Medical Records, including the psychosocial assessment.

**Referrals for support and management**

To address our secondary aim, information on referrals for treatment of depression and anxiety symptoms was obtained from the woman's maternity record.

**Data sources and measures**

The EPDS is a 10-item, Likert-style self-report measure validated for use in pregnancy [16]. When administered in English, the EPDS performs with moderate sensitivity 0.83 (0.76-0.88) and high specificity 0.90 (0.88-0.92) [16]. An EPDS cut-off score ≥13 requires further assessment [16]. However, based on previous validation studies and to balance psychometric performance with differences in cultural practices, beliefs, and degree of stigma in culturally linguistic and diverse women, we used a lower EPDS cut-off score $\geq$9 [16, 25]. EPDS items 3, 4, and 5 have been found to be sensitive to symptoms of anxiety, with a score of ≥4 indicative of a high-risk of anxiety symptoms

and requiring further assessment [26, 27]. The final item (question 10) on the EPDS assesses suicidal ideation and risk of self-harm.

Health record audit tools were developed specifically for the project and in collaboration with stakeholders. The hospital databases Birthing Outcomes System, Scanned Medical Record, and Hospital Management System were accessed and relevant demographic, pregnancy history, mental health assessment and referral documentation from each participating woman's history and those in routine care retrieved. All data were entered into a REDCap [28] database developed for the project. Entered data were checked against the audit tools until 10% (31 histories) did not require corrections.

**Study size**

Based on rates of 20% of non-refugee women in the general population experiencing perinatal mental health disorders [1, 2], and consistent with previous research, we estimated that 40% of women of refugee background would have an overall EPDS cut-off score ≥9 [10, 29]. To detect a minimum hypothesised difference of 20% between the proportion of depression and anxiety symptoms in women of non-refugee background (20%) and women of refugee background (40%), 119 participants per group were needed at an alpha level of 0.05 and 90% power. Current health service data indicates that less than <5% of women attending routine maternity care are recorded as having a mental health disorder. The number of women required to detect a difference of 20% between the two groups, with 80% power, is 34 per group.

**Statistical methods**

Data were analysed using Stata Statistical Software: Release 14 software [30]. Categorical data are presented as count and proportions; groups were compared using Pearson $\chi 2$ tests or Fisher exact tests. Continuous data are presented as mean ± standard deviation or median and interquartile

range. First and third trimester EPDS results were compared using Wilcoxon Signed Rank Tests. A two-sided *p* value of ≤0.05 was considered statistically significant.

This study was not designed to assess which psychosocial factors contribute to depression and anxiety symptoms, and the health service does not use a validated psychosocial measure to determine the factors that may contribute. Therefore, only descriptive analyses were performed.

**Ethics**

The project had ethical approval from Monash University and Monash Health Human Research and Ethics Committees (14475L).

## 3. Results

In total, 581 women were screened during the implementation. Of these, 274 (47.1%) women consented to their data being used in this research. One hundred and nineteen (43%) women were of refugee background originating from Afghanistan (50%), Myanmar (Burma) (17%), and Pakistan, Iraq or Iran (12%), with a mean age of 28.34 (*SD*±5.9) years. Women of non-refugee background (n=155), mean age: 31.69 (*SD*±5.0) years) were predominately migrant women originating from India (19%), Cambodia (13%) and Vietnam (11%). Twenty-six women (9%) were born in Australia. Of the women of refugee background receiving routine care, 22/34 (65%) originated from Afghanistan. The mean maternal age was 28.78 (*SD*±5.9). The characteristics of women participating in the screening program and those receiving routine care are summarized in Table 1.

**Depression and anxiety symptoms**

Thirty-nine percent (39%) of women of refugee background scored positive for depression symptoms compared to 40% of women of non-refugee background (Table 2). This was not statistically significant (*p*=0.93). In women of refugee and non-refugee background, nearly half had

anxiety symptoms, with no statistically significant difference between the two groups ($p$=0.78). Thirty-six percent (36%) of women of refugee background scored positive for both depression and anxiety symptoms compared to 32% of women of non-refugee background, which was not statistically significant ($p$=0.50) (Table 2).

As there were a number of Australian-born women in the non-refugee group who would otherwise have been assessed with an EPDS cut-off score ≥13, we compared the two groups at the higher cut-off and found a statistically significant difference in women of refugee background and an EPDS cut-off score ≥13 (21%) compared to women of non-refugee background (12%) ($p$=0.05). Further analysis excluded Australian-born women (n=26) in order to compare women of refugee background with women who had migrated to Australia. There was still a difference between groups in the proportion of women with an EPDS cut-off score ≥13, but this was not statistically significant ($p$=0.07) (Table 2). There was no statistically significant difference between women of refugee background with an EPDS cut-off score ≥9; an anxiety sub-score ≥4, or both and women of non-refugee, migrant background (Table 2).

There was a statistically significant reduction in both the EPDS score ($p$=0.006) and anxiety sub-score ($p$=0.004) for women of refugee background between early pregnancy and the third trimester, however, there was no statistical significance for women of non-refugee background (Table 3).

**Psychosocial assessment and women of refugee background**

Psychosocial assessment responses were compared between women of refugee background who participated in the screening program and those who received routine care with no screening. There was a statistically significant difference between women of refugee background in the screening program who reported concerns regarding their current pregnancy or birth (24%), and women of

refugee background who received routine care with no screening (3%) ($p$=0.005). Only one woman receiving routine care disclosed a previous mental health diagnosis (Table 2).

**Referral made at first antenatal visit**

Women of refugee background in the screening program were more likely to receive a referral based on screening and/or psychosocial assessment (41%) than women of refugee background attending routine care and not receiving screening (18%) ($p$=0.012).

## 4. Discussion

This study found no statistically significant differences in the proportion of women of refugee background reporting depression or anxiety symptoms compared to women of non-refugee background. However, women of refugee background who received screening were more likely to be identified with mental health issues than women who received routine care and no screening. Women of refugee background in the study were also more likely to report current pregnancy or birth concerns than women of refugee background receiving routine care and no screening.

The proportion of women participating in the screening program reporting antenatal depression symptoms (40%) is higher than previous studies with immigrant women, where the range is reported to be 17–37% using EPDS cut-off scores of 10-13 [31-35]. In this study, the proportion of women of refugee background reporting antenatal depression symptoms when using an EPDS cut-off score ≥13 was 21%, and similar to what is expected in the general population [1, 2, 20]. There is a lack of studies reporting anxiety symptoms in women of immigrant background in the perinatal period, however in the general population anxiety symptoms are reported to be between 15 and 23% [27, 36]. The higher proportion of women in our study who reported depression and anxiety symptoms may potentially be explained by the use of a lower EPDS cut-off score (≥9) together with the ease of use of the iCOPE digital platform and translated measures enabling women to complete screening more accurately in their own language. We conducted a qualitative evaluation with women in this

study and found that women value being able to complete screening on their own using iCOPE, rather than an interview, as it provided a greater sense of privacy and opportunity to answer sensitive questions truthfully [37]. They also reported feeling more supported and cared for, which facilitated open discussion with health professionals on mental health concerns [37].

Women receiving routine care and no screening are likely to have completed the psychosocial assessment with a midwife. Only one woman receiving routine care reported having had a previous mental health diagnosis (3%) and only one reported having concerns about her current pregnancy or birth. This finding is suggestive that the environment in which women discuss their mental health concerns needs consideration in busy clinical environments. Research into how and when women discuss mental health concerns identifies the attitude and behaviour of the clinician and the environment in which the visit is being held is important [3, 8, 9]. In the instance when health professionals appear busy and unable, or unwilling, to engage in meaningful discussion, women of migrant and refugee background feel uncomfortable disclosing emotional and psychosocial concerns [9, 38, 39]; expressing feelings of stigma, shame and not wanting to be a burden [3]. Coupled with language barriers that may prevent disclosure, particularly in the instance of not having a professional interpreter or concerns about stigma and confidentiality in small communities, women experience further barriers to appropriate care [5, 9, 38, 40]. Health professionals are encouraged to consider the way in which they interact with women when discussing mental care. Developing practice to incorporate women-centred communication is encouraged for all health professionals working with pregnant women [16]. For example, improving ones skill in how to ask women sensitive questions in a non-judging manner and demonstrating empathy begins to create an environment in which women feel safe and fosters women-centred approaches to care [41].

Demographic characteristics found women of refugee background were more likely to be under 25 years of age and more recently arrived in Australia. This finding is consistent with the Australian

migration patterns whereby people who arrive on a humanitarian visa are younger than those who arrive by other migration streams [42]. Regarding psychosocial concerns, this study found women of non-refugee background reported concerns for the current and past pregnancy and birth more frequently, whilst women of refugee background reported concerns regarding finances more frequently. Previous research indicates psychosocial concerns are intrinsically linked to women expressing depression and anxiety symptoms [9, 16, 20, 43], and may explain why women in our study reported similar depression and anxiety symptoms given 91% had migrated to Australia. The many effects of migration, such as unemployment, grief and loss and social isolation [5-7] and for women of refugee background, the likelihood of being of younger age, are factors for consideration when screening for and discussing emotional health with women of refugee and migrant background. This study was not designed to explore the psychosocial factors that impact on women's depression and anxiety symptoms, but in consideration of previous research in this area, we suggest health professional raise discussions with women about psychosocial concerns and explore factors that may affect women's emotional health and wellbeing.

The finding that women of refugee background in the screening program had a reduction in their EPDS score and anxiety sub-scores in the third trimester may potentially have been due to a referral and further mental health assessment by the RHNL at the point of first screening. In comparison to the women of non-refugee background who had a positive screening result and offered referral to their GP, women of refugee background were able to access mental health assessment at the refugee antenatal clinic directly after screening. Given up to 50% of women with a positive screening do not engage in further mental health assessment [16], we suggest the presence of the RHNL in the clinic may have facilitated access to services [44], which in turn may have resulted in a decrease in symptoms. Traditional referral routes to mental health care can be ineffective for women of refugee background [45], with women preferring models that reflect a person-centred approach and options for improved communication with health professionals [40].

**Limitations of the study**

We acknowledge the EPDS has limitations due to language and cultural appropriateness of the measure [16]. Women with low literacy levels and unable to read their own language may rely on family members, particularly their partner to read and interpret the questions, which may have led to misinterpretations and under-reporting symptoms. The use of interpreters in screening can lead to under-reporting due to stigma and shame. In the case of misinterpretations, the use of idiomatic language in the EPDS, such as the term, 'things have been getting on top of me', can be misinterpreted by women of culturally and linguistically diverse background [46]. However, in our study overcoming this obstacle was possible by the availability of highly trained bi-cultural workers and interpreters employed by the health service who were very familiar with the communities who access it. The large number of women born in Australia and the use of a lower EPDS cut-off score may have contributed to a higher number of women in the non-refugee group reporting symptoms of depression and anxiety. Had the health service used a validated psychosocial assessment measure, more sophisticated analysis about what contributes to high EPDS scores would have been possible.

**Conclusion and future directions**

Perinatal mental health screening appears to facilitate the identification of women of refugee background who require emotional health support early in pregnancy. Women of refugee background in the screening program were more likely to report concerns for their current pregnancy or birth and receive a referral based on screening or psychosocial assessment than women of refugee background receiving routine care and no screening. We suggest this particular screening program and its many components such as the development of co-designed refugee appropriate referral pathways, use of a digital platform, translated measures, education for midwives, the availability of interpreters and trained bi-cultural workers have been important aspects in enabling women to disclose mental health and psychosocial concerns in pregnancy.

This program has addressed a major gap in maternity care and offers health services a valuable example of how implementing screening for depression and anxiety in pregnancy care improves the detection of symptoms in women of refugee background.

## 5. Acknowledgements

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**Table 1: Characteristics of women of refugee and non-refugee background receiving screening, and women of refugee background receiving routine care and no screening (n=308)**

| | WOMEN TAKING PART IN THE SCREENING PROGRAM | | p-value* | |
|---|---|---|---|---|
| | *Women of non-refugee background n=155 (%)* | *Women of refugee background n=119 (%)* | | *Women of refugee background receiving routine care and no screening n=34 (%)* |
| **Age** | | | | |
| ≤25 | 17 (11) | 50 (42) | | 14 (41) |
| 26-34 (ref) | 92 (60) | 52 (44) | <0.001 | 15 (44) |
| ≥35 | 46 (30) | 17 (14) | | 5 (15) |
| **Year of arrival to Australia** | | | | |
| ≤2007 and Australian born | 66 (43) | 18 (15) | | 7 (21) |
| 2008 – 2017 | 89 (57) | 101 (85) | <0.001 | 27 (79) |
| **Marital status** | | | | |
| Single/Divorced/Widowed | 1 (<1) | 7 (6) | | 2 (6) |
| Married/Defacto | 154 (99) | 112 (94) | 0.023§ | 32 (94) |
| **Primary Language** | | | | |
| English | 88 (57) | 11 (9) | | 4 (12) |
| Dari | - | 47 (39) | | 16 (47) |
| Burmese | - | 17 (14) | | 2 (6) |
| Hazaragi | - | 10 (8) | | 4 (12) |
| Khmer | 17 (11) | - | | - |
| Vietnamese | 16 (10) | - | | - |
| Punjabi | 6 (4) | - | | - |
| Other† | 28 (18) | 34 (29) | | 8 (24) |
| English | 88 (57) | 11 (9) | <0.001 | |
| Language other than English | 67 (43) | 108 (91) | | |
| **Interpreter Required** | | | | |
| Yes | 33 (21) | 72 (60) | <0.001 | 12 (35) |
| No | 122 (79) | 47 (39) | | 22 (65) |
| **Parity** | | | | |
| 0 | 56 (36) | 39 (33) | 0.155 | 7 (20) |
| 1 | 63 (41) | 40 (34) | | 23 (68) |
| ≥2 | 36 (23) | 40 (34) | | 4 (12) |
| **Number of babies in Australia** | 73 (47) | 66 (55) | 0.170 | 15 (44) |
| 0 | 82 (53) | 53 (45) | | 19 (56) |
| ≥1 | | | | |
| **Weeks pregnant at MAC** | | | | |
| ≤12 | 42 (27) | 25 (21) | | 4 (12) |
| 13-19 | 102 (66) | 80 (67) | 0.266 | 26 (76) |
| ≥20 | 11 (7) | 14 (12) | | 4 (12) |

§ Fisher's exact test

* Comparison between women of refugee background and non-refugee background taking part in the screening program

† Other languages: Albanian (n=1), Arabic (n=8), Bengali (n=1), Cantonese (n=1), Croatian (n=2), Dinka (n=1), Ethiopian (n=1) Farsi (n=2), German (n=1), Hindi (n=4), Kannada (n=1), Karen (n=2), Kirundi (n=1), Korean (n=1), Krio (n=1), Macedonian (n=1), Malay (n=5), Mandarin (n=2), Nepali (n=1), Pashto (n=10), Persian (n=2), Rohingyan (n=2), Romanian (n=1), Sinhalese (n=3), Somali (n=2), Swahili (n=2), Tamil (n=7), Urdu (n=4)

**Table 2: Mental health screening and psychosocial assessment at first antenatal visit with a midwife for women of refugee and non-refugee background receiving screening, and women of refugee background receiving routine care and no screening (n=308)**

| | WOMEN TAKING PART IN THE SCREENING PROGRAM | | p-value* | | p-value† |
|---|---|---|---|---|---|
| | ***Women of non-refugee background n=155 (%)*** | ***Women of refugee background n=119 (%)*** | | ***Women of refugee background receiving routine care and no screening n=34 (%)*** | |
| **EPDS screening** | | | | | |
| EPDS overall score ≥9 | 62 (40) | 47 (39) | 0.93 | | |
| EPDS overall score ≥13 | 19 (12) | 25 (21) | 0.05 | | |
| Anxiety sub-score ≥4 | 73 (47) | 58 (49) | 0.78 | | |
| Both EPDS ≥9 and Anxiety sub-score ≥4 | 50 (32) | 43 (36) | 0.50 | | |
| | ***Women of non-refugee, migrant background n=129 (%)*** | ***Women of refugee background n=119 (%)*** | **p-value#** | | |
| EPDS overall score ≥9 | 55 (43) | 47 (39) | 0.61 | | |
| EPDS overall score ≥13 | 16 (12) | 25 (21) | 0.07 | | |
| Anxiety sub-score ≥4 | 63 (49) | 58 (49) | 0.98 | | |
| Both EPDS score ≥9 and Anxiety sub-score ≥4 | 44 (34) | 43 (36) | 0.73 | | |
| | ***Women of non-refugee background n=155 (%)*** | ***Women of refugee background n=119 (%)*** | **p-value*** | | |
| **Psychosocial assessment** | | | | | |
| Previous mental health diagnosis | 12 (8) | 6 (5) | 0.37 | 1 (3) | 1.00§ |
| Previous mental health treatment | 7 (5) | 4 (3) | 0.76§ | - | |
| Concerns regarding current pregnancy or birth | 59 (38) | 28 (24) | 0.01 | 1 (3) | 0.005§ |
| Concerns related to past pregnancy or birth | 44 (28) | 19 (16) | 0.01 | 2 (6) | 0.16§ |

| | | | | | |
|---|---|---|---|---|---|
| Experienced abuse; feared for yours or children's safety and/or afraid of anyone at home or in your life | 9 (6) | 5 (4) | 0.55 | - | |
| Disabilities that will impact on caring for your baby | 1 (<1) | 2 (2) | 0.58§ | - | |
| Financial concerns | 20 (13) | 26 (22) | 0.05 | 5 (15) | 0.36 |
| Concerns regarding social or family support after birth | 17 (11) | 16 (13) | 0.53 | 4 (12) | 1.00§ |
| Accommodation concerns during pregnancy or when baby is born | 5 (3) | 10 (8) | 0.06 | 2 (6) | 1.00§ |
| Any children not living with you | 8 (5) | 6 (5) | 0.96 | 1 (3) | 1.00§ |
| Main carer for anyone other than your children | 29 (19) | 20 (17) | 0.68 | 3 (9) | 0.43§ |

* Comparison between women of refugee background and non-refugee background taking part in the screening program

§ Fisher's Exact Probability test

† Comparison between women of refugee background taking part in the screening program and women of refugee background receiving routine care and no screening

# Comparison between women of refugee background and non-refugee, migrant background taking part in the screening program

**Table 3: Wilcoxon Signed Rank tests comparing EPDS scores at the first antenatal visit and in the third trimester for women of refugee background (n=58) and non-refugee background (n=53)**

| | Median (IQR) | | p-value |
|---|---|---|---|
| | First visit screening | Third trimester screening | |
| **Women of refugee background** | | | |
| EPDS score | 7 (3 - 12) | 4 (2 - 8) | 0.006 |
| Anxiety sub-score | 4 (2 - 5) | 2 (0 - 4) | 0.002 |
| **Women of non-refugee background** | | | |
| EPDS score | 6 (2 - 9) | 5 (2 – 8) | 0.379 |
| Anxiety sub-score | 2 (1 - 4) | 2 (1 - 3) | 0.354 |

# Chapter 6: Discussion, recommendations and conclusions

## 6.1 Introduction

The overall aim of this study was to evaluate the implementation of a perinatal mental health screening program for women of refugee background. This evaluation has found screening in pregnancy using the EPDS enables better detection of symptoms of depression and anxiety in women of refugee background compared to current routine care. This research has also found perinatal mental health screening in pregnancy using an electronic platform is acceptable and feasible to both women and health professionals. The program resulted in more referrals for support and management for women of refugee background compared to women of refugee background who attend routine care. Professional development for health professionals is integral to effective screening programs and from this research several recommendations can be made including: improved access to seminars and structured workshops or conferences, holistic approaches to care that identify each woman's cultural and social context and clearer options for referral. This research identified no statistically significant difference in depression and anxiety symptoms in early pregnancy between women of refugee and non-refugee background.

There are many components that may have contributed to the effectiveness of this program, many have been detailed throughout this thesis. No one factor alone was found to contribute more than another in the program. This program has likely to have experienced its many successes due to the engagement of key stakeholders in co-designing refugee appropriate referral pathways; facilitating health professional education before and throughout implementation; the use of the translated EPDS and Monash Health psychosocial measures; utilising a novel approach to screening in a digital platform, the availability of trusted female interpreters and bi-cultural workers and the commitment of maternity managers, midwives and staff at the antenatal clinic

and refugee health and wellbeing service in recognising the importance of screening women of refugee background and being willing to implement this program.

### 6.2 Implications of the research findings

The women of refugee background participating in the study appeared to have higher rates of depression and anxiety symptoms than the general population and higher than women of refugee background who received routine care. Thirty-nine percent of women of refugee background in this study reported depression symptoms in early pregnancy and forty-nine percent reported anxiety symptoms. Thirty-six percent reported both depression and anxiety symptoms in early pregnancy. In this study, there was no statistically significant difference in depression and anxiety symptoms between women of refugee and women of non-refugee background. This may be explained by the use of a lower EPDS cut off score ≥9 rather than an EPDS cut off score ≥13, which is recommended for use when the EPDS is administered in English and in general populations (1). The finding of a statistically significant difference between women of refugee background and an EPDS cut off score ≥13 (21%) and women of non-refugee background (12%) ($p$=0.05), plus a noted trend when Australian-born were excluded from the non-refugee cohort ($p$=0.07) suggests women of refugee background in this study may have been more likely to screen risk positive for depression and anxiety symptoms if an EPDS cut off score ≥13 was used. Previous research in the general population estimates one in ten women experience depressive symptoms in pregnancy and one in five women experience anxiety symptoms in pregnancy (1). Our findings suggest women of refugee background are at increased risk of mental health disorders in pregnancy when compared to the general population, and in the absence of screening, women of refugee background are poorly identified with mental health disorders in maternity care.

Women of refugee background in the screening program were more likely to receive a referral compared to women of refugee background attending routine care. Improved options for

management and treatment for women due to the development of refugee appropriate referral pathways was acknowledged in the evaluation by health professionals as facilitating referrals and may have contributed to this result. Another facilitating factor was the RHNL in clinic. This role supported midwives and conducted further mental health assessment of women who screened risk positive, at the time of screening. The evaluation also reported health professionals would value multi-disciplinary clinics, with onsite psychology support. Women suggested the acceptability of referral and management for mental health issues was dependent on feeling comfortable with initiating discussions with health professionals, which was facilitated by the screening process. They also reported that referral and management would be more acceptable if access to mental health professionals occurred within the antenatal clinic setting as this would decrease stigma. This is similar to previous research indicating women of refugee and migrant backgrounds prefer mental health referral options that involve collaborative and integrated service models that cater for all bio-psychosocial aspects of care in one clinical or community setting (8, 84, 85). Such models of care expand upon current maternity models to include social work, mental health services and community supports and organisations (86).

This evaluation found perinatal mental health screening using a digital platform is feasible and acceptable to both women of refugee and migrant background and health professionals. Women overwhelmingly reported screening was acceptable, it helped them to have conversations about emotions; some suggesting this was the first time they had been asked about their feelings. The use of a digital platform enabled women to answer questions more independently, with many suggesting this allowed for more truthful answers. Health professionals demonstrated a preference for technology over paper-based forms and valued how the digital platform empowered women to be more independent in their health care. Challenges such as the time it took for some women to complete screening and technological issues created frustrations

amongst health professionals. However, many suggested that a flexible approach such as giving women time to complete screening in the consultation room and with increased familiarity with the technology, many issues could be overcome or resolved. Our findings are consistent with previous research which found screening using technology provides more privacy for women (87, 88), and is an acceptable option for perinatal mental health screening (89). Furthermore, language barriers between women and health professional can be overcome when screening measures are offered in many languages (88).

The findings related to health professional education needs indicate the importance of ensuring all health professionals involved in perinatal mental health screening have access to resources and a broad range of professional development opportunities to improve knowledge and skills. This program provided midwives access to education sessions before the program implementation as well as the ongoing 'on the job' opportunities throughout implementation. Education benefited midwives throughout the process of implementation; however, many indicated more training is required, a finding consistent with previous research (36, 47). As midwives report feeling less skilled than GPs and MCHN in conducting mental health screening, and midwives are a core health professional in identifying and referring women at risk of mental health illness in pregnancy (6, 36, 48), recommendations from this study suggest organisational support for health professionals, particularly midwives is necessary to building sustainable perinatal mental health screening in pregnancy. Focussed education on perinatal mental health which involves regular access to seminars and conference style professional development opportunities or online training which is easily accessible, such as that developed by COPE are suggested. Education on trauma-informed care, cultural responsiveness and working with people of refugee background are also recommended topics.

### 6.3 Recommendations for integration of perinatal mental health screening

This evaluation identified a number of effective strategies for planning and implementing perinatal mental health screening for women of refugee background. In this section, what worked well during implementation will be discussed under the four key strategies identified as potential contributing factors to successful and sustainable integration of perinatal mental health screening into routine pregnancy care:

- supporting mental health screening in pregnancy with women-centred and culturally appropriate referral pathways;
- redesigning health services to enable the integration of mental health care to be in parity with physical health care;
- professional development for health professionals that strengthen assessment skills and treatment options, and
- improving service co-ordination between hospital and community based services.

#### *6.3.1 Supporting mental health screening in pregnancy with women-centred and culturally appropriate referral pathways*

Women in this study accepted referral to another health professional as an option for further assessment and treatment if necessary and were happy to seek initial advice from the midwife. We hypothesis the presence of the RHNL within the clinic may have contributed to women's acceptance of a referral as the nurse was able to discuss mental health assessment with the woman at the time of screening. Despite these positive findings, women did also discuss barriers to mental health care that are consistent with the literature: stigma, language, not wanting to accept help, ignoring problems, reluctance to share problems, and the feeling that a referral cannot solve your problems (1, 6, 38, 52, 84).

*6.3.1.1 What worked well in the perinatal mental health screening program*

Referral pathways developed in collaboration with key stakeholders for this program ensured there was an appropriate system for follow up and support (1). One important element in the design of the referral pathways for women of refugee background was to have the RHNL present for further mental health assessment and provide linkage to the MH Refugee Health & Wellbeing Service. The presence of the RHNL in the clinic provided midwives direct access to a health professional with expertise in refugee health and extra support in cross-cultural mental health assessment and referral (90). In addition, the RHNL provided a link between hospital and community, a vital role when busy clinic environments may leave little time for hospital based health professionals to explore community support options for women. During assessment, the RHNL was able to explore the women's needs and preferences for referral. An evaluation of the RHNL in a general health care setting suggests the RHNL is a vital link in effectively supporting health services when working with women of refugee background (91). RHNLs provide a number of functions that include organisational capacity building, improvements in care coordination, and enhance the experience of women of refugee background when engaging with health services (91). By developing refugee specific referral pathways, this program offered women of refugee background access to a multidisciplinary and collaborative model of maternity care that integrated emotional health and wellbeing (92) and provided women of refugee background access to culturally appropriate care.

*6.3.1.2 Recommendations for integrating perinatal mental health screening*

Targeted interventions to reduce the many barriers women face when accessing mental health care (35) are needed. Rather than relying solely on mental health services for women with psychosocial concerns, incorporating other supports such as community based ethnic and religious organisations may be appropriate places to link some women of refugee background for further

support (93). In addition, offering collaborative and integrated models of care in hospital based maternity services that include bi-cultural workers and social supports, such as those available in this study, is woman-centred and reduces the many concerns women have in regard to stigma when accessing mental health management and treatment (8, 86).

Although this research did not evaluate how the diversity of the workforce improves women access to mental health care, previous studies have reported that increased health care professional diversity that mirrors the demographics of the local community provides greater cultural concordance which can help in reducing health disparities and improve access to care (9, 94). Given the high proportion of women from diverse backgrounds attending for maternity care at Monash Health, facilitating diversity of health providers may improve healthcare.

Future improvements to the iCOPE digital platform functionality will allow women to skip questions on family violence if at the time it is not appropriate for them to answer these questions, for instance, their husband or partner is present. Instead, women will be asked these questions at the next visit or when most it is most suitable (personal communication, Nicole Highet, 2019).

### *6.3.2 Redesigning health services to enable the integration of mental health care to be in parity with physical health care*

An important finding of this research has been the acceptance of the program by health professionals and women. Health professionals were able to access clinical reports that were immediately generated and reduced reporter error. Women valued completing screening in their own language and expressed this facilitated privacy and more truthful answers to sensitive questions. This program implemented strategies such as providing extra time for women to complete the screening measures in the waiting room before an appointment, along with access

to translated versions of the measures. Both of these strategies were successful in overcoming individual and system level barriers to perinatal mental health screening, as they have enabled women who may otherwise depend on others to complete screening, greater independence and empowered women to have a voice in their own health care.

*6.3.2.1 What worked well in the perinatal mental health screening program*

Redesigning the clinic to incorporate perinatal mental health screening using a digital platform has facilitated a progressive integration of mental health care into pregnancy care. Women suggest they are more comfortable in having conversation about their emotional health and wellbeing with midwives. Perinatal mental health screening has increased the confidence in midwives to conduct comprehensive emotional health assessment, offer appropriate referral options, and has endorsed their role in providing maternal mental health care in pregnancy. In addition, implementing the screening program has allowed mental health to be in parity with physical health care, a concept referred to by Rahman and colleagues, whereby maternity care is focussed on biopsychosocial health, rather than physical health care of mother and baby only (95).

*6.3.2.2 Recommendations for integrating perinatal mental health screening*

Including technology-based screening in health care is becoming an increasingly standard option for health care record management. The move from paper-based health records to electronic patient records aligns with nationally targeted strategies (89), as digital health care records deliver safer, more efficient and better quality health care (96). Regarding the experience of using technology as a tool for screening, health care consumers report it to be easier, more comfortable and private when compared to paper-based screening (87). Furthermore, a recent evaluation on the functionality of iCOPE (the platform used for this study) in a community-based maternal and child health [MCH] setting found only minor changes to practice were required; iCOPE was time efficient, allowed a high proportion of women to be screened and produced quality reports (89).

For ongoing emotional support throughout pregnancy, continuity of midwifery care models are another important aspect in providing perinatal mental health care in the perinatal period. These models are designed to provide women with a primary midwife who cares for the woman across the perinatal period (97) and can reduce barriers to perinatal mental health care such as time constraints in busy clinics (98). These models enable women to know her midwife during this time, thus are a suitable option for increased emotional support for women of refugee and migrant background. The two qualitative evaluations conducted in this PhD research support continuity of care as an important factor in enabling women to build a relationship with one midwife and therefore feeling more comfortable with discussing sensitive issues (90, 99). Research into continuity of care models report women have high levels of satisfaction with their care, suggesting midwives are more likely to address concerns, worries and anxieties more seriously and offer more reassurance when compared to women attending standard care (97). For socially disadvantaged women, continuity of midwifery care models facilitate the building of trusting relationships with midwives, help women to feel valued as a person (100), improve symptom monitoring and promote disclosure of mental health concerns (9), thus reducing the need for women with complex histories to repeat their story (100).

### *6.3.3 Professional development for health professionals that strengthens assessment skills and treatment options*

The need for ongoing professional development opportunities for health professionals to support them in providing effective and appropriate perinatal mental health care has also been an important finding from this study. The evaluation with health professionals reported in manuscript three, found health professionals requested further skill development and knowledge in perinatal mental health assessment and treatment. Health professionals in manuscript two indicated a preference for structured workshops or conferences for professional development. Furthermore,

professional development opportunities that incorporate cultural competency training and trauma-informed approaches to care are recommended.

*6.3.3.1 What worked well in the perinatal mental health screening program*

In the pre-implementation phase, the researchers, refugee health nurse liaison and a psychologist (with expertise in safety planning for those with suicide ideation), conducted in-service sessions with midwives at Dandenong hospital. These sessions focussed on the use of the digital platform, the EPDS as a screening measure, post-screening discussion when women screened risk positive and referral pathways developed for the program. As the researchers were present in the clinic each week, further on the job training was available as well as being able to attend team meetings on a regular basis. My background as a midwife and refugee health nurse within the service was beneficial in that I was known to midwives and other staff at the clinic and had a good understanding of the clinical environment.

*6.3.3.2 Recommendations for integrating perinatal mental health screening*

Midwives, GPs and MCHN are at the forefront of providing perinatal mental health screening (36, 101), however, midwives feel less skilled and knowledgeable in providing comprehensive mental health assessment than GPs or MCHN (6, 36, 48). Given antenatal depression is a strong predicator for postnatal depression and anxiety is often co-morbid with depression (87, 102), it is imperative midwives are well-equipped to assess and appropriately refer women who identify with mental health and psychosocial concerns in pregnancy (49).

Routine screening provides an opportunity for midwives to initiate discussion, which may otherwise not have occurred (103). Additionally, women are accepting of discussing mental health with midwives and express high regard for midwives who are confident and informed about mental health; are able to contextualise, normalise and validate concerns within the normality of

pregnancy, and provide support strategies for mental health and wellbeing (104). Yet to support women appropriately, midwives need access to formal training to ensure they feel confident and have the skill required to be competent in discussing and supporting women experiencing perinatal mental health issues (6). Organisational support for midwives to access professional development (such as attendance at conferences, seminars and in-service education) is one way to provide training and enhance the midwifery workforce capacity in perinatal mental health care (6). Given there is limited perinatal mental health education in most undergraduate midwifery curricula programs in Australia, another option is to increase the provision of perinatal mental health education in midwifery curricula (105).

Other important elements in health professional education are trauma-informed approaches to care and cultural competency (13). Women may not always disclose previous trauma and health professionals do not always routinely ask (106); however, those with a previous history of trauma can be vulnerable at the time of engaging with the health service and can become distressed or re-traumatised as a result of health care practices (13, 106). Therefore, health professionals, such as midwives are encouraged to have knowledge on trauma-informed approaches to care and instigate these regardless of whether a woman discloses previous trauma or not. Strategies health professional can integrate into their daily health practice include building a therapeutic relationship through providing a welcoming, person-centred environment; and acknowledging health literacy, cultural and religious factors and pre- and post-migration experiences may raise anxiety during consultations and impact on people's ability to engage in their own health care (14). Importantly, health professionals who are able to reflect on and understand their own cultural context, beliefs, values and biases and develop reciprocal interactions with health care consumers, provide care that is sensitive to the cultural context of others (68, 107).

In clinical practice, it may not always be possible for every health professional to attend every training or education opportunity, or have well developed skills needed as mentioned above. In this instance, approaches whereby teams identify clinical champions to provide the necessary support to others is one option in reducing the education/skill gap. These clinical champions can be accessed as for many reasons, provide education opportunities on clinical issues as well as be available to help with troubleshooting any technology issues that arise from digital screening. Furthermore, they could work with women who have been identified with complex needs or have urgent needs so midwives can continue with the normal running of the clinic.

### *6.3.4 Improving service co-ordination between hospital and community based services*

*6.3.4.1 What worked well in the perinatal mental health screening program*

This program has been a collaborative effort formed through the projects' steering committee and the community advisory committee. Both of these committees met regularly throughout the implementation of the program and worked collectively with a strong purpose and clear objective. In conjunction, significant contributions and support from the organisation, particularly Monash Women's and the Refugee Health and Wellbeing service have enabled reconfigurations in service delivery and the development of refugee appropriate referral pathways which enabled improvements in service coordination across departments.

*6.3.4.2. Recommendations for integrating perinatal mental health screening*

The next step for this program is to improve service co-ordination through developing secure data linkage between hospital and community based services. The Victorian *Child Wellbeing and Safety Act 2005* stipulates that every baby born in Victoria must have a birth notification given to the Chief Executive Officer of the council in the municipal district where the mother resides or where the birth take place (108). Current practice in the hospital based maternity service is to provide

the new mother a number of copies of her discharge summary which includes details of her pregnancy, birth and postnatal experience, one copy is for the MCHN.

Findings from this study suggest women are willing to have conversations about their emotional health and wellbeing when offered the opportunity. However, in many health systems women are not provided this opportunity and are often reluctant to discuss emotional health and wellbeing. In this circumstance, mental health issues in women can be missed by health professionals. Implementing perinatal mental health screening in pregnancy provides hospital based maternity health professionals details on women's depression and anxiety symptoms, yet, these results are currently not recorded on discharge summaries. This leads to community based MCHN not having prior knowledge of women's risk of depression and anxiety in pregnancy. Given women are unlikely to raise this conversation, depression and anxiety can be undetected or not addressed in a timely manner once a woman is discharged from the hospital maternity service. As previously mentioned, depression and anxiety in pregnancy is a major risk factor for postnatal depression (87, 102), thus confirms the importance of improvements in service coordination between hospital and community based services. Adding the EPDS screening result and subsequent management to each woman's discharge summary would reduce the need for women to initiate conversation and improve information and ongoing care the woman receives from community-based service such as the MCHN. In consideration that the perinatal mental health screening program will be scaled up to the broader maternity service, the addition of the screening result to the discharge summary is imperative. In order for this to occur, the early pregnancy screening result must be added as a mandatory field to the hospital maternity birthing outcomes system (BOS) database.

My post-PhD work will seek to embed these improvements into routine maternity practice and hospital systems so data linkage between hospital based maternity and community based MCH

services occurs. Outcomes from these improvements in service co-ordination will aim to enhance women's experience of safe and equitable mental health care in the perinatal period.

### 6.4 Limitations of this PhD research

A limitation of this study is it has been designed to evaluate a new program for women who have access to health services and maternity care. Thus it can be acknowledged this study is limited by not exploring the needs of women who do not attend antenatal care. However, previous research conducted at Monash Health on antenatal attendance by women from humanitarian source countries found 2.9% of these women experienced poor/no pregnancy care attendance (defined as two or more booked hospital pregnancy care visits missed) (24). This research therefore suggests most women of refugee, asylum seeking and migrant background who attend Monash Health do access antenatal care and most women who birthed had a booking visit before 20 weeks. In Victoria (the state in which this research was conducted), state government policy support access for all asylum seekers. This means all women seeking asylum have access to public health care regardless of visa status thus, access to antenatal care at Monash Health (109). Pregnant women in other states or territories however may experience barriers to attending maternity care and their needs are not addressed by this research.

### 6.5 Overall Summary

In summary, this screening program addressed an evidence-practice gap. The research confirmed that screening is more likely to identify women at risk of mental health disorders than routine care. This research has found implementing a co-designed, refugee appropriate perinatal mental health screening using a digital platform is both acceptable and feasible option for women and

health professionals in a busy clinical environment. Key findings from this evaluation provide the evidence for scale-up of the program across the broader maternity service and align perinatal mental health care with evidence-based national guidelines.

# Chapter 7: Translating evaluation findings into maternity practice

## 7.1 Introduction

The perinatal mental health screening program was developed and informed by the *Clinical practice guidelines for depression and related disorders – anxiety, bipolar disorder and puerperal psychosis – in the perinatal period. A guideline for primary care health professionals* (Austin et al, 2011), and is consistent with the newer *Mental Health Care in the Perinatal Period Australian Clinical Practice Guideline* (1). This guideline summarises the best evidence available on effective approaches to providing perinatal mental health care, and was developed for all health professionals who work with women in the perinatal period (1). This screening program was designed to address a common evidence practice gap in Australia and as a result of this evaluation, Monash Health, (which has over 9000 births per annum), have committed to scaling-up the program across the whole maternity service. Throughout my candidature, I have been involved in other projects, in particular the Commonwealth funded Migrant and Refugee Women's health partnership and a Rapid Review of Evidence-Based Information, Best Practices and Lessons Learned in Addressing the Health Needs of Refugees and Migrants: A report for the World Health Organization.

## 7.2 Culturally Responsive Clinical Practice: Working with People from Migrant and Refugee Backgrounds: Competency Standards Framework for Clinicians (CRCPF)

My experience as a midwife, nurse, maternal child health nurse and my academic work with migrant and refugee women led to my selection as the Australian College of Nurses' representative on the refugee women's health working group of the Migrant and Refugee Women's health partnership. This group met regularly and throughout the course of my PhD. I directly contributed and was acknowledged to the *Culturally responsive clinical practice: Working*

*with People from Migrant and Refugee Backgrounds: Competency standards framework for clinicians* (2019) and was invited to contribute to an article in the O&G magazine (included in this chapter).

These competency standards were the result of a national partnership between health professionals and services working with people of refugee and migrant background. The partnership aimed to address systematic barriers women of refugee and migrant background experience in accessing and interacting with health care. Cultural responsive clinical education and training is imperative to build a culturally responsive health workforce and a rapid review of existing international and national scholarly literature, safety and quality standards, professional codes of ethics and conduct, competency standards and frameworks, national reports and guidelines, reported the need for clear frameworks for health professionals to support better healthcare. The subsequent 12 competency standards are classified under seven domains and is underpinned by the principles of; person-centred and family-focused care; access and equity; quality and safety; dignity and respect, and effective communication (68). They have been endorsed by 22 medical, nursing and allied health colleges and societies, five language and settlement services and supported by The Australian Government, Department of Health and Department of Social Services, The Migrant Council Australia and Ramsay Health Care.

*Linking to this PhD research*

This work directly relates to the professional development for health professionals work that has been conducted throughout this research. One important aspect of working with women from migrant and refugee backgrounds is for all health professionals to develop culturally responsive clinical practice through ongoing professional development. This has been identified throughout this thesis in the literature review, manuscript two and three.

### 7.3 Safety and quality improvements in communication and health literacy

One of the most important safety and quality mental health care improvements of this program is the development and use of the translated written measures, and plans for ongoing work to develop translated audio versions of the measures. I have engaged with the projects' community advisory committee to discuss the best options for implementing the audio versions such as discussing how women with low literacy would best identify correct response to each of the EPDS question, i.e. the use of a picture or diagram that lights up when the response is being read out, or use highlighted text instead. I have also provided feedback to the projects steering committee on this advice, and assisted the research assistant conducting the evaluation with access to the clinic and advice on approaching women and health professionals. Language barriers are a key issue for women of refugee background when accessing maternity care and many rely on family members due to the lack of interpreter availability (86, 110). The initiative to translate the measures in both written and audio format aims to improve communication and health literacy for women, both of which create barriers to women of refugee background accessing equitable maternity care in Western health systems (44, 110).

For many women of refugee background pre-migration education opportunities are limited (111) due to oppressive regimes and the refugee experience (112). Post-migration, women often have caring responsibilities that reduces participation in English language classes, creating further social disadvantage and inequity when accessing health care (111). Lower levels of health literacy are directly related to low education and income level and health disparities are more prevalent for those with lower levels of health literacy (60), placing many women of refugee background at risk of poorer health outcomes and inequities.

The inclusion of audio versions of the measures to complement the written versions means many women who would otherwise struggle with the written format only, will now have access to

perinatal mental health screening in their chosen language. Women who participated in the qualitative evaluation reported the addition of the audio versions would be very helpful and benefit many women who were low in literacy as they too could access screening and complete the screening more independently. Therefore, the improvements to language and communication due to the translated written and audio versions of the measures means women with limited English are less reliant on interpreters and family members when responding to screening questions. The audio is currently available in English with other languages in development.

In my post-doctoral studies, I will be participating in the ongoing development of the audio version of the EPDS and the broader dissemination of the perinatal mental health screening program. In particular, I will be exploring ways to link data between the hospital and community-based MCH Services to ensure women who screen risk positive are appropriately followed up and access ongoing treatment and care. This work will also continue to build on improving women's health literacy and access to mental health screening across the perinatal period. Further discussion on my post-doctoral role has been included in chapter 6.

The perinatal mental health screening program as a safety and quality improvement development aligns to the National Safety and Quality Health Service Standards (NSQHS) and CRCPF in that all health professionals are required to be effective communicators and considerate of the health literacy levels of health care consumers (68, 113). The NSQHS has a number of criterion and action areas whereby health services must provide evidence on adapting health care to meet the diverse needs of the community; have effective communication strategies in place; engage interpreters and address health literacy as a core concern (113). In addition, the CRCPF describes important clinical practice points to include the need for clinician to recognise and support the impact of language, literacy and cultural considerations when people engage in health care and assessing the need for and engaging interpreters (68).

### 7.4 Translation through invited speaker opportunities

Throughout my candidature I have been invited to speak at two one-day seminars. The first *Strengthening the Village* in Melbourne August 2018 required me to do a 45 minute presentation of the overall perinatal mental health screening program to an audience predominately made up of MCHN and midwives. The second invited speaker opportunity was in Melbourne for the seminar *Supporting Perinatal Wellbeing in a Diverse and Changing Society: A roundtable on bringing research & practice into closer dialogue,* February 2019. Here I co-presented with my primary supervisor Associate Professor Jacqueline Boyle on reflections of implementing perinatal mental health screening into routine maternity practice to an audience of clinicians, policy makers, managers and researchers. Having the opportunity to disseminate our findings in this way helps to increase awareness of best practice in perinatal mental health care, share learnings on enablers and facilitators and resources to effectively implement these for women from CALD backgrounds across individual, health professionals, health services and policy levels.

### 7.5 Other translational activities throughout my PhD

Throughout my candidature, I have been involved in other projects that have not directly related to the perinatal mental health screening program, but has been linked to health care for women of refugee background.

This first piece of work included in this chapter resulted from being successful in an expression of interest from the Southern Academic Primary Care Research Unit, Department of General Practice, Monash University to contribute to, *A Rapid Review of Evidence-Based Information, Best Practices and Lessons Learned in Addressing the Health Needs of Refugees and Migrants: A report for the World Health Organization*. My contribution was lead author of chapter 4.7: 'Protecting and improving the health and well-being of women and girls' and had the primary responsibility for

conducting a rapid review of the evidence, screening articles for inclusion, writing the chapter and attending meetings with other chapter authors.

A further piece of work not directly related to the perinatal mental health screening program; however, was published during my candidature is included in appendix 6:

**Willey SM**, Cant RP, Williams A, McIntyre M. Maternal and child health nurses work with refugee families: Perspectives from regional Victoria, Australia. J Clin Nurs 2018; 27(17-18): 1–10. https://doi.org/10.1111/jocn.14277

**7.6 Summary of chapter**

This screening program was designed to address a common evidence practice gap in Australia and as a result of this evaluation, Monash Health have committed to scaling-up the program across the whole maternity service. Throughout my candidature I have been involved in the development and dissemination of a culturally responsive competency standards framework for clinicians through my involvement with the Migrant and Refugee Women's Partnership, as well as a number of other translational activities relevant to this project. As a safety and quality improvement strategy the perinatal mental health screening seeks to improve communication and health literacy for women of refugee background and aligns with a number of national standards and frameworks. My post-doctoral work will involve ongoing participation in the development of the EPDS audio versions and the broader dissemination of the perinatal mental health screening program

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# 4.7. Protecting and improving the health and well-being of women and girls

**What is the evidence on the reduction of inequalities in accessibility and quality of maternal and reproductive health care delivery for refugees and migrants?**

## Context

Sexual and reproductive health (SRH) is a broad construct that includes gynaecological health from menarche to post-menopause, abortion rights, infertility, sexually transmitted infections, gender-based power relations and sexual violence. Across the spectrum of SRH it is important to acknowledge the heterogeneity of women's beliefs and the influence these beliefs have on how, when and why women access SRH services (188, 189).

### Sexual and reproductive health care for refugee and migrant women

SRH care is intertwined with economic and migration status as well as gender, ethnicity, religion and culture (190). Migrant women are a diverse group but are often from a background of economic hardship, arriving in their destination country with limited local knowledge and the skills and resources required to access health care (190). Issues such as unfamiliarity with a new health care system, language barriers and lack of awareness of rights and entitlements create barriers for these women.

Refugee women experience barriers to SRH due to the perilous circumstances around conflict and movement. Armed conflict disrupts access to essential services and distribution of health care. Prolonged emergencies weaken health systems and can affect women's health in a variety of ways, such as access to family planning; safe motherhood; increasing sexual and gender-based violence; increased risk of sexually transmitted infections (STIs), and the daily risk of sexual, physical and mental abuses (191). In these contexts, there is often poor reproductive health care due to lack of access to basic hygiene needs such as water, sanitary products and bathing facilities (191). In addition, pregnancy represents a serious threat to women's health due to high maternal mortality rates in refugee source countries (192).

Both refugee and migrant women experience separation from community leading to social isolation and the need to meet costs and continue to support their families can lead some refugee and migrant women to engage in risky sexual behaviour such as sex work (191, 193), which may result in increased vulnerability of the transmission of STIs, including HIV (194).

Girls under 18 years of age are vulnerable to rape and undertaking prostitution as a means to support their families and underage marriage as preservation of family honour. These girls are less likely to use family planning, and are at greater risk of inadequate antenatal care, preterm labour and neonatal complications (191).

Different conflicts and countries impact on SRH differently. For example, mobility restrictions for Palestinian women can affect access to services, resulting in reduced access to antenatal care and an increasing home birth rate (195). Syrian women in Lebanon have been reported to have reduced rates of HIV testing through fear of being deported and rarely accessing health services unless they are pregnant, due to stigma and lack of knowledge about reproductive health (191). Whilst countries such as Lebanon and Jordan have laws that require antenatal coverage, the financial costs are not fully covered for many refugee women (191). Other factors include cost, distance to travel, fear of mistreatment and discrimination, lack of appropriately trained and preferred gender health providers. There is an underreporting of sexual violence due to fear and shame (191).

Seeking asylum brings stress, sadness and frustration which can have a negative impact on sexual health and create barriers to sexual activity and intimacy. Privacy for couples cannot be guaranteed even once in westernised countries such as Australia. Often, couples are separated from one another (193).

### Limited access to health care for women

There are many access issues and barriers to care for migrant and refugee women. Many of these overlap with access issues for all migrants and refugees, such as, language barriers, access to interpreters, low levels of health literacy, discrimination, health professionals lack of understanding the rights of migrant and refugee women and other challenges in navigating complex health systems such as cost, differing views and perceptions of health care and scarcity of female medical practitioners (see Section 4.2, Promoting access to health services) (196, 197).

Migrant and refugee pregnant women are less likely to access antenatal care or seek care later in pregnancy than other women resulting in poor perinatal outcomes (188). Asylum seeking pregnant women may experience reduced access to antenatal care due to limitations in service eligibility and fears associated with registering with authorities for risk of deportation (198). Fear and confusion of health care policies for these women, in both communities and the health care workforce often inhibit women from receiving appropriate care (198). Migrant women who live in rural areas, are younger than 20 years, have limited language proficiency and education, are single, multiparous and have an unplanned pregnancy are even more vulnerable (197).

Migrant women have higher levels of maternal morbidity and mortality; poorer pregnancy outcomes (188, 193), higher levels of HIV and STIs, and less access to SRH services. Furthermore, they are more likely to become victims of sexual and interpersonal violence and female genital mutilation (193). Differing health care entitlements according to immigration status leads to confusion among health providers (188).

## Findings: sexual and reproductive health services

The rapid review literature search yielded several examples of good practices for promoting access, implementation and utilization of sexual and reproductive health services for migrant and refugee women in both humanitarian and resettlement countries.

### Improving access to maternity care

Providing maternity care to migrant and refugee women requires health care professionals to engage with specific training opportunities that address: the use of interpreters, culturally competent care and how to involve migrant women and communities in planning and implementing sexual and reproductive health services (197). Consideration must be made for the migrant women's perceptions, previous experiences, attitudes and awareness of SRH as these are likely to be different to that of the resettlement country. In addition, comprehensive policy and programmes tailored to meet the needs of migrant women in improving access to maternity care must include familiarity, comprehensibility, affordability, availability and acceptability which is both physical and culturally appropriate (197).

In Turkey, health policy entitles Syrian women to universal health coverage, although this is not always well applied (191). Most women access health care at field hospitals in government run camps with very few NGOs involved in delivering health care. However, in 2014, aiming to improve health care, the Turkish

Ministry of Health signed a memorandum of understanding with the United Nations Population Fund (UNFPA) to coordinate delivery of women's health services (191). In Jordan the Ministry of Health responded early in the humanitarian crisis and works with a number of organisations, showing a strong commitment to women's health. A number of clinics or mobile teams are dedicated to reproductive health (191).

The complexities of the Israeli-Palestinian conflict have resulted in reduced mobility and resultant barriers to maternity care for women living in the West Bank and Gaza. Responses to improve women's access to maternity care at the time of labour and birth has seen the development of programmes whereby access to health professionals has increased through staff staying at the hospital during times of curfew; setting up a hotline and network of volunteers to assist home births over the phone; staff to live close to health centres; training midwives to attend home births and provide clean birthing kits (195).

## Delivering service packages

Collaborative programmes that involve NGOs, UN agencies, government and have a community focus have been shown to assist women with SRH needs in emergency and humanitarian situations. The UK NICE guideline "Care for women with complex social factors" stipulates the need for inter-agency arrangements for women from disadvantaged groups (such as migrant and refugee women) to ensure adequate support and benefit from other agencies; provide flexible, accessible and culturally sensitive services to motivate all women to engage in maternity services; and provide interpreting services for women whose first language is not English.

## Minimum Initial Service Package (MISP)

NGOs, UN agencies and governmental donors worked together to develop the Minimum Initial Service package (MISP) (194, 199). MISP are a set of actions at the time of a humanitarian crisis that build the foundation for comprehensive reproductive health care for women, girls and newborns (191). The MISP objectives are to identify an agency to lead the implementation of the MISP, prevent and manage the consequences of sexual violence, reduce the transmission of HIV, prevent maternal and infant mortality and plan for comprehensive reproductive health services integrated into primary health care (200).

## The Reproductive Health Access, Information and Services in Emergencies (RAISE)

Initially a joint initiative of the Colombia University Mailman School of Public Health and Marie Stopes International, RAISE has the primary aim of ensuring good quality comprehensive reproductive health services are routinely provided to those in emergency situations (201). The initiative began in 2006 as a five-year project to enable partner agencies the opportunity to develop expertise and to provide comprehensive services, to set longer-term objectives and monitor results, and to strengthen linkages between relief and development partners.

The five main areas of focus for the RAISE initiative are: basic and comprehensive emergency obstetric care, including post-abortion care; all family planning methods and emergency contraception; sexually transmitted infection prevention and treatment; HIV prevention, including voluntary counselling and testing, prevention of mother-to-child transmission and referral, and medical response and referral for gender-based violence. Since 2011, the RAISE initiative has had a more intensive focus on contraceptive services and abortion-related services in humanitarian settings as there have been significant gaps in services for these crucial areas relative to other components of SRH (202).

Culturally responsive family planning policies and programmes

UK policy initiatives such as the Inequalities in Health Report (published 1998 and now archived); Race Relations Amendment Act (2000) and Race Equality Scheme 2005-2008, although not maternity specific, all underscore the importance of creating health and social care services responsive to ethnic diversity, proactively setting out a high-level vision for reducing health inequalities and promoting equity (188).

Rwandan refugees in the Democratic Republic of Congo during the mid-1990s voiced a demand for family planning services; some sought to have contraceptive implants removed, while others wanted contraceptives so that they would not have another child to carry on their return journey. Access to family planning services

in these camps was established, however, soon after the services were established, the refugees had to flee ongoing conflict (192).

In Southern Sudan, the American Refugee Committee started reproductive health programming, beginning with several meetings to raise community awareness and sessions to train health workers about reproductive health. The organization offered family planning services bringing oral and injectable contraceptives to a war-ravaged people who live under difficult circumstances and who had not had access to modern methods (192).

The Mae Tao Clinic near the Thai-Burma border provides reproductive health services to tens of thousands of Burmese refugees (192). The Reproductive Health Programme established in 1989 aims to keep mothers strong and give all children a healthy start. Inpatient and outpatient departments provide comprehensive women's services including family planning, gynaecology, normal and complicated labour and delivery, neonatal care, and post-abortion care. The antenatal care programme offers screening for malaria, HIV, sexually transmitted infections and anaemia (203).

### Community participation in developing sexual and reproductive health programmes

Participatory approaches, whereby sexual and reproductive health programmes are designed in consultation and collaboration with women, ensure programmes are based on sound knowledge of cultural beliefs and practices (204). The inclusion of men, adolescents and those not of reproductive age is advised (204). Programmes are best developed with staff who are knowledgeable in caring for women and children in complex humanitarian settings, yet flexible enough to provide integrated, comprehensive and culturally appropriate information to meet the diversity of regions, populations and communities (194). These approaches work best when they emphasise essential services, including a mix of preventative and treatment strategies such as curative interventions for STIs and breastfeeding education and they are not heavily reliant on advanced technologies (194).

For example, in Switzerland mobile health services were developed with local government, community and medical institutions. Irregular migrants attended the mobile community service primarily due to the clinic employment of bi-cultural staff and that the facility was outside public institutions (198).

### Education and Health Promotion

Reframing the way sexual and reproductive health care is discussed with migrant and refugee women enables more culturally appropriate education which may help to overcome resistance to family planning. For example, discussing and promoting the use of contraceptives as a means for birth spacing and its usefulness in protecting women's health is more acceptable to many migrant women, rather than discussing contraceptive use as a means to reduce the number of children only (195). In addition, traditional media (TV, radio), and social media are acceptable platforms for culturally competent sexual and reproductive health promotion ensuring a socio-ecological approach is taken (193).

## Implications

SRH should not be viewed as only within the medical domain. Instead it should be incorporated into population-based policies and programmes (204).

### Improving Access to Maternity Care

Structural, organisational and societal factors should provide refugees, asylum seekers and migrant women the same opportunity as general citizens, that is to be equally in control of their sexual health and sexuality (193). Achieving this is possible when policy and programmes are developed with collaborative arrangement between global policy organisations, NGOs and importantly consultation with women and their communities (204-206).

### Service packages

Reducing barriers to sexual and reproductive health service access is important to improve health care for women. Achieving this can occur by addressing the prevention and management of sexual violence, reducing HIV transmission, preventing maternal and newborn death and illness, and planning for comprehensive sexual

and reproductive health care that is integrated into primary health care (191). Furthermore, better data collection and evaluation that aims to improve service package planning, implementation and sustainability is required (188, 191) as well as improved funding and coordination across sectors (191).

### Culturally responsive services

Developing policy that addresses more than maternal health care and HIV/AIDS is required if refugee and migrant women are to experience a holistic approach to sexual and reproductive health care (207). Women should also have access to sexual education, the freedoms to decide on choice of partner and when to become sexually active, the ability to be able to pursue a satisfying sexual life, family planning that includes effective contraception choices (207) and safe abortion care (192). Focussing on women of all ages rather than only those in the reproductive years ensures all migrant women have access to screening programmes and gynaecological health care (207).

Culturally competent health care is imperative to improve access to sexual and reproductive health services for migrant and refugee women. Services must ensure access to appropriate interpreting services (188). Multi-sectoral and multi-disciplinary services provide co-ordinated service delivery in complex health systems and appropriate referral pathways (196). Professional development opportunities for health professionals in best practice SRH education (193) and increased awareness and knowledge of cultural and religious beliefs ensures health professionals are providing person centered care (189).

## Limitations

This section reflects many of the issues refugee and migrant women face when accessing sexual and reproductive health care and implications for policy and programmes, however, limitations exist. A comprehensive, systematic review process has not been undertaken and this has limited the quantity of evidence in this rapid review. Gaps in the published literature concerning the subtopics of migrant women were present. Most papers described interventions and approaches to sexual and reproductive health for refugee and migrant women, however, did not evaluate their impact. (See Section 5, Limitations of the literature).

As an invited article for the Australian O&G magazine, this second piece was written because of the role the authors had with the *Migrant and Refugee Women's Partnership and the work the partnership was contributing on culturally responsive healthcare.*

Boyle, J., **Willey. S.** & Abbasova, G. (2018). Supporting better outcomes for migrant and refugee women, O&G magazine, 20(1), p1.

# Supporting better outcomes for migrant and refugee women

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Migration-related factors are recognised as social determinants of health.[1] Conditions surrounding migration and resettlement may exacerbate health inequities, exposing women and their families to increased health risks and poorer health outcomes. The Australian Bureau of Statistics estimates that there are more than three million overseas-born women in Australia and about 460,000 of them reported that they do not speak English well or at all.[2] It is vital that health providers are equipped with tools to provide person-centred and culturally responsive care that recognises the heterogeneity of individuals within cultures. Our colleges, societies and healthcare settings need to support these endeavours by providing culturally responsive care, with systems that support the engagement of interpreters and facilitate training for all health staff.

In response to this need, the Migrant and Refugee Women's Health Partnership (MRWHP) was established in late 2016. The Partnership brings together health practitioners and the community to improve the capacity of the Australian healthcare system to provide accessible and appropriate care to women of migrant and refugee backgrounds. The Partnership is driven by the imperative of fostering collaboration and consensus across clinical education, with its work overseen by a working group. The working group is chaired by RANZCOG President Prof Steve Robson and comprises representation from eleven medical colleges, professional bodies for nurses and midwives, other relevant health practitioner representation bodies, government and community.

The Partnership undertakes work in migrant and refugee women's health through: literature review; scoping of practice; policy and education by medical, nursing and midwifery colleges and societies; and workshops connecting health providers with women from the community.

## Health of migrant and refugee women

Women of migrant or refugee background are at increased risk of poor health in pregnancy (such as perinatal mortality, preterm birth and low birth weight).[3] Mental health (anxiety, depression and post-traumatic stress disorder)[4] and reproductive health are also areas of increased risk for these women.[5]

Factors contributing to health disparities are multi-faceted, but may include specific risks related to past environments (for example, infectious diseases and anaemia), or specific population-based risks (such as thalaessamia, diabetes, previous female genital mutilation).[6,7,8] Many factors, however, relate to broader issues, such as access to care,[3] interactions with the health system and health literacy.[9]

Challenges accessing care include socioeconomic factors, such as visa class, finance, transport and language barriers.[7,8] Many women have lower levels of health literacy, lack familiarity with preventative healthcare and have differing personal concepts of health and illness,[8] and therefore are more likely to access acute and emergency care.

Resettlement is an overwhelming process involving issues that lead to many migrant and refugee women failing to prioritise their own health. Difficulty adapting to a new culture and language barriers often result in social isolation and exclusion, all of which exacerbate psychosocial risk and vulnerability.[8] Women seeking asylum and those from refugee backgrounds, in particular, are at increased risk of poorer health and wellbeing due to both pre-migration experiences, including exposure to trauma, and post-resettlement experiences.

## Working with migrant and refugee women

Health practitioners should have the skills to work with women from refugee and migrant backgrounds, being aware of culture, community and past experiences and their influence on women's expectations for care, health beliefs and behaviours.[10] It is particularly important for health practitioners to be aware of the need to provide trauma-informed care, incorporating such factors as patient-centred communication and care, safe clinical environments and knowing when to refer for trauma screening.

Focus should be on supporting the capacity of health practitioners to communicate with migrant and refugee women. These women may have low English proficiency or health literacy and be unable to provide the practitioner with relevant information. They may lack the confidence necessary to be active participants in the process. Individual experiences can impact on women's knowledge of the healthcare system and their capacity to navigate it. This may include poor understanding of their rights as

consumers in the healthcare system. Women may also lack confidence in the healthcare system and need to be assured of the confidentiality between themselves, health practitioners and, if required, interpreters. They may feel more comfortable with female health practitioners and interpreters,[11] particularly when disclosing women's health issues.

When English is the woman's second language, an accredited interpreter is a vital part of ensuring optimal healthcare. To prevent language discordance and promote effective communication,[11] health practitioners must respect the woman's preference for the interpreter's gender, ethnicity and dialect.[12] When working with an interpreter, reaffirming confidentiality and the right to privacy are particularly important to provide women with the opportunity to disclose sensitive information. Issues may arise, however, if the woman and the interpreter are from the same small, tight-knit community and potentially know each other. In this instance, a telephone interpreter may be a preferable option.

Medical practitioners (general practitioners and medical specialists), as well as nursing and practice support staff, can access the free interpreting service delivered by Translating and Interpreting Service (TIS National) when providing Medicare rebateable services in private practice.[13] Clinicians working in state-funded health services can access their service's respective arrangements for interpreting. It is important to assess the need for engaging interpreters with appropriate credentials and to have systems available to make necessary arrangements through an appropriate language services provider. Not doing so may open the health professional to medico-legal redress.[12] This is consistent with the Medical Board of Australia Code of Conduct.[14]

## Strategic response

Culturally responsive practice needs to be embedded in health practitioner education, training and professional development to ensure improved individual client health and wellbeing outcomes.[15] MRWHP aims to promote systemic supports, competencies and appropriate resources to support better outcomes for women.

Initial steps undertaken by the partnership include a review of policies and practices developed by the peak medical, nursing and midwifery colleges and societies on the implementation of cultural responsiveness in clinical education. The review was informed by the findings of an extensive consultation undertaken with lead bodies who have responsibility for standard-setting, education and the continuing professional development for health practitioners.

Encouragingly, the report concluded that cultural responsiveness is increasingly considered a core pillar of education and training of health practitioners. A range of initiatives have been developed across curricula, training programs, publications, standards and practice guidelines, and research that could be shared.[16] Remaining gaps include insufficient information around how cultural responsiveness is included in core training and professional development, and the level of uptake. Additionally, there is insufficient information on the standards for communicating effectively with patients with low English proficiency and working with interpreters.

MRWHP is working to address these gaps by:

- Identifying strategies to develop the requisite skills, based on the seven domains or roles health providers have as identified by the CanMEDs framework.[17] These are: medical expert, communicator, collaborator, leader, health advocate, scholar and professional.
- Exploring ways to evaluate effectiveness and uptake of education across these domains.
- Promoting platforms and ways to share education, training and resources for all health providers.

Responding to the needs of women from migrant and refugee backgrounds requires leadership and collaboration across all the professional and consumer groups in the Migrant and Refugee Women's Health Partnership. Further information on the Partnership's work is available at www.culturaldiversityhealth.org.au or by contacting secretariat@culturaldiversityhealth.org.au.

Information about the free interpreting service is available from the Department of Social Services:www.dss.gov.au. Eligible medical practitioners can register to access the free interpreting service at: www.tisnational.gov.au/register.

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As a recipient of the Cabrini Foundation PhD scholarship, I was asked to contribute to the Cabrini Institute Annual Report 2017-18. The following article was written: Improving health outcome for refugee women

## IMPROVING HEALTH OUTCOMES FOR REFUGEE WOMEN

Cabrini is supporting PhD scholar Sue Willey to evaluate the implementation of a perinatal mental health screening program to improve health outcomes for refugee women and their families.

When she saw the Cabrini advertisement for a PhD scholarship in refugee perinatal mental health, it was like a dream come true. Ms Willey has a strong career in nursing and midwifery, with substantial experience in maternal and child health and refugee health nursing and teaching. The PhD scholarship was an opportunity to undertake research full-time in the areas she was most passionate about: refugee health, mental health, primary healthcare, health promotion and maternity care. She is guided in her studies by her three supervisors, Associate Professor Jacqueline Boyle and Dr Melanie Gibson-Helm at Monash University, and Professor Lee Boyd at Cabrini.

Now in her third year of her PhD, Ms Willey is excited about how her work can improve care provided to women and clinical practice: "I really love how it can improve care provided to the women and clinical practice. The midwives are valuing the program and it allows them to provide more holistic care for the women visiting the clinic. The program has also been well embraced by the other health professionals involved. I'm excited knowing my research will contribute to an improvement in healthcare."

The perinatal mental health national guidelines recommend women are screened for mental health in pregnancy, at the beginning, during and postnatally. While postnatal depression is commonly screened, it is less well appreciated that depression and anxiety can develop in earlier stages of pregnancy. By picking up the signs early, it is hoped women can be referred to services and get the support they need.

Ms Willey's research is based at a dedicated refugee health antenatal clinic at Dandenong Hospital. While most who attend the clinic are women from a refugee background, she has also been working with a group of non-refugee migrant women who have culturally and linguistically diverse backgrounds. Early screening in women of refugee or migrant backgrounds is particularly important because previous research has shown less than five per cent of refugee women in the Monash Health database were being identified as having a mental health condition in pregnancy. This is low given that in the general refugee population, 31 per cent experience mental health issues. Following the implementation of the perinatal mental health screening program at the antenatal clinic at Dandenong Hospital, 36 per cent of refugee women are self-reporting mental health issues during pregnancy, including depression and anxiety symptoms.

The screening program utilises the digital platform ICOPE, which has been developed by the Centre of Perinatal Excellence. All women attending their first antenatal appointment with a midwife are given an iPad on arrival and asked to complete the self-report questionnaires: the Edinburgh Postnatal Depression Scale (which includes a sub-anxiety assessment and self-harm question) and the Monash Health psychosocial assessment. Midwives are able to access an online clinical report and make an assessment from the score as to whether further clinical discussion and referral is required to assist a woman. The assessments have been translated into a number of common refugee and migrant languages including Arabic, Dari, Farsi, Pashto, Tamil and Vietnamese. The program also frequently uses interpreters because a lot of women attending the clinic have limited education and cannot read. The research team is in the process of developing the iPad assessments to be delivered in an audio format so women can listen to it and respond accordingly.

Ms Willey's PhD project forms part of a large-scale program. Her aims are to evaluate the effectiveness of the program, including whether:

- the women are being supported effectively
- the program is effective in identifying mental health concerns
- women are being referred for help

Her studies will investigate what still needs improvement and what would be required to scale up the program across all maternity services. Ms Willey has completed interviews and focus groups with health professionals and is in the process of completing interviews with refugee and non-refugee migrant women.

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## Appendix 1: Evaluation Plan

| | |
|---|---|
| **Project title:** | Evaluation of a perinatal mental health screening program for women of refugee background |
| **Evaluation purpose:** | 1. To ascertain the acceptability and feasibility of perinatal mental health screening; referral pathways and follow-up diagnosis and management after screening from the perspective of women from refugee background and health professionals.<br>2. To identify strategies that will improve clinical management and referral pathways for perinatal mental health disorders in women of refugee background. |
| **Key questions:** | 1. Was the delivery of the screening program feasible and acceptable to the participating women and health professionals?<br>2. What are the barrier and facilitators of the screening program; referral pathways and subsequent management for women of refugee background and health professionals?<br>3. How many women from a refugee background have been<br>a) referred to the Refugee Health & Wellbeing Clinic (MH RH&W) and/or their GP after a positive screening result?<br>b) diagnosed with depression and/or anxiety following referral?<br>4. How much improvement in knowledge and skill of midwives and doctors in screening and referring women for perinatal mental health has been achieved? |
| **Evaluation resources:** | 1.0 FTE PhD student over 3 years to conduct evaluation<br>NOMAD toolkit for survey – adapted from NPT online resource<br>Budget $10,000 for interpreting and transcription of focus groups and interview<br>Digital voice recorder for focus groups and interviews<br>In-kind contribution from Refugee Health and Wellbeing Clinic (MH RH&W) – Monash Health- refugee health nurse liaison (RHNL); bi-cultural worker; counselling staff; management to facilitate program implementation and evaluation |
| **Evaluation design:** | Q1. a) Focus groups and semi-structured interviews with women; b) focus groups with Rose Quartz midwives and doctors<br>Q2. a) Focus groups and semi-structured interviews with women; b) focus groups with Rose Quartz health professionals<br>Q3. a) collect baseline screening data and referral information at first antenatal visit, b) Health records audit - Monash Health RHWC and maternity record and GPs<br>Q4. a) peer case review sessions, b) online survey of Rose Quartz midwives and doctors |
| **Data collection methods:** | Q1 and Q2. a) Focus groups with interpreter (n=7); 6-8 women participating in common refugee languages (Arabic, Burmese, Dari, Farsi, Hazaragi Pashto and Tamil). Semi-structured telephone or face-to-face interviews with women (n=14) who are not able/not willing to attend a focus group. Transcribed and re-checked for authenticity; b) minutes from community advisory committee meetings; c) Focus groups (n=2) with 6-8 Rose Quartz midwives and doctors; d) survey of all Rose Quartz health professionals<br>Q3. a) Baseline EPDS and psycho-social screening and referral data (at first midwives visit in early pregnancy) from each participating woman (n=119); b) health record audit for documentation of referral history and outcomes at MH RH&W; MH maternity and GPs for all participating women of refugee background (n=119).<br>Q4. a) Monthly case/peer review meeting notes; steering committee minutes; b) survey of all Rose Quartz health professionals |

| **Priority Area:** | **Perinatal mental health screening for women of refugee background** | | |
|---|---|---|---|
| **Goal:** | Implement a perinatal mental health screening program that is acceptable and feasible for women and health professionals, and improves referrals made for support and management. | | |
| **Target population/s:** | Women of refugee background who speak Arabic, Burmese, Dari, Farsi, Hazaragi Pashto or Tamil receiving maternity care at the Rose Quartz clinic at Dandenong Hospital | | |
| **Objective** | **Impact indicators** | **Evaluation methods/tools** | **Timelines and responsibilities** |
| 1. Deliver a screening program that is feasible and acceptable for women and health professionals. | Level of feasibility and acceptance of screening program expressed by<br>– participating women, and<br>- health professionals<br>(NPT four core constructs - coherence; cognitive participation; collective action; reflexive monitoring) | Focus groups with interpreter (n=7); 6-8 women in common refugee languages (described above). Semi-structured telephone or face-to-face interviews with participating women in their preferred language with an interpreter (n=20)<br><br>Focus group with Rose Quartz health professionals (n=2); 6-8 midwives/doctors | Conducted by PhD student<br>July - Nov 2017 |
| **Strategies** | **Process indicators** | **Evaluation methods/tools** | **Timelines and responsibilities** |
| • Establishment of a community advisory committee to inform ongoing implementation of the project and translation to universal maternity practice.<br><br>• Development of culturally sensitive, translated screening tools for women who do not have English as their first language. Tools are to be made available using an iPad and in audio format for women who have difficulties with reading their language.<br><br>• Perinatal mental health screening to be conducted on an iPad at the first midwives visit for women attending the Rose Quartz Thursday clinic | Community advisory committee has a diverse representation of community members relevant to project<br><br>How many meetings the community advisory meeting had<br><br>Number of women completing screening on iPad at first antenatal visit<br><br>Percentage of each language being accessed to complete screening<br><br>Percentage of women utilising written format of screening tool<br><br>Percentage of women utilising audio format of screening tool | Community advisory committee minutes<br><br>EPDS and psycho-social screening data collected at first antenatal visit and entered into research Access database<br><br>Written implementation logs | PhD student throughout Aug 2016 – Aug 2017 |

| Objective | Impact indicators | Evaluation methods/tools | Timelines and responsibilities |
|---|---|---|---|
| 2. To assess the acceptability of the screening program, and experience of subsequent management from the women's and health professionals perspective | Health professionals report improvements in managing women with perinatal mental health disorders<br>- The screening program facilitates improved access to acceptable and appropriate services for women | Focus groups and semi-structured interviews with participating women conducted in their preferred language as described above (see objective 1)<br>Focus group with health professionals as described above (see objective 1) | Conducted by PhD student in months<br>July - Nov 2017 |
| **Strategies** | **Process indicators** | **Evaluation methods/tools** | **Timelines and responsibilities** |
| • Clinical reports immediately generated after screening and available for health professionals<br>• Reports post-screening emailed or sent as SMS to women. These reports provide further details on local services in relation to the woman's responses to each of the screening questions | Number of health professionals who received the clinical report post-screening<br>How many health professionals found the clinical report useful<br>How many women received an email or SMS report post-screening<br>How many women accessed the local services detailed in the clinical report<br>Barriers to receiving the post-screening email or SMS | Survey for health professionals<br>Focus groups and semi-structured interviews with participating women conducted in their preferred language as described above (see objective 1) | Conducted by PhD student in months<br>July - Nov 2017 |

| Objective | Impact indicators | Evaluation methods/tools | Timelines and responsibilities |
|---|---|---|---|
| 3. To increase the uptake of referrals for support and management following screening for women of refugee background | Health professionals express improvement in accessing referral services for women<br>Percentage of women who accessed ongoing mental health support and management<br>Increased usage of referral services experienced by women<br>- Ongoing access to services experienced by women | Survey of health professionals<br>Health records audit | Conducted by PhD student in months<br>July - Nov 2017 |
| **Strategies** | **Process indicators** | **Evaluation methods/tools** | **Timelines and responsibilities** |
| • Referral pathways for women who require referral to Refugee Health and Wellbeing Clinic developed in collaboration with RHWC nursing/counselling staff and manager<br>• Referral pathways provided to antenatal midwives for women who are identified as requiring referral post-screening | How did the referral pathways assist health professionals to refer women to appropriate services?<br>How did the referral pathways inhibit health professionals to refer women to appropriate services?<br>How many women accessed the referral service offered<br>Number of women who were referred to the RHWC post-screening<br>Number of women who were subsequently referred to their GP after RHWC assessment<br>Percentage of women who required ongoing mental health support and management | Health record audit<br>Steering committee minutes<br>Survey with health professionals | Conducted by PhD student in months<br>April 2016 – Aug 2017 |

| Objective | Impact indicators | Evaluation methods/tools | Timelines and responsibilities |
|---|---|---|---|
| 4. To increase the knowledge and skills of midwives and doctors in screening and referring women for perinatal mental health disorders | Increased confidence expressed by midwives and doctors in screening and referring women for perinatal mental health disorders<br>- Increased knowledge and skill of midwives and doctors in identifying women with perinatal mental health disorders (NPT four core constructs) | Survey<br>Focus group with health professionals as described above (see objective 1) | Conducted during formative evaluation phase; by PhD student at Apr 2016 – Aug 2017 |
| **Strategies** | **Process indicators** | **Evaluation methods/tools** | **Timelines and responsibilities** |
| • Establish a steering committee who meet fortnightly to plan for and monitor progress during implementation<br>• Education/in-service preferences reported by health professionals<br>• Education/in-service presentations with midwives and doctors who work in the antenatal clinic | Attendance at steering committee meeting<br>Frequency of steering committee meetings<br>How many midwives and doctors attend the education/in-service sessions<br>Number of health professionals who completed the survey on professional development preferences | Steering committee minutes<br>Education session attendance documentation | Steering committee meet fortnightly 6 months before implementation and throughout project<br>Education sessions with health professionals commencing 2 months before implementation and throughout project – PhD student; RHNL; project team |

## Appendix 2: Monash Health Psychosocial Assessment

# Southern Health

- ☐ Dandenong Hospital
- ☐ Kingston Centre
- ☐ Jessie McPherson
- ☐ Casey Hospital
- ☐ Monash Medical Centre - Clayton
- ☐ Monash Medical Centre - Moorabbin
- ☐ Community Health Services
- ☐ Cranbourne Integrated Care Centre

*Affix Patient Identification Label*

Unit Record Number: .....

Surname: .....

Given Name: .....

D.O.B: ..... Age: ..... Sex: .....

Address: .....

.....

SHF028800

## MATERNITY PSYCHOSOCIAL NEEDS ASSESSMENT

The following questions will provide additional information that will assist us in your care.
They are designed to be asked twice in your pregnancy (or before discharge after having your baby)
Please **CIRCLE** an answer for each question and provide descriptions where relevant

| | | Booking | | Late pregnancy/ after giving birth | |
|---|---|---|---|---|---|
| 1 | Do you have any concerns regarding this pregnancy or birth? | Yes | No | Yes | No |
| 2 | Do you have any concerns related to past pregnancy or birth experiences? | Yes | No | Yes | No |
| 3 | Do you have any concerns or questions related to past breast feeding experience or plans for feeding this baby? | Yes | No | Yes | No |
| 4 | Have you experienced any abuse? (E.g. physical, sexual, emotional) | Yes | No | Yes | No |
| 5 | In the past year have you experienced any violence or been fearful for your safety or that of your children? | Yes | No | Yes | No |
| 6 | Are you afraid of anyone at home or in your life? | Yes | No | Yes | No |
| 7 | Do you have any physical, psychological or intellectual disabilities which will impact on caring for your baby? | Yes | No | Yes | No |
| 8 | Have you ever been diagnosed with a mental health condition? (E.g. depression, anxiety, bipolar disorder, psychosis) | Yes If yes, go to question 9 | No If no, go to question 12 | Yes If yes, go to question 9 | No If no, go to question 12 |
| 9 | Please provide a description of the condition: | | | | |
| 10 | Have you needed treatment for the mental health condition? | Yes If yes, go to question 11 | No If no, go to question 12 | Yes If yes, go to question 11 | No If no, go to question 12 |
| 11 | Please provide a description of the treatment: | | | | |
| 12 | Do you think that you (or your partner) may have a problem with drugs or alcohol? | Yes | No | Yes | No |

***Clinician Use Only***

| Booking | Late pregnancy / after giving birth |
|---|---|
| Documentation continued in MRF01 / 02 or MRJ01 or MRA01 (circle) Yes / No | Documentation continued in MRF01 / 02 or MRJ01 or MRA01 (circle) Yes / No |
| Print Name: ..... | Print Name: ..... |
| Signature & Designation: ..... | Signature & Designation: ..... |
| Date: ..... | Date: ..... |

MRF05
03/13

MATERNITY PSYCHOSOCIAL NEEDS ASSESSMENT

MRF05

# Southern Health

- ☐ Dandenong Hospital
- ☐ Kingston Centre
- ☐ Jessie McPherson
- ☐ Casey Hospital
- ☐ Monash Medical Centre - Clayton
- ☐ Monash Medical Centre - Moorabbin
- ☐ Community Health Services
- ☐ Cranbourne Integrated Care Centre

*Affix Patient Identification Label*

Unit Record Number: .....

Surname: .....

Given Name: .....

D.O.B: ..... Age: ..... Sex: .....

Address: .....

.....

## MATERNITY PSYCHOSOCIAL NEEDS ASSESSMENT

The following questions will provide additional information that will assist us in your care.
They are designed to be asked twice in your pregnancy (or before discharge after having your baby)
Please **CIRCLE** an answer for each question and provide descriptions where relevant

| | | Booking | | Late pregnancy/ after giving birth | |
|---|---|---|---|---|---|
| **13** | Have you recently arrived in Australia as a visitor, migrant, refugee or asylum seeker and now have concerns about the supports available to you? | **Yes** | **No** | **Yes** | **No** |
| **14** | Do you have any issues that need to be considered in planning your care? (E.g. cultural/ religious, dietary) | **Yes** | **No** | **Yes** | **No** |
| **15** | Do you have any financial concerns (including unemployment) which will impact on caring for your baby? | **Yes** | **No** | **Yes** | **No** |
| **16** | Do you have any concerns related to stable accommodation during your pregnancy and for when you take baby home? | **Yes** | **No** | **Yes** | **No** |
| **17** | Are you the main carer for anyone other than your children? | **Yes** | **No** | **Yes** | **No** |
| **18** | Do you or your partner have any children not living with you? | **Yes** | **No** | **Yes** | **No** |
| **19** | Do you have any concerns related to the family / social supports you have, especially during your first week at home with baby? | **Yes** | **No** | **Yes** | **No** |
| **20** | Are you currently receiving community support services? (E.g. family or disability services, DHS) | **Yes** If yes, go to question 21 | **No** If no, go to question 22 | **Yes** If yes, go to question 21 | **No** If no, go to question 22 |
| **21** | Please provide a description of the services: | | | | |
| **22** | Have you received community support services in the past? | **Yes** If yes, go to question 23 | **No** If no, questionnaire is complete | **Yes** If yes, go to question 23 | **No** If no, questionnaire is complete |
| **23** | Please provide a description of the services: | | | | |

***Clinician Use Only***

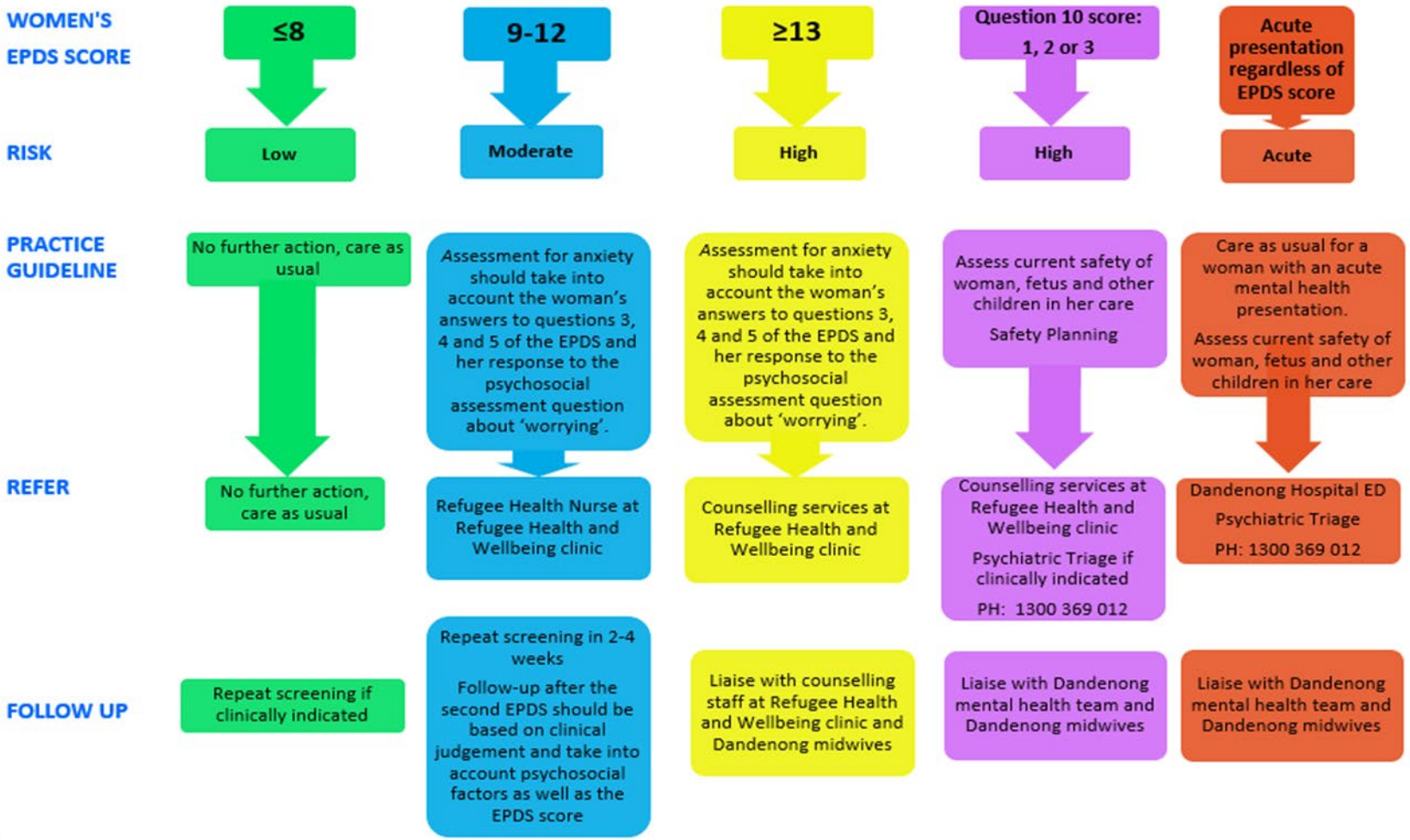
| Booking | Late pregnancy / after giving birth |
|---|---|
| Documentation continued in MRF01 / 02 or MRJ01 or MRA01 (circle) Yes / No | Documentation continued in MRF01 / 02 or MRJ01 or MRA01 (circle) Yes / No |
| Print Name: ..... | Print Name: ..... |
| Signature & Designation: ..... | Signature & Designation: ..... |
| Date: ..... | Date: ..... |

MATERNITY PSYCHOSOCIAL NEEDS ASSESSMENT

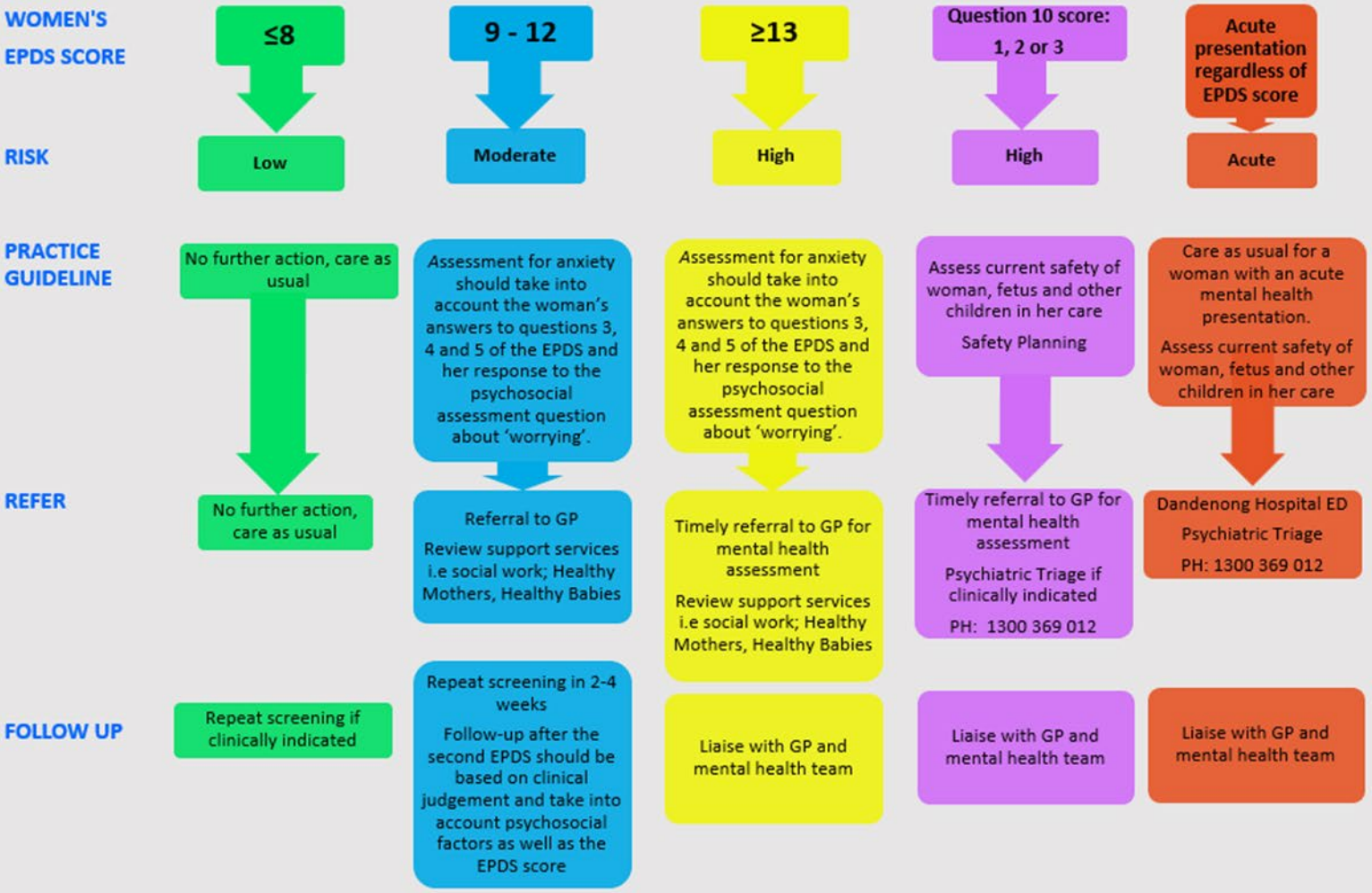
MRF05

## Appendix 3: Referral pathways for women of refugee and non-refugee backgrounds

# Practice guidelines – EPDS administration
## WOMEN OF REFUGEE BACKGROUND



## Practice guidelines of EPDS administration
## WOMEN WHO ARE NOT OF REFUGEE BACKGROUND



## Appendix 4: Plain English language statement for health professionals

**Screening women of refugee background for depression and anxiety in pregnancy. What maternity health providers think?**

Contact: jacqueline.boyle@monash.edu

**Background:** Up to 1 in 5 women feel depressed or anxious when pregnant. They can also feel like this after having a baby. Women of refugee background may be more likely to be at risk. This is because of exposure to conflict, violence and loss. Australian guidelines recommend screening all women in pregnancy. This is for depression and anxiety. Screening in early pregnancy can help find women who need support. Not all women are asked in all hospitals.

In 2016, we started a screening program. We asked women about symptoms of depression and anxiety. This happened at their first appointment with a midwife. We asked questions about depression and anxiety. This was on the Edinburgh Postnatal Depression Scale. We also asked questions about social health. Women answered the questions on an iPad using iCOPE*. The questions were in English. They were also in other languages. Results were available for midwives on a website called COPE. Women received results by text or email. We included extra referral options. These were for women who had symptoms of depression and anxiety.

**Aim:** To find out what maternity health providers views are on screening women for depression and anxiety in early pregnancy.

**Method:** We surveyed 24 maternity health providers. We followed this with 2 focus groups and 8 interviews.

**Results:** Maternity health providers liked the program. They agreed the program helped to provide more holistic care. Screening helped to discuss depression and anxiety with women. These discussions were more detailed than before. Maternity health providers said they would like more training and resources. This would help with making the program routine practice.

**Discussion:** This information will help introduce the program across the all of the maternity service at Monash Health.

**What maternity health providers told us about the program**

| | |
|---|---|
| **How they made sense of the screening program** | Better discussion about mental health.<br>They liked the use of the iPad.<br>More information was available on referral. |
| **How they build their practice around the screening program** | They see screening as a part of their role.<br>They need key people to drive the program forward. People like the refugee health nurse liaison and managers.<br>More screening could happen. This could happen with audio versions for women with low literacy. |
| **How they can establish the program into routine practice** | Working with each other helps.<br>Need to have support from managers.<br>Need more training and resources. |
| **How they understand the program** | It provides more holistic care.<br>Helps to find women with emotional health issues.<br>Improves being able to discuss emotional health with women. |

**What does this mean for maternity practice?** We asked women and they told us they liked being able to talk about their feelings with midwives.

Women who took part in the study were more likely to report depression and anxiety symptoms. Women who needed more support for depression and anxiety were more likely to get help.

Knowing what maternity health providers and women need will help us make emotional health care in pregnancy better for all women.

***COPE digital screening** https://www.cope.org.au/health-professionals/icope-digital-screening/

## Appendix 5: Plain English language statement for women

**Asking about depression and anxiety in pregnancy. What do women of refugee background think?**

Contact: jacqueline.boyle@monash.edu

**Background:** Up to 1 in 5 women feel depressed or anxious when pregnant or after having a baby. Women of refugee background may be more likely to be at risk of depression and anxiety in pregnancy because of hardship, violence and loss. The Australian guidelines recommend asking every woman about her emotional health in pregnancy. Asking in early pregnancy can help find women who need support. But not all women are asked in all hospitals.

In 2016, we started asking women questions about how they were feeling. We did this the first time they came to see a midwife at the hospital. Women used an iPad to answer the questions. We translated the questions into different languages. Some women needed an interpreter to help them. Then the midwife spoke with women about their answers. Any woman who had signs of being sad or worried was asked if she would like to speak to another health care worker who could help her with her emotional health.

**Aims:** We wanted to know how women felt about being asked these questions and about speaking to the midwives about their emotional health.

**Methodology:** We spoke to 22 women from 4 different refugee and migrant groups. We read the interviews many times. We found common ideas and thoughts.

**Results:** All women said that being asked about emotional health was important. They liked being asked about how they were feeling. They liked being able to talk with the midwife about how they were feeling. Many women said it was the first time anyone had asked them about their emotional health. Women felt cared for and supported.

**Women's experiences**

Could talk about emotional health with the midwife.

Would suggest other women in their community do screening.

They liked doing the screening in their own language. It was more private and encouraged more honest answers.

Some women liked having something to do when in the waiting room.

Other women felt doing the screening in the waiting room was difficult. They needed the interpreter to help. They worried other people would hear their answers.

**What women said about getting help for emotional health**

Many women said that if a woman needs help, she should ask for help.

Women do not get help because of shame and dishonour. They cannot speak the language. They do not want to take help. They ignore problems. They do not want to share problems. They think extra help cannot solve problems.

Women suggested it would be good to have a health care worker at the clinic who was expert in helping with emotional health problems. It would help women who were worried about someone finding out they were getting help for emotional health. Because you could visit this health care worker at the same time you saw the midwife.

**Suggestions for improving emotional health care for pregnant women**

Every women said being able to listen to the questions on the iPad would be very helpful.

**What this means for the future**

Knowing what women value and what they want changed will help us make emotional health care in pregnancy better for all women.

We did another study and found women who were asked about their emotional health in pregnancy were more likely to report signs of being sad or worried than women who were not asked about emotional health in pregnancy.

Women were also more likely to have extra checks because they were asked about their emotional health.

## Appendix 6: Maternal and child health nurses work with refugee families: Perspectives from regional Victoria, Australia

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SPECIAL ISSUE ARTICLE

WILEY Journal of Clinical Nursing

# Maternal and child health nurses work with refugee families: Perspectives from regional Victoria, Australia

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**Aims and objectives:** To explore service provision for Victorian regional refugee families from the perspective of maternal and child health nurses.

**Background:** Increasingly, more families from a refugee background are resettling in regional Victoria. The refugee journey has significant effect on families. Refugee families with infants and young children can be provided with support by maternal and child health services; however, many families experience barriers to ongoing engagement with this service.

**Design:** This descriptive study used focus group and questionnaire. A purposive sample of 26 maternal and child health nurses was drawn from six municipalities throughout regional Victoria, where higher numbers of people from a refugee background resettle. Six focus groups were held in 2014. Audio-recorded narratives were transcribed, prior to inductive thematic analysis.

**Methods:** This descriptive study used focus group and questionnaire. A purposive sample of 26 Maternal and Child Health nurses was drawn from six municipalities throughout regional Victoria where higher numbers of people from a refugee background resettle. Six focus groups were held in 2014. Audio-recorded narratives were transcribed verbatim, prior to inductive thematic analysis.

**Results:** Participating nurses were experienced nurses, averaging 12 years in the service. Four major themes emerged from thematic analysis: "How to identify women from a refugee background"; "The Maternal and Child Health nurse role when working with families from a refugee background"; "Interpreting issues"; and "Access to other referral agencies." Nurses worked to develop a relationship with families, attending to a complex mix of issues which were complicated by language barriers. Nurses found their role in supporting refugee families required additional time and more home visits.

**Conclusions:** To provide best practice, maternal and child health nurses need (i) ongoing professional development; (ii) time, flexibility and creativity to build relationships with refugee families and (iii) better access to services that enhance communication, such as interpreting services and translated resources.

**Relevance to clinical practice:** Nurses require ongoing professional development to help them address the multifaceted needs of families of refugee background. With limited resources available in regional areas, accessing further education can be challenging.

  

Distance education models and organisational support could provide nurses with educational opportunities aimed at improving service provision and clinical practice.

KEYWORDS
continuing education, maternal child health service, nursing and midwifery, refugees and asylum seekers

## 1 | INTRODUCTION

Australia has a long history of resettling people from a refugee background and currently resettles a minimum of 13,750 people per annum (Parliament of Australia, 2016). Around 4,000 people from a refugee background resettle each year in the state of Victoria through the Australian Humanitarian Program (Victorian Department of Health [DoH], 2017). Approximately half are children (Paxton, Smith, Win, Mulholland, & Hood, 2011), indicating a number of young families. Many will resettle in metropolitan Melbourne, yet figures show an increasing number resettle in rural and regional Victoria (AMES, 2015; Australian Government, Department of Social Services, 2013). In 2014–2015, more than half of those from a refugee background who resettled in Australia via the offshore humanitarian programme were from Afghanistan, Myanmar (Burma), and Iraq (Parliament of Australia, 2016). More recently, additional places have been offered to those displaced due to the conflict in Syria (Refugee Council of Australia, 2016). Furthermore, approximately 10,000 asylum seekers (those waiting for determination of their refugee claim) live in the Victorian community (DoH, 2017).

Past experience of limited access to health care, exposure to war, conflict, trauma and torture, disease and limited access to basic daily requirements are some of the many issues people from a refugee background face during the refugee journey (Pottie et al., 2011; The Victorian Foundation for Survivors of Torture, 2012). Resettlement in Australia provides people from a refugee background the opportunity to improve health and well-being (Australian Government, Department of Social Services, 2016). Therefore, health systems and the professionals who work within these systems must be cognisant of the bio-psycho-social health and well-being requirements for people from a refugee background if they are to provide care that is tailored to meet individual and community needs. A "person from a refugee background" is the term used in this study to describe individuals who have arrived through either the Australian humanitarian programme (refugees and humanitarian entrants) or as an asylum seeker (see Box 1).

The effects of the refugee journey significantly impact women (Willey & Duell-Piening, 2014). Poorer health, racism, discrimination and illiteracy are concerns reported by women from a refugee background (Drennan & Joseph, 2004). In the perinatal period, separation from loved ones and from traditional cultural norms may result in feelings of isolation and vulnerability (The Royal Australiasian College of Physicians, 2015; Willey & Duell-Piening, 2014). Furthermore, maternal perinatal mental health issues can impair mother–infant attachment, thus impacting the cognitive, physical and emotional development of the infant (Harvey, Fisher, & Green, 2012). Children of refugee families are more likely to live in socio-economic

**What does this paper contribute to the wider global clinical community?**

- Improving access to health care for people from a refugee background requires nurses and midwives to build trusting relationships with community members and engage in ongoing education.
- To provide care that is tailored to meet the needs of people from a refugee background, ongoing education for nurses and midwives must include how to identify people from a refugee background and ways to enhance communication.
- Building trusting relationships with people from refugee a background requires time, flexibility and creativity.

**BOX 1**

The UNHCR 1951 Refugee Convention defines a refugee as:

> *any person owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it. (United Nations High Commissioner for Refugees (UNHCR), 1951)*

disadvantage compared to other children and thus have a higher risk of adverse physical, cognitive and socio-economic development (Paxton et al., 2011).

In recognition of the multiple and complex psychosocial health needs people from a refugee background face after resettlement, health professional networks and refugee health initiatives have been established across Australia to provide expertise in refugee health and well-being (RHeaNA, 2016). One example of many refugee health initiatives has been the Victorian Department of Health funded Refugee Health Program founded in 2005 (DoH, 2015). This programme funds community-based nurses with expertise in working with culturally and linguistically diverse communities in regions where high numbers of refugee populations resettle (DoH, 2015). In addition to nurses, the programme funds allied health professionals, bicultural workers and interpreters to provide a coordinated approach to health care and improve the health and well-being of individuals and communities from a refugee background. This service operates in 17 metropolitan and regional municipalities in Victoria, Australia, and acts as a resource for all health professionals and service providers (DoH, 2015).

Australia's nationally funded public health system provides universal access to health care through the national health insurance scheme (Medicare) for citizens and residents with a permanent visa (Department of Human Services, 2017). Three levels of government are collectively responsible: federal, state and territory, and local. Federal government responsibility is to fund Medicare and the Pharmaceutical Benefits Scheme. States have the majority of responsibly for public hospitals, community health services, public dental care and mental health services, and local government deliver community health programmes such as immunisation and maternal and child health (MCH) services (The Commonwealth Fund, 2017). Dependent of visa category when entering Australia, people from a refugee background may or may not have universal access to public health care. Policy on access to health care for people from a refugee background is complex and beyond the scope of this study. In summary, people who resettle with a permanent protection visa have access to the universal public healthcare system as described. For those seeking asylum, eligibility to Medicare will depend on visa status (Victorian Refugee Health Network, 2015). In Victoria, the state government has special arrangements in place to support asylum seekers access to state funded public health services such as MCH services (Victorian Department of Health, 2011).

The Victorian MCH service is a state and local government-funded service, providing primary health care for all families who have a child between 0–6 years, and is available in all municipalities across the state of Victoria (Department of Education and Early Childhood Development, 2011). The MCH service offers ten key age-and-stage growth and development checks by MCH nurses during this period. All Victorian MCH nurses are both registered nurses and midwives who have further postgraduate qualifications in child, family and community health nursing (Municipal Association of Victoria, 2015) that does not include specific refugee health education. The MCH nurse role is similar to that of the health visitor in the UK (Cowley, Caan, Dowling, & Weir, 2007) and Plunket nurse in New Zealand (Royal New Zealand Plunket Society, 2017).

The typical MCH nurse role encompasses health promotion and education, parenting support, nursing intervention and timely referral to specialty services for all family members (Municipal Association of Victoria, 2015). In addition to routine care, specific health and socio-cultural issues are crucial to the ongoing health care of families from a refugee background. This may place a significant demand on the MCH role. A qualitative study by Riggs et al. (2012) explored the experiences of women from a refugee background who accessed MCH services in metropolitan Melbourne and reported a number of barriers to ongoing engagement with the service. Cultural differences, language difficulties, lack of awareness of available services and MCH nurses lack of understanding of the complexity of needs when working with this population were barriers identified by women. Notably, these barriers have been reported in the literature as common concerns for nurses and midwives in other jurisdictions (Drennan & Joseph, 2004; Khanlou, Haque, Skinner, Mantini, & Kurtz Landy, 2017).

In recognition that families from a refugee background face barriers accessing MCH service and MCH nurses report they require further support to work with refugee families (Riggs et al., 2012), it was deemed important to examine MCH service provision in regional areas, where services, supports and resources are less abundant. Professionals in regional areas must manage distance to metropolitan-based services and resources, reduced access to health services and limited access to on-site interpreting services. This study aimed to explore service provision for Victorian regional refugee families from the perspective of MCH nurses and identify whether there are continuing professional development needs and MCH nurses who work with families from a refugee background.

## 2 | METHOD

This qualitative descriptive study collected data using focus group and questionnaire. Qualitative methods such as focus group attempt to increase knowledge and understanding and provide the researcher greater insights into how others experience the event; why health professionals may behave in certain ways and opportunity to gain new knowledge on organisational culture (Hoffman, Bennett, & Del Mar, 2013). Furthermore, in a collaborative environment, focus groups foster group participation providing the researcher with a unique view lens into a collective set of values, experiences and observations (Richards, 2015; Schneider, Whitehead, LoBiondo-Wood, & Haber, 2014).

### 2.1 | Participants

A purposive sample of MCH nurses was drawn from six municipalities throughout regional Victoria where a Refugee Health Nurse was employed, based on knowledge that each region would have higher number of resettled families from a refugee background due to the

employment of the Refugee Health Nurse. The six MCH team coordinators were contacted by telephone and email and asked to identify MCH nurses interested in participating in a focus group. This resulted in recruitment of 26 MCH nurse participants from across the six municipalities in May–June 2014. Each nurse provided written informed consent to take part in a focus group.

### 2.2 | Data collection

At each of the six municipalities, a 90-min focus group with the MCH nurses was conducted. All focus groups were facilitated by a nurse/midwifery researcher with extensive experience as a midwife, MCH nurse and Refugee Health Nurse. Light refreshments were provided at each focus group. Focused discussions were assisted by a question schedule with participants being asked about their experience of service delivery, their training, skills, the healthcare supports available to families and suggestions for improvement to the MCH service. Discussions were audio-recorded.

At the commencement of the focus group, each MCH nurse completed a short background questionnaire asking about personal details such as gender, age and years working as an MCH nurse and in their current organisation. Additional questions asked about referral services/agencies, available professional development opportunities and how many families from a refugee background they provided a service for per month. Human ethics approval was obtained from Monash Universtiy, and consent was granted from the Victorian Department of Education and Early Childhood Development to approach MCH staff.

### 2.3 | Data analysis

Data collected using the questionnaire were collated and summarised. Focus group recordings were transcribed by a commercial provider. To focus on exploring the phenomenon in depth, an inductive approach to thematic analysis was undertaken to ensure identified themes were strongly linked to the data (Braun & Clarke, 2006; Richards, 2015). One researcher who was independent of data collection conducted the initial narrative analysis using NVIVO qualitative data analysis software (version 10, QSR International, Victoria, Australia, 2012). Transcriptions were open coded to attribute nominal codes; data were then organised into patterns with the emergence of categories that identified and highlighted the situation, experiences and beliefs of the MCH nurses. The categories were developed and agreed by two researchers. Finally, a process of synthesising the data was undertaken by all four researchers (Braun & Clarke, 2006; Richards, 2015) resulting in the identification of four key themes which are described below.

## 3 | RESULTS

### 3.1 | Participant characteristics

Twenty-six maternal child health nurses participated in the study. All were female, with an average age of 50 years (range 32–61 years), and experience working as a MCH nurse for between 1–30 years (average 12 years) also averaging 12.5 years in their current organisation. Nearly all reported experiences of working with families from a refugee or asylum-seeking background either in their current, or previous centre.

Of the 26 nurses, nearly all ($n$ = 20) worked in a universal MCH role, in which there was no distinction between referrals and no particular specialisation to advise refugee families. Five nurses worked in an outreach/enhanced and more specialised role. The MCH nurses gained education and information on refugee health via professional development, through team meetings ($n$ = 16), professional journals ($n$ = 10) or conferences ($n$ = 6). Very few (<4) received specialist education available at the Victorian Foundation for Survivors of Torture (Foundation House), or in tertiary studies.

#### 3.1.1 | Referral in, referral on

Nurses were asked how many families from a refugee or asylum-seeking background they provided a service to per month. Responses indicated three participants were unable to give a number due to not being able to differentiate between a person who had been granted refugee status and a person who was seeking asylum. Three participants provided care to between 15–24 refugee and/or asylum-seeking families each month. Another ten nurses indicated they were uncertain of a person's refugee status.

Maternal and child health nurses were asked in the questionnaire about available support services for families, and almost three-quarters (18/26) were aware of the Refugee Health Nurse employed at the local community health service. Very few nurses were aware of the specialist torture and trauma counselling service, the Victorian Foundation for Survivors of Torture (Foundation House), yet later clarified they referred to the Refugee Health Nurse in their local area who was then able to link families to specialist services.

### 3.2 | Focus group findings

Four key themes emerged from thematic analysis: "How to identify women from a refugee background," "The MCH nurse role when working with families from a refugee background," "Interpreting issues," and "Access to other referral agencies." The care that families from a refugee background required was seen as complex.

#### 3.2.1 | How to identify women from a refugee background

Many MCH nurses identified they provided a service for both refugees and asylum seekers, but did not routinely differentiate between the two. Some of these nurses specified they were unsure of a women's background and assumed that due to the country of origin, language spoken, or ethnicity, that the woman was from a refugee background.

Several nurses were reluctant to question a woman about her actual background when this was not given in client or infant referral

information. The nurses felt by questioning whether a person was from a refugee background that they were prying, or being too personal:

> *. . .I . . . find it difficult to ask . . . you sometimes feel like you're prying . . . I sort of probably should ask more. [FG6]*

Nurses suggested they were lacking information from the referral process about the background of women and yet were reluctant to question women themselves. There was a lack of agreement that MCH nurses obtained a social history, and thus, they could miss resettlement issues that the family maybe experiencing. Conversely, one participant felt that probing questions were vital:

> *. . .it's for a reason. It's not to be nosy. It's not to be disrespectful. It's about driving the service and what's appropriate for them, and liaising, providing appropriate resources for them. [FG2]*

Nurses identified that not questioning a person's background to identify refugee or asylum seeker status limited their ability to plan care appropriately. Others felt confident in asking in a sensitive way:

> *I've actually got a huge map of the world, . . . I ask them to point to it [where they're from], I mean, I know where most of them are from, but just to sort of help them, I say "Can you show me where you're from?" [FG6]*

This research found when MCH nurses had contact with the local Refugee Health Nurse, families were often well linked into other services, such as General Practitioners, public health services such as hospitals/clinics and/or social supports such as volunteer services. If this was so, families were more aware of the MCH service, highlighting that communication and service coordination is required to improve access and enable better identification of a person's refugee background. Some nurses reported dual employment: they were also employed in the local maternity hospital, thereby providing unintentional continuity of care with linked services for women in the early postnatal period.

### 3.2.2 | The MCH nurse role when working with families from a refugee background

The MCH nurse role was underpinned by the MCH nurses' experiences of working with refugee families, particularly "The cultural background of women," "Flexible appointment scheduling," "Health education," "Negotiating traditional versus western practices" and "Building relationships with families." MCH nurses felt these issues impacted on their current practice, yet improvement requires further support and/or professional development to enable better management of the complex care issues for women and children.

The *Cultural background of women* required MCH nurses to adapt care according to the family's culture, such as communal living arrangements. Nurses indicated the family unit was often well supported by the wider community and could be quite different in composition to traditional western families. For instance:

> *. . .there was about five children in the family plus a new baby. And the older children were left at home to look after the baby while mum went fruit picking, . . . because the community would look after them. . . [FG3]*

Maternal and child health nurses often faced barriers in arranging appointment times with women because of the language barrier and had to resort to relayed messages through other family members or the community. Although it was regarded as essential to tailor care to meet individual needs, a major barrier such as lack of transport or child-minding meant that appointments were sometimes missed. This required *Flexible appointment scheduling*, often involving extra home visits and outreach. This strategy, however, impacted the MCH nurses time and workload:

P1 . . .sometimes it's hard to tee up the visit because you don't have an interpreter to tee up the visit . . . you try and ring and make the appointment and book the interpreter but whether the person actually knows that you're going to come at that time and whether they're going to be home. . .

P2 . . .sometimes it's easier to hop in the car and say 'I'm a nurse', I find a calendar and the right time . . . and then say 'interpreter' and they go 'yes'. I just find it so much easier. [FG5]

Time was also spent rescheduling missed appointments to suit the women:

> *. . .we set up an appointment at the centre and organised an interpreter over the phone. Mum didn't turn up . . . she's quite happy to have home visits. But to get her to come in to the centre, even with that first child there's a history of only turning up about every second appointment and always turning up late. [FG3]*

There was a broadened role for MCH nurses in providing *Health education*, particularly *Negotiating traditional versus western practices*. Nurses made many comments regarding the differences in parenting styles across cultures; such as swaddling, co-sleeping and safe sleeping, feeding practices (such as using formula) indicating these were different. Many client families were large or else combined family households with various parenting practices. MCH nurses reported they encouraged acceptance of what was best practice together with the family's own cultural norms, recommending they follow their traditional practices:

*. . .I often ask them too 'What culturally would you do in your own country' so you've got, that my education level increases to, like for something like the safe sleeping you know what their norm is so then you can say 'Well, this is what, that's okay but in Australia you might do this a bit differently because the weather's so much colder here than in Africa as well'. We wrap the babies . . . So find out what their normal is before trying to change it. [FG1]*

The discussion at focus group 6 particularly highlighted the nurses' experiences work negotiating *traditional versus western practices* and *health education*:

P1 . . .we're giving them information on how we, as a culture, live. . . When we talk about you need to have three meals a day, and three snacks, and things like that and the sorts of food, they just don't eat that sort of food. They don't know what you're talking about.

P2 . . .not imposing our culture on their culture, which you're constantly having to. . . like even the sleeping

P3 we've got the safe sleeping guidelines which are completely the opposite of what their culture is. You just accept that and . . . guide them on what's safe . . .it's just learning to kind of understand, try to fit in with their culture but still give good health promotion, advice [FG6]

Recognising the need to not impose Western culture onto others provided nurses the ability to foster *Building relationships with families* by ensuring communities knew about the existence of the MCH nurse programme and involving them in the service. Due to barriers such as language, culture, family structure and transport, working with families from a refugee background was complex. Furthermore, developing relationships could be difficult as families did not have a similar service in their country of origin and thus may not attach importance to the MCH service:

*. . .Some think the service is great and enjoy coming. Others have got no idea what we're about. . .particularly African families. If they've got a large number of children and they've had some born in Africa and some in Australia, because the service didn't exist there, they don't see the point of it here. [FG1]*

Nurses found ongoing engagement with the MCH service challenging:

*. . .I find if you're making the effort to contact them initially they will be fine with it. Once you ask them to start contacting you,. . .I think that's when they get lost as it's not an important part possibly, it's not what we feel is a need from the family's perspective of maternal child health service because I think they've come from somewhere they've never had anything like that before. [FG1]*

### 3.2.3 | Interpreting issues

Nurses found telephone interpreting less successful than face-to-face interviews. As services were situated in regional areas of the state, many nurses struggled to obtain on-site interpreters and therefore relied on the telephone interpreter service, or family members. The greater the distance from Melbourne, the more this difficulty seemed to occur unless there was a large community with readily available interpreters. MCH nurses reported numerous issues with missed appointments, inconsistencies with booking interpreters and telephone interpreting particularly at home visits:

Q Do you have access to speaker phones or do you use your own phones?

P2 We don't do it at all.

P4 It doesn't work actually, does it? They don't want to talk into the phone. They want to have face-to-face.

P1 And you need something clearer. We've got little old phones that are not very good for those sort of things.

P3 That would only work in the centre and we're often home visiting. So most interpreting goes through a family member . . . [FG1]

Furthermore, MCH nurses found difficulty in identifying specific ethnicity or dialects for families when arranging translation services:

*. . .knowing that you've got the right interpreter who is interpreting what you're saying and not having to rephrase it . . . So it's a lot of asking them what they said to them and what the response was, getting a female preferably . . . all of those things and then be able to pin them down to a timeframe. [FG1]*

One service, however, had identified necessary change and made improvements in providing services when an interpreter was required. They extended visit times from half an hour to one hour as well as successfully engaging respected community members as regular interpreters. The benefits to nurses and families who accessed the service were reported as positive:

*. . . we've gotten a couple of really good interpreters that have been working here for quite a long time they. . . have been . . ., really really beneficial in our clinic too, to make the clients aware what the service is and what its used for and what you can use maternal and child health for, because it's something that is totally new to them. [FG2]*

### 3.2.4 | Access to other referral agencies

The services MCH nurses most commonly referred families to include the closest Refugee Health Nurse, local community-based health services and General Practitioners. Timely access was viewed as sometimes difficult. Nurses reported barriers to families accessing local services due to the service's limited resources or service policy. For instance, not all General Practitioner clinics accept families from a refugee background, with the reasons including clinics not accepting new clients and/or the language barriers and time required.

However, nurses who had worked in the MCH service for a number of years felt they had developed expert knowledge regarding where to refer the women, and had good access to local resources. How to access a General Practitioner who spoke the same language as the women was a problem. One service had developed a resource list of doctors and the languages spoken. Access to female doctors' was an additional concern.

I Do you have female GPs or people that you might be able to refer to them?

P1 . . .we had one female GP who worked at the hospital, . . . she was expected to be there 24 hours a day seven days a week in the hospital, when they wanted her, which was very difficult for her. . . [FG2]

Religious groups, playgroups and multicultural centres were seen as good points of referral and these provided a mutually beneficial service whereby staff at these services would refer families to the MCH service. In addition, MCH nurses viewed these services as referral options for families and a means for increasing a families' engagement within the local community.

> *. . .The neighbourhood House or . . . playgroup. . .I think this Baptist Church has a few programs for them as well. . .And the Salvation Army. . . they have a community garden that a lot of the men work at, . . . So there's a few different programs for different areas of the community that are set up . . .* *[FG6]*

Difficulty in accessing or knowing about specialist referral services (particularly if someone disclosed a history of torture or trauma) was apparent, with nurses not readily aware of specialist torture and trauma services. Nurses were not clear on how to refer and suggested they would contact the local Refugee Health Nurse or turn to mainstream services such as the woman's General Practitioner.

One MCH service employed a nurse who acted as the liaison for refugee health. This nurse updated others at team meetings about current trends and issues within the broader refugee health sector. MCH nurses within this service felt well supported by this individual and contacted her as the main resource person.

In summary, MCH nurses showed great insight into the need for more cultural awareness training, recognising how important this was if they were to work effectively with families from a refugee background.

I Is there special skills or things that you feel that you need within your own practice that would help you work better with the refugee and asylum seeker families?

P5 Foundation House came down a couple of years ago . . . which was an interesting insight . . . the way they approached it was personalising it in terms of where have we come from in terms of our families and how did we settle in. And that was a really good insight. For those of us who travelled to foreign countries, you could really relate to the anxiety and the vulnerability that you experience when you're in another culture . . . bringing that forward and becoming aware . . . can . . . help you engage . . . [FG1]

## 4 | DISCUSSION

This research explored service provision for Victorian regional refugee families from the perspective of MCH nurses, with particular reference to the experiences and continuing professional development needs of MCH nurses. The results align with findings from research conducted with MCH nurses in metropolitan Melbourne (Riggs et al., 2012), identifying that service provision for refugee families is complex and MCH nurses need ongoing and targeted professional development to help meet the multifaceted needs of families (Drennan & Joseph, 2004).

Paramount to the MCH nurses' role and work with the complex families of refugee background is the nurses' ability to be able to identity refugee families. Identification of families from refugee background allows for the provision of care that can be tailored to best meet the needs of the family, particularly with facilitating improved access to MCH services and culturally responsive practice. Research indicates many health professionals feel ill-equipped to question a person and may even query why having knowledge of the person's migration history is necessary (Yelland et al., 2014). Such is the case found in the practice of the participating MCH nurses who acknowledged they did not routinely establish the women's migration history. Furthermore, data sets in MCH practice only require the collection of country of birth and year of arrival information, thus not prompting nurses to enquire further. Sensitive questioning about social circumstances, migration and resettlement is welcomed by individuals (Yelland et al., 2014) and provides opportunity for people to build trusting relationships with health services which reduces the risk of significant health concerns being missed.

The constraints and challenges of organisational policy and systems impact on the work of MCH nurses (Renzaho & Oldroyd, 2014). MCH nurses wanted to provide the best care possible, yet at times felt service supports such as translated information, flexible

appointment scheduling and limited interpreting services hindered care. Best practice indicates that providing a professional interpreter is necessary to ensure quality and safety in all communication when the woman's first language is not English (Attard et al., 2015; Flores, 2005). However, challenges are faced when on-site interpreters are not readily available. In this instance, telephone interpreters are often employed with varying results. Successes have been demonstrated when using an interpreter via video-conference and is a preferred option to a telephone interpreter for both health professionals and clients (Schulz, Leder, Akinci, & Biggs, 2015). Video conferencing benefits clients by reducing barriers to their preferred language and facilitates improved nonverbal communication between client and health provider. Both of these support the building of trusting relationships when working with people from a refugee background. In the absence of an on-site interpreter, video conferencing is the ideal source for accessing an interpreter in regional, rural and remote locations (Schulz et al., 2015).

Building refugee health expertise into MCH services compels MCH nurses to be culturally competent professionals, yet MCH nurses exhibited a lack of confidence in this area. Cultural competency is best achieved when MCH nurses have the knowledge, attitudes and skill (Suurmond, Seeleman, Rupp, Goosen, & Stronks, 2010) to provide holistic and culturally competent care. Preparing MCH nurses with knowledge that provides understanding of the refugee journey and the impact of resettlement (Samarasinghe, Fridlund, & Arvidsson, 2010), with attitudes that acknowledge one's own culture and how this shapes behaviour and thinking (Suurmond et al., 2010), and the skill to develop trusting relationships is imperative to building relationships with people from a refugee background. Professional development opportunities for MCH nurses that include working with refugee communities are keys to building a culturally competent MCH workforce who are able to appropriately respond to the unique needs of refugee women and their families. For instance, education that aims to improve MCH nurses' confidence to identify women from a refugee background or working with a woman who discloses their experience of torture, trauma and/or persecution (Murray & Skull, 2005) will foster the provision of inclusive and culturally competent care to a diverse community and strengthen the MCH profession.

## 4.1 | Implications for practice

Maternal and child health nurses work at an advanced level of nursing and midwifery practice and have a scope of practice that requires them to be skilled, knowledgeable and competent when providing health care to vulnerable communities such as refugees and asylum seekers. There were indications that some nurses had sought professional development opportunities, although many had not. Distance tertiary education models are well positioned to provide regional MCH nurses with online postgraduate studies opportunities, or else employers need to ensure nurse are provided with study leave to attend regular professional development sessions. It would be advantageous for MCH services to establish a "refugee health" portfolio holder to enable one interested member of staff to act as the "go to person" to keep the team informed of developments in refugee and asylum seeker health at team meetings.

## 4.2 | Limitations and strengths

The strengths of this research include participants' direct experience in working with families from a refugee background. Sampling across a number of Victorian regional centres enabled exploration of MCH experience and enabled a shared meaning to emerge. As in all qualitative research, there is potential for researcher bias; however, involvement of four researchers in the analysis balanced the prior clinical experience of the researcher who collected data. The researchers strived to understand the lived reality of the MCH nurses' work with refugees, however, limited by data analysis occurring independently from the participating nurses. Additionally, data collected was primarily subjective and only provides viewpoints from MCH nurses in regional Victoria. Due to limitations of this research, no community consultation was possible. Further research should include community consultation as community members may have alternative views regarding optimal service provision and enable more mutual understandings.

## 4.3 | Recommendations and conclusions

Refugee health and well-being is not limited to the specialty refugee health services alone. Therefore, nurses and midwives need to acknowledge their professional responsibility when working with individuals, families and communities by seeking out and engaging in both informal and formal education. Thus, to provide best practice MCH nurses need (i) ongoing professional development with emphasis on knowledge, skill and attitudes required for advanced nursing/midwifery practice when working with people from a refugee background; (ii) time, flexibility and creativity to build trusting relationships with families; and (iii) access to services that enhance communication such as interpreting services and translated resources.

The findings suggest that MCH nurses need further education and training, in particular, regarding working with interpreters, understanding the refugee journey and cultural competency. The results from regions indicated a consensus and similar issues are likely to apply in nursing and midwifery practice both nationally and internationally; anywhere people from a refugee background reside.

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## CONTRIBUTIONS

Study design: SW, RC, AW, MM; data collection: SW; analysis: SW, RC; and manuscript preparation; SW, RC, AW, MM.

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