Supporting Equitable Perinatal Mental Health Outcomes for Asian Women

A REPORT FOR THE NORTHERN REGION DISTRICT HEALTH BOARDS

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June 2021

Asian Family Services

ACKNOWLEDGEMENTS

The authors would like to acknowledge:

- members of the Clinical Advisory Group for your ongoing support and advice about the project;
- Caryn Tasker of Northern Regional Alliance for support and assistance in coordinating the project;
- participants of the interviews for your enthusiasm and willingness to share your experience and knowledge to the project;
- research team members Sunjin Heo, Hiromi Kominami, Yvonne Tang and Vivian Terei for your help with recruiting research participants from relevant ethnic communities, your substantial contribution to the interviews and continuous input to the project; and
- Kristy Kang for review and assistance with the preparation of this report.

Citation: Ho, E., Feng, K. and Wang, I. (2021)
Supporting Equitable Perinatal Mental Health Outcomes for Asian Women. A Report for the Northern Region District Health Boards. Auckland: Asian Family Services.

Caring for mothers,
Caring for the future.

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EXECUTIVE SUMMARY

This research was contracted by the Northern Region District Health Boards to provide understandings of the factors driving Asian women's low access rates into maternal mental health services and to identify actions to improve access and maternal mental health outcomes for Asian women during the perinatal period (from pregnancy to the first year after childbirth). The research questions were:

a) What are Asian women's emotional health and wellbeing and their experiences of help-seeking when they have experienced mental distress during the perinatal period?

b) What are the barriers to accessing mental health and support services experienced by Asian women in relation to perinatal mental ill health?

c) What are Asian women's perceptions and acceptability of perinatal mental health services in New Zealand?

d) What actions can be identified to improve access and maternal mental health outcomes for Asian women in the perinatal period?

The study used a qualitative inductive thematic research design. A total of 48 interviews were completed between November 2020 and February 2021. They included 17 women during the perinatal period from five Asian sub-groups (six Chinese, four Japanese, three Indian, three Korean, and one woman of a refugee background), nine family members (seven husbands/partners and two mothers of women), six community group representatives (e.g. mothers' group facilitators, parent support group coordinators), and 16 healthcare providers (Asian or non-Asian) involved in the care of Asian women during pregnancy and postnatally (e.g. general practitioners (GPs), midwives, Plunket nurses, social workers, counsellors, psychologists, psychiatrists). The use of triangulation, or obtaining information from multiple data sources, helped to bring forth different points of view and perspectives of the participants and promote a more comprehensive understanding of the phenomenon under study.

The research identified a range of challenges encountered by Asian women and families during the perinatal period. The key cultural challenges are related to Asian women's traditional roles as homemakers and mothers. Hence, compared with women from more individualist cultural backgrounds, Asian women tend to feel a huge amount of responsibility about their babies, and often put the needs of their children and husbands before themselves. Asian women's cultural background makes it challenging for them to seek help from outside of the family. Many Asian women also face migration-related challenges, which have intensified during the COVID-19 pandemic when border closures keep them separated from their extended families overseas. With no immediate family support in New Zealand except their husbands, many Asian women are solely responsible for caring their babies at home most of the time. Feelings of exhaustion, loneliness and emotional isolation can impact on their relationship with their husband, other older adults in the family as well as their own mental wellbeing.

Our research explored Asian women's experiences of help-seeking for their mental health concerns during the perinatal period. There were substantial variations in Asian women's emotional states during the perinatal period, their help-seeking intentions and sources and their experiences of using or not using mental health services and other support. Of the 17 Asian women interviewed, only two

had ever used specialist maternal mental health services in New Zealand. One woman sought telephone counselling, and five sought help from GPs, midwives and Plunket nurses for their mental health difficulties. For these participants, the support provided by family was a major factor for seeking help. GPs, midwives and Plunket nurses were also important. They helped to identify and provide support for early-stage mental health issues, and made referrals to specialist mental health services if needed. Henceforth, having family support, and having trust and confidence in health professionals are important factors affecting Asian women's utilisation of perinatal mental health services. Moreover, having culturally- and linguistically-matched practitioners, assurance of confidentiality and provision of free or low-cost services would also improve the effectiveness and acceptability of services.

Multiple barriers to access mental health services and support were identified. The biggest barriers are the social stigma attached to mental ill health and the harmful effects of discrimination, followed by language difficulties, lack of access to appropriate interpreters, poor understanding of perinatal mental health problems and Western treatment approaches, and lack of awareness of the New Zealand health system and services. Other practical issues that may impact on Asian women's access to perinatal mental health support include limited financial capacity, domestic responsibilities and lack of transport.

There are also systemic barriers preventing Asian women from receiving mental health services across primary, secondary and tertiary levels. GPs, midwives and Plunket nurses are the first point of contact for health advice and services by the majority of Asian women during pregnancy and postnatally, however failure to recognise somatic presentations of mental health problems can result in missed opportunities to identify Asian women's perinatal mental health problems at an early stage. The under-recognition of mental health problems at the primary care level can delay treatment and referral to secondary and tertiary mental health care. Furthermore, the triage of referrals is done by a referral management team. The problems of the triage process may include insufficient information provided in the referrals, and under-diagnosis due to a lack of recognition of cultural elements in psychiatric diagnosis. This may result in under-treatment of some Asian patients.

Based on the study findings, recommendations for actions to improve access and maternal mental health outcomes for Asian women in the perinatal period are made.

1. Actions to enhance health literacy and promote early help-seeking.
    - Promote perinatal mental health of Asian women through incorporating a focus on perinatal mental health within existing antenatal and parenting classes, and supporting Asian women to join mothers' groups to develop social networks and reduce isolation.
    - Promote mental health and wellbeing of fathers and other members of the extended family through delivering fathers' programmes to promote positive parenting for men and providing parenting education for grandparents. The programmes will also help to raise awareness about perinatal mental health and promote the mental health and wellbeing of families.
    - Develop culturally appropriate resources to de-stigmatise mental illness and promote early help-seeking.

2. Actions to improve early identification and intervention at primary care level.
    - Upskill GPs, midwives and Plunket nurses to identify warning signs and possible risk factors for perinatal emotional issues, equip them with skills to support Asian women and their families, and provide early intervention or make referrals if necessary.
3. Actions to strengthen referral pathways to maternal mental health services.
    - Improve primary-secondary care interface through improving the quality of referrals from primary care and referral management at secondary level.
4. Actions to foster growth of ethnic-specific counselling and support services.
    - Improve Asian families' access to services through providing culturally responsive, holistic care by practitioners who share the same cultural and language backgrounds. Areas of service include: empowering Asian women and families to manage their stress and mental health difficulties, providing cultural, psychological, social and practical support, assistance with navigating systems, and provision of education, information and resources.
    - Improve timely access to professional interpreters.
    - Promote better inter-agency referrals and communication.
5. Workforce development.
    - Provide CALD cultural competency training and resources in health and social service sectors to improve understanding of cultural differences in the way different Asian groups may present with mental distress, their help-seeking patterns and cultural methods of supporting women's wellbeing during pregnancy and postnatally.
    - Peer review groups for clinicians for continuing professional development.
6. Future research.
    - Potential areas of future research include: the experiences of fathers and families affected by perinatal mental ill health, and the services and support they need; interventions to improve the quality of referrals from primary care to specialist mental health services; and the effectiveness of using screening tools to detect depression among pregnant and postpartum women.

INTRODUCTION

Maternal mental health services across the metro Auckland District Health Boards (DHBs) (Waitemata, Auckland and Counties Manukau) have identified that people who are Asian consistently have lower access rates into services compared to people who are of Māori or Other ethnicity. This is despite Asian women experiencing high rates of mental ill-health during the perinatal period as evidenced by literature. This study was contracted by the Waitemata DHB (on behalf of the Northern Region DHBs) to provide understandings of the factors driving the low access rates, and to provide recommendations for actions to improve mental health outcomes for Asian women during pregnancy and postnatally.

Studies have indicated that women from ethnic minority groups are at greater risk of developing mental health problems, and that it is less likely that these problems will be detected or treated, including during the perinatal period (Mehta, 2012; Prady et al., 2016; Watson et al., 2019). While the reasons for these disparities are not fully explained, belonging to an ethnic minority group may be associated with exposure to psychosocial triggers such as deprivation and social isolation (Karlsen et al., 2005), discrimination (Bécares & Atatoa-Carr, 2016; Harris et al., 2012; Paterson et al., 2016), being a migrant, refugee or asylum seeker (Au & Ho, 2015; Howard et al., 2014), and inequity in health care access and support (Anderson et al., 2017).

Across Asian ethnic groups, there are some cultural factors which may be contributing to the low access of perinatal mental health services. Mental illness is highly stigmatising in many Asian cultures (Jain & Levy, 2013; Ng, 1997). In these societies, depression is culturally unacceptable because it is seen as implying weakness (Hanley, 2007; Parvin et al., 2004). Asian people are expected to practice self-control and to maintain social harmony — it is culturally unacceptable to talk about problems, feelings or emotional issues to people outside the family home (Ho et al., 2002). Consequently, many Asian women are reluctant to use mental health care, or are restricted by family members from seeking support services (Raymond, 2007; Wittkowski et al., 2011). There is also evidence that some women will present with somatic (physical) symptoms of postnatal depression such as headaches and stomach pain, rather than with psychological symptoms such as low mood (Klainin & Arthur, 2009; Zaroff et al., 2012). Among Asian recent immigrants, language difficulties, inadequate knowledge and awareness of existing services, and lack of culturally appropriate services, are additional barriers to their use of the mental health care system (Ho et al., 2002). Other practical issues that may impact on Asian women's access to perinatal mental health support include financial problems, waiting times, domestic responsibilities, lack of childcare, and lack of transport (Masood et al., 2015).

Poor perinatal mental health impacts on maternal morbidity and mortality and can have a devastating impact on child and family wellbeing (Gaynes et al., 2014; Kingston et al., 2012). To reduce health inequalities among vulnerable mothers and families affected by perinatal mental ill health, it is important to understand Asian women's experiences of perinatal mental health conditions and utilisation of services to inform the development of culturally appropriate maternal mental health services and future interventions.

Research questions

This study aims to address the following research questions:

a) What are Asian women's emotional health and wellbeing and their experiences of help-seeking when they have experienced mental distress during the perinatal period?

b) What are the barriers to accessing mental health and support services experienced by Asian women in relation to perinatal mental ill health?

c) What are Asian women's perceptions and acceptability of perinatal mental health services in New Zealand?

d) What actions can be identified to improve access and maternal mental health outcomes for Asian women in the perinatal period?

METHODS AND DESIGN

This section discusses the process of designing and carrying out a qualitative study involving participants from different Asian sub-groups and healthcare providers involved in the care of Asian women and their families during the perinatal period. It addresses preparations for recruiting participants, developing the interview schedules, and identifying anticipated ethical issues for research. It also describes the procedures for collecting data, the characteristics of research participants, and the steps in analysing data and validating the accuracy of findings.

Recruitment strategies

Within the broad label of 'Asian' ethnicity, there are many ethnic sub-groups with specific health care beliefs and practices related to pregnancy, childbirth and care (Choudhry, 1997; Grewal, Bhagat & Balneaves, 2008; Holroyd et al., 1997; Ito & Sharts-Hopko, 2002; Lee et al., 2009; Park & Peterson, 1991; Pritham & Sammons, 1993). Due to time and resource constraints, 'Asian' participants in this study have been drawn primarily from Chinese, Indian, Korean, Japanese and refugee backgrounds. According to the 2018 Census, Chinese, Indian, Korean and Japanese sub-groups made up the majority (81.2%) of the Asian population in the Auckland region. Although people of refugee background only make up a small proportion of the total Asian population in Auckland, refugee women usually face many obstacles when accessing health services (Guerin et al., 2004; Waitemata DHB eCALD Services, 2016). Thus, this group has also been included in the study to understand their experiences of pregnancy and childbirth and their perceptions of mental health issues.

Within the five Asian sub-groups (Chinese, Indian, Japanese, Korean, former refugees), the study has sought to recruit three groups of participants: (1) women in the perinatal period (i.e. from pregnancy to the first year after childbirth); (2) family members/carers of Asian women in the perinatal period (e.g. husbands, parents, in-laws); and (3) representatives from Asian community groups involved in providing support to women and/or their families during the perinatal period (e.g. mothers' support groups). The fourth group of participants are healthcare providers (Asian or non-Asian) who are providing services to women and/or their families during the perinatal period (e.g. GPs, midwives, Plunket nurses, social workers, counsellors, psychologists, psychiatrists). The use of triangulation, or obtaining information from multiple data sources, is a qualitative research strategy to promote a more comprehensive understanding of the phenomenon under study (Patton, 1999).

Extensive preparations were required in order to access the relevant ethnic communities and potential research participants. Our recruitment methods included using Asian Family Services' (AFS) existing connections with Asian communities (e.g. AFS' official WeChat account, social workers' networks), research team members' personal networks and snowballing. We used ethnic/culture- and language-matched interviewers to interview Asian women, family carers and community representatives in order to build trust, instill confidence and to improve understandings of participants' experiences. These interviewers also helped to inform potential participants in their respective ethnic communities about the study by posting the study's advertisement flyer with the social media groups and chats that they had joined, such as mothers' chat groups and parenting forums. Some participants were recruited through snowball sampling in which research participants were asked to assist in identifying other potential participants.

Regarding the recruitment of healthcare providers, a list of potential participants was identified by the research term in consultation with the project's Advisory Group which included maternal and infant health provider, manager of mental health service and manager of Asian and refugee health services from across the metro Auckland DHBs.

Interview schedules

Four interview schedules were developed to collect information from participants. **The interview schedule for Asian women** (Appendix 1) was in six sections: (A) Basic demographic information and family background; (B) General wellbeing: this section includes a Ladder Scale which measures participant's feelings of wellbeing during pregnancy, following childbirth, and during the child's first year; (C) Mental health concerns: this section includes the Kessler Psychological Distress Scale (K10) which comprises 10 questions about emotional state, each with a five-level response scale; (D) Emotional wellbeing during COVID-19 pandemic: this section explores the impact of COVID-19 lockdowns on participant's daily living, and their physical and emotional health; (E) Help-seeking behaviour: this section explores participant's help-seeking sources for mental health issues during the perinatal period and the factors affecting their access to formal mental health and support services when they are mentally distressed; (F) Knowledge and experiences of using perinatal mental health services.

The interview schedule for family members (Appendix 2) consists of three sections: (A) Family background; (B) Challenges during the perinatal period: this section explores participant's experiences of caring for a family member during pregnancy, following childbirth and during the child's first year, and the impact of these life events on family relationships, emotional health and other aspects of life; (C) Help-seeking sources: this section explores participating family's sources of support for mental health issues during the perinatal period and the factors affecting Asian women's access to formal mental health and support services when they are mentally distressed.

Interview schedules for healthcare providers (Appendix 3) and **Asian community representatives** (Appendix 4) cover similar sections but they provide different perspectives on the following topics: participant's experiences of providing support to Asian women and/or their families during the perinatal period; how Asian families use specialist mental health services and other support services during this period; the barriers Asian families faced in accessing and using perinatal mental health services; and resources which are currently available to help healthcare providers and mothers' support groups to provide mental health support to Asian women and their families during the perinatal period.

All four interview schedules used a semi-structured question design to ensure consistency of information, but were sufficiently open for participants to offer viewpoints they thought were important.

Ethical considerations

Ethical approval from the Health and Disability Ethics Committees (HDEC) was obtained prior to conducting the interviews (Ethics Ref. 20/NTB/187, dated October 7, 2020). Information sheets for

research participants (Appendices 5-8) were provided to all potential respondents. The information sheet described the background of the study, participants' rights and their involvement, and how data collected in the study will be used. Individuals who freely consented to participate in the study signed a consent form (Appendix 9) before the commencement of interviews. This form acknowledged that participants' rights would be protected during all phases of the study. Elements of informed consent included the following:

- the purpose of the study, so that individuals understood the nature of the research and its likely impact on them;
- the procedures of the study, so that individuals could reasonably expect what to anticipate in the research;
- the right to participate voluntarily and the right to withdraw up to four weeks after the interview, so that an individual does not feel coerced into participation;
- the right to ask questions, and have their privacy respected;
- the right to decline to answer any particular question;
- the right to decline audio-taping of the interview; and
- the overall benefits and risks of the study that will accrue to the individual (Creswell, 2003).

Participants were assured that their names and any other personally identifiable information would not be included in written reports or other publications arising from the study. To ensure confidentiality was maintained throughout the process of the study, participants' interview recordings and transcripts were identified only by pre-assigned codes, using two upper case letters and a number – for example, CM1, KF4. The first letter was used to identify the ethnicity of the participant: C for Chinese, I for Indian, J for Japanese, K for Korean and O for Other. The second letter was used to identify if the participant was a mother (M), family member (F) or community group representative (R). The letters HP were used for healthcare providers.

Data collection

A total of 48 interviews were completed between November 2020 and February 2021. Interviews were conducted by qualified social workers, counsellors and therapists from Asian Family Services who had very good communication skills, relevant education and practice experience in mental health and came from similar cultural backgrounds as the participants. Given these factors, it was deemed appropriate for Asian Family Services staff to conduct interviews in the Asian community.

Before the interviews were conducted, a training workshop was held to help the interviewers gain a comprehensive understanding of the interview schedule and ethical aspects of the research. The selection criteria of participants were discussed. Because of their close connections within their communities, interviewers also helped to identify possible interview participants from their respective communities.

Prospective participants interested in the study were sent the Participant Information Sheet (PIS) and Consent Form (CF). They could ask for the research documents to be translated into their first language.

Individuals who freely consented to participate in the study were arranged for an interview. All interviews took place at mutually agreed locations (e.g. home, office) where privacy could be maximised, by phone, or online via video conferencing tools. Although New Zealand was at COVID-19 Alert Level 1 during the interview period, there was still a lot of uncertainty about the long-term containment of the virus. Hence, interview via phone or video conferencing was offered as an alternative option. Over half of the interviews (52%) were conducted online because of its convenience, and also because many participating women wished to stay home to look after their newborn babies (Table 1). When participants indicated that they would like to take part in an online interview, the interviewer would find out from them which video conferencing tool they would use to participate in the interview (e.g. Zoom, WeChat video call, WhatsApp video call), and an interview location (e.g. a private room) where noises and distractions could be minimised (Salmons, 2012).

Table 1 Number of interviews by participant group and interview method

	At home	In office	By phone	Online	Total
Asian women	5	4	1	7	17
Family members	4	1	1	3	9
Community representatives	1	1	1	3	6
Healthcare providers	1	1	2	12	16
Total	11 (22.9%)	7 (14.6%)	5 (10.4%)	25 (52.0%)	48 (100%)

The consent form was signed before interview started. Interviews were conducted in the participant's preferred language, which included English, Cantonese, Japanese, Korean and Mandarin. Most interviews lasted between 1 - 1½ hours for Asian women, and up to one hour for family members, healthcare providers and community representatives. All interviews were audio-taped with participants' informed consent. At the end of the interview, each participant was offered a $30 supermarket voucher as a token of appreciation for their participation.

Participant characteristics

Among the 48 participants who took part in the study, 17 (35.4%) were mothers, 9 (18.8%) family members, 6 (12.5%) community representatives and 16 (33.3%) healthcare providers (Table 2).

Six of the participating mothers were Chinese, four Japanese, three Indian, three Korean, and one mother was Afghani of a refugee background. The women' age ranged from 25 to 42 years, and they had one to four children. Three women had a spouse of a different ethnicity. At the time of interview, three participants were between 22 weeks to 36 weeks pregnant, and 14 had newborn babies aged one to nine months. All participating women were born overseas, and had lived in New Zealand from 1 to 19 years. New migrants, or those who had lived in New Zealand for less than five years, were the biggest group (8, or 47%). Four (23.5%) participants were established migrants who had been resident in New Zealand for over ten years. Eight of the 17 participating women were stay-at-home mothers,

four were working and four were on maternity leave at the time of interview. Participating women's self-rating of their English ability varied: on a scale of one to ten (with 1 being very poor and 10 being very well), two (11.8%) gave a rating of between one and three; seven (41.1%) between four and seven, and eight (47.1%) between eight and ten.

Table 2 Participants by participant group and ethnic group

	Chinese	Indian	Japanese	Korean	Other	**Total**
Asian women	6	3	4	3	1	**17 (35.4%)**
Family members	3	1	2	2	1	**9 (18.8%)**
Community representatives	3	1	1	1	0	**6 (12.5%)**
Healthcare providers	11	1	1	1	2	**16 (33.3%)**
Total	23	6	8	7	4	**48 (100%)**

Nine family members (seven husbands/partners and two mothers) who provided childcare and support to their wives/partners or daughters during the perinatal period were interviewed about their experience. Three of them were Chinese, two Japanese, two Korean, one Indian, and one was a Filipino husband to a Japanese wife.

Six community representatives interviewed included mothers' group facilitators, parent support group coordinators, playgroup leaders and early childhood education (ECE) teachers. Three of them were Chinese, one Indian, one Japanese and one Korean. Most of them provided support activities to new mothers and families in their own ethnic communities. One participant worked in a multicultural playgroup which supported mothers from refugee and migrant backgrounds, and one worked in a community cultural team which provided support to parents of children with disabilities.

A total of 16 healthcare providers were interviewed. Half of them were primary and community care providers including GPs, midwives, Plunket nurses and counsellors; the remainder included mental health nurses, social workers, a clinical psychologist and a psychiatrist working in specialist mental health service. The participants were mostly from Chinese backgrounds, with the exception of one European, one Indian, one Japanese, one Korean and one Pakistani. Two healthcare providers worked extensively with Asian clients from refugee backgrounds.

Data analysis method

All interviews were audio-taped with the permission of participants. The interviewers who conducted the interviews transcribed the interviews from the language that the interview was conducted in: 21 interviews (43.8%) were conducted in English and 27 interviews (56.2%) conducted in other languages. Each transcript was assigned a code name and all personally identifiable information (e.g. participant's name, address) was removed. At their request, participants were sent a copy of the interview

transcript. They had the opportunity to make corrections or request for the erasure of any material they did not wish to be used, within two weeks of the transcript being sent to them. Any material that participants did not wish to be used were removed before data analysis. If the interview was conducted in an Asian language, the interviewer who conducted the interview would remove any material that the participant did not wish to be used from the transcript before translating it into English for analysis.

A qualitative inductive thematic approach was used for data analysis, which involved multiple layers of analysis to enable the identification of themes and sub-themes relevant to the research objectives (Thomas, 2006). The themes were then compared across ethnic groups and participant types — the triangulation of results helped to bring forth different points of view and perspectives of the participants and enhanced the validity of findings (Olsen, 2004).

Follow-up discussions were ongoing with individual interviewers to ensure that the interview transcripts were correctly interpreted. After preliminary data analysis was completed, a "member-checking" meeting (Creswell, 2003) was held with the interviewers during which a summary of the analysis was presented to find out whether the interviewers felt they were accurate. This process helped validate the emerging themes in the research.

To ensure confidentiality was maintained during data analysis and presentation, care was taken in choosing quotes from the interview recordings used in this report. In addition to using a code name, names of specific people, groups, or places that could disclose confidentiality were replaced, while avoiding loss of context in the interview.

Four broad themes emerged from the interviews: challenges experienced by Asian families during the perinatal period; Asian women's emotional wellbeing and help-seeking for mental health issues; barriers to accessing specialist mental health services; and perceptions of acceptability of perinatal mental health services. These themes are discussed in the next four sections.

CHALLENGES DURING THE PERINATAL PERIOD

Pregnancy and the arrival of a new baby brings joy and hope for the future, yet this is also a challenging time for many women and families. This section looks specifically at the challenges experienced by Asian women and families during the perinatal period.

Cultural challenges

Culture plays an important role in the way that Asian women experience pregnancy, birth, and childcare. In traditional collectivist and patriarchal cultures, men are heads of household and decision makers, while women are expected to maintain harmony in the home and to take care of the family. There is a great shame to mothers of children with disabilities: these mothers are often blamed for violating the cultural taboo during pregnancy, such as doing something wrong or eating the wrong kind of food.

- **Asian women's traditional homemaker and mother roles**

Although cultural traditions and norms may change over time with acculturation, certain core cultural values and practices remain significant in the everyday lives of the Asian women interviewed in this study. They tended to feel a huge amount of responsibility about their babies. Many felt pressure to keep their babies as healthy as possible, and they blamed themselves when their babies were unwell.

> *Doing housework and looking after babies are women's job. Even when she is sick, she still tries to do everything.* (CR2)

> *Asian culture tends to blame mothers for any issues related to the baby. … If a baby is born with any disability, the mother can be blamed. So, mothers have great responsibility and pressure.* (HP13, psychiatrist)

> *I am very worried about my baby. If the baby is sick, or not sleeping well, I feel that this is my problem: I haven't done enough to care for my baby.* (JM2)

- **Asian women put the needs of their children and husbands before themselves**

Healthcare providers in this study added that Asian women put the needs of their children and husbands before themselves. This was presented in contrast with their perceptions of European mothers from more individualist cultural backgrounds.

> *Asian mothers pay much more attention to their babies, when compared with other ethnic groups. They are more worried about their baby, and can get really anxious over minor matters, such as when the baby [is] pooping differently, having a cough, or a small red rash.* (HP12, Plunket nurse)

> *Asian mothers have a lot of anxiety just from the baby. Pākehā women also have anxiety, but Pākehā mothers, once their children become one year old or so, then they don't put themselves less than their children. But with Asian women, they always put themselves less than their children and their husbands.* (HP4, GP)

> *Asian mothers put family first, before themselves. They prioritise their children and other family members.* (CR2)

Healthcare providers further said that Asian women's cultural backgrounds made it challenging for them to ask for support and to access mental health services and support that were offered.

> *From a cultural perspective, [Asian] women's needs in terms of mental health, are really pushed aside. When [Asian] clients have an appointment with me … they have to juggle around who's going to babysit, whether the partner is willing to bring them to the appointment, whether they have other [house] commitments that they have to complete, whether they've got permission from their in-laws or whoever. So by the time they have gone through the whole tick boxes their needs are so [far] down … it's always an effort to come and seek support.* (HP16, counsellor)

> *They [Asian mothers] only look for support for their babies. They don't seek professional support for themselves.* (HP10, social worker)

- **Postpartum confinement and care in Asian cultures**

In Asian cultures, women are traditionally required to spend a period of time in confinement after childbirth (known as *Zuo Yue Zi* in Chinese and *Sanhujori* in Korean). This tradition combines prescribed foods to help the new mother replenish her body, as well as a number of restrictions on activities such as no heavy lifting, and no bathing and hair washing after birth. The duration is typically 21 days in Korean culture, one month or 30 days in Chinese culture, up to 40 days in Hindu culture, and up to 100 days in Japanese culture. Despite living in a Western country, the majority of Asian women interviewed in this study believed in traditional postpartum care, but found it challenging to follow proper postpartum practices in New Zealand.

> *The concept of postnatal care is very different between Korea and New Zealand. Korean people believe that caring for the mother after childbirth is very important, but in New Zealand it is really hard to get proper postnatal care.* (KR1)

> *After the birth of my baby a nurse took me to have a shower. Culturally we don't do that because my mother had told me not to shower nor wash hair after birth as that will cause my body to go into a state of yin (cold), resulting in poor health later in life. I didn't know how to explain our cultural belief to the nurse, so I had taken a shower less than five hours after birth.* (CM5)

> *After they have their baby, Chinese mothers cannot go outside. They can become more stressed because they are at home with the baby alone and can't get support.* (HP6, midwife)

> *In our [Afghani] culture, we're confined for forty days, can't go outside, no cold food like yogurt or ice cream, no cold water, and we take special foods to keep the body warm.* (OM1)

> *In Japan, showering or washing hair is prohibited until seven days after birth.* (HP1, midwife)

> *In India, postpartum care is usually provided by the mother and other maternal relatives of the postpartum woman. I am so lucky because both of my parents have come to look after me before my baby was born. They took the last flight to come here just before COVID-19 lockdown.* (IM2)

> *Asian cultures have many traditional forms of postpartum confinement and care, but we are living in a Western country. If we must follow these traditional practices, this will bring*

a heavy burden to ourselves, and increase the stress of the husband and other family members. (HP8, clinical psychologist)

Due to cultural differences, practising postpartum care in New Zealand is adding a lot of stress and anxiety to the whole family in the process of having a baby. (HP5, mental health nurse)

Providing postpartum care is an important cultural practice in Asian families. However, this practice also poses challenges within families. Intergenerational issues may arise between the postpartum women and family members providing care (usually their mother or mother-in-law). Moreover, at the time of data collection, overseas family members were unable to travel to New Zealand to provide care due to border restrictions during the COVID-19 pandemic. The lack of cultural support for postpartum care brings additional stress and anxiety to the postpartum women and their families. These topics are further discussed below.

Personal and familial challenges

All women interviewed in this study were of migrant or refugee backgrounds. Migration, whether voluntary or forced, is a major life transition. The process of adapting to a new environment involves many challenges, such as learning a new language, and negotiating cultural practices different to their own. Pregnancy and having a baby are also major life transitions. Hence, the multiple life transitions faced by migrant and refugee parents can present complex and difficult challenges.

- **Separation from family and limited social support networks**

Isolation and limited social support networks were cited by healthcare providers and community group representatives as common problems experienced by the Asian clients whom they had contact with. They described that many of their clients felt lonely and emotionally isolated because their husbands were working and the people whom they could rely upon for help or support in New Zealand were limited.

Asian mothers are really isolated. They don't have their community around them. Our culture – Western culture or New Zealand culture – doesn't make allowances for other cultural practices when it comes to pregnancy, birth and postnatal care. I think we just expect that everybody does what we do. (HP5, mental health nurse)

A lot of them [Asian mothers] feel lonely and isolated. The husband is off at work, there's nobody to talk to, and they can't share their situation with their parents back in India, or wherever. (HP4, GP)

They have to look after their children alone as husband are out working and their families and friends are back in Japan. They don't have anyone else to rely on. They are under stress as they don't have sufficient information or they don't know what to do. Sometimes they don't realise they need to do certain things. We see them struggling but they don't see it the same way as we do. (JR1)

A lot of Asian mums experience anxiety about social isolation, unfamiliarity with the New Zealand health system, limited support systems, family conflict, financial issues, and a lot of them also have a language barrier. And there's also stigma around mental illness. (HP15, social worker)

Eight out of the 17 participating Asian women in this study were recent migrants and stay-at-home mothers with small children. They reported feeling lonely when their husbands were busy with work and some remained reliant on their families and friends back in their home country for emotional support.

> *My husband works full time. I am fully responsible for looking after the baby, and cooking. … Caring [for] the baby alone make me feel down.* (JM1)
>
> *I'm nine months pregnant and I feel tired all the time. In these days I'm always thinking what will happen when the new baby comes, because I also have two kids. We don't have anyone to look after the kids, just me and my husband. … I am alone all the time. I'm doing everything by myself. Sometimes when I feel depressed, I call my mother or my sister [in the home country] and talk to them.* (OM1)

- **Always worried about the baby's health and development**

Healthcare providers interviewed in this study asserted that a major source of stress in Asian mothers came from their worries about their baby's health and development, especially in first-time mothers. During pregnancy, some women were worried that something might be wrong with the baby. After the baby was born, they might be worried about the baby not getting enough milk, sleeping too much or too little, or the baby not progressing at the same pace as others. Their worries could adversely affect their own health and wellbeing, as well as their relationship with husband/partner.

> *Asian mothers tend to be more worried about their baby than other mothers. They are worried when the baby is crying a lot, or not sleeping well, and then they become worried that they are not a good-enough mother. First-time mothers often have these worries. Over time their worries can affect not only their own emotions, but also the emotions of their husband. A vicious cycle.* (HP10, social worker)
>
> *After the baby is born, their worries are about the baby's healthy growth and development, no matter how trivial they are. They can become anxious and stressed easily, but they deny that they are stressed.* (HP12, Plunket nurse)
>
> *If my baby didn't sleep, I couldn't sleep myself, and I cried at the bedside. When my husband woke up in the middle of the night and saw me crying, he became worried about me.* (CM4)

- **Lack of sleep and no time for self-care**

With no immediate family support in New Zealand except their husbands, many of the participating women were exclusively responsible for caring their newborns most of the time. Feeling exhausted, having little or no sleep, having no time for themselves and isolation from friends were commonly cited as the main challenges they faced.

> *I have found it challenging getting up in the middle of the night. I have no sleep due to breast feeding, making formula milk and using breast pump. (*JM2)
>
> *They [new mothers] are really exhausted, because most of them have no family support. They have to look after the baby all by themselves, getting up four to five times at night to feed the baby. They have little or no sleep. Insufficient sleep can increase their risk of postpartum mood problems. And they don't know where to get help.* (HP14, social worker)

I don't have any family here. After the birth of the baby, I was at a birth care centre. But as soon as I return home, I need to do everything: cooking, cleaning, and driving a car to do grocery shopping alone. I am really busy. I also have stress coming from my eldest child who is going through terrible two. (JM3)

Absolutely no time for Zuo Yue Zi (postpartum care). My parents can't come to help, and I don't have a nanny. Even if I can find a nanny, we can't afford that! (CM4)

Because my husband has a full-time job, I am primarily responsible for looking after the baby myself. She is only eight months. I have been giving all my time to her: feeding her, bathing her, changing her diapers, soothing her when she cries, and making sure that she sleeps safely. I don't have time to go shopping, I don't have time to meet my friends. I don't have time for myself. I don't have time for self-care. (CM4)

They [Asian mothers] are quite isolated. They just stay home and don't get out. Only a few can drive. Even for those who can drive, some are still reluctant to go out. Chinese and Indian mothers don't want to take their babies out in public before the babies are vaccinated, for safety reasons. Chinese mothers have to follow the cultural practice of postpartum confinement. They are staying home for one month, and their children stay home too. (HP12, Plunket nurse)

- **Changes in couple relationship after having a baby**

Having a new baby introduces new challenges to the parents as a couple. Participants explained that some of the common causes of stress for couples after the birth of a child included: having less sleep and less free time together, having more arguments about who will do what in the household, and disagreements about parenting styles and money issues. Having a new child also brought up any pre-existing issues in the relationship. Couples were challenged to make adjustments to their relationship and to develop a new sense of teamwork.

[After having a baby] there are relationship changes in the family. Stress and fatigue often provide the spark to set off a heated argument. (HP3, counsellor)

Caring for a new baby can put new pressures on the postpartum women's relationship with their husband and other family members. Tension in a relationship may build up over differences in how childcare tasks are done. As arguments, accusations and complaints have increased, the whole family atmosphere will become more tense. (HP14, social worker)

We had so many arguments and our relationship became rather bad. I compared him to other husbands. (KM1)

Several participating women pointed out that both women and men experience a variety of emotions and life changes after giving birth to a baby. Most fathers have major adjustments to make, and they have their own feelings and concerns to deal with too.

I think he [my husband] is feeling stress. I don't think he expects his life to be this different because of our child. He doesn't say but I can see he is tired. I assume he is not getting enough sleep. (JM2)

We are sleeping in the same room. I change nappies in the middle of the night but when the baby cries, he wakes up. On his days off, I ask him to get some shopping done. When the baby is around, I can't do washing or cooking easily so I ask him to help a lot. Even on his days off, he doesn't get to rest so I do feel sorry for him. Before we got married, he liked

biking but he is not doing it anymore. I think he wants to go fishing too. During the lockdown, he bought a game but he hasn't managed to play much. (JM2)

One woman who had gestational diabetes and complications during childbirth, observed:

The first week I got home, my husband was exhausted because he had a really hard time when I was in the hospital and he was tense. Unlike me, he is not a person who can self-regulate. It took him a very long time to recover. (CM6)

Seven husbands/partners were interviewed in this study. They elaborated on the challenges they faced after having a baby.

My wife isn't good in English and doesn't drive, so she can't buy food for herself. Even though I am prepared to do all, small and big things for her, I feel burdened sometimes. … My wife often said that my life and work was a lot easier than hers. She felt that caring [for] the baby 24/7 was so much more important and tiring than me. I thought it was unfair and I felt humiliated. (KF2)

I want to help her at night but she feels that it's her job to look after the baby. She gets angry if I help. But If I don't help, she gets upset as well. Sometimes she feels pressured if I try to make the baby sleep. She feels like she is not doing a good job. For me, it should be like working together, making situation better between us. But eventually, I am just trying to make her happy, so I tried to follow what she wants or how she likes to do things. (IF1)

We don't usually argue, but since our child was born, we argue approximately once a month. I am feeling tired. … We are still figuring things out. (JF3)

When couples were from different countries of origins or different cultural backgrounds, cultural differences in childcare could trigger emotional difficulties and increase conflicts within couples.

I felt like I wasn't wanted. Anything I did wasn't good enough. I feel undervalued and underappreciated, when no one come out to say, I appreciate you. … In terms of the cultural significance side of parenting, I do want a lot more of it to happen. Each culture has its own traditions and values. I would have loved my baby to have gone through both. However, she has only got through one side. … (IF1)

- **Family intergenerational issues**

Another challenge identified by the participants was the intergenerational issues arising from differences in health beliefs and childcare practices between Asian women during the perinatal period and the older generation in the family. These differences included: breastfeeding practices, baby's diet, the amount of clothing the child wore, and where and how often the child slept. These issues were seldom openly discussed but they could undermine the harmony and relationships between family members.

How to raise a newborn can create tension with other adults in the family. The woman's partner may share similar ideas, but if you add in father, mother, father-in-law and mother-in-law; the more people there are, the more conflicts there will be. They all want to be good for the baby, but each person has a different perspective, different beliefs and practices. The contractions are too many, thus the probability of conflict is very high. (HP14, social worker)

If mother-in-law lives with the family, she [the Asian woman] is under a lot of pressure. For example, if the mother-in-law says one thing but her husband says another, the woman will be at a loss and such stress can affect her health. On the other hand, if she

has no family here, and her husband is not very supportive, then she feels like a single mother. (HP10, social worker)

When Chinese mothers follow postpartum confinement practices, they often ask their extended family to help. Whether or not family members come to help will cause family tension. If family members come, due to differences in lifestyles and cultures, there will be a lot of conflicts, dissatisfaction and complaints within the household, especially between mothers-in-law and daughters-in-law; thus it would be better if it is their own mother who comes. If no family members come, the mothers will feel that they have not been taken seriously, that they haven't received proper care, and then they will be very upset. (HP11, counsellor)

Even when overseas parents were unable to come to provide direct care, they could engage in "backseat parenting":

During COVID-19 lockdown, the elderly parents could not come but they could become "remote control parents". They will video every day. If they think the baby is not growing well, they will think this matter is serious. Even if the baby is well-proportioned and not fat, they will still think this is a big problem. (HP12, Plunket nurse)

More stress came from my parents back home [in China]. They are very controlling. They wanted us to listen to them because we are first-time parents, but they had gone through this many times. Sometimes it was really hot, baby only wore short sleeves, without a coat. When my parents saw that via Zoom, they said we shouldn't do that. … We both felt very stressed. We felt tired, not getting enough sleep. … (CF3)

- **Other challenges**

Other than the above-mentioned challenges, which a majority of participating women in the study encountered, some women also faced other issues during the perinatal period which had impact on their mental wellbeing. Four participating women in the study were temporary visa holders in New Zealand. Issues around immigration visas had brought extra stress to some of them.

My family's visa will expire in August next year. I will need to find a way to renew the visa before it expires. One way is to find a good job before August next year and then I can apply for PR. Another way is to change to another temporary visa, such as a study visa or work permit. (CF1)

Four participating women were on maternity leave at the time of interview. For some, deciding when to get back to work, or when to look for a new job, could be a cause of stress.

Lack of sleep and job search have been factors for my stress. I am taking maternity leave and I know I don't need to look for a job urgently. I think I am thinking too much. … But I am worried about our future. I would like our children to grow up in New Zealand but the rent is high. When our landlord asked to increase our rent, I felt stressed. If we want to buy a house, it will cost around one million. Thinking about this, I felt stressed. I am worried about our finance. (JM4)

A number of participating healthcare providers and community group representatives brought up their concern about family violence within Asian communities, and the impact on women's mental wellbeing. They explained that Asian women tend to hide family violence as a private matter, which then becomes a barrier to providing assistance and support to women experiencing this.

I was in an abusive relationship before this relationship. It did really cut down my self-esteem. Without support, I went through periods of depression and grief. (IR1)

COVID-19 lockdown challenges

In early 2020, during the COVID-19 pandemic, the New Zealand Government introduced border restrictions and a four-level COVID-19 alert system to stop the spread of COVID-19. A country-wide level 4 lockdown was implemented between March 25 and April 27. This was followed by a slightly less restrictive level 3 lockdown until 13 May. In addition, there were three level 3 lockdowns in the Auckland Region: August 12 - 30, 2020; February 14 - 17, 2021 and February 28 - March 7, 2021. The COVID-19 pandemic has created considerable uncertainties and challenges for many whānau and communities in New Zealand. Participating Asian women in this study were interviewed about their experiences during the pandemic, and how the lockdowns affected their social and emotional wellbeing. Their experiences are discussed under four broad headings below.

- **Experiences of childbirth during lockdown**

Four participating women gave birth to their babies during lockdown. All of them found the experience challenging because their husbands were not allowed to stay with them. They expressed feeling lonely, depressed and stressed in that time.

> *It was difficult because Auckland was in Level 3 lockdown when I gave birth. My husband was not allowed to stay in the hospital. I was so physically exhausted after my c-section operation. It was challenging for me to be alone with my baby at the hospital.* (KM3)

> *___ was born just after lockdown. My husband was not there, nobody was there in the hospital. During childbirth my husband was allowed to come with special consideration, but then he could not leave the room. My midwife could not come. I felt very bad. I was crying. It was really hard for me that time.* (IM2)

> *The fact that I could not see my family at the hospital during the lockdown was the most difficult thing. I was really anxious and uneasy. My husband was asked to leave as soon as I had given birth.* (KM2)

> *It was COVID level 2.5 lockdown during my hospital stay, so only my husband could accompany me. He was the only one allowed to stay, but he couldn't accompany me at night. At that time, the baby was just born; he didn't sleep and just kept crying. Oh my God, he kept crying. I couldn't sleep at all at night, I could only sleep during the day, only when my husband came to see me during the day.* (CM6)

One woman had a miscarriage and she described her experience in the hospital devastating and traumatic.

> *Women not only experience severe physical pain after a miscarriage, but also a roller coaster of emotions. I was in the hospital at COVID Level 2.5. My son could not come to see me, only my husband was allowed to come. My husband was busy with his work, and we did not have family to look after my son. So my husband could only come to the hospital for 1 to 2 hours when our son was looked after by someone. It was so difficult. The hospital did not give me any support, even normal service was lacking.* (CM3)

- **Overseas family members could not come due to border closures**

The majority of participating women in this study did not have immediate family support in New Zealand. Hence, when they were faced with important life transitions like having a baby, they had looked upon their extended family living overseas to provide support and assistance. Border closures during the COVID-19 pandemic had disrupted their families' travel plans, with many participants feeling overwhelmed and stressed about how they could cope without family support.

> *During COVID, my parents were unable to come here to support me. My life was completely messed up. My husband had to take responsibility for everything, and also worried about my physical and mental wellbeing.* (CM3)

> *During COVID, my parents wanted to come here to support me. But then all flights were cancelled.* (IM1)

> *Because of COVID-19, my mother was unable to come to New Zealand to help me. They will not be able to come all year long this year, and we will have to rely on ourselves.* (CM2)

Healthcare providers explained that the lack of social support during the COVID-19 pandemic could take an emotional toll on Asian women during the perinatal period.

> *Some women are very stressed because they cannot get help from China. They cannot find anyone to cook for them. And sometimes, they have a second baby, but they still have to look after the first one, because the first one is too young to go to kindy.* (HP6, midwife)

> *This year with the COVID, a lot of the referrals are Asian clients who struggle with a lack of social support. These clients won't be able to have families coming from overseas to support them, or they're not able to travel back to their home country to receive support. Particularly during the lockdown, their support is really limited. So they are all stressed. COVID has had a significant impact on their mental wellbeing.* (HP15, social worker)

One participant's parents managed to come to New Zealand just before the level 4 lockdown, but their experience was difficult and challenging.

> *It was really stressful. My Mum and Dad came on the last flight, just three weeks before my due date. But when my midwife knew that they came from overseas, she asked me to leave the house. I couldn't stay with my Mum and Dad. So I had to move to my friend's house, and had my parents to self-isolate in my house. … After about a week, the Prime Minister declared lockdown. Then I had to decide whether I continued to stay in my friend's house, or came back home. If I didn't come back, I had to stay in my friend's house throughout the lockdown.*
>
> *The lockdown was initially for four weeks. So we decided to come back here. But we had to separate ourselves: my Mum and Dad were to isolate in one room, and we stay in the other room. And then we had to make everything for them. They could not cook for me, and I had to cook for them. Mum was supposed to come here to look after me. But it was the other way round, and Mum felt so bad. …* (IM2)

Another woman was worried about her parents in India who were both tested positive for COVID-19. She felt stressed and helpless.

> *Back in India, both of my parents were tested positive, so my Mum was in the hospital and my Dad was at home in self-isolation. That was really stressful for me.* (IM3)

- **Other worries**

Participating women were generally worried about contracting COVID-19, and had kept themselves and their babies at home most of the time. But many said they still felt anxious and stressful, and were also concerned how a lack of social contact could impact on their newborn's development.

> *I was afraid of getting outside because I was pregnant. My main concern was I couldn't see my midwife. I met my midwife for the first time when I was five months pregnant.* (JM3)

> *I didn't want to get COVID as I was concerned about my unborn baby. I did my best not to go out but it gave me stress doing it.* (JM2)

> *Restriction is the thing. We cannot go out, and we cannot get any support. Not even from friends. They cannot come to us and we cannot go to them.* (IM2)

> *My baby spent time all day with me and he had no interaction with anyone else. I wished he had more opportunity to spend time with others.* (JM3)

One woman had four children aged 8 years, 5 years, 2 years and 8 months. During the lockdown, she struggled to look after her four children when they were all staying at home.

> *I couldn't cope with the first lockdown. My baby was born on the second day of lockdown. My mood was very bad. There was no school, all four kids were staying at home. I said, oh my God, why the schools won't open?* (CM4)

Several families faced financial hardship due to job loss during the COVID-19 pandemic.

> *Suddenly our family has no income. Both of us have lost our job. During the lockdown period, we have nothing. My husband was forced to go out looking for work during lockdown. He found a job in a supermarket. Later, the supermarket boss learned that I was going to have a baby. They thought that my husband would not be able to work for long, so they told him they no longer wanted him. My husband was only able to work for just over a month.* (CM1)

> *My husband worked for a restaurant but he could no longer work. Although he was still receiving his pay, I was planning on saving some money for our baby which we were no longer able to do. It was a difficult time, and people around us was worried about us.* (IM2)

Participants also talked about the uncertainty the pandemic had created in their lives. Before the lockdown, some were faced with decision whether they should return to their home countries until COVID-19 settled down, or continue to stay in New Zealand. They found uncertainty during COVID-19 upsetting, confusing and challenging.

> *When we went to the first lockdown, one of my Japanese friends suggested that I should go back to Japan and give birth there, and to stay home until COVID settles down. During the lockdown, I had already found uncertainty distressing and challenging to cope with. I did not want to deal with conflicting advice from others.* (JM2)

> *Our baby is first grandchild of both my parents and my husband's parents, so I do really want to visit them with my baby as soon as possible. But If I go now, there will be more challenges. I can't see what our future may look like. I don't know what to do*. (JM1)

- **Positive experiences**

Six women said they had adjusted to the lockdowns well, and had kept their families safe and healthy. They had highlighted some positive outcomes of COVID-19 for their families.

Lockdown was not a problem at all, because my daughter was in a good mood and wasn't affected, so our family was peaceful. Our family finance was not affected. My husband had income, and he could work from home, which actually gave him more time to be with us and did the housework at home. The only pity was that my mother couldn't come to New Zealand to help us. No way. Everyone should prioritise health and safety during COVID-19. (CM2)

The first lockdown was a bit overwhelming at the beginning. But I was happy to spend time together with family. We went for walks, did exercises together and cooked food together. We also received subsidies, so we didn't struggle financially too much. (KM1)

I actually didn't really experience stress during the lockdown. I rarely go out the house because my baby is still small. (JM3)

Because of COVID, our relationship has probably become stronger. We are communicating more. I feel like our relationship has deepened. (JF2)

At the moment, New Zealand is doing a lot better dealing with COVID than Japan. So I am pleased to give birth and raise my child in New Zealand. (JM2)

The challenges experienced by Asian women during the perinatal period could cause anxiety and distress, and impact on their mental wellbeing. The next section explores the emotional health of the participating Asian women in this research and their help-seeking behaviour for mental health issues.

EMOTIONAL WELLBEING AND HELP-SEEKING BEHAVIOUR

The first research question of this study was: *What are Asian women's emotional health and wellbeing and their experiences of help-seeking when they have experienced mental distress during the perinatal period?* To address this question, Asian women interviewed in this study were asked how they had been feeling during the past four weeks prior to the interview, using items from the Kessler Psychological Distress Scale (K10). They were also asked their help-seeking intentions when they were feeling anxious, depressed, or experiencing mental health difficulties, and if they had ever seen a psychiatrist or a specialist doctor who prescribed a medicine for their mental health. This section examines the information participants provided to these questions. We also look at six case studies to provide a more in-depth understanding of Asian women's experiences of help-seeking, and the experiences of those who had not used mental health services or sought formal help from a health professional when they had experienced mental distress during the perinatal period.

Kessler Psychological Distress Scale (K10)

The Kessler Psychological Distress Scale (K10) was used in this study as a brief screen to identify participating Asian women's levels of distress during the perinatal period. The K10 scale involved 10 questions about emotional states each with a five-level response scale (All of the time = 5, Most of the time = 4, Some of the time = 3, A little of the time = 2, and None of the time = 1). Scores of the 10 items were summed to yield a minimum score of 10 and a maximum score of 50. Low scores indicate low levels of psychological distress and high scores indicate high levels of psychological distress.

Of the 17 Asian women interviewed in this study, their levels of psychological distress ranged from low (17.6%) and moderate (47%) to high (11.8%) and very high (23.5%). (Table 3)

Table 3 Kessler Psychological Distress Scale (K10): Level of psychological distress

Level (K10 score)	Low (10-15)	Moderate (16-21)	High (22-29)	Very high (30-50)	**Total**
Number	3	8	2	4	**17**
Percent	17.6	47.0	11.8	23.5	**100**

Help-seeking intentions and sources

The General Help-Seeking Questionnaire (GHSQ) was adapted to assess participants' intentions to seek help from different sources when they were experiencing mental distress. For each of the help-seeking sources below, participants were asked to rank their answers in a scale from 1 to 5, with 1 being not at all likely to 5 being extremely likely:

a) Family (e.g. husband/boyfriend/de facto partner, parents, in-laws, siblings, relatives in New Zealand, relatives overseas)

b) Friends (e.g. New Zealand friends, friends from overseas)

c) Professionals (e.g. midwife/Lead Maternity Carer, doctor/GP, birth centre, Plunket nurse, psychologist, social worker, counsellor, telephone helpline)

d) Community (e.g. Minister/religious leader, parent groups, people from societies in the community)

e) Information from newspapers, magazines, television, websites, social media platforms (e.g. YouTube, WhatsApp, Twitter, Facebook, Instagram)

f) Other support not listed above

Of the five help-seeking sources for emotional problems, Asian mothers interviewed were most likely to seek help from family (4.5 out of 5), then friends (3.4) and professionals (3.1). They were less likely to get help from the community (2.5) and the media (2.5), and not at all likely to get help from any other sources not included in the list (1.0). (Table 4)

Table 4 Help-seeking intentions and sources

Help-seeking source	Help-seeking intention					Number of responses	**Average Score**
	1 Not at all likely	2	3	4	5 Extremely likely		
Family	0	1	2	2	12	17	**4.5**
Friends	1	4	3	5	4	17	**3.4**
Professionals	4	2	2	7	2	17	**3.1**
Community	6	0	5	4	2	17	**2.8**
Media	7	3	2	1	4	17	**2.5**
Other	2	0	0	0	0	2	**1.0**

Knowledge and use of specialist mental health services

Of the 17 Asian women interviewed, only two had ever used specialist maternal mental health services in New Zealand (Table 5). One of them whose score on K10 indicated that she had 'very high' psychological distress had also used NGO/Community support services (see Case 1 below). The other one whose current level of psychological distress was 'moderate' had used specialist mental health services after a previous birth (Case 2). For the other three women with 'very high' psychological distress, one of them sought telephone counselling for her mental health issues. She felt comfortable using telephone counselling because "*the counselling conversation is confidential*" and "*I can be completely honest as I do not have to show myself to the counsellor*" (Case 3). The other two who had not accessed mental health services had sought support from their GPs and midwives. Three women with 'moderate' psychological distress also sought support from their GPs, midwives and Plunket nurses for their mental health concerns.

Table 5 Mental Health and other support services used by level of psychological distress

Level of distress	Specialist maternal mental health services	NGO/ Community support services	Antenatal clinic	Super clinic	Telephone counselling	GP	Midwife	Plunket nurse	Do not know or use any support services
Very high (N = 4)	1	1		1	1	2	2		
High (N = 2)									2
Moderate (N = 8)	1		1			3	3	3	4
Low (N = 3)						1			2
Total (N = 17)	**2**	**1**	**1**	**1**	**1**	**7**	**5**	**3**	**8**

Several women, including two with 'high' psychological distress and four with 'moderate' distress had neither accessed mental health services nor sought formal help from a health professional for their mental health concerns. One woman was a former refugee who said she did not know about mental health services (Case 4). Lack of English language proficiency was also a barrier to accessing support and services, especially among new migrants (Case 5). One woman was told by her GP that it was highly likely that she was suffering from postnatal depression, but her GP had not referred her to specialist mental health services (Case 6).

The above data show that there were substantial variations in Asian women's emotional states during the perinatal period, their help-seeking intentions and sources, and their experiences of using or not using mental health services and other support. Below we look at six specific case studies to get a more in-depth understanding of participants' experiences to identify what might have facilitated or hindered their access to mental health and support services in relation to perinatal mental ill health.

Case studies

Case 1: "My husband was the first to find out that I had emotional problems."

CM1's family went through unforeseen financial hardship when her husband lost his job. Then just before COVID-19 lockdown, CM1 also lost her job when she was six months pregnant.

> *At that time, I couldn't eat, and I couldn't sleep. I cried at home every day. I became irritable or upset easily. I would lose my temper with some small things, and the relationship with my husband was not very good. … My mood was very low every day, and I had unconsciously hurt myself. When my husband found out, he felt that there must be something wrong with me, so he took me to see the doctor. My family doctor conducted a screening assessment. When he got my score he immediately referred me to _____ (a specialist maternal mental health service). Since then, I have been seeing the psychiatrist there.* (CM1)
>
> CM1 was able to get treatment early because her husband supported her to seek help early. The family doctor also referred CM1 to a social worker in an NGO which provides community mental health services and support.

Case 2: "I trust my GP. He has been my family doctor for many years and he looks after me well. So when he told me that I needed to see a specialist to deal with my problems, I listened to him."

CM4 was a mother of four. One of her children was born with a limb defect. She had gone through periods of deep sadness and depression, which had affected her functioning.

> *I was so scared and lost. I cried all the time. I cried at home, when I was alone and never in front of other people. Only my husband knew. I didn't want to face my problems. I lost all hope. … At that time, my emotion was at rock bottom. I felt really sad. Afterwards, my GP and Plunket nurse referred me to _____ (maternal mental health service). I talked to a counsellor regularly for nearly eight months. I stopped seeing the counsellor when my child turned one.* (CM4)

CM4 was grateful to her GP who referred her to see a specialist. Without the GP's encouragement and support she might not know she had postnatal depression and needed to get timely treatment and care.

Case 3: "My counsellor is Korean. She understands Korean culture and speaks in Korean. She understands my difficulties and my feelings. She is a good listener and has a genuine empathy with my struggles and emotions."

KM1 spoke limited English. She was 32 weeks pregnant at the time of interview. There was tension in her relationship with husband since the first child was born about two years ago. She often felt stressed taking care of the baby by herself when her husband went to work. During the second COVID-19 lockdown, she felt depressed and hated being at home with her husband, and she took her emotions out on her husband.

> *I went to a GP and was diagnosed with depression. I was given medication but now, I'm okay to manage the depression without taking medication. Through GP's recommendation, I started counselling from _____ last year. The counsellor was Chinese, and an interpreter was provided. Doing counselling through an interpreter was not helpful as there were often miscommunications due to the cultural and generation gaps. We stopped after two sessions because I noticed that the interpreter had missed a lot of important points, and I was disappointed that interpreting could not convey all what I wanted to say to the counsellor. … Eventually I was introduced to a Korean counsellor. I felt much better receiving phone counselling from this Korean counsellor. I can talk about my husband, my struggles and everything with her.* (KM1)

Case 4: "I don't know about mental health services."

RM1 was a former refugee who came with her husband to New Zealand about six years ago. At the time of interview, she was nine months pregnant and was looking after her two children aged 5 and 2 years. She had a lot of worries about who could help her to look after the children when she was in the hospital for the birth of the new baby.

> *I worry a lot about my kids. If I am sick, or when I will be in the hospital, if they are hungry or sleepy, or if they want something, my husband doesn't understand them because my son is not good at talking. Only I understand what he says. … I'm all the time alone, and*

I need to do everything by myself. When I am sad, NO, I am not going to tell my husband. I am not going to tell anybody, I keep everything in my heart. (RM1)

RM1 also told the interviewer that when she was really upset, she would not talk to her GP about her emotions. When the interviewer told her that some women could feel depressed after childbirth, she replied, "*I don't have that. I don't know about that. … I don't know about [mental health] services."*

Case 5: "Language barrier plays a part for not seeking help."

JM2 came to New Zealand one year ago and her baby was one month old at the time of interview. She had limited knowledge about services in New Zealand and her limited English also posed as a barrier for her to seek help and support services.

I have only been living in New Zealand for just over a year so my knowledge around available services and support is very limited. … When I was feeling depressed or mentally distressed, I didn't know who to talk to in New Zealand. When I had mastitis last time, I had no idea who I should contact. When I was worried about my baby's health, I also had no idea what to do. … My English isn't great. Since giving birth, Plunket nurse and GP asked if I wanted to have a Japanese interpreter. Only then I realised that such a service is available to me. I wish I knew this service earlier as I could have come and seen them more often. (JM2)

Case 6: "I would have accessed mental health service if my GP had provided me with information about how to access the service."

JM4 was feeling down after giving birth to her baby who was five months old at the time of interview. Due to the COVID-19 pandemic, JM4 had kept herself and her baby at home most of the time during her maternity leave. That was in great contrast to her first childbirth, when she was able to go out doing yoga and swimming just six weeks after giving birth. She felt very lonely and isolated.

After _____ was born, I went to my GP who conducted an assessment for postnatal depression. My scores were quite high and I was told that it's highly likely that I was suffering from postnatal depression. However, my GP didn't give me any information about who to contact or how to contact services. To be honest, I don't really know how to access mental health services myself. … I would have accessed the service if someone had encouraged me to do so. (JM4)

The psychological support provided by family is a major factor facilitating Asian women in this research to seek help for their mental health difficulties. GPs, midwives and Plunket nurses are also important. They can provide support for early-stage mental health issues, or make referrals to specialist mental health services. Factors affecting access to, and utilisation of, specialist mental health services are multiple and complex. These factors will be discussed in the next section.

BARRIERS TO ACCESSING SPECIALIST MENTAL HEALTH SERVICES

The second research question of this study was: *What are the barriers to accessing mental health and support services experienced by Asian women in relation to perinatal mental ill health?* All four groups of participants (Asian mothers, family members, community representatives and healthcare providers) were asked to address this question. The barriers identified are examined in this section.

Stigma and discrimination

As participants pointed out, mental illness is highly stigmatising in many Asian cultures. The social stigma attached to mental ill health and the harmful effects of discrimination were one of the biggest barriers preventing Asian women from accessing mental health and support services when they experienced perinatal mental ill health.

> *Among Chinese people, mental illness is terrible. Derogatory words or phrases are often used to describe someone who experiences mental ill health. Asian mothers therefore feel very shameful to look for help.* (HP9, social worker)
>
> *Not washing our dirty linen in public is the traditional Chinese culture. We feel that we can't ask for help openly.* (CM1)
>
> *I am afraid of what other people think of me. I feel embarrassed. I feel that people would think that I am melodramatic, making a big fuss over a very minor issue.* (CM2)
>
> *For Japanese, seeking help is shameful. We are expected to solve problems by ourselves. Yamato-Damashii is the Japanese cultural value. We see ourselves as losers if we rely on other people.* (JM4)
>
> *If you go to someone and say, "I'm depressed", people will judge you. So it is not common for us [Indian people] to seek mental health support.* (IM1)
>
> *Any type of support from any mental health services would be looked down upon.* (IF1)
>
> *There are many negative stereotypes about mental illness and counselling in Korea. No Korean would honestly say they need to see a mental health specialist or seek counselling for their mental difficulties, like depression. This is related to Korean culture. Korean people don't want to show their weaknesses to others. They tend to find solutions by themselves; seeking professional help for mental health issues is the very last resort. They would say, "I'm not weak, I don't need to see a specialist for this minor inconvenience".* (KF2)
>
> *With refugee women, culturally Burmese women are really stoic. They just don't express themselves, because it's just the way, culturally, "life is suffering, life is misery", and also they don't want to trouble other people. … Working with refugees you see lots and lots of post-traumatic stress disorder (PTSD). Even when children are growing up, they will present to you with PTSD because they've experienced it in childhood and nobody has actually resolved that. You'll see people who've grown up and become pregnant, and they live here, but they experience that trauma – the PTSD – because of the pregnancy. And when I tell them, they don't believe me because mental ill health means madness. But it's not madness.* (HP4, GP)

Because mental ill health is highly stigmatising in Asian cultures, many Asian women who experience mental distress during the perinatal period would avoid making their conditions known, or their conditions are concealed by their families for extended periods of time. They are reluctant to request

outside help for their difficulties, and would accept psychiatric referral only as the last resort. This could lead to under-utilisation of mental health services and other support.

> *By the time when Asian mums come to our services, they either have moderate, severe or quite severe symptoms, or have been quite unwell for a long period of time. Because of stigma, they have been struggling with mental health issues for quite a long period of time before looking for help.* (HP15, social worker)

> *If an Asian mother came with a work permit, she would be very careful when she talked to me about her health issue. They are afraid of leaving any health records that would affect their immigration or work visa applications. … So even if I ask them about the history of mental health, they may not tell the truth.* (HP12, Plunket nurse)

Only a few participants said they would access specialist mental health services when they experienced mental health issues.

> *For my family, If I mention [that I am mentally distressed], they would probably encourage me to see someone. I would also feel better if I go.* (JM3)

> *I am open minded about receiving counselling and mental health care, but it is not my first option for relieving stress.* (KF2)

> *Nowadays, recently arrived young immigrants have better knowledge in this area. They understand that if they are mentally unwell, they can talk to their family doctors. … They also know that doctors and counsellors are different professions, so some will take a two-pronged approach by getting services from both.* (HP3, counsellor)

Language barrier and lack of access to appropriate interpreters

Lack of English language proficiency was another key barrier preventing Asian mothers from using mental health services. Participants further pointed out that many Asian mothers were not aware that such services existed because they did not have the language skills to access the information.

> *There are still challenges for Kiwi mothers, but definitely it is less than Asian mothers. It is easier for Kiwi women to meet mental health professionals and there are various support groups and training programmes. However, most support groups and programmes are offered in English, so it is challenging for Asian mothers who are not good at English to access services. Plunket also provides many information, programmes and activities for mothers, but most of them target English speakers.* (HP13, psychiatrist)

> *If English is their second language, they are not too comfortable to have a full-on conversation in English. I think the only time they would use support or go seeking for services is when they hear it from someone else.* (IF1)

Healthcare providers interviewed added that accessing appropriate interpreters was often a problem, resulting in many Asian clients relying on relatives and friends to do the interpreting for them.

> *At _____ hospital, interpreting service is available, so we always arrange for interpreters to come before any appointments with patients. However, there are still some complicating and sensitive points. Not every language interpreter is available at any time. Also, some patients do not want interpreting service because of confidentiality issue.* (HP13, psychiatrist)

Language is a big issue – if I met a mum who only spoke Chinese, I would need an interpreter. It's very hard to get interpreters – they're not always available. (HP5, mental health nurse)

There are very few GPs in New Zealand who are good at using interpreting services. An average refugee consultation is about 30 minutes – this is for a newly arrived refugee who is resettling in the community. Sometimes patients bring in their own people, … So we mainly rely on relatives. Then it brings other difficulties. For example, we cannot ask everything in front of the family, for example, when family violence is involved. (HP4, GP)

The biggest barrier is that women are not being heard, because they are not given an interpreter. So how are you supposed to communicate? (HP16, counsellor)

There was also concern about inadequate translation of mental health information and resources.

When mental health information and resources are translated from English to Asian languages, the translation must be non-stigmatising and acceptable to Asian people and the lay public. Terms used for mental illnesses are highly affected by cultures; for example, in some Asian cultures, the use of words like 'anxiety' and 'depression' is a taboo. We need to use translated terms that are aligned with Asian people's understanding and conceptualisation. Literal translation or translation using highly technical terms are not appropriate. (HP2, social worker)

However, a few healthcare providers observed that the demographic profiles of the Asian population were changing. Recent migrants on average have higher levels of education and higher English language skills than those who came a decade or more ago.

Language barrier was quite common a decade ago, but in the past few years, the language skills of Asian mothers have improved a lot. They were born in the 1990s, and many were former international students. They have no problem communicating in English. … The older generation experienced a language barrier, but this is less of a problem now. (HP11, counsellor)

Poor knowledge of perinatal mental health problems

Lack of understanding and knowledge about mental health and perinatal mental health problems was raised by healthcare providers as a concerning issue influencing the extent to which Asian mothers access and use mental health services.

Their knowledge of mental health is quite limited. They lack understanding of postnatal depression. Some feel that baby blues after pregnancy is no big deal. Some believe that they have postnatal depression because the postpartum confinement hasn't been done well, or that they eat too much 'heaty food' during postpartum confinement. Their families are not supportive. Their parents have never experienced or heard of postnatal depression, so they deny that there is an issue to deal with. (HP10, social worker)

They don't even know they are anxious or depressed unless we actually screen them. Because of health literacy. There's a huge difference in cultural understanding of mental health with Pākehā, Māori, Pasifika and Asians. … Asians will come but they will come with physical issues and they don't like to be told that perhaps it could be your stress. (HP4, GP)

If they have pain or feel discomfort, they will go to see a doctor. But if it is emotional pain or discomfort, unless it is really serious, they would not think this is an issue which

needs to talk about. They don't have the awareness, and so they don't reach out for help. (HP2, social worker)

I think they are running away because dealing with the problem is even harder. They don't want to deal with it. They have other concerns like visas or jobs. (JR1)

Healthcare providers interviewed observed that Asian mothers' help-seeking pathways were not direct. They tended to consult with family members first, or use traditional healthcare methods extensively, before turning to their family doctors for help.

There is no such culture among Chinese people to talk to a family doctor about emotional issues. So they don't know how and where to seek help. Maybe it was better during COVID-19, because they would call to tell me, "My baby is three months old and there is no milk powder to feed him. What should I do?" Then I can use this opportunity to find out if they have other issues requiring support. Not everyone knows they can seek help through this channel, because they have no idea about early warning signs. So by the time they ask for help, their problems have become quite serious. (HP2, social worker)

It must be very difficult for Asian women to talk about their mental health problems. They would try to find the causes from family issues or personal failures, rather than focusing on mental health issues. This negatively influences their access to professional help. Therefore, most Asian patients I see have multiple physical symptoms, family conflicts, domestic violence, as well as psychological problems like depression. In a way, they seek help only when their situation becomes very bad. (HP13, psychiatrist)

Alongside language barrier, participants interviewed believed that not knowing the New Zealand health system and not knowing where and how to get help also played an important role in Asian women's delay in getting mental health care.

Some people are not familiar with the New Zealand health system. Even if they want to get help, they don't know where to go and what services are available. Because they haven't been living in New Zealand for a long time, they don't know what is primary support, what is secondary support. They lack information, and they don't know where to get this information. They don't even know that as long as they go to a family doctor, they can be referred to a professional in mental health if needed. (HP9, social worker)

Misunderstanding about Western treatment approaches

Western treatment options for perinatal depression include drug therapy (e.g. antidepressants) and psychological treatments (e.g. supportive counselling, cognitive behaviour therapy). However, participants in this study observed that many Asian mothers were not accessing mainstream mental health services, or were terminating treatments prematurely, due to a lack of trust in Western treatment approaches.

[Asian mothers] do not want to see a doctor because they don't want to take medication. They think taking medication is terrible because according to Chinese health concepts, Western medicines have strong side effects. Asian women also fear that Western medicine can affect breastfeeding, and they are also afraid of drug dependence. (HP3, counsellor)

When the doctor asked me to take medicine, I became worried. Will they take my kids away? Will they not allow me to take care of my kids? (CR3)

> *When the psychiatrist told me that I had depression and should take medicine, I just said, "I don't want to take medicine. I think counselling is enough". I personally think that drugs cannot solve my problem. My problem is my psychological adjustment, and drugs are all short term.* (CM4)

However, not all Asian women in this study understood how psychological intervention worked and what their potential benefits were.

> *As far as I am concerned, counselling is just talking to someone about my problems. It might be helpful but would there be any practical help? During the confinement period, I was very tired, I didn't sleep well and I was very uncomfortable physically. I didn't even have time to see a doctor, I didn't even have time to go to bed. Ask me to talk to someone? Where do I find so much time?* (CM5)

> *They have misunderstanding about counseling. They may think that if they pay for counselling, the effect can be guaranteed after one session. In fact, this is not the case. Effective counselling is the result of the efforts of both the counsellor and the client. Clients need to be an active part of the process.* (HP3, counsellor)

> *They don't know the New Zealand social service system. They expect social services or social workers to give them practical help. They think social workers are here to provide them with transportation services. If we can't take them where they want to go, such as buying milk powder, then they say they don't need our service. A mother asked me if I could help to look after her baby, if I couldn't, then no need to come again.* (HP2, social worker)

Some Asian women were worried about confidentiality issues, especially those in small ethnic communities.

> *[Asian] people are reluctant to access services, and then, when they are seeing us, they don't want anybody to know. So it is very hard to find support for them because they don't want to tell anybody. The other thing is that they don't want to take medication, they are reluctant to take it. They would try Chinese medicine and they would try yoga and Tai Chi, and homeopathy and different things, and then eventually they might consider trying the Western medicine.* (HP5, mental health nurse)

System-level barriers

In New Zealand, perinatal mental health services are provided in primary, secondary and tertiary settings. In the primary care setting, GPs, midwives and Plunket nurses are the first point of contact for the majority of Asian women seeking health advice and services during the perinatal period. These practitioners play the role of identifying Asian women's mental health issues at an early stage. They also provide an important point of referral to more intensive secondary and tertiary services. Healthcare professionals interviewed in this study discussed some systemic barriers preventing Asian women from receiving mental health services across primary, secondary and tertiary levels.

- **Issues with identifying mental health problems at the primary care level**

GPs interviewed identified that time constraints, and the failure to recognise somatic presentation of mental health problems, could result in missed opportunities at the primary care level to recognise

early-stage mental disorders. They revealed that they would often need to go beyond the standard consultation time of fifteen minutes to assess the mental health status of their patients.

> *Patient's consultation time with GP is only 15 minutes. Asian patients would focus on physical symptoms, such as cough, flu, and would not tell the doctor that they have emotional problems, or that they were under stress. If the GP doesn't ask, they will not talk about them. If they have built their relationship with the GP, have trust in the GP, then they may talk.* (CR3)

> *When Asian mothers have depression, they tend to show physical symptoms such as unexplainable pain, stomach pain, or headaches. They experience physical pains for the way of expressing mental hardships unconsciously. Asian women feel more comfortable to receive physical treatment rather than psychological treatment due to Asian culture. It occurs unconsciously — the body chooses physical pains as an alternative and desperate way to express their needs for getting help.* (HP13, psychiatrist)

> *Our main constraint is time. We only have 15 minutes for one patient. Some doctors would say, "If I ask more deeply, will I be opening a can of worms?" But as a doctor, we have the responsibility to find out our patients' needs and main concerns, not just prescribing medication. … If the same patient has come to me two to three times complaining the same problem, I need to look deeper to figure out what's causing the problem, and explore whether their physical symptoms are related to stress.* (HP7, GP)

A few Asian mothers interviewed felt that some midwives and Plunket nurses tended to focus primarily on the physical health of mothers and babies, and failed to ask about their mental health needs.

> *Chinese midwives seldom talk about mental health. I have attended three pregnancy classes offered by Chinese midwives, and none of them mentioned mental health problems. If health professionals don't tell us about postnatal depression and support services that are available for women with perinatal mental health problems, how can we know?* (CM6)

- **Issues with referring to secondary and tertiary services**

The under-recognition of mental health problems at the primary care level could delay treatment and referral to specialist secondary and tertiary mental health services.

> *The primary healthcare system is a commercial model of work. Doctors have limited time to build relationship with patients, or for patients to build a relationship with the doctor. … [Asian patients] just don't present their mental health problems to the GP because it's such a shameful thing for them. And at our level we don't have enough time to screen people. So what we see, by and large, in terms of referrals to the secondary and tertiary care is really overtly psychotic people, or people who have conditions like schizophrenia, or severe drug addiction or things like that.* (HP4, GP)

> *I have some doubts about the referral process of GPs. One of my current clients has a certain degree of suicidal intentions. I gave her an assessment using the postnatal depression scale and the scores were very high. I immediately asked her to see the doctor. But she told me that the doctor did not refer her to mental health services because he felt that she was not that serious. From my point of view, my client has a history of mental illness, but she stopped taking medication because she didn't want to rely on medicine. … Doctors and midwives play an important role in the early identification of mental health issues, because referrals to secondary mental health services must be made through them. Asian clients don't know that their family doctor can refer them to*

get better support and services for their mental health problems, such as Asian mental health services, supportive counseling and clinical psychological services. (HP9, social worker)

GPs have their own standards for referral - Some Kiwi mothers told me that they would talk to their GP about their struggles, but if the GP did not refer them to specialists, they will change to another GP who would make the referral. Asian mothers would not do that. (HP10, social worker)

To access specialist mental health services, people will need to go to GP first. Having the additional process to access the specialist may prevent [Asian mothers] from using the service. (JM1)

Some midwives interviewed further revealed that although they could refer Asian mothers to secondary services, referrals by GPs were preferred. This might result in the Asian mothers going through screening by multiple providers before they could receive specialist mental health care.

Although midwives can make referrals, our referrals are often rejected. So I still need to refer my clients to GPs. Sometimes even referrals by GPs are rejected; only the very serious cases got accepted. (HP6, midwife)

As Plunket nurses, we ask new mothers about their mental health conditions from Week 4. If the assessment indicates that the new mother has mental health issues, with her consent, we can refer her to the family doctor. But if the new mother doesn't want to talk to the GP, no one can force her. We can only encourage and support her to get help. There are many obstacles for new mothers to overcome to get mental health services. (HP12, Plunket nurse)

- **Engagement problem and under-diagnosis at secondary and tertiary levels**

Engaging mothers and families in specialist mental health care may involve a number of challenges, including stigma associated with accessing mental health services, language barriers, and other practical issues such as lack of time, lack of transport, lack of childcare.

I have referred many patients to secondary or tertiary mental health services, but very soon they come back. They said the psychiatrists and psychologists did not listen to them. Language and communication are common barriers to engagement. {HP7, GP}

There are other practical issues. If she goes to counselling, who will look after the baby? Her husband can't look after the baby because he has to go to work. Lack of transport is another issue. (HP2, social worker)

Healthcare professionals working in secondary or tertiary settings explained the triage process after receiving a referral from a GP or midwife. They discussed the reasons why some cases did not reach their service if there was insufficient information provided in the referrals, or when mental illnesses were under-diagnosed.

Referrals [from GPs or midwives] to our adult mental health team will go to referral management where it is triaged. If the triage staff feels that it's appropriate for maternal mental health, then it gets passed to our team. If they feel it's not for maternal mental health, then it will go to the adult team. Or, if the mum was in crisis, the mum would be cared for by the crisis team and later passed to our maternal mental health team. (HP5, nurse in maternal mental health team)

Referrals do not go directly to our team. They go to the team of the referral manager where the referrals are triaged. Therefore, information provided in the referrals is very important. If the referral is very general, we don't know whether it is a bonding problem, a mental health problem, or maybe it is just an ordinary mother's concern. More information is helpful. For example, we would like to know if they are really at risk, or if they are particularly serious, or if they had taken medication but the medicine was not effective. Such information would be very useful in deciding if the case meets the criteria for referring to our service. (HP10, social worker in maternal health team)

Some patients cannot see us due to the management team's referral decision. In some cases, if the patient does not have severe symptoms, the referral management team will send them to see a psychologist or counsellor first. … But sometimes the team may miss some Asian women's cases that should be sent to us due to misunderstanding of cultural points. … In terms of postnatal depression, professionals can have the problem of under-diagnosis. Asian women's symptom presentation of emotional problems is different from those of European or Kiwi women; they could hide their negative emotions even if they have serious problems. Understanding the differences is important for mental health professionals to improve Asian women's access to services. (HP13, psychiatrist in maternal mental health team)

Some healthcare professionals interviewed asked for husbands, and women who have had miscarriages, be included in the target population served by perinatal mental health services.

It would be good if husbands can be included in the referral criteria. In Europe there are Family Units where husbands/fathers are involved. Another group is women who have had miscarriages. This is because the negative mental health issues that happened in the perinatal period can appear again at later life stages. If women have miscarriages, it is important to support them for longer period because some can be traumatic triggers later in life. (HP13, psychiatrist in maternal mental health team)

Many times, we find that fathers need help, or fathers also have problems. But because our target clients are mothers and babies, we can only encourage fathers to see a doctor. … We don't see many mothers who have had stillbirths, because our service is centred on mothers and babies. If there is no baby, the case will not be referred to our team. (HP10, social worker in maternal health team)

Lack of family support

Many healthcare professionals interviewed observed that a lack of family support was a common barrier preventing Asian women to access mental health services when they experienced psychological distress during the perinatal period. Lack of awareness of perinatal mental health issues, and the social stigma attached to mental ill health, were the main reasons for the low levels of family support provided to Asian women experiencing postnatal depression and other perinatal mental health problems.

Family members don't know that she [Asian mother] has postpartum depression. They have seen her not getting better for a long time, and they still think that she is just attention seeking. Sometimes the husband came home after a day's work, and became annoyed when he found the housework was not done well. He asked his mother, but his mother said there was nothing wrong with his wife. She was only attention seeking and spoilt. (HP3, counsellor)

Family members do not have such awareness. I have heard many family members say that she [Asian mother] is melodramatic. The husband would say that she just doesn't want to do anything because she is lazy or tired. (HP2, social worker)

Family members have no knowledge about postpartum depression. They feel that she [Asian mother] was making trouble out of nothing. So the Asian mother feels very helpless, because her emotional problems are not accepted or recognised by her husband and other family members. (HP12, Plunket nurse)

Family members do not know about mental health services. If someone recommends mental health services to their wife or daughter, they will be defensive and feel insulted. They may also be afraid of the family's reputation in the small ethnic community. … If she finally reaches out to maternal mental health service, the husband will struggle to tell other people about his wife's depression. Some husbands experience postpartum depression too, because they don't have any time to look after themselves. (HP13, psychiatrist)

The next section will look into mental health and support services perceived as acceptable to Asian women who have experienced mental health issues during the perinatal period.

SERVICE ACCEPTABILITY

The third research question of this study was: *What are Asian women's perceptions and acceptability of perinatal mental health services in New Zealand?* Asian women and family members interviewed were asked for their views on this question. Their responses are examined in this section.

Trust

Asian women in this study said that having trust and confidence in health professionals is an important factor affecting their utilisation of perinatal mental health services when they experienced mental distress. As GPs are an important point of referral to specialist mental health services, participating Asian women said that they would listen if their GP referred them to seek mental health care.

CM4 (Case 2 above) was referred by her family doctor to maternal mental health service for treatment of her postnatal depression. She explained that her trust in the family doctor was her main reason for seeking mental health services.

> *A very important reason was because I trust my GP. He has been my GP for many years. He is very careful and attentive every time when I get sick, and he tells me what to do. Because of this relationship, when he told me that I needed to go to see specialist professionals to deal with my problems, I listened to him. He called me a few times to encourage me to receive treatment. … If your patient is depressed, you must call them, not just once, but several times, because she may not want to come to see the doctor if you only call her once*. (CM4)

> *I am the kind of people who trust doctors and healthcare professionals. I will listen to any advice they give to me.* (KF1)

> *If I have built trust in a counsellor, or if I believe that they are kind and trustworthy, I will definitely recommend them to my friends. If my friends know that I have had a good experience, they will have more confidence in seeking counselling.* (KM2)

Culturally- and linguistically-matched practitioners

Asian mothers interviewed indicated that having culturally- and linguistically-matched practitioners would improve the effectiveness and acceptability of services. This was particularly useful if the Asian mothers identified strongly with traditional Asian values, or where language was a key issue.

> *People from other cultural backgrounds may not understand the conflicts [Chinese women have] with family during postpartum confinement. Since we come from the same cultural background, I can better understand these conflicts and be more empathetic.* (HP2, social worker)

> *Mental health requires high standard of language because we need to explain our emotions and our mental health conditions in detail. Even my husband who speaks English at work, struggles with medical vocabulary. So I have been saying, if I need to see a mental health specialist, I would go home [to Japan] and see someone back home. If I could speak Japanese to a psychiatrist, I would have been open to see a psychiatrist here. But I could not find anyone.* (JM1)

If a woman has mental health problems, it is hard for her to communicate openly unless the mental health practitioner is a Korean. Because English is not our mother language, minor changes in language choice can make a big difference. Some words can have different meanings when they are translated, and the mental health practitioner may misunderstand what we express. (KR1)

I think she [Asian mother] will face a barrier if she needs to communicate with the mental health practitioner through an interpreter. It is best if she can speak in Mandarin. It would be easier for her to open her mind and talk about her experiences. (HP6, midwife)

I am satisfied because the psychologist is a Hong Kong Chinese. He speaks Cantonese with me. But my previous psychiatrist was Indian. (CM4)

The counsellor and social worker are both Chinese. Because my family doctor knows that if I need to speak in English, I would be more stressed. (CM1)

Confidentiality

Participating Asian mothers and family members shared their concerns around confidentiality when they accessed mental health services. Participants were particularly concerned if they came from small ethnic communities and the Asian staff in mental health services were also from the same communities. They felt that it is important to assure Asian clients that their conversations with mental health professionals are kept private and that other people cannot find out about their visits to a mental health service.

Japanese network is very small. So if you go and seek help from mental health professionals, others may find it out and [be] worried about the mother. (JM3)

Confidentiality is very important to me. If I see a Korean counsellor, I would be worried about my stories and problems that can be leaked to the Korean community. The Korean community is very small. (KF2)

Fees

A number of Asian participants interviewed were concerned about the fees they needed to pay to receive professional services. They felt that free or low-cost services could help overcome the financial barrier preventing them from accessing mental health services.

When they are told to see a psychiatrist or psychologist, they immediately think of costs. They don't know that if they get a referral to see a mental health professional, some or all of the costs can be paid by the government. (HP8, clinical psychologist)

Many mothers would ask me to find free services for them, because they have no income. Not every family respect women's contribution in caring children at home. If the family has only one source of income, they cannot afford to pay. If Asian mothers think that there is no way that they can pay, they simply don't say they have this need. (CR1)

I have no idea how much it costs to see a specialist. It is not a physical injury. I assume it will take more time for mental health issues. If so, it may cost a lot of money. (JM4)

I think people may be discouraged [to seek counselling services] because they think it is expensive. If they know about free or low-cost counselling services they will probably seek it more. (KM2)

Home visit

A few Asian mothers proposed that in-home visits from healthcare workers or counsellors, would be more convenient for them because during the postpartum confinement period, it would be difficult for them to leave home, or leave their babies at home when they travel to receive services.

> *For most mothers having young babies, it is almost impossible to make time even if low-cost counselling is available. If there is nobody who can help them look after their babies, it is impossible to make time.* (KR1)

> *It would be good for healthcare workers or counsellors to come to the new mothers' homes, because it is so difficult for them to leave home or to leave their babies at home.* (KM3)

> *Our Asian service can provide telephone counselling and home visits. We found home visits useful as they can help us better understand the home environment of the mothers.* (HP12, Plunket nurse)

The next section will address the final research question of the study, and provide recommendations for actions to improve access and maternal mental health outcomes for Asian women and their families.

RECOMMENDATIONS

The final research question of this study was: *What actions can be identified to improve access and maternal mental health outcomes for Asian women in the perinatal period*?

Our research identified multiple barriers faced by Asian women to access mental health services and support during the perinatal period. Asian women's collectivist and patriarchal cultural backgrounds, and the social stigma attached to mental ill health, are the most fundamental barriers. There are also systemic barriers preventing Asian women from receiving mental health services across primary, secondary and tertiary levels. GPs, midwives and Plunket nurses are the first point of contact for health advice and services by the majority of Asian women during pregnancy and postnatally, however failure to recognise somatic presentations of mental health problems can result in missed opportunities to identify Asian women's perinatal mental health problems at an early stage. The under-recognition of mental health problems at the primary care level can delay treatment and referral to secondary and tertiary mental health care. Under-diagnosis may also occur during the triage of referrals due to a lack of recognition of cultural elements in psychiatric diagnosis. Furthermore, Asian women's language difficulties, lack of access to appropriate interpreters, poor understanding of perinatal mental health problems and Western treatment approaches, as well as a lack of awareness of the New Zealand health system and services are additional barriers. Other practical issues that may impact on Asian women's access to perinatal mental health support include limited financial capacity, domestic responsibilities and lack of transport.

Some factors that facilitate Asian women's utilisation of perinatal mental health services were identified. Family is an important source of support and plays a significant role in supporting Asian women to seek help and get treatment early. Moreover, having trust and confidence in health professionals, availability of culturally- and linguistically-matched practitioners, assurance of confidentiality and provision of free or low-cost services are also important and can help to improve the effectiveness and acceptability of services.

Based on the study findings, recommendations for actions to improve access and maternal mental health outcomes in Asian communities are made below.

Actions to enhance health literacy and promote early help-seeking

- **Promote perinatal mental health and emotional wellbeing through antenatal classes, mothers' groups, parenting groups, coffee groups and playgroups.**

Actions to promote perinatal mental health to Asian women during pregnancy and postnatally can include incorporating a focus on perinatal mental health and wellness within existing antenatal and parenting classes, and inviting counsellors and professionals to share their knowledge and information about services, resources, and referral pathways from GPs to specialist services. Support groups and classes also provide an opportunity for participants to share experiences, develop social networks and support, and reduce isolation.

- **Promote the mental health and wellbeing of fathers and other members of the extended family.**

Actions can include extending existing services for expectant and new mothers to include fathers, grandparents and other members of the extended family, delivering fathers' programmes to promote positive parenting for men and help fathers form support networks, as well as providing parenting education for grandparents. The programmes will also help to raise awareness about perinatal mental health and promote the mental health and wellbeing of families.

- **Develop culturally appropriate resources to de-stigmatise mental illness and promote early help-seeking.**

Access to information is critical for improving the health literacy in Asian communities. Currently there are a few mental health pamphlets available in Asian languages, but none are specifically about perinatal mental health — for example, information about postnatal depression and other perinatal emotional issues, and how to access available professional services and support. The information should come in various formats (e.g. posters, printed leaflets, online videos) for sharing or downloading, professionally translated into different Asian languages and deliver to diverse groups and communities through GPs, midwives and Plunket nurses, as well as via ethnic specific platforms such as Facebook, Instagram, twitter; WeChat and Little Red Book (小红书) for Chinese; Kakao talk and Korea Post for Koreans; and Gekkan NZ and NZ Daisuki for Japanese.

Actions to improve early identification and intervention at primary care level

- **Upskill GPs, midwives and Plunket nurses to identify warning signs and possible risk factors for perinatal emotional issues, equip them with skills to support Asian women and their families, and provide early intervention or make referrals if necessary.**

In some countries the Edinburgh Postnatal Depression Scale (EPDS) is used as a screening tool to assess mood in women during pregnancy and for the first 12 months after their baby is born. This is currently not legally required in New Zealand but will be helpful to implement in New Zealand. Providing primary care education programmes and clinical screening tools to GPs, midwives and Plunket nurses can help to improve their skills in early identification and intervention of perinatal mental health issues, as well as improve referral appropriateness.

Actions to strengthen referral pathways to maternal mental health services

- **Improve information sharing and referral management to improve primary-secondary care interface.**

Making the referral process simpler and more efficient is important for improving people's access to specialist mental health care. Currently patients need to find a GP, receive a referral, and then wait for a decision from the referral management team. There are a lot of steps for patients. The process will be even harder for Asian women with limited English and poor understanding of the referral process.

Some patients may not get the specialist mental health care required due to insufficient information provided in the referrals (resulting in delayed referrals), or under-diagnosis due to a lack of recognition of cultural elements in psychiatric diagnosis (resulting in triaging errors). Actions to address these issues include improving the quality of referrals by providing clearer guidelines to the referring GPs and allied health workers, and improving cultural sensitivity of referral decision through better decision support.

Actions to foster growth of ethnic-specific counselling and support services

- **Counselling and social services can better support Asian families.**

The provision of culturally responsive, holistic care can improve access to services and can potentially improve perinatal outcomes. Asian families have a strong preference for counselling and support services provided by practitioners who share the same cultural and language backgrounds. The provision of culturally responsive, holistic care includes establishing a trusting relationship with Asian mothers and their families, empowering them to manage their stress and mental health difficulties, providing cultural, psychological, social and practical support, assistance with navigating systems, and provision of education, information and resources.

- **Improve timely access to professional interpreters.**

Utilising interpreters is a critical component of providing health care to those who are not proficient in English. However, healthcare providers interviewed in this study noted that professional interpreters were not always available in every language, at any time. There is a need to make funding available to improve professional interpreter services. It is necessary to train interpreters for each ethnic group. To ensure quality of service, interpreters should be bound by ethical standards and have adequate awareness and understanding of the mental health and cultural backgrounds in their communities.

- **Promote better inter-agency referrals and communication.**

Perinatal mental ill health among Asian women involves multiple risk factors which affect many aspects of life and other family members. Therefore, appropriate collaboration and communication across services and systems is essential to better support Asian women and families in the perinatal period.

Workforce development

- **Promote CALD cultural competency training and resources.**

Provide CALD cultural competency training and resources in health and social service sectors to improve understanding of cultural differences in the way different Asian groups may present with mental distress, their interpretations of mental illness and mental wellbeing, help seeking patterns and cultural methods of supporting women's wellbeing during pregnancy and postnatally.

- **Peer review groups for clinicians to share, discuss and review complex cases.**

Peer review groups can be used for continuing professional development of clinicians. They are valued by clinicians for having the effect on improving clinical performance.

Future research

In terms of future research, there are a number of potential areas. For example, the experiences of fathers and families affected by perinatal mental ill health, and the services and support they need. Future research could also look into interventions to improve the quality of referrals from primary care to specialist mental health services, and the effectiveness of using screening tools (e.g. Edinburgh Postnatal Depression Scale) to detect depression among pregnant and postpartum women.

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Appendix 1 Interview schedule: Asian women

Introduction

I would like to talk with you about your experience during the perinatal period (i.e. during pregnancy and through the child's first year). I am especially interested in understanding how your emotional state has changed during this period, and what help, if any, you have sought when you have experienced mental distress. I would also like to know if there is anything that restricts your access or use of mental health and support services, and would like to hear your views about how service delivery and mental health outcomes can be improved for Asian women during the perinatal period.

This interview will last for approximately one to 1½ hours. With your permission, the interview will be audio recorded and transcribed, and I will take notes where appropriate. Your participation in the study is entirely voluntary. You may choose not to answer any particular question, and you can ask me to pause or stop the audio-recording at any time. You also have the right to withdraw from the study within four weeks of the interview without giving a reason.

Do you have any questions before we start?

[Check if interviewee has read, understood and signed the Consent Form]

Section A: Family background

First of all, we want to get some background information about you and your family.

1. Including yourself, how many people are living in your house? _____

Please provide the following information about the people living in your house:

	Relationship	Gender	Age	Ethnicity	Birthplace	Years in NZ (if born overseas)	Employment status	Occupation
1	SELF							
2								
3								
4								
5								
6								
7								
8								

2. On a scale of 1 to 10, with 1 being very poor and 10 being very well, how would you rate your ability to speak English? _____
3. What is the main language you speak at home in New Zealand? _____
4. Do you, or your family, own or rent the house in which you live?

   ☐ Homeowner
   ☐ House owned by family member/relative
   ☐ Rent
   ☐ Other _____

5. How many children do you have? _____ Their age/s? _____

6. How many of your children were born in New Zealand? _____

7. Are you pregnant now? ☐ Yes ☐ No

   If yes, how many weeks into pregnancy are you? _____

Section B: General well-being during the perinatal period

This section is about your overall satisfaction with life during the perinatal period.

8. Here is a picture of a ladder with ten rungs. Suppose we say the top of the ladder (the 10th rung) represents the best possible life for you and the bottom of the ladder (the 1st rung) represents the worst possible life for you. The other rungs are in between.

	1	2	3	4	5	6	7	8	9	10
a. Where on the ladder do you feel you are standing at the present time?										
b. Where on the ladder would you say you stood during your last pregnancy?										
c. Where on the ladder would you say you stood following your most recent childbirth? (if applicable)										
d. Where on the ladder would you say you stood during the child's first year? (if applicable)										

9. Based on the interviewee's answers to Q8, explore her experiences during the perinatal period. Possible topics that could be covered include:

   - What were your general feelings about pregnancy? how did pregnancy impact on:
     - your daily life (e.g. household work, job, study or social activities)?
     - your family relationships?
   - How was your most recent birth experience?
   - How was your experience at the birth facility (e.g. hospital or birth care facility)?
   - How was your recovery period after your most recent childbirth?
   - How was your experience caring for your child during the first year?
   - How did caring for your child's first year impact on:
     - your daily life (e.g. household work, job, study or social activities)?
     - your family relationships?
   - If you have other children, how did this most recent birth experience compare to your other birth experience(s)?

Section C: Emotional state

Below are some questions about how you have been feeling during the past 4 weeks.

10. Please tick the answer that comes closest to how you have been feeling **during the past four weeks.**

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
a. In the past 4 weeks, about how often did you feel very tired for no good reason?					
b. In the past 4 weeks, about how often did you feel nervous?					
c. In the past 4 weeks, about how often did you feel so nervous that nothing could calm you down?					
d. In the past 4 weeks, about how often did you feel hopeless?					
e. In the past 4 weeks, about how often did you feel restless or fidgety?					
f. In the past 4 weeks, about how often did you feel so restless you could not sit still?					
g. In the past 4 weeks, about how often did you feel depressed?					
h. In the past 4 weeks, about how often did you feel that everything was an effort?					
i. In the past 4 weeks, about how often did you feel so sad that nothing could cheer you up?					
j. In the past 4 weeks, about how often did you feel worthless?					

11. Use the items in Q10 to further explore interviewee's emotional states (e.g. feeling nervous, hopeless, depressed, sad, worthless) during the perinatal period. Possible topics that could be covered include:

    - How concerned or not are you about these feelings?
    - What are the types of situations that have caused these feelings?
    - Did you have these feelings in other parts of your perinatal period (e.g. during pregnancy, at the birth facility, recovery after childbirth, caring for your child during the first year)?

Section D: Emotional wellbeing during Covid-19 pandemic

Between March 25 and April 27, New Zealand entered into a nationwide lockdown (Covid-19 Level 4 lockdown). This section contains questions about your experiences during the pandemic.

12. How did the lockdown affect your daily life? your physical health? Your mental/emotional health?

13. On a scale of 1-10, with 1 being very poor and 10 being very good, how would you rate your mental/emotional health:

	1	2	3	4	5	6	7	8	9	10
a. During Level 4 lockdown?										
b. During Level 3 lockdown?										
c. Now?										

14. What are (were) the things that have (had) affected your emotional health the most during Covid-19 pandemic?

Section E: Help-seeking for mental health issues

The following questions ask about people in your social environment you may approach to seek help when you are feeling anxious, depressed, or experiencing mental health difficulties.

15. How likely is it that you would seek help from the following sources? Please rank your answers in a scale from 1 to 5, with 1 being not at all likely to 5 being extremely likely.

	1	2	3	4	5
a. Family (e.g. husband/boyfriend/de facto partner, parents, in-laws, siblings, relatives in NZ, relatives overseas)					
b. Friends (e.g. NZ friends, friends from overseas)					
c. Professionals (e.g. midwife/Lead Maternity Carer, doctor/GP, birth centre, Plunket nurse, psychologist, social worker, counsellor, telephone helpline)					
d. Community (e.g. Minister/religious leader, parent groups, people from societies in the community)					
e. Information from newspapers, magazines, television, websites, social media platforms (e.g. YouTube, WhatsApp, Twitter, Facebook, Instagram)					
f. Other support not listed above (please specify)					

16. Explore further the interviewee's help-seeking behaviour. Possible topics that could be covered:

- Why do you prefer to seek help from _____ (two of the most likely sources) than from other sources?
- Is there any stigma attached to seeking help from _____ (two of the least likely sources)?
- Other than stigma, what are the factors that affect your accessing and using formal mental health and support services when you are mentally distressed? Explore:
  - Cultural beliefs and attitudes

- Family/intergenerational issues
- Health system barriers (e.g. lack of knowledge of services; lack of culturally responsive services)
- Language issues
- Financial factors
- Other factors

- In what ways does your family encourage or not encourage you to seek help when you are mentally distressed?

Section F: knowledge/use of mental health services

17. Have you ever seen a psychiatrist/ a specialist doctor who prescribed a medicine for your mental health?
    - ☐ Yes
    - ☐ No
    - ☐ Not sure

18. If the interviewee answers 'yes' to Q17, (a) Which of the following services have you used?

Name of Service	Address	Used?
a. Community Mental Health Centres		
WDHB – North	44 Taharoto Road, Takapuna	
WDHB – Rodney	Whangaparaoa Road, Red Beach	
WDHB – Tohu-Wairua	7 Alnwick Street, Warkworth	
WDHB – Helensville	65 Commercial Road, Helensville	
WDHB – West	33 Paramount Drive, Henderson	
ADHB – St Lukes	615 New North Road, Morningside	
ADHB - Manaaki House	15 Pleasant View Road, Panmure	
ADHB - Cornwall House	Greenland Clinical Centre	
ADHB - Taylor Centre	308 Ponsonby Road, Ponsonby	
CMDHB – Matariki	492 Great South Road, Otahuhu	
CMDHB - Te Rawhiti	15 Aberfeldy Avenue, Highland Park	
CMDHB – Manukau	17 Lambie Drive, Manukau City	
CMDHB – Rapua Te Ao Waiora	5-19 Great South Road, Papakura	
CMDHB – Nga Raukohekohe	Pukekohe Hospital, 1 Tuakau Road, Pukekohe	
b. Inpatient services		
Starship Mother and Baby Unit	Starship children's hospital, 2 Park Road, Central Auckland	
c. Specialist maternal mental health services		
WDHB maternal mental health service	North Shore Hospital and Waitakere Hospital	
ADHB Aronui Ora	Greenlane Clinical Centre, Central Auckland	
CMDHB maternal mental health service	7 Springs Road, East Tamaki (previously based at Kerr's Road, Wiri)	
d. Intensive pregnancy and parental services		
Community Alcohol & Drug Service (CADS) Pregnancy and Parental Service	50 Carrington Rd, Pt Chevalier	
e. NGO/Community support services		
Awhi Rito / Kāhu Tū Kaha Support Services and Respite	650 Great South Road, Ellerslie Respite: Manurewa	
He Kakano Ora / Walsh Trust Support Services and Respite	8 Hickory Avenue, Henderson	
f. Other services (please specify)		

18(b) Explore the interviewee's experiences of using secondary mental health services. Possible topics that could be covered:

- Did the specialist doctor or nurse spend enough time with you? Did they listen to what you had to say? Did they explain things to you in a way that was easy to understand?
- Overall, how satisfied were you with the services you had received? What did you like most about the services? What did you dislike most?

19. In your opinion, what would motivate Asian women and their families to seek mental health and other support services when they are mentally distressed during the perinatal period?

These are all the questions that I have for you. Do you have any further comments?

Appendix 2 Interview schedule: Family members

Introduction:

Partners and wider family members play a vital role during women's perinatal period (i.e. during pregnancy and through the child's first year). I would like to talk with you about your experience of caring for your (wife/partner/daughter/daughter-in-law/ _____) during the perinatal period. I am especially interested in understanding the impact of pregnancy and childbirth on your family relationships, as well as on the parents' and other family member's emotional health. I would also like to know your views and experiences of the services and support that your (wife/partner/daughter/daughter-in-law/ _____) has sought for her perinatal mental health.

This interview will last for approximately one hour. With your permission, the interview will be audio recorded and transcribed, and I will take notes where appropriate. Your participation in the study is entirely voluntary. You may choose not to answer any particular question, and you can ask me to pause or stop the audio-recording at any time. You also have the right to withdraw from the study within four weeks of the interview without giving a reason.

Do you have any questions before we start?

[Check if interviewee has read, understood and signed the Consent Form]

Section A: Family background

10. What is your relationship to the woman going through the perinatal period?

    ☐ Husband / partner
    ☐ Mother / father
    ☐ Mother-in-law / father-in-law
    ☐ Other relative _____

11. Which ethnic group(s) does your (wife/partner/daughter/daughter-in-law/ _____) belong to? _____

12. Which ethnic group(s) do you belong to? _____

13. How many children does your (wife/partner/daughter/daughter-in-law/ _____) have? _____ Their age/s? _____

14. How many of these children were born in New Zealand? _____

15. Is your (wife/partner/daughter/daughter-in-law/ _____) pregnant now?

    ☐ Yes ☐ No

    If yes, how many weeks into pregnancy is she? _____

16. What has been your role in supporting your (wife/partner/daughter/daughter-in-law/ _____) through her perinatal period?

Section B: Challenges faced during the perinatal period

17. How was your experience caring for your (wife/partner/daughter/daughter-in-law/ _____) during her (last) pregnancy? What has been the impact of her pregnancy on:
    - your family relationships
    - her emotional health
    - your own emotional health

- other relatives' emotional health
- other aspects of life (Please specify)

18. How was your experience caring for your (wife/partner/daughter/daughter-in-law/ _____) during her (most recent) childbirth? What was the impact of her childbirth on:
    - your family relationships
    - her emotional health
    - your own emotional health
    - other relatives' emotional health
    - other aspects of life (Please specify)
19. How was your experience caring for (your wife/partner/daughter/daughter-in-law/ _____) during the child's first year? What has been the impact on:
    - your family relationships
    - her emotional health
    - your own emotional health
    - other relatives' emotional health
    - other aspects of life (Please specify)
20. If your (wife/partner/daughter/daughter-in-law/ _____) has other children, how did this most recent birth experience compare to her other birth experience/s?

Section B: Help-seeking for mental health issues

21. Can you describe any support your (wife/partner/daughter/daughter-in-law/ _____) has received from the following sources when she was feeling anxious, depressed, or experiencing other mental health difficulties?
    - Family (e.g. husband/boyfriend/de facto partner, parents, in-laws, siblings, relatives in NZ, relatives overseas)
    - Friends (e.g. NZ friends, friends from overseas)
    - Professionals (e.g. midwife/Lead Maternity Carer, doctor/GP, birth centre, Plunket nurse, psychologist, social worker, counsellor, telephone helpline)
    - Community (e.g. Minister/religious leader, parent groups, people from societies in the community)
    - Information from newspapers, magazines, television, websites, social media platforms (e.g. YouTube, WhatsApp, Twitter, Facebook, Instagram)
    - Other support (please specify)
22. Can you describe any support you have received from the following sources when you are feeling anxious, depressed, or experiencing other mental health difficulties?
    - Family (e.g. husband/wife/partner, parents, siblings, relatives)
    - Friends
    - Professionals (e.g. doctor/GP, psychologist, social worker, counsellor, telephone helpline)
    - Community (e.g. Minister/religious leader, people from societies in the community)
    - Information from newspapers, magazines, television, websites, social media platforms (e.g. YouTube, WhatsApp, Twitter, Facebook, Instagram)
    - Other support not listed above (please specify)
23. Is there any stigma attached to seeking help from mental health services or professionals in your (wife's/partner/daughter/daughter-in-law/ _____) culture/ethnic community? In your culture/ethnic community?
24. Other than stigma, what are the factors that can affect Asian women's accessing and use of formal mental health and support services when they are mentally distressed? Explore:

- Cultural beliefs and attitudes
- Family/intergenerational issues
- Health system barriers (e.g. lack of knowledge of services; lack of culturally responsive services)
- Language issues
- Financial factors
- Other factors

25. What would motivate Asian women and their families to seek mental health and other support services when they are mentally distressed during the perinatal period?

These are all the questions that I have for you. Do you have any further comments?

Appendix 3 Interview schedule: Community representatives

Introduction:

I would like to talk with you about your experience of providing support to Asian women and/or their families during the perinatal period (i.e. during pregnancy and through the child's first year). I am especially interested in understanding how Asian families use specialist mental health services during this period, and the barriers they might experience in accessing these services. As well, I would like to hear your views about how service delivery and mental health outcomes can be improved for this population group.

This interview will last for approximately one hour. With your permission, the interview will be audio recorded and transcribed, and I will take notes where appropriate. Your participation in the study is entirely voluntary. You may choose not to answer any particular question, and you can ask me to pause or stop the audio-recording at any time. You also have the right to withdraw from the study within four weeks of the interview.

Do you have any questions before we start?

[Check if interviewee has read, understood and signed the Consent Form]

Section A: Background information

1. What is your role in your (support) group? How long have you been working in this role?
2. What is your role in supporting women and/or their families during the perinatal period? In this role, what is the proportion of your time involved in supporting Asian women and/or their families? Are you working with particular Asian sub-group(s)?
3. What is your ethnic or cultural background?

Section B: Access to and utilisation of secondary perinatal mental health services by Asian families

4. In your work, have you encountered Asian women who might experience anxiety, depression or other mental health issues during their perinatal period? If yes, how many in the past 12 months?
5. Have the numbers increased, decreased, or been more or less the same over the past few years?
6. What are the characteristics of Asian women who might be experiencing anxiety, depression or other mental health issues during their perinatal period? Can you also describe their patterns of accessing and utilising mental health services?
7. Are these characteristics/patterns different from the general population? In what ways? What are the key challenges Asian mothers face during the perinatal period?

Section C: Barriers to access and impacts

8. What are the main reasons driving the low access rates into secondary perinatal mental health services among Asian women? Explore:
    - Cultural beliefs and attitudes
    - Migration factors
    - Family/intergenerational issues
    - Health system barriers (e.g. lack of knowledge of services; lack of culturally responsive services)

- Language barrier
- Financial issues
- Other factors

9. Are these factors different from those in the general population?

10. What are the impacts of low access rates on family?

Section D: Services and resources

11. Referring to the services provided by your (support) group, how well is your group able to support Asian women who might experience mental health issues during the perinatal period?

12. Referring to the services provided by your (support) group, what resources are available to help your group to provide mental health support to Asian women during the perinatal period? Explore:

- Cross-cultural training and resources
- Interpreter services and translated resources
- Interviewee's own cultural background and resources
- Other resources

13. Beyond community/peer support groups, what other services/actions are required to improve maternal mental health outcomes in New Zealand's Asian communities?

14. There is a huge stigma attached to mental health issues within Asian communities. What strategies and/or actions can New Zealand's Asian communities take to improve maternal mental health outcomes for Asian women?

These are all the questions that I have for you. Do you have any further comments?

Appendix 4 Interview schedule: Healthcare providers

Introduction:

I would like to talk with you about your experience of working with Asian women and/or their families during the perinatal period (i.e. during pregnancy and through the child's first year). I am especially interested in understanding how Asian families use specialist mental health services during this period, and the barriers they might experience in accessing these services. As well, I would like to hear your views about how service delivery and mental health outcomes can be improved for this population group.

This interview will last for approximately one hour. With your permission, the interview will be audio recorded and transcribed, and I will take notes where appropriate. Your participation in the study is entirely voluntary. You may choose not to answer any particular question, and you can ask me to pause or stop the audio-recording at any time. You also have the right to withdraw from the study within four weeks of the interview.

Do you have any questions before we start?

[Check if interviewee has read, understood and signed the Consent Form]

Section A: Background information

15. What is your role in your organisation? How long have you been working in this role?

16. What is your role in supporting women and/or their families during the perinatal period? In this role, what is the proportion of your time involved in supporting Asian women and/or their families?

17. What is your ethnic or cultural background?

Section B: Access to and utilisation of secondary perinatal mental health services by Asian families

18. In your work, have you encountered Asian women who might have been experiencing anxiety, depression or other mental health issues during their perinatal period? If yes, how many in the past 12 months?

19. Have the numbers increased, decreased, or been more or less the same over the past few years?

20. What are the characteristics of Asian women who might be experiencing anxiety, depression or other mental health issues during their perinatal period? Can you also describe their patterns of accessing and utilising mental health services?

21. Are these characteristics/patterns different from the general population? In what ways? What are the key challenges Asian mothers face during the perinatal period?

Section C: Barriers to access and impacts

22. What are the main reasons driving the low access rates into secondary perinatal mental health services among Asian women? Explore:

- Cultural beliefs and attitudes
- Migration factors
- Family/intergenerational issues

- Health system barriers (e.g. lack of knowledge of services; lack of culturally responsive services)
- Language barrier
- Financial issues
- Other factors

23. Are these factors different from those in the general population?

24. What are the impacts of low access rates on family?

Section D: Services and resources

25. Referring to your area of service (e.g. primary health, mental health, maternity care, Plunket, community support, religious service), how well is the service addressing mental health issues among Asian women during the perinatal period? What is working well and what isn't?

26. Referring to your area of service, what resources are available to help you and/or your colleagues to provide culturally appropriate services to Asian women during the perinatal period? What is working well and what isn't? Explore:

- Cross-cultural training and resources
- Interpreter services and translated resources
- Workforce development
- Interviewee's own cultural background and resources
- Other support

27. Beyond your current area of service, what kind of work and/or resources are required in other services to address perinatal mental health among Asian women? What is working well and what isn't?

28. There is a huge stigma attached to mental health issues within Asian communities. What efforts have been made to address this stigma? What is working well and what isn't?

29. Are there any examples of strategies and/or actions from other countries that you would recommend to implement in New Zealand to improve maternal mental health outcomes for Asian women in New Zealand?

These are all the questions that I have for you. Do you have any further comments?

Appendix 5 Participant Information Sheet for Asian Women

Study title: The emotional wellbeing and care of Asian women during the perinatal period

Locality: Asian Family Services, Level 1, 128 Khyber Pass Road, Grafton, Auckland

Ethics ref: 20/NTB/187

Sponsor: Northern Region District Health Boards

Lead investigator: Dr Elsie Ho Contact phone number: [redacted]

You are invited to take part in a study on the emotional wellbeing and care of Asian mothers during the perinatal period. Whether or not you take part is your choice. If you do not want to take part, you do not have to give a reason, and it will not affect the care you receive. If you do want to take part now, but change your mind later, you can pull out of the study up to four weeks after the interview.

This Participant Information Sheet will help you decide if you would like to take part. It sets out why we are doing the study, what your participation would involve, possible benefits and risks to you, and what would happen after the study ends. We will go through this information with you and answer any questions you may have. You do not have to decide today whether or not you will participate in this study. Before you decide, you may want to talk about the study with other people, such as family, whānau, friends, or healthcare providers. Feel free to do this.

If you agree to take part in this study, you will be asked to sign the Consent Form on the last page of this document. You will be given a copy of both the Participant Information Sheet and the Consent Form to keep.

This document is 5 pages long, including the Consent Form. Please make sure you have read and understood all the pages.

What is the purpose of the study?

The purpose of this study is to get a better understanding of the experiences of Asian mothers during the perinatal period (i.e. from pregnancy to the first year after childbirth), and the support and services they have sought when they have experienced mental distress. The study will also interview family members, healthcare professionals and Asian representatives from mothers' support groups to understand their perspectives on the topic.

The study is funded by the Northern Region District Health Boards and carried out by research staff at Asian Family Services. If you wish to get more information or ask questions about the study, please contact Ingrid Wang (phone [redacted], or by email [redacted]@asianfamilyservices.nz)

The study has been approved by the Health and Disability Ethics Committee on 7 October 2020 (Ref 20/NTB/187).

What will my participation in the study involve?

If you are aged 18 years or above, living in the Auckland region, self-identify as Asian (or any Asian subgroups, e.g. Chinese, Indian, Japanese, Korean) and are pregnant or have a child under one year of age, you are welcome to take part in this study.

If you agree to take part, you will need to sign a Consent Form and take part in an interview. You can ask for the interview to be conducted in your preferred language (e.g. English, Cantonese, Hindi, Japanese, Korean, Mandarin). The interview will take place face-to-face at a location where privacy can be maximised, or on-line via video conferencing if required. The interview is expected to take about 1 to 1½ hours.

During the interview, you will be asked questions about your family background, your feelings of wellbeing during pregnancy, following childbirth, and during the child's first year. We are also interested in your physical and emotional health during the Covid-19 pandemic. Finally, we would like to know what support you have sought when you have experienced mental distress during the perinatal period, and if there is anything that have facilitated or restricted your use of mental health and support services.

With your permission, the interview will be audio-recorded, and the researcher will take notes where appropriate. The audio recording will be transcribed by the researcher who has conducted the interview. At your request, you will have the opportunity to review the interview transcript, make corrections, or request for the erasure of any materials you do not wish to be used, within two weeks of the transcript being sent to you. Any material that you do not wish to be used will be removed from the transcript (and then translated into English if the interview is conducted in an Asian language) before data analysis.

What are the possible benefits and risks of this study?

The results of the study will inform the development of more culturally appropriate maternal services and will also help to improve mental health outcomes for Asian women.

As the topics explored in interview include discussing personal experiences, there is a possibility that you may experience some emotional discomfort when discussing sensitive issues during the interview. If you feel uncomfortable from topics discussed in the interview, you may ask for the interview to be terminated at any time. If you require, you can contact the counsellors at Asian Family Services (0800 862 342). Asian Family Services is a non-government organization which provides free, confidential, professional, face-to-face or telephone counselling and support services in eight languages: English, Cantonese, Hindi, Japanese, Korean, Mandarin, Thai and Vietnamese.

Who pays for the study?

Your participation will not incur any costs. We will give you a $30 supermarket voucher to thank you for the time and effort you have provided in taking part in the study.

What are my rights?

Your participation in this study is entirely voluntary. You can decline to participate without giving a reason. If you choose to participate, you may decline to answer any individual question, or request that the recorder be turned off at any time during the discussion. You also have the right to withdraw from the study within four weeks of the interview without giving a reason.

All the information that is collected from you will be kept confidential. The researchers who conduct the interviews, transcribe the audio recordings and translate the transcripts have signed a confidential agreement. Unless permission is obtained, your name and other information which can identify you personally will not be used in any publications arising from the study.

A participant's identity will not be disclosed to a third party, unless they disclose information that suggests that the participant poses a threat to their own safety (or the safety of others). In such events, the researcher has a duty to disclose the information to a third party.

What will happen to my information?

During the interview the researcher will record information about you and your study participation. Only the researcher will have access to your identifiable information (that is, any data that could identify you such as your name, phone number, address). These personally identifiable information will be removed from the substantive data collected in the study. In all interview recordings,

transcripts and notes, you will be identified by a code name only known to the researcher. It will not be possible for you to be individually identified in any reports or publications arising from the study.

Quotes from the interview recordings may be used in final publications. Care will be taken in choosing quotes, or altering them such that specific information that could disclose confidentiality will be replaced.

Security and storage of study data

All data collected in this study will be stored securely on a password-protected computer, or in a locked cabinet on Asian Family Services premises. Only the researchers will be able to see or use the data. The data will be kept for 10 years. After this time, all data will be destroyed.

Rights to access the study results

A report summarising the results of the study will be prepared after the study ends. Other conference papers and journal articles may be prepared. You can request for a summary of the findings after the final study report is produced in March 2021. The summary report will be translated into Chinese, Hindi, Korean, Japanese, or other Asian languages as needed.

Who do I contact for more information or if I have concerns?

If you have any questions, concerns or complaints about the study at any stage, you can contact:

Ms Kelly Feng, National Director, Asian Family Services
Phone: 09 212 6781
Email: kelly.feng@asianfamilyservices.nz

If you want to talk to someone who isn't involved with the study, you can contact an independent health and disability advocate on:

Phone : 0800 555 050
Fax : 0800 2 SUPPORT (0800 2787 7678)
Email : advocacy@advocacy.org.nz
Website: https://www.advocacy.org.nz/

You can also contact the health and disability ethics committee (HDEC) that approved this study on:

Phone: 0800 4 ETHICS
Email: hdecs@moh.govt.nz

Appendix 6 Participant Information Sheet for Family Members

Study title: The emotional wellbeing and care of Asian women during the perinatal period

Locality: Asian Family Services, Level 1, 128 Khyber Pass Road, Grafton, Auckland

Ethics ref: 20/NTB/187

Sponsor: Northern Region District Health Boards

Lead investigator: Dr Elsie Ho Contact phone number: [redacted]

You are invited to take part in a study on the emotional wellbeing and care of Asian mothers during the perinatal period. Whether or not you take part is your choice. If you do not want to take part, you do not have to give a reason. If you do want to take part now, but change your mind later, you can pull out of the study up to four weeks after the interview.

This Participant Information Sheet will help you decide if you would like to take part. It sets out why we are doing the study, what your participation would involve, possible benefits and risks to you, and what would happen after the study ends. We will go through this information with you and answer any questions you may have.

If you agree to take part in this study, you will be asked to sign the Consent Form on the last page of this document. You will be given a copy of both the Participant Information Sheet and the Consent Form to keep.

This document is 5 pages long, including the Consent Form. Please make sure you have read and understood all the pages.

What is the purpose of the study?

The purpose of this study is to get a better understanding of the experiences of Asian mothers during the perinatal period (i.e. from pregnancy to the first year after childbirth), and the support and services they have sought when they have experienced mental distress. The study will also interview healthcare professionals and Asian representatives from mothers' support groups to understand their perspectives on the topic.

The study is funded by the Northern Region District Health Boards and carried out by research staff at Asian Family Services. If you wish to get more information or ask questions about the study, please contact Ingrid Wang (phone [redacted], or by email [redacted]@asianfamilyservices.nz)

The study has been approved by the Health and Disability Ethics Committee on 7 October 2020 (Ref 20/NTB/187).

What will my participation in the study involve?

If you are living in the Auckland region and are caring for your close family members (e.g. partner, daughter, daughter-in-law) who self identifies as Asian (or any Asian subgroups, e.g. Chinese, Indian, Japanese, Korean), is pregnant or has a child under one year of age, you are welcome to take part in this study.

If you agree to take part, you will need to sign a Consent Form and take part in an interview. You can ask for the interview to be conducted in your preferred language (e.g. English, Cantonese, Hindi, Japanese, Korean, Mandarin). The interview will take place face-to-face at a location where privacy can be maximised, or on-line via video conferencing if required. The interview is expected to take about 1 hour.

During the interview, you will be asked questions about your family background and your experiences of caring for your close family member through her perinatal period. We would also like to know your family's sources of support when your close family member has experienced mental distress during the perinatal period, and if there is anything that have restricted her access to, or use of specialist mental health and support services.

With your permission, the interview will be audio-recorded, and the researcher will take notes where appropriate. The audio recording will be transcribed by the researcher who has conducted the interview. At your request, you will have the opportunity to review the interview summary, or request for the erasure of any materials you do not wish to be used, within two weeks of the interview summary being sent to you. Any material that you do not wish to be used will be removed before data analysis.

What are the possible benefits and risks of this study?

The results of the study will inform the development of more culturally appropriate maternal services and will also help to improve mental health outcomes for Asian women.

As the topics explored in interview include discussing personal experiences, there is a possibility that you may experience some emotional discomfort when discussing sensitive issues during the interview. If you feel uncomfortable from topics discussed in the interview, you may ask for the interview to be terminated at any time. If you require, you can contact the counsellors at Asian Family Services (0800 862 342). Asian Family Services is a non-government organization which provides free, confidential, professional, face-to-face or telephone counselling and support services in eight languages: English, Cantonese, Hindi, Japanese, Korean, Mandarin, Thai and Vietnamese.

Who pays for the study?

Your participation will not incur any costs. We will give you a $30 supermarket voucher to thank you for the time and effort you have provided in taking part in the study.

What are my rights?

Your participation in this study is entirely voluntary. You can decline to participate without giving a reason. If you choose to participate, you may decline to answer any individual question, or request that the recorder be turned off at any time during the discussion. You also have the right to withdraw from the study within four weeks of the interview without giving a reason.

All the information that is collected from you will be kept confidential. The researchers who conduct the interviews, transcribe the audio recordings and translate the transcripts have signed a confidential agreement. Unless permission is obtained, your name and other information which can identify you personally will not be used in any publications arising from the study.

A participant's identity will not be disclosed to a third party, unless they disclose information that suggests that the participant poses a threat to their own safety (or the safety of others). In such events, the researcher has a duty to disclose the information to a third party.

What will happen to my information?

During the interview the researcher will record information about you and your study participation. Only the researcher will have access to your identifiable information (that is, any data that could identify you such as your name, phone number, address). These personally identifiable information will be removed from the substantive data collected in the study. In all interview recordings, transcripts and notes, you will be identified by a code name only known to the researcher. It will not be possible for you to be individually identified in any reports or publications arising from the study.

Quotes from the interview recordings may be used in final publications. Care will be taken in choosing quotes, or altering them such that specific information that could disclose confidentiality will be replaced.

Security and storage of study data

All data collected in this study will be stored securely on a password-protected computer, or in a locked cabinet on Asian Family Services premises. Only the researchers will be able to see or use the data. The data will be kept for 10 years. After this time, all data will be destroyed.

Rights to access the study results

A report summarising the results of the study will be prepared after the study ends. Other conference papers and journal articles may be prepared. You can request for a summary of the findings after the final study report is produced in March 2021. The summary report will be translated into Chinese, Hindi, Korean, Japanese, or other Asian languages as needed.

Who do I contact for more information or if I have concerns?

If you have any questions, concerns or complaints about the study at any stage, you can contact:

Ms Kelly Feng, National Director, Asian Family Services
Phone: 09 212 6781
Email: kelly.feng@asianfamilyservices.nz

If you want to talk to someone who isn't involved with the study, you can contact an independent health and disability advocate on:

Phone : 0800 555 050
Fax : 0800 2 SUPPORT (0800 2787 7678)
Email : advocacy@advocacy.org.nz
Website: https://www.advocacy.org.nz/

You can also contact the health and disability ethics committee (HDEC) that approved this study on:

Phone: 0800 4 ETHICS
Email: hdecs@moh.govt.nz

Appendix 7 Participant Information Sheet for community representatives

Study title: The emotional wellbeing and care of Asian women during the perinatal period

Locality: Asian Family Services, Level 1, 128 Khyber Pass Road, Grafton, Auckland

Ethics ref: 20/NTB/187

Sponsor: Northern Region District Health Boards

Lead investigator: Dr Elsie Ho Contact phone number: [redacted]

You are invited to take part in a study on the emotional wellbeing and care of Asian mothers during the perinatal period. Whether or not you take part is your choice. If you do not want to take part, you do not have to give a reason. If you do want to take part now, but change your mind later, you can pull out of the study up to four weeks after the interview.

This Participant Information Sheet will help you decide if you would like to take part. It sets out why we are doing the study, what your participation would involve, possible benefits and risks to you, and what would happen after the study ends. We will go through this information with you and answer any questions you may have.

If you agree to take part in this study, you will be asked to sign the Consent Form on the last page of this document. You will be given a copy of both the Participant Information Sheet and the Consent Form to keep.

This document is 5 pages long, including the Consent Form. Please make sure you have read and understood all the pages.

What is the purpose of the study?

The purpose of this study is to get a better understanding of the experiences of Asian mothers during the perinatal period (i.e. from pregnancy to the first year after childbirth), and the support and services they have sought when they have experienced mental distress. The study will also interview Asian mothers, family members and healthcare professionals to understand their perspectives on the topic.

The study is funded by the Northern Region District Health Boards and carried out by research staff at Asian Family Services. If you wish to get more information or ask questions about the study, please contact Ingrid Wang (phone [redacted], or by email [redacted]@asianfamilyservices.nz)

The study has been approved by the Health and Disability Ethics Committee on 7 October 2020 (Ref 20/NTB/187).

What will my participation in the study involve?

You are invited to take part in the study as an Asian representative of a community group (e.g. mothers' support group, coffee group, new parent group) providing support to women during the perinatal period.

If you agree to take part, you will need to sign a Consent Form and take part in an interview. You can ask for the interview to be conducted in your preferred language (e.g. English, Cantonese, Hindi, Japanese, Korean, Mandarin). The interview will take place face-to-face at a location where privacy can be maximised, or on-line via video conferencing if required. The interview is expected to take about 1 hour.

During the interview, you will be asked about your experience of providing support to Asian women and their families during the perinatal period. We are particularly interested in understanding how

Asian families use specialist mental health services and other support during this period, and the barriers they might experience in accessing these services.

With your permission, the interview will be audio-recorded, and the researcher will take notes where appropriate. The audio recording will be transcribed by the researcher who has conducted the interview. At your request, you will have the opportunity to review the interview summary, or request for the erasure of any materials you do not wish to be used, within two weeks of the interview summary being sent to you. Any material that you do not wish to be used will be removed before data analysis.

What are the possible benefits and risks of this study?

The results of the study will inform the development of more culturally appropriate maternal services and will also help to improve mental health outcomes for Asian women.

We do not anticipate that the study will cause you any psychological or social discomfort. In the event that you do feel uncomfortable from topics discussed in the interview, you may ask for the interview to be terminated at any time. If you require, you can contact the counsellors at Asian Family Services (0800 862 342). Asian Family Services is a non-government organization which provides free, confidential, professional, face-to-face or telephone counselling and support services in eight languages: English, Cantonese, Hindi, Japanese, Korean, Mandarin, Thai and Vietnamese.

Who pays for the study?

Your participation will not incur any costs. We will give you a $30 supermarket voucher to thank you for the time and effort you have provided in taking part in the study.

What are my rights?

Your participation in this study is entirely voluntary. You can decline to participate without giving a reason. If you choose to participate, you may decline to answer any individual question, or request that the recorder be turned off at any time during the discussion. You also have the right to withdraw from the study within four weeks of the interview without giving a reason.

All the information that is collected from you will be kept confidential. The researchers who conduct the interviews, transcribe the audio recordings and translate the transcripts have signed a confidential agreement. Unless permission is obtained, your name and other information which can identify you personally will not be used in any publications arising from the study.

A participant's identity will not be disclosed to a third party, unless they disclose information that suggests that the participant poses a threat to their own safety (or the safety of others). In such events, the researcher has a duty to disclose the information to a third party.

What will happen to my information?

During the interview the researcher will record information about you and your study participation. Only the researcher will have access to your identifiable information (that is, any data that could identify you such as your name, phone number). These personally identifiable information will be removed from the substantive data collected in the study. In all interview recordings, transcripts and notes, you will be identified by a code name only known to the researcher. It will not be possible for you to be individually identified in any reports or publications arising from the study.

Quotes from the interview recordings may be used in final publications. Care will be taken in choosing quotes, or altering them such that specific information that could disclose confidentiality will be replaced.

Security and storage of study data

All data collected in this study will be stored securely on a password-protected computer, or in a locked cabinet on Asian Family Services premises. Only the researchers will be able to see or use the data. The data will be kept for 10 years. After this time, all data will be destroyed.

Rights to access the study results

A report summarising the results of the study will be prepared after the study ends. Other conference papers and journal articles may be prepared. You can request for a summary of the findings after the final study report is produced in March 2021. The summary report will be translated into Chinese, Hindi, Korean, Japanese, or other Asian languages as needed.

Who do I contact for more information or if I have concerns?

If you have any questions, concerns or complaints about the study at any stage, you can contact:

Ms Kelly Feng, National Director, Asian Family Services
Phone: 09 212 6781
Email: kelly.feng@asianfamilyservices.nz

If you want to talk to someone who isn't involved with the study, you can contact an independent health and disability advocate on:

Phone : 0800 555 050
Fax : 0800 2 SUPPORT (0800 2787 7678)
Email : advocacy@advocacy.org.nz
Website: https://www.advocacy.org.nz/

You can also contact the health and disability ethics committee (HDEC) that approved this study on:

Phone: 0800 4 ETHICS
Email: hdecs@moh.govt.nz

Appendix 8 Participant Information Sheet for healthcare providers

Study title: The emotional wellbeing and care of Asian women during the perinatal period

Locality: Asian Family Services, Level 1, 128 Khyber Pass Road, Grafton, Auckland

Ethics ref: 20/NTB/187

Sponsor: Northern Region District Health Boards

Lead investigator: Dr Elsie Ho Contact phone number: [redacted]

You are invited to take part in a study on the emotional wellbeing and care of Asian mothers during the perinatal period. Whether or not you take part is your choice. If you do not want to take part, you do not have to give a reason. If you do want to take part now, but change your mind later, you can pull out of the study up to four weeks after the interview.

This Participant Information Sheet will help you decide if you would like to take part. It sets out why we are doing the study, what your participation would involve, possible benefits and risks to you, and what would happen after the study ends. We will go through this information with you and answer any questions you may have.

If you agree to take part in this study, you will be asked to sign the Consent Form on the last page of this document. You will be given a copy of both the Participant Information Sheet and the Consent Form to keep.

This document is 5 pages long, including the Consent Form. Please make sure you have read and understood all the pages.

What is the purpose of the study?

The purpose of this study is to get a better understanding of the experiences of Asian mothers during the perinatal period (i.e. from pregnancy to the first year after childbirth), and the support and services they have sought when they have experienced mental distress. The study will also interview Asian mothers, family members and Asian representatives from mothers' support groups to understand their perspectives on the topic.

The study is funded by the Northern Region District Health Boards and carried out by research staff at Asian Family Services. If you wish to get more information or ask questions about the study, please contact Ingrid Wang (phone [redacted], or by email [redacted]@asianfamilyservices.nz)

The study has been approved by the Health and Disability Ethics Committee on 7 October 2020 (Ref 20/NTB/187).

What will my participation in the study involve?

You are invited to take part in the study as a service provider who has expert knowledge and understanding of the research topic under study. If you agree to take part, you will need to sign a Consent Form and take part in an interview. The interview will take place face-to-face at a location where privacy can be maximised, or on-line via video conferencing if required. The interview is expected to take about 1 hour.

During the interview, you will be asked about your experience of providing support to Asian women and their families during the perinatal period. We are particularly interested in understanding how Asian families use specialist mental health services and other support during this period, and the barriers they might experience in accessing these services.

With your permission, the interview will be audio-recorded, and the researcher will take notes where appropriate. The audio recording will be transcribed by the researcher who has conducted the interview. At your request, you will have the opportunity to review the interview summary, or request for the erasure of any materials you do not wish to be used, within two weeks of the interview summary being sent to you. Any material that you do not wish to be used will be removed before data analysis.

What are the possible benefits and risks of this study?

The results of the study will inform the development of more culturally appropriate maternal services and will also help to improve mental health outcomes for Asian women.

We do not anticipate that the study will cause you any psychological or social discomfort. In the event that you do feel uncomfortable from topics discussed in the interview, you may ask for the interview to be terminated at any time. If you require, you can contact the counsellors at Asian Family Services (0800 862 342). Asian Family Services is a non-government organization which provides free, confidential, professional, face-to-face or telephone counselling and support services in eight languages: English, Cantonese, Hindi, Japanese, Korean, Mandarin, Thai and Vietnamese.

Who pays for the study?

Your participation will not incur any costs. We will give you a $30 supermarket voucher to thank you for the time and effort you have provided in taking part in the study.

What are my rights?

Your participation in this study is entirely voluntary. You can decline to participate without giving a reason. If you choose to participate, you may decline to answer any individual question, or request that the recorder be turned off at any time during the discussion. You also have the right to withdraw from the study within four weeks of the interview without giving a reason.

All the information that is collected from you will be kept confidential. The researchers who conduct the interviews, transcribe the audio recordings and translate the transcripts have signed a confidential agreement. Unless permission is obtained, your name and other information which can identify you personally will not be used in any publications arising from the study.

A participant's identity will not be disclosed to a third party, unless they disclose information that suggests that the participant poses a threat to their own safety (or the safety of others). In such events, the researcher has a duty to disclose the information to a third party.

What will happen to my information?

During the interview the researcher will record information about you and your study participation. Only the researcher will have access to your identifiable information (that is, any data that could identify you such as your name, phone number). These personally identifiable information will be removed from the substantive data collected in the study. In all interview recordings, transcripts and notes, you will be identified by a code name only known to the researcher. It will not be possible for you to be individually identified in any reports or publications arising from the study.

Quotes from the interview recordings may be used in final publications. Care will be taken in choosing quotes, or altering them such that specific information that could disclose confidentiality will be replaced.

Security and storage of study data

All data collected in this study will be stored securely on a password-protected computer, or in a locked cabinet on Asian Family Services premises. Only the researchers will be able to see or use the data. The data will be kept for 10 years. After this time, all data will be destroyed.

Rights to access the study results

A report summarising the results of the study will be prepared after the study ends. Other conference papers and journal articles may be prepared. You can request for a summary of the findings after the final study report is produced in March 2021. The summary report will be translated into Chinese, Hindi, Korean, Japanese, or other Asian languages as needed.

Who do I contact for more information or if I have concerns?

If you have any questions, concerns or complaints about the study at any stage, you can contact:

Ms Kelly Feng, National Director, Asian Family Services
Phone: 09 212 6781
Email: kelly.feng@asianfamilyservices.nz

If you want to talk to someone who isn't involved with the study, you can contact an independent health and disability advocate on:

Phone : 0800 555 050
Fax : 0800 2 SUPPORT (0800 2787 7678)
Email : advocacy@advocacy.org.nz
Website: https://www.advocacy.org.nz/

You can also contact the health and disability ethics committee (HDEC) that approved this study on:

Phone: 0800 4 ETHICS
Email: hdecs@moh.govt.nz

Appendix 9 Consent form

Please tick to indicate you consent to the following		
I have read, or have had read to me in my first language, and I understand the Participant Information Sheet.		
I have been given sufficient time to consider whether or not to participate in this study.		
I have had the opportunity to use a legal representative, whānau/family support or a friend to help me ask questions and understand the study.		
I am satisfied with the answers I have been given regarding the study and I have a copy of this consent form and information sheet.		
I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study up to four weeks after the interview without giving a reason.		
I agree to my interview being audio-recorded.	Yes ☐	No ☐
I wish to review the interview transcript.	Yes ☐	No ☐
I agree to the researcher collecting and processing my information, including information about my health.		
I understand that the topics discussed in the interview may cause emotional distress and I am aware that there are counselling services available to assist me if required.		
I understand that my participation in this study is confidential and that no material, which could identify me personally, will be used in any reports on this study.		
I know who to contact if I have any questions about the study in general.		
I understand my responsibilities as a study participant.		
I wish to receive a summary of the results from the study.	Yes ☐	No ☐

My email or physical address is _____

Declaration by participant:

I hereby consent to take part in this study.

Participant's name:

_____

Signature: Date:

_____

Declaration by member of research team:

I have given a verbal explanation of the research project to the participant, and have answered the participant's questions about it.

I believe that the participant understands the study and has given informed consent to participate.

Researcher's name:

_____

Signature: Date:

_____