Examining the views and opinions of Sri Lankan women about mental health from pregnancy to two years after their childbirth when living in the UK: a mixed method survey about perinatal mental health

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Glossary

Perinatal- Conception to two years postpartum period

Migrant- Any person who is moving or has moved across an international border or within a State away from his/her habitual place of residence, regardless of (1) the person's legal status; (2) whether the movement is voluntary or involuntary; (3) what the causes for the movement are; or (4) what the length of the stay is.

Indigenous- People who inhabited a country or a geographical region at the time when people of different cultures or ethnic origins arrived

South Asia- A subregion of Asia, extended from the Indo-Gangetic Plain (North Indian River Plain) to peninsular India. It included the countries of Bangladesh, Bhutan, India, Pakistan, Nepal, Sri Lankan, Afghanistan, and the Maldives

Sri Lanka- Formerly known as Ceylon, and officially known as the Democratic Socialist Republic of Sri Lanka which is an island country in South Asia

Nulliparous- Woman who had not given birth to a child before

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Abbreviations

DSM- Diagnostic and Statistical Manual

EPDS- Edinburgh Postnatal Depression Scale

EU- European Union

GRIPP2 Short Form- Guidance for Reporting Involvement of Patient and the Public Version 2

HCP-Healthcare Professionals (Midwife, Health Visitor and General Practitioner)

HIC- High Income Countries

ICD - International Classification of Disease

MBRRACE-UK- Mothers and Babies: Reducing Risks through Audits and Confidential Enquiry across the UK

PMH- Perinatal Mental Health

PMHI – Perinatal Mental Health Issues

PPIE- Patient Public Involvement and Engagement

PTSD- Post Traumatic Stress Disorder

SA- South Asian

UN- United Nations

UNDP- United Nations Development Programme

WHO- World Health Organisation

Abstract

Background: Perinatal Mental Health Issues (PMHI) are a key contributor to maternal ill-health and morbidity. The prevalence of PMHI is significantly higher among migrant women compared to indigenous populations in high-income countries (HIC). Reasons for this difference are suggested as lower socio-economic status, low health literacy, language barriers and psychosocial stresses during migration. Little attention has been given to examine the views and opinions of PMH among the sub-groups of South Asians in the UK.

Aim: To examine the views and opinions of Sri Lankan women, living in the UK about perinatal mental health.

Methods and analysis: A convergent mixed method online survey was designed and administered in English and Sinhalese languages. Sri Lankan women in the UK, from conception to two-year postpartum were included. Recruitment involved non-probability and snowball sampling. Standard descriptive statistics presented frequency and distribution whereas qualitative responses were interpreted via thematic analysis.

Findings: Thirty-four Sri Lankan women in the UK participated in the survey. Thirty-two (94%) viewed that PMH was important to be discussed with primary social groups and more widely. Nine women (26%) expressed psychological distress during their own perinatal stage. Women reported that their good perinatal mental health was maintained by support from their partner and family during pregnancy (n=13, 48%) and after birth (n=16, 64%). Twenty-seven (79%) received formal information during postpartum period and eleven (32%) found the information useful. Eight (34%) reported that sharing emotions with primary social groups was important. Twelve (52%) reported social stigma was a barrier to access support.

Conclusion: Health professionals need raised awareness about how to tailor support for Sri Lankan women's PMHI needs. Partner and family support would be a modifiable target for intervention to improve Sri Lankan women's PMH outcomes. Future research on migrant PMH should focus on culture sensitive subjective approaches where patients' views, and opinions should be largely considered.

Introduction

This dissertation consists of six chapters as follows:

Chapter One (Background)- The background in chapter one demonstrates an overview of PMHI in general and the rationale for conducting this study. As this dissertation is concerned with the PMHI of Sri Lankan women living within the UK, PMHI are explored through a global, national and a cultural lens and analysed in relation to Sri Lankan women in the UK.

Chapter Two (Literature Review)- The literature review in chapter two critically analyses published literature in relation to PMHI among Sri Lankan women in the UK. An in depth, structured, literature search identified four articles around the topic which have been critiqued and highlights the lack of previous studies conducted specifically on Sri Lankan women in the UK.

Chapter Three (Methodology)- Chapter three outlines the research aim and objectives of the study and the mixed method survey research design used. The non-probability method and snowball sampling, and recruitment methods are justified in the chapter. The descriptive analysis methods and thematic analysis approaches used to analyse the data are discussed in this chapter along with the ethical considerations and approvals which underpinned the study.

Chapter Four (Results)- This chapter presents the quantitative and qualitative results of the survey. The results were analysed, merged and presented under four sections;

- Demographic data, Sri Lankan women's opinion about PMH, Sri Lankan women's

views and opinion about accessing information about PMH and Sri Lankan women's opinion of accessing support services.

Chapter Five (Discussion)- The discussion synthesises and contextualises the findings with existing knowledge. The chapter discusses the findings under four key themes generated related to; - Women's view about why PMH is important, their perceptions about accessing information, their access to professional and non-professional support for PMH and how Sri Lankan women share their emotions about PMH.

Chapter Six (Overarching conclusion of the dissertation)- The concluding chapter provides a personal reflection of the study and a summary of the strengths and limitations of the study. Recommendations are included for policy, practice and future research and the contribution to knowledge is presented.

1.1 Chapter Overview

This chapter focuses on the context, background, and rationale for this research. The chapter begins by a short introduction to the author and then leads onto providing the definition of perinatal mental health (PMH) and topic of PMH in general is introduced from a global, and a national perspective. Furthermore, Sri Lankan migration trends, and their cultural influences in relation to perinatal mental health are explained in depth.

1.1.1 The author of the study

The author herself is a Sri Lankan migrant woman who recently completed her perinatal stage and her experience influenced why this research was important while enabling to relate her personal insight into this social phenomenon.

1.2 Definition of Perinatal Mental Health (PMH)

The definition of the perinatal period in relation to mental health and the rational for adapting the definition given by Leadsom (2014) is provided in this section. Perinatal includes a wide variation of definitions which increase ambiguity (Howard and Khalifeh, 2020). There is a consensus that the perinatal stage begins from conception to two years (Leadsom, 2014) however, the postpartum time frame is influenced by the definition of the postpartum period used across countries. According to World Health Organisation's (WHO, 1992; 2019) International Classification of Disease (ICD) 10 and ICD 11, the definition of the postpartum period in relation to mental and behavioural disorders encompasses up to six weeks after child delivery, whereas as the American Psychiatric Association (APA, 1994) Diagnostic and

Statistical Manual (DSM) IV encompasses up to 4 weeks. However, in a wealth of literature published on perinatal psychiatry, the perinatal period is defined as conception to one year postpartum (Coates et al., 2016; Noonan et al., 2017; Brady et al., 2018; Viveiros and Darling 2018). This variation in definition leads to confusion about the perinatal phase in practice, education, policy making and research. However, based on current consensus mentioned in the 1001 Critical Days (Leadsom, 2014), the perinatal phase is defined as conception to two years postpartum period while reiterating the criticality of this phase in a child's life. In The Best Start for Life, Leadsom (DfHSC, 2021) had further added

"*Two is too late! The building blocks for life long emotional and physical health are laid down in the period from conception to the age two and we don't give this critical period the focus it deserves"*

Andrea Leadsom

The Best Start for Life (DfHSC, 2021, p. 5)

From conception to the age of two, widely known as the first 1001 days, is the most significant period to optimise health and wellbeing across the lifespan due to the rapid growth and neurodevelopment which occurs during this period of time (Scott, 2020). It is suggested that the synaptogenesis (the formation of synapses/ neural connections) is shaped by interacting with their primary caregiver, which is often the mother of the baby (Kolb and Gibbs, 2011; Schmidt et al., 2021). Hence the perinatal period (from conception to two-years) is determined as crucial for a child's cognitive, physical, and emotional development. In consensus with Leadsom's (2014) the 1001 Critical Days and the Best Start for Life (DfHSC, 2021), the attribution of 1001 days is

used throughout this dissertation and the perinatal period is referred to as the period which involves conception to two-year postpartum.

1.3 Perinatal Mental Health Issues (PMHI): Prevalence, global and national interventions

This section provides an overview of PMHI, the prevalence of the issue and the global and national initiatives in the prevention and management of PMHI. PMHI in this dissertation refers to psychological or psychiatric disorders prevalent from conception to two-year postpartum period.

1.3.1) Prevalence of Perinatal Mental Health Issues (PMHI)

A range of mental health issues can be associated with the perinatal period. Some women would encounter these issues for the first time during the perinatal period whereas others would experience relapses, worsening or a continuation of pre-existing conditions (Viveiros and Darling 2018). These issues may also vary in their severity. The most common disorders that occur during this stage are postpartum depression (PPD) and anxiety disorders (Fisher et al., 2012; Rallis et al., 2014; Noonan et al., 2017, Viveiros and Darling 2018). As published in the most recent government report on maternal mental health, every 30 per 1000 women in the UK experience severe depressive symptoms and every 100 to 150 women per 1000 births experience mild to moderate depression during perinatal stage (Kulakiewicz et al., 2021). Kulakiewicz et al. (2021) further highlighted that every 150 to 300 women in 1000 births in the UK struggle with adjustment issues that can have an adverse impact on their mental health at this stage. Although self-harm and suicidal ideations are often presented with depressive disorders, thoughts of infanticides are rarely reported

among women with PPD or anxiety (Lisette and Crystal, 2018). However, one of the most distressing consequence of PMHI is the maternal impulse of injuring or killing their offspring (infanticides). Psychotic issues such as schizophrenia are strongly associated with the act of infanticide (Luykx et al., 2019). Often psychotic symptoms are hardly detected as the presentation of the condition is not initiated by the patient until at a late stage (Osborne, 2018). One review conducted in the UK based on postpartum psychosis has shown one to two women per 1000 births can be affected by postpartum psychosis. However, it is the most poorly understood condition although considered as one of the most dangerous psychiatric issues that could occur during perinatal stage (Osborne, 2018, Kulakiewicz et al., 2021).

Research indicates that 20% of women across the globe suffers from at least one perinatal mental health issue (Alderdice, 2020; Howard, 2020). Public Health England (2019) shows the prevalence of PMHI in the UK is between 10% to 20%. Although the prevalence in the UK is low or equal to global prevalence, an exacerbation of the rate of PMHI has been identified over the last two years due to the pandemic (Kulakiwicz et al., 2021). However, the exact rise of the prevalence of PMHI since the pandemic is still not known, but recent figures identify that 71% of women at the perinatal stage were psychologically distressed during the pandemic (Dib et al., 2020). Figures show that maternal suicide is the second leading cause of maternal mortality in the UK (Watson et al 2019). The MBRRACE report identified that 62 women between 2017 to 2019 died by suicide which is a rate of 2.64/100,000 maternities in the UK (Knight et al., 2021). However, according to the Royal College of Obstetricians and Gynaecologists (2017), only 7% of women with PMHI are referred to specialist care in the UK. Hence, it is crucial that detection of PMHI is accurate,

however, the reported figures are not definitive and many women, and their families could be suffering in silence both globally and nationally.

1.3.2) Global Interventions

The discourse of perinatal mental health has been more evident globally in health research, policy, and practice since 2015, in response to the global initiative of Ending Preventable Maternal Mortality (EPMM) (WHO, 2015). This initiative was taken in support of the Global Sustainable Development Goal 3.1 for reducing global maternal mortality ratio (MMR) to less than 70 per 100,000 live births by 2030. Since, 2012, the WHO introduced a new classification of ICD 10 to recognise deaths related to perinatal period. This made a significant change in classifying maternal suicides up to 12 months after delivery as direct obstetric deaths, this change facilitates consistent data collection and aims to reduce under-reporting globally (Howard and Khalifeh, 2020). Despite these initiatives, still 300,000 women worldwide die annually, and 810 women die every day during the perinatal stage from preventable causes (WHO, 2015; WHO, 2019; Mahmood et al., 2020). However, according to Jolivet et al. (2018), many challenges are encountered in implementing the recommendations of WHO initiatives as maternal health and survival is situated in a broader societal context where this aspect cannot be addressed in isolation. It is suggested by many scholars that many political and social structural dynamics should be reformed in order to end preventable maternal mortalities across the globe (Jolivet et al., 2018; Fellmeth, 2018).

1.3.3) National Interventions

Compared to the global trends, PMHI are better addressed in the UK and have been given a higher profile and better focus in prevention, detection, and management during the perinatal stage (Kulakiwicz et al., 2021). For instance, to address PMHI,

many government policies such as the Five Year Forward View for Mental Health (2016) is promoted and there has been an £8.1 billion investment each year allocated to mental health care (Ham, 2017). The key recommendation of this five-year- plan is to encourage at least 300,000 more women to access PMH services in the UK (Ham, 2017; Smith, 2019). Yet, many studies have shown that existing government interventions have not reached the most vulnerable women and accessibility of services vary based on factors such as ethnicity and socioeconomic status (Karamanidau, 2020; Pollard and Howard, 2021). Therefore, investigations are required to examine why existing PMH interventions have not reached the most vulnerable women in the UK.

The Marmot review (2010) identified health inequalities based on marginalisation and economic adversity act as barriers to access health services in the UK. These barriers to access services increase adverse health outcomes predominantly among disadvantaged groups such and ethnic minorities and migrant groups in the UK (Marmot review, 2010). The notion of giving every child the best start was thereby ingrained into the health system with an emphasis on delivering child and maternal health services with an equity approach in health (Marmot, 2010). A further eight years on, the MBRRACE report has identified an ethnic disparity in maternal care in the UK (Knight et al., 2018). For instance, out of 566 women who died during perinatal stage between 2016 to 2018, 216 women were born outside the UK, 119 women belonged to an ethnic minority and 22 women were non-English speakers. The findings of the MBBRACE report suggested that women from ethnic minority groups are more likely to die than their white counterparts during childbirth or within the first five years of the baby (Knight et al., 2018). For instance, black women's mortality rates are five times and Asian women's mortality rates are twice higher than

white counterparts in the UK (Knight et al., 2018). However, the MBRRACE report has not commented on this further (McKenzie, 2019). One argument suggests that the increased death rates among ethnic minority women are related to their physiological differences which has been interpreted that white bodies are the '*ideal*' while brown and black bodies are the '*defective versions*' (McKenzie, 2019, p.3).

The latest Marmot review (2020), 'Build Back Fairer' and The Covid Marmot Review (2021), reiterates the same ethnic disparities that were observed a decade ago and indicates that PMHI cost more lives among ethnic minority and migrant groups during the pandemic. This issue has been echoed by Suleman et al. (2021) who added that deprivation and income loss among ethnic minority and migrant groups have exacerbated adverse mental health outcomes during the pandemic. In response to inequalities identified over years, the NHS Long Term Plan (2019) has invested more on perinatal mental health assessments, while expanding perinatal mental health services nationwide. However, it is still identified that facilitating women from poorer and at-risk backgrounds to access mental health support is underdeveloped (Jankovic et al., 2020).

1.4 Migration and Women

In this section, an overview of migrant trends, inequality and associated PMHI is discussed in relation to out-migration of Sri Lankan women as a migrant community in the UK.

1.4.1) Migration trends for Sri Lankan women and PMHI

There is a tendency of more females (81% compared to 19% of men) arriving from Sri Lanka to Britain based on matrimonial affinities compared to other South

Asian (SA) countries in the region, which is rather unusual compared to gender mobility in other countries (Charsley et al., 2012). However, with this trend, it has emerged many social challenges on women who migrated based on matrimonial affinities, which yet has not been given much focus in research and policy (Kaufman, 2018). The increasing Sri Lankan migrant female population constitutes a heterogeneous group demanding answers for their multifaceted biopsychosocial issues.

As mentioned by Fernandes-Reino (2020), non-EU born migrants in the UK are twice as likely to be discriminated compared to EU migrants which is 19% versus 8% respectively, due to their protected characteristics such as religion, skin colour, ethnicity and race. This notion was further supported by Nandi and Luthra (2021) however, they further mentioned that migrants from the EU were equally discriminated since the EU referendum in 2015. According to the concept of Coloniality and Power, the colonial structure of power created a caste system where colonials (for instance, British and Spaniards) ranked top in the hierarchy whereas people with different phenotypic traits presumed to be inferior (Quijano, 2001). As a result, it is socially and culturally conditioned for the dominant cultures in the West to consider migrant communities from Africa and Asia as a burden to the host country. According to Macfarlane (2021) this social hierarchy in 21st century is propagated predominantly through social media. There are adverse effects of migrants' mental health related to complex protected characteristics, for instance, ethnicity and low socio-economic status (economic adversity and marginalisation) (Prady et al., 2016; Anderson et al., 2017; Watson et al., 2019). However, these aspects have not been fully explained in existing literature as many of these communities are hard to reach due to language and cultural barriers (Sihre et al., 2019).

Many studies have shown accumulated pre-conception stresses (i.e., social stresses) have detrimental effects on PMH (Cousseson-Read, 2013; Sutherland, 2018). Similarly, a study conducted by Kee et al. (2021) has investigated that the first onset of symptoms among many women with PMHI has a periconceptional origin, for instance almost 50% women with PPD had a history of depressive disorders prior to conception yet has not been identified these mental health concerns before their conception.

The migration trajectory has a strong association with adverse mental health outcomes (Kirmayer et al., 2011). The migration trajectory encompasses three segments: pre immigration, migration and post-migration resettlement. These segments include exposure to traumatic events during the pre-immigration phase, the stresses can be related to transitioning and settlement issues such as language barriers or crisis in social integration, alongside of the biological changes among women at the perinatal stage (Wu et al., 2021). Similarly, studies have shown that women who migrated based on spousal sponsorship are more likely to experience domestic violence, marital restrains such as caring responsibilities and lack of financial independence and voice (Stewart et al., 2008; Hassain et al., 2015).

1.4.2) Out-migration flows of Sri Lankan women and the influence on PMHI

Figure 1.1 Map of Sri Lanka (Pieris and Arsarathnam, 2019)

To explain out migration further, Figure 1.1 identifies the location of The Democratic Socialist Republic of Sri Lanka is formally known as Ceylon and is located in the Indian Ocean (see Figure 1). Since mass migration from the commonwealth, Sri Lanka at present has nearly three million expatriates permanently settled in other nations (Jayawardhane, 2020) and it is estimated that total 146, 627 are in the UK (ONS, 2020). However, this population is substantially neglected in British demographics and health research (Aspinall, 2019).

Sri Lankan migrants in the UK have been assimilated to ‘Other Asian’ category although they need a discrete legible identity in the UK as they are the largest population (18%) categorised among the Other Asian category (Aspinall, 2019). It is evident in all categories, the Sri Lankan population has distinctive characteristics (Siddhisena, 1999; Apspinall, 2019). In existing literature, it is perceived that Sri Lankan descents in the UK attributed to a 'healthy migrant effect' where migrants who moved to the host country have better health and low mortality than the native population of other SA migrant groups (Siddhisena, 1999; Kearnes et al., 2017;

Aspinall, 2019, p. 245). However, little is known as Sri Lankan community in the UK is largely omitted from health research, policy and practice.

A considerable proportion which is 817,000 from Sri Lanka migrated to the West due to civil wars and displacement (United Nations for High Commission for Refugees, 2006; Jayawardhana, 2020). Women were at a more vulnerable position as high rates of sexual assaults were reported in consequence of war (Traunmüller et al., 2017). About 80% of women in war-torn areas became widowed, separated, divorced or unmarried (Yusuf, 2018). An estimated 89,000 war widows in the north and east were destined to become the primary providers (Quest, 2015). Most of them fled to Western countries such as Britain and Canada as a result. A study conducted in Canada on Sri Lankan Tamil refugees has shown that Post-Traumatic Disorder was high (17%, one-in-six among the refugees) among the Tamil refugee group (Beiser et al., 2015). Similarly, Silove et al. (1998) and UNHCR (2014) has shown that Sri Lankan Tamil refugees taking irregular migration pathways have contributed an increase of mental health issues which can lead to a high susceptibility in developing PMHI (Boyle et al., 2019). However, published research specifically on Sri Lankan refugees and their PMHI in the UK is scarce.

Since 2000, a new surge of youth migration trend has increased predominantly for educational and economic purposes (Jayawaradane, 2020). Youth in relation to Sri Lankan migration trends is defined as the age category between 15 to 29 (UNICEF, 2014; Dawson, 2016). Although in the beginning, migration of the youth consisted of single men, towards the latest decade single middle-class women have started to migrate as student or skilled migrants (Lucassen, Lucassen, & Manning, 2010; Ramanayake and Wijethunge, 2018). The trend of single women migrating for work

and educational purposes from a middle-income country (MIC) to a HIC country enables them to become autonomous decision-makers despite the women's early acculturation into traditional gender roles (Bandara, 2011). On the contrary, studies have shown women who migrated from a MIC to a HIC are more likely to experience unintended pregnancies and do not access services. As a result, this issue has become a leading cause of maternal deaths while they are more susceptible to PMHI (Yazdkhasti et al., 2015). However, literature surrounding Sri Lankan's mental health in HIC remains underdeveloped.

Kunz (1973,1981) explains how the settlement structure impacts mental health of the refugees in the host country. Two typologies of refugee settlement are introduced by Kunz (1981) which are: - the traditional refugee settlement and the new refugee settlement. Supporting Kunz (1981), George (2010) further described that in a traditional refugee settlement the host country shares a similar culture, language and ethnicity. Similarly, the refugees have family and friends in the host country to cushion their adjustment to the host country (George, 2010). On the contrary, in a new refugee settlement, the culture, language and ethnicities of the host country are vastly different from their country of origin and migrants have less social support in adaptation (George, 2010). Hence, new refugee settlers are more susceptible to psychological trauma in adaptation (George, 2010). A study conducted on Sri Lankan Tamil refugees shows that refugees who migrated to Canada based on new refugee settlement displayed high levels of psychological stresses compared to the Tamil refugees who migrated to India based on traditional refugee settlement (George and Jettner, 2016). However, the same study identified the elevated daily stress levels (employment issues, financial issues) among refugees in India compared to the

refugees in Canada. However, no studies have been conducted in the UK in relation to PMHI among Sri Lankan refugees.

1.5 Cultural influences on PMHI of Sri Lankan women

An overview of the cultural influences of Sri Lankan women on PMHI will now be briefly analysed and explored via social stratification based on caste, gender, education, marriage, motherhood, religion and breastfeeding.

1.5.1) PMHI and the influence of Caste

Sri Lankans have a distinctive variation of a caste system that has also been existed since antiquity (Thorat and Shah, 2007). In modern Sri Lankan society, this difference is less visible, yet the majority of the population still upholds the caste system for certain purposes- such as in marriages and interpersonal alliances (Leach 1961; Ryan 1993, Silva et al., 2009). For those who favoured the social hierarchy based on caste system attribute caste on Karmic theory (the notion of good or bad deeds of an individual being rewarded or reprimanded in their next birth) as a justification of the system (Sankaran, 2017). However, since the 21st century the social hierarchy in Sri Lankan culture is dominated by wealth and power, mainly political power and hence the caste stratification is less visible among those who have socially migrated to the top end in the social hierarchy (Riswan, 2014). Many studies that have focused on SA caste system has shown social exclusion based on caste incurs an elevated risked of developing depression and anxiety (Kohrt et al., 2009; Konanapali and Rao, 2021). A Nepalis study conducted on caste system on mental health demonstrated that women displayed more depressive symptoms than men based on

caste discrimination coupled with other life adversities (Kohrt et al., 2009). However, studies in relation to mental health based on Sri Lankan caste system is under-researched to date.

1.5.2) PMHI and the influence of Gender

As reported by the World Bank Data (2020) women make up 52.1% compared to 47.9% of males in the Sri Lankan population. Education for women in Sri Lanka is ranked as exceptional (Wijethunge, 2011). According to UN Data Report (2020) there is no preferential treatment for men in access to education in Sri Lankan societies and in-fact women have high level of educational attainment where 68.5% of women compared to 31.5% of men graduate from university (UNDP, 2016; Perera, 2017). However, according to Chandradasa and Rathnayeke (2019), educated women seem to experience more psychological distresses in Sri Lankan patriarchal society where they are expected to fulfil traditional gender roles alone with contemporary commitments.

In Sri Lanka, since the pre-colonial period between 543 BC to 1815, women were deemed to be physically weaker and vulnerable and as a result women received secondary status to men (Jayawardena, 2002). The psychosocial factors in Sri Lankan patriarchal society had greatly impacted mental health of women at all stages and exposes women to become more vulnerable during the perinatal stage (Metheson et al., 2021). Zovit et al. (2020) in their scoping review investigated women from patriarchal societies were greatly influenced by gender roles and expectations which had a greater impact on maternal mental health and access to services. Similarly, a study conducted in Pakistan, a similar patriarchal context as Sri Lanka, has

investigated that the household power dynamics had a greater impact on women's PMHI (Mustafa et al., 2020).

Marriage creates a method of control and the minimum age for marriage in Sri Lanka is 18 years, where the average age of Sri Lankan women entering their first marriage is 25 years and is slightly skewed towards an older age limit compared to all the other SA countries (The World Bank, 2020). Sex and pregnancy out of marriage is socially unacceptable (Jordal, 2013). Challenges encountered by single motherhood where women go through divorce and being widowed are greater compared to motherhood within marriage (Jordal, 2013). The social norm in Sri Lanka is that woman should live under her father's influence prior to the marriage, then her husband after the marriage and the male offspring after the death of the spouse (Obesekara, 1984; Hewamanne, 2007; Jordal, 2013). A wealth of evidence has shown a supportive family network and the presence of a supportive partner act as a psycho-protective mechanism on women during perinatal stage (Iafrate et al., 2014; Antoniou et al., 2021). Yet in Sri Lankan communities, despite the increased level of education and employment, women are still obliged to maintain their family role in homecare and strengthening family ties which can create disparity during the perinatal stage (Gunathilake, 2013; Ranaraja and Hassendeen, 2016: Perera and Kailasapathy, 2020). These constrains lead to a cascade of adverse effects such as distress in life and marriage, physical and psychological exhaustion, resentment and poor healthcare outcomes which increase susceptibility to PMHI among Sri Lankan women (Grant-Vallone & Donaldson, 2001; Shaffer et al., 2011; Zhang et al., 2012). The gender inequality in household labour is common in every culture including indigenous women in the UK (Seedat and Rondon, 2021). However, the difference among Sri Lankan women is that it is culturally conditioned to believe women's wisdom is mainly

manifested in assisting the husband and managing household affairs despite academic achievements in the 21st century (Renzella et al., 2021).

The normal practice of marriage since antiquity was organised by parents, yet towards the latest century, marriage based on mutual love is equally considered in Sri Lankan societies (Chandrika, 2021). Certain practices in marriage in Sri Lankan society had direct links to domestic and honour-base violence while marginalising women by the culture. For instance, the practice of dowry (a payment of money, gold, and property given by the bride's family at the time of marriage for the cost of her living expenses after the marriage) have direct links to Post Traumatic disorders (PTSD) (O'Connor, 2017; Senenayeke et al., 2019). Senenayeke et al. (2019) identified the dowry system was a direct causation of stress which also impacted Sri Lankan women's mental health. Fisher et al. (2019) suggested interpersonal violence such as dowry-related violence increased susceptibility to PMHI.

The practice of testing virginity, where newlywed bride is subjected to be examined for her purity in her maidenhood, still known to be persisting in some conservative Sri Lankan societies (Olson and Garcia-Moreno, 2017). There is an association between virginity testing, intimate partner violence and honour-based violence (Crosby et al., 2020; Malik, 2021). WHO (2018) identified this practice as a human rights violation however, the practice persists in SA communities even in HIC countries to date (Wijethunge, 2011; Moaddab et al., 2017). These practices show stronger links with depression, anxiety, low self-esteem and in worst case leads to suicides and self-harm (Olson, 2017; Ahuja, 2020). However, as Ferero et al. (2017) identified although these practices persist in many parts of the world, these aspects are severely under-researched due to its sensitive nature. Similarly, studies have

observed that these patriarchal norms linked to domestic violence have gone less detected due to justifying behaviour of SA women (Tongsing and Tongsing, 2017, Palfrymen, 2021).

1.5.3) PMHI and the Perception of motherhood in Sri Lankan culture

The female suicide rate in Sri Lanka is one of the highest in the world which is 6.20 in Sri Lanka compared to 5.40 per 100,000 in the UK and similar trends follows with self-harm (Changradasa and Rathnayake, 2019). A recent study conducted by Palfreymen (2021) identified one-in-four Sri Lankan women with low educational attainment at the antenatal stage had a history of suicidal ideation and behaviour. As reported in a large cross-sectional study, the prevalence of postpartum depression in Sri Lanka is 27.1% and maternal suicide rate is 12.1 per 100,000 live births which is drastically higher than the rate of maternal suicide of 2.64 per 100,000 in the UK (Isuru et al., 2016).

The mean age of first childbirth among Sri Lankan women were recorded as 28.9 years which is higher than other countries (27.5 years in average) in the SA region (UN, 2019). Evidence supports low maternal age (teenage mothers) has high susceptibility of poor mental health (Muraca and Joseph, 2014; Peterson et al., 2018) and conversely, women with advanced maternal age have higher risks of getting postpartum depression (Akgor et al., 2021; de la Rosa, 2021). Research further shows older women are more likely to have pregnancy complications, for instance, multiple births) which that could attribute to PMHI (Jacobsson, 2004; Londero et al., 2019).

Subfertility is another major factor of women being discriminated by the Sri Lankan society. The societal pressure surrounded with fertility issues impact negative mental health outcomes (Lansakara, 2011). In SA societies, life events are expected

to have an ordered manner through the life course (Ramyo et al., 2015). For instance, childbearing should follow education, marriage (Ramyo et al., 2015). Childbearing for many Sri Lankan women is evidence of strengthening the marriage. Stigma is attached with delays in conception following the marriage (Diamond-Smith et al., 2020). The severity of this issue is that Sri Lankan women often are scapegoated in matters in fertility despite the issue may be related to the partner (Wijethinge, 2011). Research shows an association between infertility and elevated risks of PMHI (Gravensteel et al., 2018; Pekkola et al., 2020). Similarly, studies on Asian women have investigated that conception through Assisted Reproductive Technologies (ART) such as in vitro fertilisation (IVF), is equally stigmatised in society (Ranjbar et al., 2015). Therefore, women tend to hide conception using ART and one study conducted on Iranian women shows that maintaining the secrecy of conception through ART elevated anxiety levels of women during perinatal stage (Ranjbar et al., 2015). Aspects of infertility and PMHI issues among Sri Lankan demands to be researched in more depth.

The status of motherhood within a legal marriage is cherished and socially well supported (Jodal et al., 2013; Vithanage, 2015). The supreme power of maternal love is often considered the ideal love (Sirimanne, 2016). Supporting this, a recent comparison study conducted on maternal-foetal attachment among expecting mothers among eight middle-income countries, the highest attachment levels were observed among Sri Lankan mothers compared to other seven countries included in the cohort (Foley et al., 2021). The study demonstrated that the social support Sri Lankan women received in bringing up a child, and religious influences, had encouraged women to think the foetus as an individual they are developing inside the womb (Foley et al., 2021). The perinatal period in Sri Lankan societies is harmonised with spiritual activities (Pozzi, 2014). Studies have shown an association between spiritual activities

such as the practice of mindfulness and positive mental health outcomes during perinatal stage (Zonna and Wardi, 2020), which is another area under-researched with particular reference to Sri Lankan women.

The practice of breastfeeding in Sri Lankan societies is highly regarded and socially praised behaviour (Agampodi et al., 2007; 2021). Almost every Sri Lankan baby has initiated breastfeeding at birth (99% compared to 74.5% in the UK) and high rates in exclusive breastfeeding (71%) up to 6 months is prevalent compared to global trends of exclusive breastfeeding which is 42% and 34% in the UK (Sharma and Byrne, 2016; WHO, 2017; UNICEF, 2018). Research shows an association between breastfeeding and positive mental health among mothers postnatally as they are more likely to report increased calmness and less anxiety (Hahn-Holbrook et al., 2013; Figueredo, 2013). Hardi (2021) identified mother-infant affectionate touch involved in breastfeeding decreased anxiety and depressive symptoms. Yet on the contrary, an association between symptoms of anxiety and depression with early breastfeeding cessation is observed (Ystrome, 2021). Similarly, studies have shown an association between difficulties in breastfeeding with maternal distress which increase susceptibility to PMHI (Rivi et al., 2020). However, it may be likely that the social support Sri Lankan women receive in breastfeeding practice could positively impact on their PMHI, however, this needs more definitive evidence.

1.6 Chapter Summary

In summary this chapter provided the background of this research and factors that may be associated with increases susceptibility to PMHI among Sri Lankan women who migrate to the UK. Despite global and national interventions, migrant women in general are more susceptible to PMHI due to exposure to vulnerabilities in

pre and post migration phases. Sri Lankan migrant women in particular, are more susceptible to develop PMHI due to exposure to war and displacement and cultural influences based on caste and gender. However, motherhood within marriage is highly valued in society and the social, cultural, and spiritual influences have an impact on Sri Lankan women's PMH.

2.1 Chapter Overview

The previous chapter discussed Sri Lankan women's susceptibilities to develop PMHI in pre and post migration phases. In this chapter, published literature in relation to Sri Lankan women's perinatal mental health in High-Income Countries (HIC) will be critically analysed and contextualised with literature where the focus is on PMHI among migrant women in the UK in general and PMHI among South Asian (SA) women in the UK.

The aim of the literature review was to answer the question; 'What is known from the literature about perinatal mental health among Sri Lankan women?'

2.2 Identifying relevant papers

The search for literature was conducted using key databases including PubMed, PsychINFO, Cumulative Index to Nursing and Allied Health Literature (CINAHL) and Scopus using key terms including perinatal mental health, Sri Lankan women in the UK and HIC. The search for literature was mapped against Brigg's (2015) PCC (Population, Concept, Context) elements (See Table 2.1 and Appendix 1). This search located 10 relevant papers, of these six related to migrant women, SA migrant women and four focussed on Sri Lankan migrant women in the perinatal period in high income countries. Four papers were directly relevant to this review. These four papers referred to within this chapter underwent a quality appraisal process included in the appendices (see Appendix 2). The literature search took place between 16th January 2021 to 18th February 2021 and repeated between 16th July 2021 to 11th January 2022.

Population • Wom*n • Mother* • Matern* • Perinatal • Postpartum
Concepts • Perinatal mental health • Mental health • Mental wellbeing • Psychological distress
Context • Migrat* • Sri Lanka* • South Asia*
Types of sources • Research articles in all settings in four databases:- PubMed, PsychINFO, CINAHL and Scopus Original research articles (any methods) and review articles including systematic reviews, meta-analysis, meta-synthesis, narrative reviews, mixed method reviews and qualitative reviews were included.

Table 2.1 PCC Elements

Boolean operators were utilised in search terms

E.g.-

- Wom*n OR Mother* OR Matern* OR Perinatal OR Postpartum AND Perinatal mental health OR Mental health OR Mental wellbeing OR Psychological distress AND Migrat* OR Sri Lanka* OR South Asia*

No studies were published on Sri Lankan Women perinatal mental health in high income countries and hence the search term ‘Sri Lankan women’ was removed from the search. Subsequently, 201 articles were identified through database searching and 176 were excluded after going through the title and the abstracts and 25 articles were fully reviewed. However, 10 papers were selected, and 4 papers referred in chapter 2 are critically appraised using CASP tool. CASP tool was reformatted for the purpose of critical analysis.

2.3 PMHI among migrant women in the UK

In the UK, migrant communities have an increased susceptibility of developing PMHI compared to the indigenous majority, however this phenomenon is less likely to be detected in Sri Lankan women and treated due to a myriad of psychosocial triggers such as marginalisation, discrimination, social isolation or language barriers which impact their mental health (Prady et al., 2016; Anderson et al., 2017; Watson et al., 2019). For instance, 42% of migrant women are affected by postnatal depression compared to 15% of native-born women, and similar trends follow in the prevalence of antenatal depression (Collins et al., 2011; Anderson et al., 2017). O’Mahony et al.’s (2013) qualitative study has identified that migrant women with postpartum depression are more likely to experience the effects of their stresses during the migration and post-migration process rather than experiencing traditional depressive symptoms identified by the Diagnosis Statistical Manual (DSM-V). However, these aspects have not been addressed by these diagnostic manuals, for instance., in DSM-V and ICD-10 and many criticisms have been raised over this concern of social and cultural biases in existing diagnostic manuals in describing psychopathology (Caetono, 2011, Masuda et al., 2020). These qualitative studies place a great value in relation to PMHI

among migrant women as literature surrounding the social origin of PMHI and migrant women's understanding and experience remains underdeveloped (Sihre et al., 2018). However, the majority of studies conducted on PMHI in the West are quantitative gathering samples from the general population and often exclude migrant women with language barriers and hence that limits cross-cultural generalisability (Doucet et al., 2012; Glover et al., 2014; Phillimore et al., 2015).

2.4 PMHI of South Asian women in the UK

Sri Lankan women are categorised as a subgroup of SA migrants in the UK and are one of the largest growing ethnic minorities in the UK (Vertovec, 2007; Sihre et al., 2019). SA population refers to a broader ethnic group from the Indian subcontinent, mainly comprising Indians, Afghans, Pakistanis, Bangladeshis, and Sri Lankans. Although in many studies SA population have been considered as one cohort with shared beliefs and norms, they are a culturally diverse heterogenous population with a wide variation in language, rituals, religions, and social norms (Anand and Cochran, 2005).

Many studies conducted in the UK have documented those migrant women from SA backgrounds have elevated risked of developing PMHI than any other ethnic groups while less likely to be diagnosed in the UK (Anand and Cochran, 2005; Smith, 2019; Kellezi, 2019). Although many quantitative studies have observed high susceptibility of SA women in developing PMHI, qualitative studies to explore this area in depth remain at an early stage (Sihre et al., 2019). Wittkowski et al. (2011) and Higginbottom et al. (2020) investigated the major determinants of PMHI for SA women are related to marital and inter-generational conflicts, for instance, relationship issues

with in-laws, culture specific postpartum rituals, dissatisfaction of gender of the infant and economic adversity. Research also shows a higher birth rate among SA women compared to indigenous populations while they have the lowest female employment rates compared to other ethnicities in the UK (Masood, 2015). PMH has been a focus of interest in research and policy for many decades however, this interest is mainly centred around PMH in general (Howard and Khalief, 2020). The major concern in existing studies is that there is under-representation of SA women especially in sensitive research related to mental health (Doucet et al., 2012; Glover et al., 2014; Phillimore et al., 2015; Sihre et al., 2019). As highlighted by UK Government (2020), the SA population make up 6.8% of the total population in the UK, yet Quay et al. (2017) demonstrated the average representation of South Asians in six UK based randomised control trials was 0.6%. Therefore, the under-representation of SA women in existing studies may present challenges in tailoring interventions and thereby increase risks of developing PMHI.

The existing limited studies carried out on PMHI among SA women consisted of Bangladeshis, Indians and Pakistanis due to the larger proportions who had migrated from these countries to the UK (Masood et al., 2015; Sihre et al., 2019; Smith, 2019). In a meta-analysis conducted by Watson et al. (2019) on experiences of migrant women and perinatal mental health in the UK, among 15 papers that had been identified between 1984 to 2016, six publications were specifically conducted on Bangladeshi women, two publications on Pakistani women and three publications on Indian women whereas no publications were focused mainly on Sri Lankan women. Similar trends followed in meta-analysis conducted by Prajapati and Liebling (2021) on SA women's access to mental health services in the UK. However, Sri Lankan women are the eighteenth biggest migrant population and the eighth biggest Asian

population in the UK (Aspinall, 2019; UK Government, 2020). Hence, the results of these studies cannot be generalised due under-representation of women from some subgroups (for instance, Sri Lankans) from SA backgrounds.

Existing hierarchical studies based on systematic reviews have been conducted on empirical studies published on the topic of PMHI among SA women (Baker et al., 2020). However, the numbers of qualitative and mixed method approaches in relation to Sri Lankan women in the UK seem to be poor and there is a clear gap of evidence in sub-group analysis. Supporting this, the meta-analysis conducted by Prajapathi and Liebling (2021) has identified that the studies gathered on SA women would lead to a 'category fallacy' where SA women were considered as a homogeneous group although there is a large heterogeneity among the sub-groups of SA women.

2.5 Sri Lankan women's experience of PMHI in High-Income Countries (HIC)

Limited studies have been conducted on Sri Lankan women in HIC countries. As Aspinall (2019) mentioned, Sri Lankan migrant women in the UK have relatively high fertility rates of 2.62% birth rate compared to 2.35% of Indian women according to England and Wales Census in 2011. A significant population of Sri Lankan women arrived in the UK as asylum-seekers compared to self-selecting migrants (Aspinall, 2019). Therefore, pre-existing mental health problems were likely to be prevalent among this cohort as a result of exposure to vulnerabilities, discrimination, violence and abuse (David, 2012; Jones, 2016; Aspinall, 2016). Studies carried out on Sri Lankan women were largely on English speaking Sinhalese women in HIC (Lansakara

et al., 2010; Navodani et al., 2019), although the Sri Lankan community is multi-ethnic with other nationalities such as Tamils and Muslims (David, 2012). Therefore, there is a clear gap in knowledge that would help to support care for non-English speaking Sri Lankan women with their PMHI.

To the author's knowledge there were no literature published specifically on Sri Lankan women's PMH in HIC that conducted in English and Sinhalese in one study in a HIC, which this study does. One study in Australia was published on 50 Sri Lankan women's general primary postpartum healthcare needs (Nilaweera et al., 2016) and three publications also originating in Australia were conducted on PMH with representation of 68 Sri Lankan women in total (Bandyopadhyay et al., 2010; Lansakara et al., 2010; Navodani et al., 2019). According to the Australian Bureau of Statistics (2021), this could be attributed to the high density of Sri Lankan population (the 12th largest ethnic minority group) in Australia. Hence, publications in relation to PMH among Sri Lankan women in HIC were observed only in Australia and are analysed in depth in this chapter in relation to relevance, not date order. The appraisal of the literature was framed by the use a tool drawn from The Critical Appraisal Skills Program (CASP) with an amended format of the limitations and strengths (see Appendix 2). The decision to present the four papers which related to migrant Sri Lankan women in high income countries individually was taken in order to provide a detailed account of these key research studies.

2.5.1) Sri Lankan-born women who gave birth in Victoria: a survey of primary postpartum healthcare needs (Nilaweera et al., 2016)

This study conducted by a group of researchers specialised in community medicine in Australia was led by a Sri Lankan medical practitioner which may have enhanced the cultural sensitivity of the study. This study design was a prospective

quantitative survey, which collected data from 50 Sri Lankan women with at least one Victoria-born child under the age of two. The survey was designed in both English and Sinhalese languages and piloted by four bilingual women in Victoria. Piloting surveys helps to check accuracy of interpretation in the survey according to Tsug et al. (2017) which was strength of the study. Yet, the surveys were not translated into Tamil language which could lead to a selection bias and the cohort was limited to one state situated in Australia.

Data collection using surveys was conducted via post, telephone and email and hence further could lead to a bias in response. Studies have shown a social desirability bias in conducting similar data collection methods based on sensitive topics (Keeter, 2015; Jones et al., 2016; Agaku, 2021). However, this limitation had been acknowledged by Nilaweera et al. (2016).

Data comprised quantitative close-ended questions based around demographic data, postpartum care, difficulties with infant care, access to formal and informal support and most importantly questions based on practical and emotional support. The findings of the study show the women who participated report a high satisfaction of postpartum care provided by health services in Victoria, however, the most preferred source of information and support was via the partner or extended family rather than support provided by HCP. Relationship issues with spouse during the postpartum period among Sri Lankan women were also prevalent through the findings. The findings further observed that HCPs were less culturally competent and client friendly. However, the reasons for certain concerns could not explored in depth due to the structured design of the survey. Hence, the researchers' choice to not

include open text responses in the design of the survey may have limited the participants opportunity to express their views and experiences.

The paper details that ethical approval had been obtained. However, the paper does not discuss how the participants were directed to appropriate support if they divulged upset or distress in the perinatal stage.

2.5.2) Common maternal health problems among Australian-born and migrant women: A prospective cohort study (Navodani et al., 2019)

This paper focuses on broad maternal health issues in relation to the perinatal period in the same region in Australia. The study was a longitudinal prospective comparison survey study with Australian-born women (n=1115) and migrant women (n=243, including n=47 SA women and n=21 Sri Lankan women) with non-English speaking backgrounds. As mentioned in relation to the previous study, the principal investigator is Sri Lankan born hence it has the potential to increase cultural sensitivity of the research. However, there are certain issues in generalising these findings outside this area of Australia due to differences in maternity services in several ways. The major difference is in Victoria (Australia) 64% births are consultant-led and 29% midwife-led and 6.4% are GP-led (UK Government, 2014). However, in the UK 66% births are midwife-led, 25% are consultant-led (NHS, 2020).

The prospective study consisted 1507 of nulliparous women in Victoria. Data were gathered through a self-administered questionnaire and computer assisted telephone interviews in English language. The initial survey was conducted with women at early pregnancy and were followed up until 18 months postpartum. Focusing on the mental health aspect of the study, the socio-demographics were gathered using a baseline questionnaire and the Edinburgh Postnatal Depression Scale (EPDS)

which was originally designed by Cox et al. (1996) was utilised to assess the symptoms of depression and the Composite Abuse Scale (CAS), introduced by Hegarty et al. (1999) assessed the level of intimate partner abuse. The EPDS is the gold standard and the most widely used screening tool used in many countries to detect perinatal depression (Cox et al., 2014; Chojenta et al., 2016; Lupattille et al., 2018). However, a wealth of literature has identified that the EPDS is less sensitive on migrant women particularly from non-English speaking backgrounds and women who recently migrated (Mattey and Agostini, 2017; Howard et al., 2020; Marti-Casterner, 2021). The cut-off score to detect severe depression in this study conducted by Navodani et al. (2019) was set to ≥13 in both antenatal and postnatal stages although a Danish study had observed the cut-off is different in every trimester as the symptomatology contrasts based on each trimester (Smith-Nielson et al., 2018). Hence, it is unknown if there could be a slight under-representation of women with depressive symptoms. The sample of women was limited by excluding migrant women with low English language proficiency and a low number of women living in rural areas.

The findings of this study largely compliment the study conducted by Nilaweera et al. (2016). Migrant women in this study conducted by Navodani et al. (2019) were more likely to report symptoms related to depression compared to Australian born women which is 11.7% (n=28 among migrant women in early pregnancy) compared to 8.5% (n= 94 Australian women in early pregnancy) and 17.2% (n=42 among migrant women after 18 months postpartum) compared to 8.8% (n=98 among Australian women after 18 months postpartum). Migrant women's exposure to intimate partner violence coupled with emotional abuse was higher than the Australian born women which is 22.5% (migrant women) compared to 16.9% (Australian women). Social isolation, lack of social support in bringing up the new-born baby was observed among

migrant women in the study conducted by Navodani et al. (2019). Moreover, factors such as communication barriers, unfamiliarity with the healthcare system, difficulties in divulging sensitive matters with the HCP were reported in the findings. As discussed previously, this questionnaire also did not provide an opportunity to include open text responses.

The study received ethical approval and the authors discussed how they maintained participants' anonymity and the management of data. It is not clear in the paper to what extent the readability of participant information was assessed which may have limited non-English speaking women from participating.

2.5.3) Birth Outcomes, Postpartum Health and Primary Care Contacts of Immigrant Mothers in an Australian Nulliparous Pregnancy Cohort Study (Lansakara et al., 2010)

This study investigated birth outcomes, postpartum health and primary care in general among migrant mothers (n=212) in Victoria (Australia) compared to Australian-born mothers (n=1074); 20 out of the 212 (9.4%) migrant women were represented by Sri Lankan women. The studies conducted by both Lansakara et al. (2010) and Navodani et al. (2019) shared similar traits and were conducted in the same setting. As identified in previous studies above, the principal investigator in this study is a Sri Lankan born medical practitioner, hence that enhanced the cultural sensitivity of the research.

The research was a quantitative survey comprising four sets of bespoke questionnaires which included; a baseline questionnaire, a standardised questionnaire to examine physical symptoms previously utilised by Sandvik et al. (2000) and Hanley et al. (2001), the EPDS designed by Cox et al. (1996) to assess depressive symptoms and validated questionnaires to assess the relationship with the partner and

postpartum health outcomes between the two sample sets. The study followed up women at 3 months postpartum. Nulliparous women at 24 weeks of gestation had been recruited to the study via mailing an invitation to eligible women identified by hospital data system. However, excluding migrant women with inadequate English language proficiency to complete the written questionnaire is a limitation of the study. Similarly, excluding women who experienced miscarriages, ectopic pregnancies at follow-ups would have led to a limitation.

In analysing data, contradicting Navodani et al. (2019), the cut-off mark for EPDS (Cox et al., 1996) was set to ≥13 to detect probable clinical depression. However, in a systematic review conducted by O'Connor et al. (2016), in seven out of eight studies, the cut-off mark of probable depression was set to ≥10. Heyningen et al. (2018) showed setting the cut-off mark at ≥11 showed an 80% sensitivity in their cohort with multiple ethnicities. Hence, it is not known if depressive symptoms of women were under-represented in Lansakara et al.'s (2010) study. Despite the differences in the years of publications, the findings of the study conducted by Lansakara et al. (2010) were similar with the findings of Nilaweera et al. (2016) and Navodani et al. (2019). Migrant women had increased odds (9.1% among migrant women compared to 7% Australian born women) of having depressive symptoms and they were more likely (26.7% among migrant women compared to 22.5% Australian born women) to have less emotional satisfaction of the relationship with the partner. The migrant group was less likely to recall being asked about their mental health by HCP which is 39.7% among migrant women versus 48.4% among Australian born women. A lack of cultural sensitivity of HCPs toward migrant women was reported within the study. The findings also identified somatoform disorders, such as

headaches, weakness, and physical pain were more common among migrant women, which had not been discussed in the previous two studies.

The study gained ethical approval, however the paper does not include details of how women were directed to appropriate mental health support if they indicated upset or distress.

2.5.4) Life with a new baby: How do immigrant and Australian-born women's experiences compare? (Bandyopadhyay et al., 2010)

This paper reports on the birth outcomes of Australian born women and migrant women who lived in Victoria Australia. The study was a cross-sectional quantitative postal survey to compare the perinatal experiences of Australian born women (n=9796), migrant women with high English language proficiency from non-English speaking backgrounds (n=460) and migrant women with low English language proficiency from non-English speaking backgrounds (n=184). The representation of Sri Lankan migrant women in the study was 27 (4%).

The mental health aspect of the cohort was assessed using EPDS (Cox et al., 1996) and Short Form 36 (SF-36) a well-validated instrument developed by RAND, Research And Development (Hays and Sherbourne,1992), used widely across the country to assess both physical and mental health aspects. However, the experience was assessed through a standard quantitative questionnaire with close-ended questions. An approach including open text responses could have provided an opportunity for researchers to explore participant's experience while gathering data from a large number (Creswell and Plano Clarke, 2011; Wisdom and Creswell, 2013).

The findings of the study conducted by Bandyopadhyay et al. (2010) mostly compliment the findings of Lansakara et al. (2010), Nilaweera et al. (2016) and

Navodani et al. (2019). The migrant women with less proficiency in English had increased likelihood of experiencing depressive symptoms compared to Australian-born women and migrant women with proficiency in English (n=53, 28.8% among migrant women compared to n= 1467, 15% of Australian born women and n=73, 15.9% of migrant women with proficiency in English). However, no significant difference in depressive symptoms were observed between migrant women with proficiency in English and Australian born women (n=73, 15.9% versus n=1467, 15% respectively). Similarly, women with less English proficiency reported feeling lonely and isolated (n= 71, 39% among migrant women with less proficiency in English compared to n=1665, 17% Australian born women and n=36, 20% migrant women with proficiency in English) while presenting more practical and emotional support (n= 119, 65.2% versus n= 5426, 55.4% and n= 292, 63.5% respectively).

Contradicting the findings of the aforementioned studies (Lansakara et al., 2010; Nilaweera et al., 2016; Navodani et al., 2019), the study conducted by Bandyadhayay et al. (2010) did not show any difference in elevated rates of anxiety and relationship issues with the partner between the three sample groups. Contrary to common stereotypes, the migrant women with less proficiency in English were more satisfied with the support from the partner during their perinatal stage (n=92, 50.5% versus n=3036, 31% and n=170, 37% respectively). The significance of this study is that the findings identified migrant women were more likely to be breastfeeding in the first six months postpartum (n=115, 63% migrant women with less proficiency in English and n= 280, 61% migrant women proficient in English) compared 5093 Australian-born women (52%) which this aspect had not been demonstrated in the previous studies mentioned above.

Ethical approval for the study was granted. In this study, the categorisation of the migrant sample groups refers to 'immigrant women proficient in English' whereas the migrant women with less proficiency were referred as 'immigrant women less proficient in English' (Bandyopadhyay et al., 2010, p. 413). It is unknown if women with less proficiency in English were aware of how they were referred to in the study. It is unknown if this categorisation had been demonstrated in the consent forms and participant information sheets as this term could be lexically discriminating the women with less proficient in English who participated in the study. In SA societies, people are judged based on proficiency in English, and proficiency in English is a representation of social class (Flows, 2014). People with lower levels of English proficiency experience humiliation and anxiety and often express that they are discriminated by people with high proficiency in English from non-English speaking backgrounds (Gatwiri, 2015). As mentioned by the American Psychological Association (APA, 2010) and The General Data Protection Regulation (GDPR) in line with Data Protection Act (2018, p.15) the researchers should 'consider risks of discrimination and stigmatisation of participants' in any circumstance in conducting the research.

2.5.5) Gaps in knowledge in relation to PMHI among Sri Lankan women in HIC identified from the literature

The literature identified from this review highlights that many Sri Lankan women may have been excluded from participating in the studies as many of the data collection tools and recruitment materials were not translated into Tamil and Sinhalese. In addition, most studies only included women with proficiency in English language, which will have led to a biased sample. Sri Lankan women who experienced

miscarriages, ectopic pregnancies and women with stillbirths were excluded in the majority of the studies.

The review has identified that PMH is not a topic investigated in relation to Sri Lankan women in the UK. Previous studies about PMH were not based on Sri Lankan women in the UK but on Sri Lankan women in Australia. This mixed methods study aimed to address the identified gaps in the literature through examining the views and opinions of Sri Lankan women who were living in the UK about perinatal mental health (PMH). The studies identified in the review used quantitative structured data collection methods and therefore women lost the opportunity to voice their opinions and views.

2.6 Chapter Summary

In summary, studies conducted on SA women in the UK are largely represented by women from India, Pakistan and Bangladesh while there was no visible representation of Sri Lankan women in the UK. Based on limited evidence published on Sri Lankan women's PMHI in HIC, some common features were observed. Social isolation, issues in relationship with the partner during postpartum period, preference to non-professional support, less cultural sensitivity of HCPs and language barriers were some of the factors that were linked to increased susceptibility to developing PMHI among Sri Lankan women in HIC. Therefore, to attempt to have a greater understanding of PMHI and the challenges faced within this population, the author investigated the views and opinions of Sri Lankan women in the UK.

3.1 Chapter Overview

Having argued in the previous chapters that research has not addressed Sri Lankan women's PMH in the UK, this chapter provides a rationale of the chosen design and methods of this study. The chapter begins with the aims and objectives of the study, then a description of the author's philosophical orientation, the methodological approach adopted and then the research process is explained. The ethical considerations related to the study will then be discussed.

3.2 Aims and Objectives

3.2.1) Aim

To examine the views and opinions of Sri Lankan women who are living in the UK about perinatal mental health (PMH).

3.2.2) Research Objectives:

The research objectives were to:

- Examine the reported views and opinions of Sri Lankan women in the UK about perinatal mental health
- Examine views about what maintains good perinatal mental health for Sri Lankan women in the UK
- Examine Sri Lankan women's opinions about access to professional PMH support in the UK
- Examine Sri Lankan women's access to nonprofessional support for PMH in the UK

3.2 Methodology and the methods

Methodology is a set of principles underpinning the research study and is the blueprint of the research (Creswell and Creswell, 2018). Creswell and Creswell (2018) described a framework including three major components to be considered when designing a research study: the paradigm (worldview), research design and methods. Philosophical worldviews according to Creswell and Creswell (2018) are a set of beliefs that guides the researchers' actions. Worldviews are also known as the paradigm of a study. The paradigms consist of epistemologies (process of the researcher determining the reality) and ontologies (nature of the reality) (Ansari et al., 2016). Research design is a strategy of inquiry, whether it is quantitative, qualitative or mixed methods, which provides a specific direction to conduct the research (Creswell and Creswell, 2018). The third component is the research methods, which involves different approaches in data collection, analysis, and interpretation.

In this research approach a pragmatic paradigm (worldview/set of beliefs) was utilised to examine the phenomenon. Pragmatic philosophy facilitates the researcher to use all possible approaches to understand the existing problem (Creswell 2013; Creswell and Clark 2011). According to William James (1842-1910), who is a proponent in pragmatism, truth is what works best at the time (Capps, 2020). Pragmatists believe 'true ideas are those we can assimilate, validate, corroborate and verify. False ideas are those we cannot' (James, 1981, p.92). In other words, truth is not what researcher wants to believe but truth is what the researcher is led to believe based on practical reasons (Galindo, 2020). Hence, pragmatists believe that reality is socially constructed through a trial-and-error approach (Prasad, 2021). Hence, the author had a freedom of choice in adapting what worked best to achieve the purpose of the research. The design prevented being constrained to a 'forced choice dichotomy

between post-positivism and constructivism' (Creswell and Clark, 2007, p.27). In examining this phenomenon, the author's focus was based on which approach was useful to achieve understanding.

Ontology, according to Gary (2013) and Ansari et al. (2016) is the perception of the existence of knowledge and the ontological perception could be understood by answering the question 'what is the nature of the reality?' (Creswell 2003; cited by Ansari et. al., 2016, p.134). The author believed that the reality of this phenomenon (views and opinions of Sri Lankan women in the UK about PMHI) is contextual and changes according to time, place, and situation.

Epistemologically, in this research, the author believed both subjective and objective viewpoints are useful to study this social phenomenon. Therefore, in this study the author adopted both post-positivistic (Kuhn, 2000; Fox, 2008; Kelly et al., 2018) and interpretivist (Weber, 2004; Kelly et al., 2018) approaches to examine the phenomenon. As Denzin and Lincoln (2011) discuss, the research design, or in other words the strategy of inquiry enables a researcher to adopt a specific direction to achieve the aim of a study.

In this research, the author utilised a convergent mixed method design (Setia, 2016; Creswell and Creswell, 2018). Mixed method research is an approach where the inquiry involves both quantitative and qualitative data collection and integrating the two data strands using a distinctive framework (Creswell and Creswell, 2018). By using this design, the researcher can gain additional insight into the phenomenon. While quantitative methodologies often address issues related to causation, generalisation and examining the magnitudes of an effect, qualitative methodologies attempt to explore phenomena in depth (Fetter et al., 2013). Therefore, mixed-method

research draws all the strengths of both quantitative and qualitative domains to examine the phenomenon (Fetter et al., 2013; Fowler, 2013). This approach enabled the author to seek structured information from the participants while allowing opportunities for them to share their views and opinions of what matters to them (refer to Appendix 3 for the check list of questions for designing a mixed methods procedure).

The third element of a research as demonstrated by Creswell and Creswell's (2018) research framework is the method which involves data collection, data analysis and interpretation of data of the research. In this mixed method survey research, the author utilised an anonymous online questionnaire with both open and closed questions. The qualitative and quantitative data were collected concurrently at the same time and merged qualitative and quantitative components after each component was analysed completely to form the results section. Results were then synthesised during interpretation, which is situated in the discussion section, to provide a comprehensive understanding on the topic.

3.3 Patient-Public Involvement and Engagement (PPIE)

Research conducted in areas on mental health and traumatic experiences in childbirth related issues have been categorised as sensitive research (Fenge et al, 2019). Due to this sensitivity, it was important that the research design protected participants from potential harm, in the recruitment strategy and also whilst participating in this research. Patient and Public Involvement and Engagement (PPIE) advisors were consulted to get an insight on conducting this sensitive research. PPIE involvement has become an increasingly important aspect in health research, as it enables a focus on issues that are relevant and feasible to the patients and the public

(Staniszewska et al, 2017). Therefore, to inform the design of the study, four women were invited to provide feedback on the proposed project, recruitment methods and survey questions. Their involvement helped to develop a pragmatic, culturally sensitive approach to this research.

The Guidance for Reporting the Involvement of Patients and Public version 2 (GRIPP2) short form is incorporated to enhance the transparency and credibility of the study (see Appendix 4). As mentioned by Staniszewska et al. (2017) the long form is often utilised in studies that are specifically conducted on the PPIE involvement whereas the short form is utilised in reporting public involvement in designing research in general. The aim of the public involvement in this study was to inform the design of the study. They were approached through personal connections and contacted via the telephone to gain their opinions on the proposed study in view of the potentially sensitive research topic. The survey was also pre-tested by the PPIE members. The women were also contacted over the phone to gain comments on the flyer and the social media information that was circulated in the data collection phase. Their comments led to the decision to collect data through anonymous surveys using both open and closed text. The GRIPP2 short form in Appendix 4 presents an overview of the background and the outcomes of the PPIE involvement in this study.

3.4 Sampling

Although the Sri Lankan population in the UK is estimated at around 146.627, the actual number of Sri Lankan women at a perinatal stage living in the UK cannot be estimated (ONS, 2020). The study aimed to obtain 50 responses in order to identify potential patterns (see social media groups where the flyer was circulated in Appendix 5). The author utilised a non-probability sampling method based on seålf-selection.

This sampling approach according to Parahoo (2014), is a non-random sample where all members of the population do not have equal chances to participate. The choice of sampling strategy was informed by PPIE consultation (see Appendix 4). As the study progressed, snowball sampling was also utilised, where women were sharing information about the study with their networks. Snowball sampling is where primary data sources nominate other potential data sources to be utilised in the study (Parahoo 2014).

3.4.1) Inclusion criteria

The Sri Lankan women included in this study were those aged above 16 years and those living in the UK who were:

- Pregnant or had a baby under 24 months
- Had a miscarriage or a stillbirth during the last 24 months
- Literate in English or Sinhalese
- Familiar with social media and online survey platforms
- With internet access

In consensus with Leadsom (2014), Sri Lankan women from conception to two-year postpartum living in the UK were included into the study. As the WHO (2006) identified, women experiencing stillbirths and neonatal births were also included in the study, as their views and opinions were equally beneficial in gaining a deeper understanding of the phenomenon. The decision to use a method which would require women to have computer literacy with access to internet was informed by the PPIE (see Appendix 4).

3.4.2) Exclusion criteria

The study excluded the following women from participating in the study:

- Women who were not Sri Lankan
- Under 16 years of age
- Did not live in the UK
- Cannot read English or Sinhalese

3.4.3) Recruitment

A flyer was designed (see Appendix 8) to promote the study and the design and method of distribution was informed by PPIE (see Appendix 4) to ensure it was culturally sensitive. The women consulted as part of the PPIE explained that it would be acceptable to Sri Lankan women if a flyer about the study was placed in Buddhist temples locally and in Sri Lankan community groups in the UK on social media. The culturally sensitive approach included details such as the term '*woman*' was replaced by '*lady*' as this term is more acceptable in Sri Lankan society. The flyer was circulated on the Faculty of Health, Social Care and Medicine (FHSCM) Social Media platforms (Twitter and Face Book) :-see Appendix 8(a) to identify the social media links where the flyer was circulated and distributed in two local Buddhist temples (Manchester and Ilford) in the UK, with verbal permission granted by the head Priests.

3.5 Data Collection

An online survey was used to collect the mixed method data in this study and was chosen because it is recognised that respondents are more likely to disclose sensitive information through anonymous online surveys as compared to face-to-face or telephone interviews (Dewaele, 2018). For those who agreed to take part, they

accessed an anonymised questionnaire using Online Surveys (formally known as Bristol Online Surveys- BOS) to capture closed and open-ended responses (see Appendix 7). The questionnaire included topics such as: -

1. Demographic data
2. Women's opinions about perinatal mental health issues and their mental health concerns
3. Women's opinions about what would help them to maintain good mental health
4. Women's view and opinions about information to PMH support
5. Women's opinions about barriers and facilitators to access mental health provision
6. Women's opinions about professional and nonprofessional support in the UK

A Flesch reading ease scale is an in-built readability tool for Microsoft word was utilised for the survey and the information sheet to assess the readability expectation of the target population. In conducting survey research, language complexity is a major concern and questions that are difficult to understand could impact data quality (Lenzner, 2014). Therefore, consideration to the readability of self-administered surveys enables researchers to predict the validity of responses (Calderon et al., 2006; Margol-Gromeda, 2020). The Flesch reading score indicates that the context could be understood by the target population would be scored between 60-70%. The questionnaire was carefully developed in awareness of this potentially sensitive topic. The author translated the flyer, participant information sheet and the survey into Sinhalese. The translations were checked by a member of the Sri Lankan community who was part of the PPIE and who also spoke fluent Sinhalese and English. A

summary of the key points of this research and the links to the participant information sheet were provided at the beginning of the survey (see Appendix 7).

3.7 Data analysis

Standard descriptive quantitative analysis focussed on frequencies and percentages (Creswell and Creswell, 2018). The quantitative responses from the online survey were inputted into an excel database to permit enhanced data display. The qualitative data were analysed using thematic analysis involving Braun and Clarke's (2006) six-phase guide which included,

1.) Familiarisation with the data

2.) Generating initial codes

3.) Discovering themes

4.) Reviewing themes

5.) Naming and defining themes

6.) Producing the final report

Following an established analytic process has the potential to enhance the credibility of the study (Flynn and Korcusa, 2018). Qualitative responses were coded and organised into themes; a summary of the coded findings is attached in Appendix 9. To enhance credibility further, qualitative data generated themes which were cross checked with the supervisory team to form consensus of interpretation, which Creswell and Creswell (2018) suggest adds rigour. As the inductive qualitative data analysis developed, it became clear that the themes generated closely aligned and provided additional insight into the structured quantitative responses.

Triangulating data using two different methodologies (quantitative and qualitative) to examine the same phenomenon increased the validity of the research.

As recommended by Creswell and Creswell (2018), synthesis of the qualitative and quantitative data took place during interpretation using an iterative process. According to Creswell and Creswell (2018) the merged data sets should be represented in a table or graph form and this is called a joint display. The joint display analysis of this study is attached in Appendix 10. The joint display analysis attached in Appendix 10 represents the merging of both quantitative and qualitative data.

As displayed in Figure 3.1, the three-core convergent (One-Phase Design) mixed-method framework was used to collect, analyse, and interpret the data gathered.

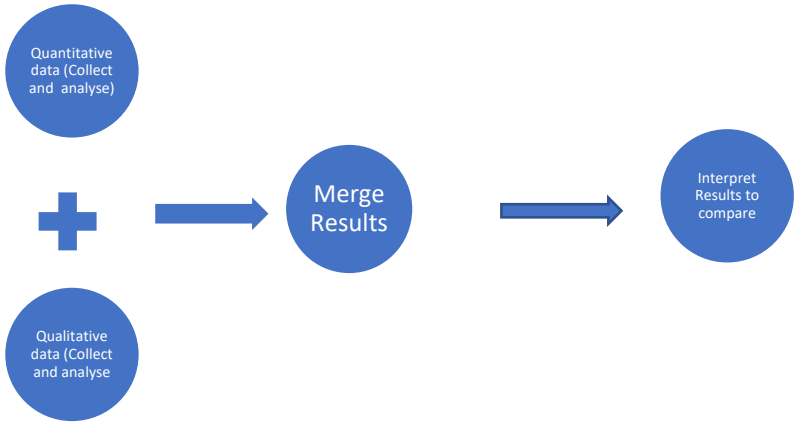

Figure 3.1 Three-core mixed-method framework (Creswell and Creswell, 2018, p.220)

As this research used a convergent approach with a questionnaire asking both close-ended and open-ended questions, the quantitative component enabled key characteristics to be highlighted whereas the qualitative component (open-ended questions) enabled the author to get an understanding of the phenomenon (Creswell and Creswell, 2018).

3.6 Ethical considerations

3.6.1) Ethical Approvals

The research project was reviewed and gained approval from the Health Research Ethics Committee (HREC) of Edge Hill University, Ormskirk, UK where the author is registered as a postgraduate research student (See Appendix 6).

3.6.2) Confidentiality

As identified by the PPIE (Patient Public Involvement and Engagement) consultation, it was important to maintain the anonymity of the participants who took part in this study. Confidentiality was maintained by conducting an anonymous survey using 'Online Surveys' (formerly known as BOS). No personal identifiers (for example IP addresses) were collected in line with GDPR guidance. The demographic information collected was minimal and did not identify participants. Participants understood that their anonymous quotes would form part of the dissemination of the study. It was intended that, if a respondent purposefully chose to share their contact details or suggested they were in danger, the research team were ready to act according to the concern raised and signpost to appropriate support. However, there were no responses submitted which indicated danger. The author checked the responses on a daily basis during the data collection phase. PMHI are taboo subjects in this community of women and having a third-party privy to their responses could compromise the woman and would be likely to influence their responses. Hence, women who were not computer literate were not able to have a family member/ friend to assist them in completing the survey.

Protection of data is a pivotal importance of conducting sensitive research as breaches in data protection could cause harm to the participants (Malgeiri, 2020). The collected data were managed in line with Data Protection Act (2018) and the General

Data Protection Regulation (GDPR) 2018 and the Edge Hill University Privacy Policy. Data were protected via the online platform used through Online Surveys (formally known as Bristol Online Surveys-BOS) and protected by Edge Hill University online processes. Therefore, the identities of the responders were not revealed. The data collected from Online Surveys was stored within Amazon Web Service (AWS) within the Republic of Ireland during the data collection phase. Online Surveys collects survey responses over encrypted SSL (TLS) connections which is a standard technology for establishing an encrypted link between the web server and a browser. It therefore ensures sensitive information to be transferred securely. Online Surveys is protected from Distributed Denial of Service (DDoS) attacks.

By the end of the data collection phase, data were transferred and stored on university one drive where the author had the only access. Similarly, for data analysing purposes, the collected anonymous data were exported via an encrypted connection to Excel, Word, and pdf through the author's university one drive account. The data were shared with the research team, who have an Edge Hill University protected email address. Once they were exported, the data which had been stored on Online Surveys was deleted. The data were also stored and backed up in the author's Edge Hill University Z drive and One Drive to minimise the risk of losing any important data. During the study, the analysed data were retained by the author, however, after the completion of the academic year the preserved data will be handed over to the Director of Studies.

3.6.3) Consideration of harm to the participants and the author

PMHI is a sensitive topic and is taboo in a Sri Lankan community (Samarasekare et al., 2018). Research conducted in areas on mental health and traumatic experiences in childbirth related issues, have been categorised as sensitive

research (Fenge et al., 2019). By providing support links at the end of the survey, Sri Lankan women who believed they have PMH concerns were sign posted to appropriate support (see Appendix 7). In completing the qualitative component of this research, a certain amount of emotional labour was required by the participants in expressing their views about PMH. In conducting sensitive research, emotional safety is fundamental (Pio and Singh, 2016; Creswell and Creswell, 2018). Hence, there were no questions asking women to disclose if they were experiencing PMHI. However, support links were included if women needed to contact others. Women have been given the option to skip questions if they find them upsetting.

In undertaking sensitive research, dilemmas experienced by the researcher throughout the research process, such as listening to emotionally challenging narratives, issues in social injustices which places the researcher at more vulnerable position may affect the researchers emotionally (Fenge et al., 2019). The author of this research was guided by two expert supervisors who are experienced in supporting researchers investigating sensitive topics. The author's well-being was further protected by not using an identifiable email address for participants to make contact and a project specific email address was used instead which was PMHStudy@edgehill.ac.uk. This email address was published on information sheets (see Appendix 7(a)) and the flyer (see Appendix 8) and were circulated through the official Edge Hill University social media platforms during the data collection phase as a measure of protecting the author. The Edge Hill University wellbeing services and personal General Practitioner (GP) were available at any time if the author needed any physical or psychological support.

3.6.4) Information

It is fundamental in conducting sensitive research with human subjects to have a well-informed consent process (Ennis and Wykes, 2016). This process should ensure that the participants are provided with all the necessary information to decide whether to take part in the study (Ennis and Wykes, 2016). Information was provided in English and Sinhalese which enabled the participants to have an overview of the research (see information sheet attached in Appendix 7(a)). The flyer was used to explain eligibility and contact details (see Appendix 8).

The information about the study has been informed by consultation with the PPIE members (see Appendix 6). The online survey was included with the links to an information sheet. The information sheet included key points of the research, the voluntary nature of participation, predicted time length of the survey what participation involved, management of data and contacts for further information. The participant information sheet was also provided with a lay title with a plain English summary. A summary of the key points from the information sheet was included at the beginning of the survey. The research team and independent person's contact details were provided in the information sheet if participants had any concerns about this research. In line with UK Policy Framework for Health and Social Care Research (2020), it is mandatory for the researcher to provide researcher's contact details if any concern was raised, and an independent contact was provided for participants to make any formal complaints. However, no emails were received indicating any concern.

3.6.5) Consent

The Nuremburg Code 1947 highlights that, 'the voluntary consent of the human subject is absolutely essential' and is similarly embedded in The Declaration of

Helsinki 1964 and in The Belmont report 1976 (Nuremburg Military Tribunal, 1947, p.181; World Medical Assembly, 1964; US Department of Health and Human Services, 1976). Therefore, it is a requirement of every research involving human subjects that they use informed consent (Manti, 2018). The consent of this research was automatically granted by the participants who clicked submit at the end of their survey completion. This process of consent was be made clear to participants in the information sheet. It was clear to participants that by clicking submit they provided permission for their responses to be used as part of this study and due to the anonymous nature of the study they were not able to withdraw their responses.

3.6.6) Withdrawal

The right to withdraw without any penalty is a central tenet of research ethics initially recognised by the Nuremburg Code of Ethic 1947 and the Declaration of Helsinki, 1964 as this protects the autonomy of the participants and helps to improve the relationship between the participants and the researcher (Nuremburg Military Tribunal, 1947; World Medical Assembly, 1964; Melhem et al., 2014). It was not possible for participants to withdraw their responses after they had submitted their survey as the data were anonymised. This was be made clear to participants on the information sheet.

3.7 Chapter Summary

In summary, this chapter provided the aims and objectives of the study and a rational for chosen philosophical approach for this research. All parts of the research design were underpinned by the involvement of the PPIEs by using a GRIPP2SF (see Appendix 6). The sampling method used non-probability method and snowball

sampling. The inclusion and exclusion criteria were driven by the PPIE consultation. Recruitment involved posting a flyer in Sri Lankan community groups in the UK on social media and placing in two Buddhist temples. Data collection involved an anonymous online survey incorporating open-and-close-ended questions. Standard descriptive analysis focussed on frequency and distribution for the quantitative component and thematic analysis focussed on the qualitative component. In Sri Lankan culture, PMH is taboo, therefore, a special focus was given to ethical considerations in protecting the participants from potential harm in the study.

4.1 Chapter Overview

This chapter presents the results gathered from the anonymous mixed-method online survey (formally known as Bristol Online Surveys). The quantitative responses were gathered through closed-ended questions and are presented in frequencies and percentages. Qualitative results, gathered via open ended questions, are presented in text to demonstrate quotes. The results of the qualitative and quantitative data are merged and presented under four sections related to:

1.) Demographic data

2.) Sri Lankan women's opinions about perinatal mental health

3.) Sri Lankan women's views and opinions about accessing information about perinatal mental health

4.) Sri Lankan women's opinions of accessing support services

4.2 Information about the survey

Thirty-four responses were received when data were gathered between the 3rd of August and the 17th of September 2021 (for 6 weeks). The time of the survey completion was 15-20 minutes. The Online Survey platform showed that, 718 people accessed/re-accessed the surveys (n=459 English Language survey/ n=259 Sinhalese translation). Thirty responses were submitted in English and four responses were submitted in Sinhalese.

The results of the quantitative and qualitative data are merged, and the findings generated four key-themes and eight subthemes (see Appendix 9 for thematic map).

The overarching themes developed as: - Women's perception of why PMH is important (theme one); Access to information (theme two); Access to support (theme three); Sharing emotions (theme four). Each key-theme consisted of a number of subthemes: - 1.) Importance due to prevalence 2.) Wellbeing for women and families (relates to key-theme one); 3.) Accessing formal information 4.) Accessing informal information (relates to key-theme two); 5.) Accessing professional support 6.) Accessing non-professional support (relates to key-theme three); 7.) Need to share 8.) Barriers to share (relates to key theme four).

4.3 Demographic data

The first five questions (see Appendix 7) of the survey gathered information on the demographics of the respondents. The first question (Q1) asked the respondents to confirm their information against the inclusion criteria for the study.

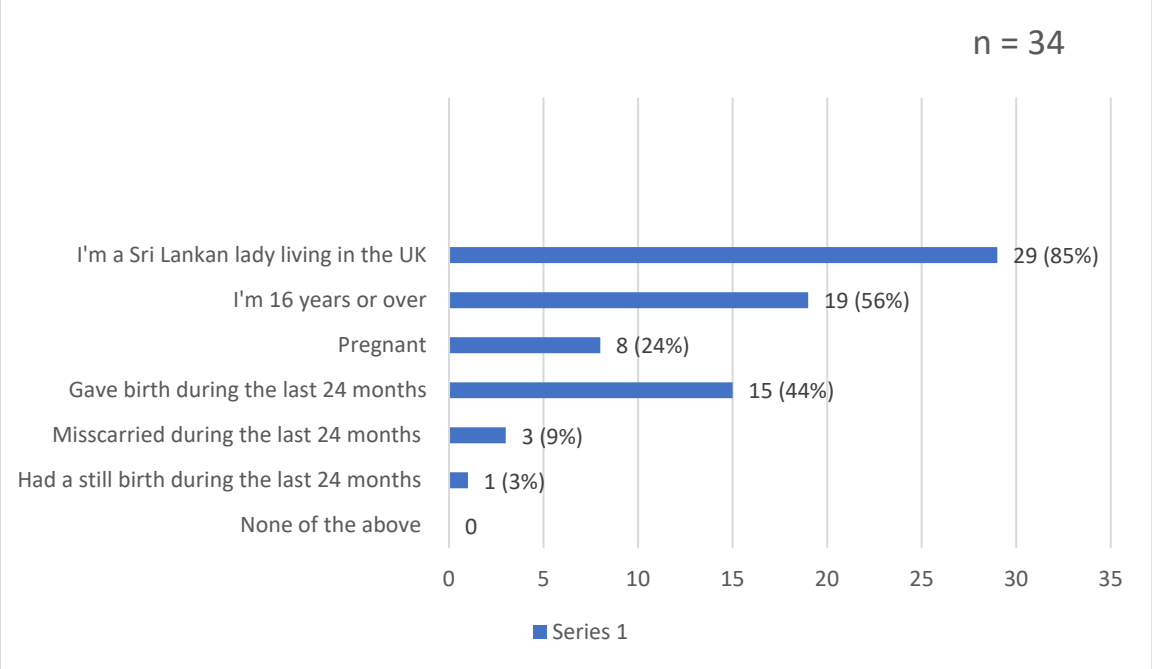

Figure 4.1 Inclusion criteria

This question (Q1) was answered inconsistently by the women who responded. As displayed in Figure 4.1, fifteen of the 34 women identified that they had given birth, three reported they had experienced a miscarriage and one responded that they had experienced a stillbirth during the last 24 months. In total, 27 women out of 34 respondents confirmed their perinatal status.

A pop-up question (Q1b) was created for those who had indicated that they had given birth during the last 24 months to examine the age of the baby. Of the 15 women who previously stated that they had given birth during the last 24 months, 13 women reported the age of their baby (ranged from one month to 24 months, mean age was 12.5 months).

The respondents were then asked about their ethnic background. As displayed in Figure 4.2, out of the 34 respondents, most women were Sinhalese (n=25) consisting of 17 women who had given birth, six pregnant women and three women who miscarried during the last 24 months. Of the three women who represented the Tamil community, two had given birth and one respondent was pregnant. The sample also consisted of two women who were Muslims who had given birth and, two women who identified as Burghers, one of whom was pregnant, and the other who experienced a stillbirth.

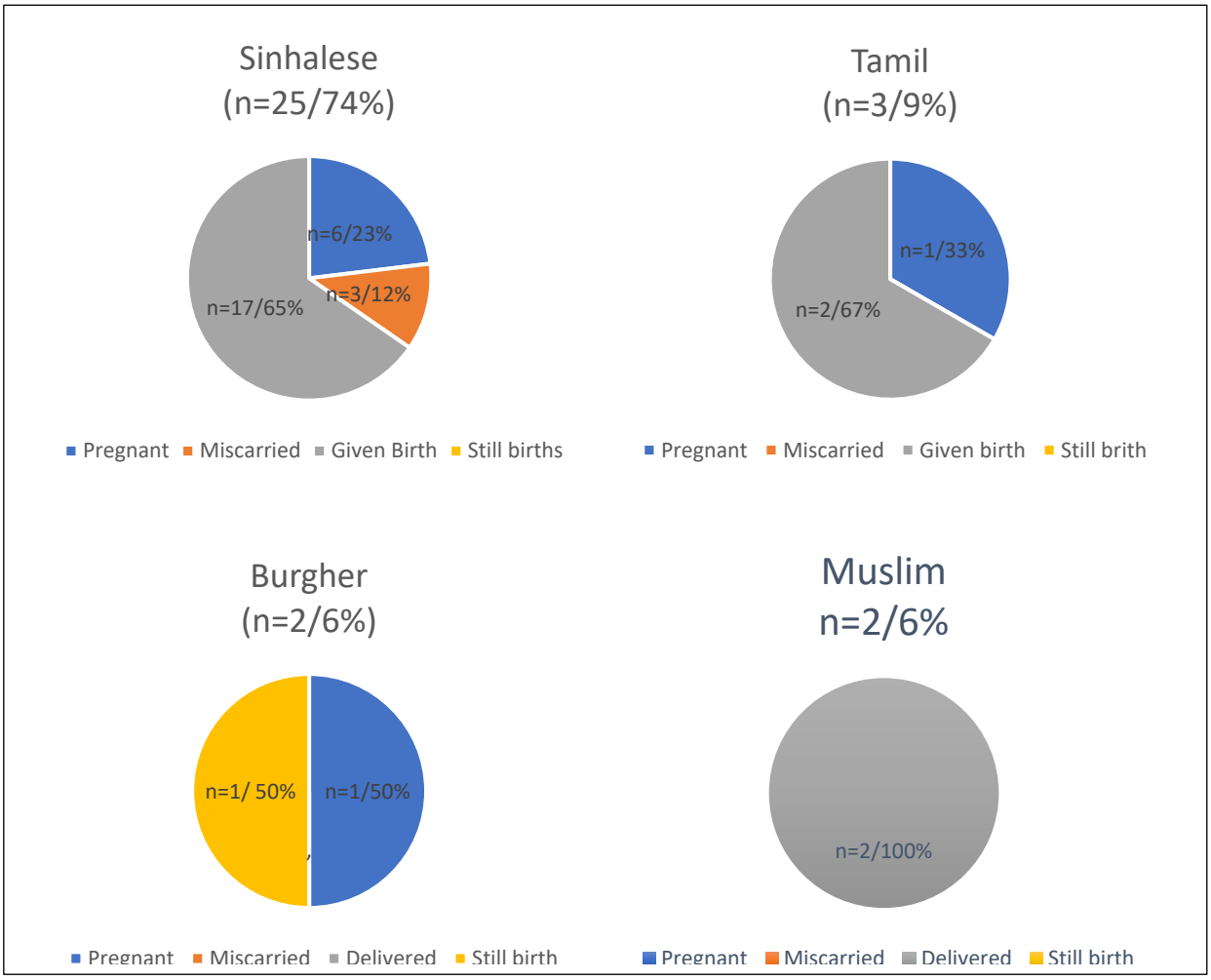

Figure 4.2 Characteristics per ethnic group

The next question (Q3) asked women to report their age. Of 32 women reported their age range, the majority of women (n=19) were aged between 31-40 years. Eight women were aged 21-30 years, three were 41-50 years and two women identified themselves as 50 years of age or above.

The following question (Q4) examined the reported level of education of the respondents. The majority of women (n=21) were educated to degree level or above. Nine women had completed their secondary education and one had taken vocational training. One response that appeared in the Sinhalese version had only completed primary education.

Employment was the focus for the final question (Q5) in the demographic section. The findings demonstrated that ten women reported being temporarily away from work, four women had never worked, five were on maternity leave, seven women

worked part-time, and six women were working full-time in their perinatal stage. The employment trajectory among the cohort was lower (n=14, 41%, about one-in-two) compared to the average in the UK as the average unemployment rate of women following the childbirth in the UK is 29%, which is about one-in-five (Harkness et al., 2019).

4.4 Sri Lankan women's opinion about perinatal mental health

Questions six to eight on the survey were designed to gain information on Sri Lankan women's opinion of perinatal mental health. It was important to know about the self-reported mental health of the respondents compared to before they were pregnant. Women were asked to tick the most suitable phrase based on their mental health (Q6).

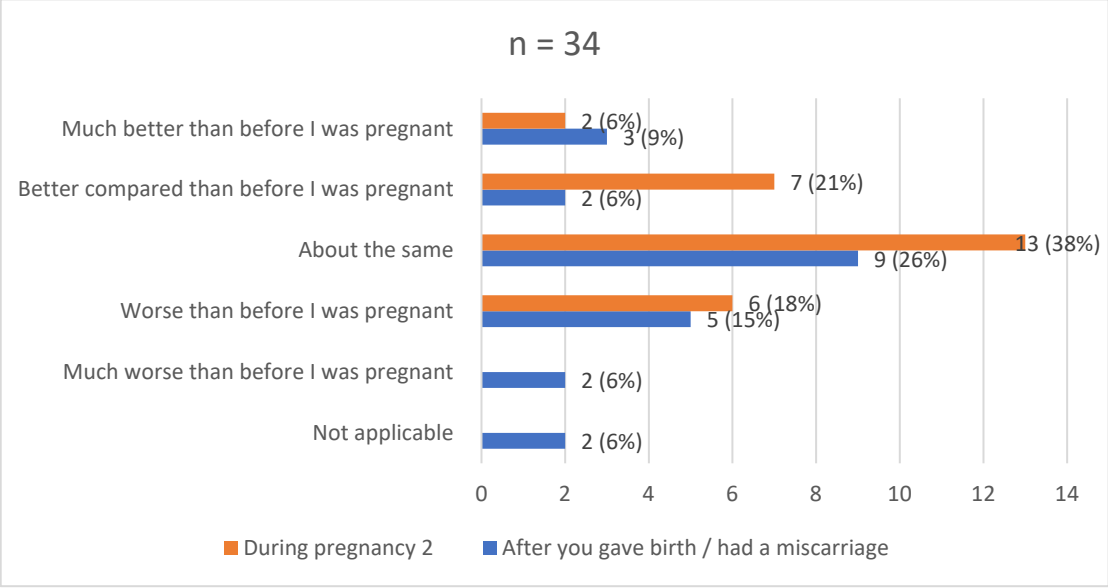

Figure 4.3 Self-reported mental health

As reported in Figure 4.3, the highest response identified no difference in mental health before and since becoming pregnant (n=13). Nine women reported feeling their mental health was better or much better since becoming pregnant and six women reported that they felt their mental health had become worse since becoming pregnant.

A similar trend followed in their post-natal period. The majority (n=9) out of 19 women declared they felt about the same postnatally. However, compared to the antenatal period, the responses have slightly skewed (n=7) towards worse or much worse during the postnatal period. Four women out of 13 responses felt worse or much worse through their perinatal stage (during pregnancy and after giving birth). Therefore, nine women in total reported that their mental health was worse or much worse during their perinatal stage.

In response to the same question base on their mental health (Q6) as reported in Figure 4.4, a higher percentage of ethnic minority women (Tamil, Muslim and Burgher) who responded felt worse or much worse (n=3 out of n=7 ethnic minority women compared to n=6 out of n=25 Sinhalese women) during their perinatal stage.

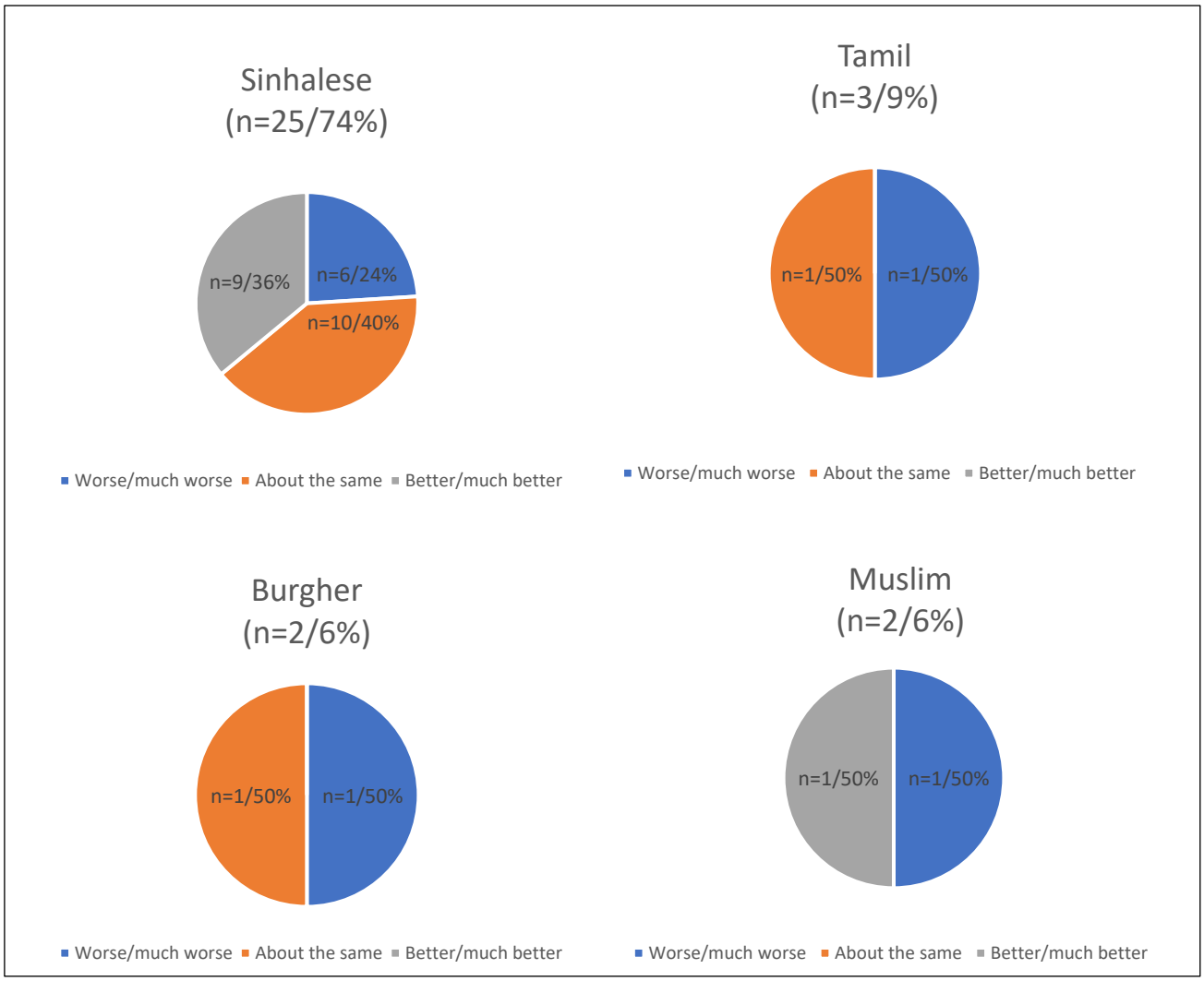

Figure 4.4 Self-reported mental health based on ethnicity

The next question examined women's opinion about PMHI, the question (Q7) inquired about who the respondents thought mental health should be discussed with and the groups selected are displayed in Figure 4.5.

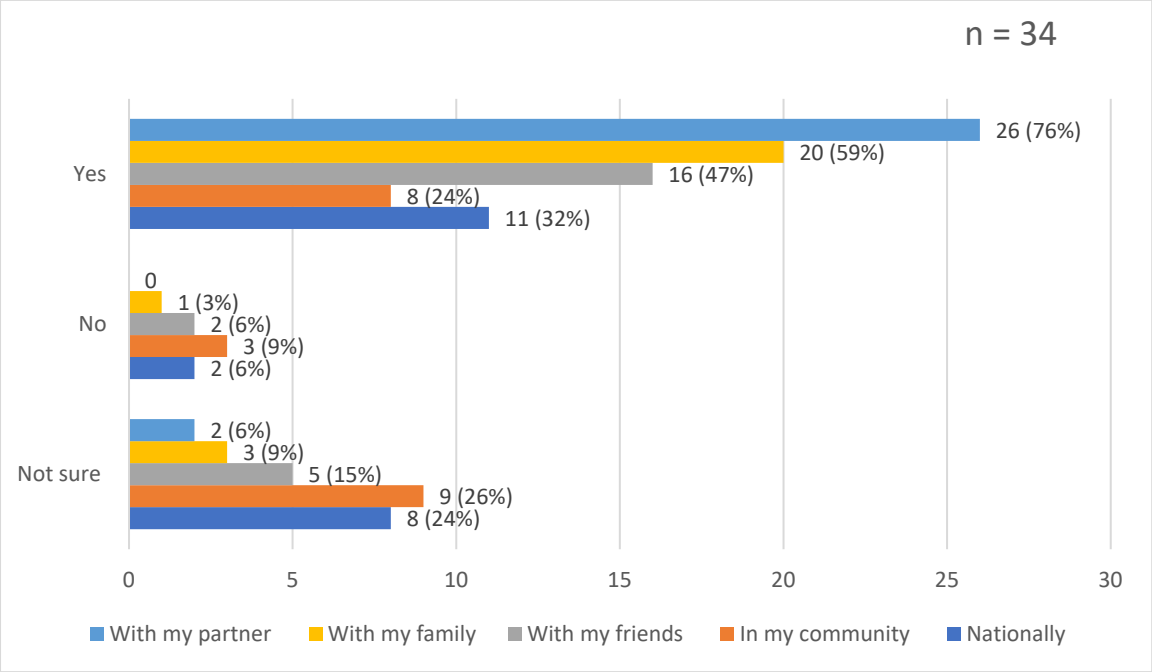

Figure 4.5 Social group PMH should be discussed

Figure 4.5 identifies that the majority of women (n=26) stated that PMH should be discussed with a woman's partner, similarly, most women felt this topic should be discussed within families (n=20) or with friends (n=16). A fewer number of women reported that PMH should be discussed at a national level (n=11) or a community level (n=8).

The respondents were then asked (in Q7a) to provide some open-text information to explain their responses. The respondents discussed their perceptions of sharing their emotions (key-theme four) and more specifically the importance of being able to share their emotions with their primary social groups (sub-theme seven). Eight women out of 23 open-text responses who felt it was good to discuss with primary social groups (partner, family, and friends) explained it was because they felt

sharing their feelings with their primary social groups could help to overcome their emotional stresses:

> *Sharing emotions helps me to release tensions in my mind, and it also helps me to improve better communication with my family. (R- 82489242)*
>
> *I feel like talking to someone about it will help me with my problems instead of keeping it inside and worrying by myself (R- 83091842)*

In response to this open text question (Q7a), the women also identified barriers to sharing their emotions (subtheme 8). For instance, some women (n=8) out of 24 open-text responses who identified the importance of discussing this topic in the community and nationally, explained barriers in accepting and seeking help were due to the cultural stigma pertaining to mental health:

> *Mental health is such a pivotal part in a woman, whether they have had a pregnancy or not. It is less well discussed in our own country due to age-old taboos. However, in a nation where mental health plays a key role in societal well-being, we should take the opportunity to discuss our own mental health and promote this back home in Sri Lanka as well" (R-82892826*)

Support for PMH was the focus in the following question (Q8) which asked the respondents which of the following healthcare professionals inquired about their mental health.

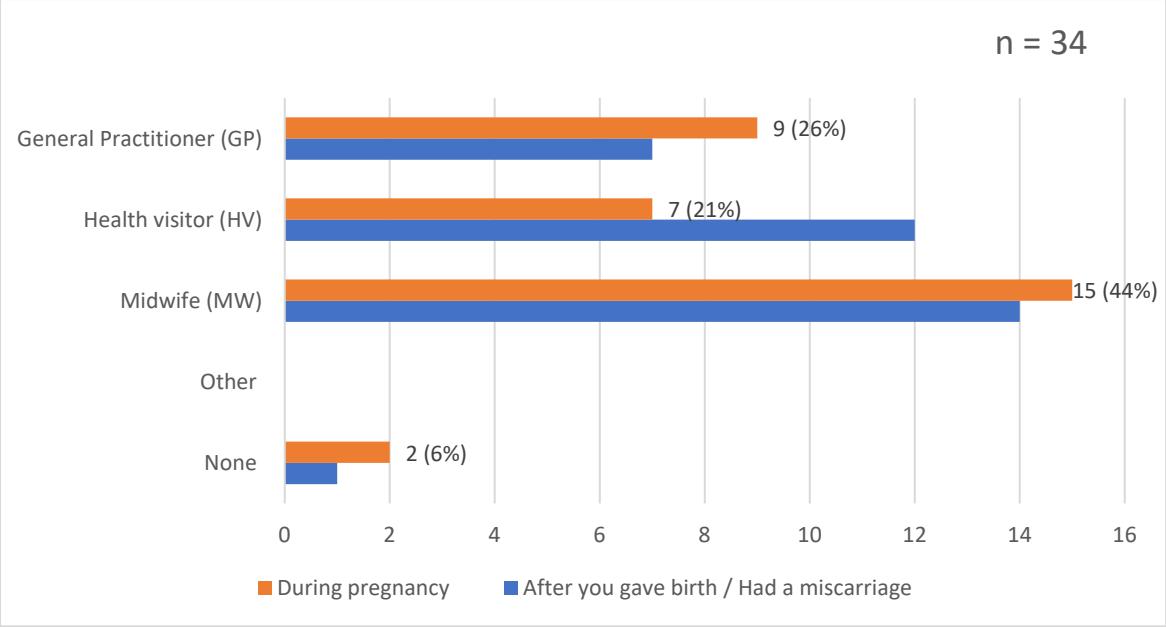

Figure 4. 6 HCP inquiry about PMH

As presented in Figure 4.6, the most frequent response from women was that the midwife had asked about their mental health during their pregnancy (n=15) and after the delivery (n=14). Twelve women reported that they had been asked about their mental health by the health visitor during their postnatal period and seven whilst they were pregnant. Nine women reported that they had been asked about their mental health by their GP during pregnancy and seven during their postnatal stage.

4.5 Sri Lankan women's views and opinions about accessing information about perinatal mental health

The following five questions (from Q9 to Q13) were designed to examine the views and opinions about Sri Lankan women's reported access to information about perinatal mental health. The women were asked (in Q9) to identify which of the

following healthcare professionals had provided them with information about their mental health at the different points in their perinatal journey.

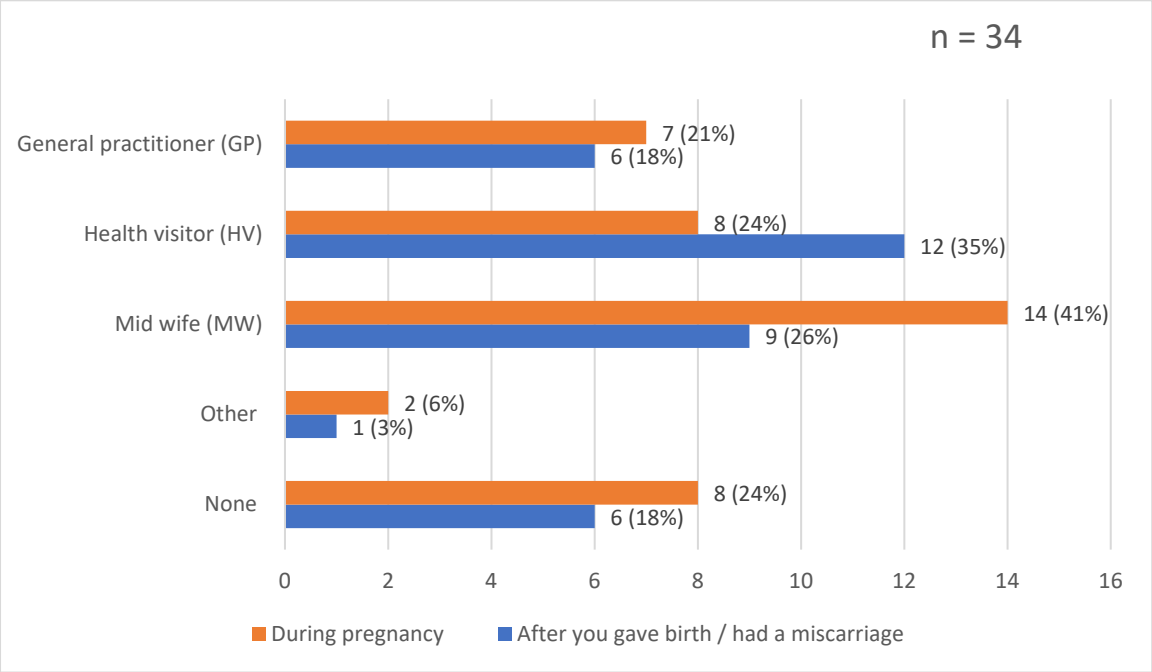

Figure 4.7 HCP support in access to information

As displayed in Figure 4.7, the women identified that midwives had had the highest involvement in providing information to them (n=14), followed by health visitors (n=8) during the antenatal period. During the postnatal period, women identified that information about mental health was mostly provided by health visitors (n=12) and midwives (n=9). The involvement of GP of providing information was slightly lower (n=7) during antenatal period and during postnatal period (n=6) compared to the other healthcare professionals. However, about 14 women who responded to this survey indicated that they were not provided with any information by any healthcare professional during their perinatal stage (both in antenatal and postnatal periods).

One respondent who ticked 'other' had further defined that she managed to receive information about PMH through personal links:

> *A friend of my husband who is a doctor (R- 83091842)*

It was apparent that the above response (R-83091842) linked to the subtheme of 'accessing informal information' (subtheme four).

In a following open-text question (in Q10) the women, who had received information about PMH, were asked to include details of what information they had been provided with. These responses identified how the women had accessed formal information (key theme two and subtheme three) under key-theme two (accessing information). Seventeen women replied to this question, with many of them identifying that they had been provided with booklets (n=5), online information (n=2) and verbal information (n=11).

> *Given me some leaflet about mental health (R- 82247667)*
>
> *Leaflets, access to websites with information and contact numbers if in need of a person/service to discuss. (R- 82888645)*
>
> *I was told that after giving birth I might experience symptoms of depression. And that it was quite common after giving birth. I was asked to reach for help if that ever happened. (R-83091842)*

Women (n=3) also identified that sources of information involved completing questionnaires and mental health assessment tools:

> *Did some checklist (R- 82488716)*
>
> *Filling questionnaires about mental health to identify the levels of mood. Online mental evaluation activities (R- 82478156)*

One respondent declared that she was neither willing to divulge their concerns nor she was asked about her PMH by healthcare professionals:

> *Did not ask about it and not wanted to talk about with others (R- 82914491)*

The next question (Q11) was fragmented into two segments; - a closed-ended question (Q11) and an open-text response (Q11a) to provide additional explanation. Women were asked (in Q11) to select if they were provided with information about mental health, how useful was this information to them. Of 23 responses, 11 women stated they found the information they received was useful. One woman reported that the information provided was not useful, and 6 women were not sure if the information they received were either useful or not useful. Of 23 responses five women reported that they were not provided with any information.

In relation to the above question (Q11), in Q11a, the women were further asked to provide additional detail as to why the information they had received was useful or not, identifying factors linked to accessing information (subtheme three). Of ten women who provided additional information, five women highlighted that information was useful to increase awareness of PMHI:

> *It was good to be aware of to avoid problems. (R-82256613)*
>
> *I still haven't given birth, but after I do, I would know what to look out for and take immediate assistance if needed. (R- 83091842)*

Some women (n=4) recognised the importance of mental health during the perinatal stage and highlighted that they felt empowered and increased self-esteem by knowing the existing healthcare system in the UK had prioritised mental health among women at perinatal stage:

> *Though I have not used the services they recommended it felt good to know that my mental condition was recognized and that I had access for assistance if I ever needed (R- 82888645)*

Her advice was quite important whenever I was in low mood, her advice intuited me to maintain my mental health (R- 82530680)

One woman under the same question (Q11a) reported that she preferred receiving expert advice on PMH:

When you have a query, you can get professional advice (R- 83120886)

Next, women were asked (in Q12) if there were any other places, they accessed information about PMH. Of 19 open text responses, the majority (n=10) reported that they have not accessed information from any other place. However, a small number of respondents had accessed informal information (subtheme four). Of 19 responses, four had accessed online information such as the 'NHS online app' whereas three had received information about PMH from their close social networks:

Spoke to my friends. They were very supportive. They managed to deal with it (R- 82914491)

One had received information from books and the other from a religious observance:

Reading books (R- 82530680)

Religious observances (R- 82873204)

Next, the respondents were asked (in Q13) to provide their opinion on what factors would improve access to information about mental health for Sri Lankan women; these responses informed the subtheme 'accessing formal information'. Of twenty-one women who had responded to this question, nine women (n= 9) emphasised the importance of healthcare professionals' involvement in improving access to information. The need of making Sri Lankan women aware of information

available by other means in addition to providing booklets or links to online support services was highlighted in their comments:

> *Information, leaflets, and links to websites should be made known to women. (R- 82888645)*
>
> *Information should be translated into Sinhalese and Tamil languages. (R- 82977727)*
>
> *Continuous support via telephone and text to ensure women know of continued support as not all women are forthcoming to seek help. (R- 82892826)*
>
> *Look at the matter without looking at traditional implications and make sure to make the person understand how important it is for their well-being (R- 82909375)*

Increasing awareness not only among women who are at the perinatal stage but also among their primary social groups (partner and family) was further reflected upon:

> *Acknowledgement/understanding by partners and family. Talking about it with other mothers who have had the problem. (R- 82256613)*

However, in response to the same question (Q13), one woman who accessed perinatal mental health support reported that she was well satisfied with the support she received:

> *As I personally experienced, I was given all the support and information from my health visitor and midwife. I didn't feel there should be a special attention of being a SL woman. (R- 82478156)*

4.6 Sri Lankan women's opinions of accessing support services

The following questions (from Q14 to Q17) asked the opinion about access to support services. Their opinion's in Q14 and Q15, on the factors that maintained good mental health during pregnancy and after giving birth informed a prominent theme

within the analysis relating to non-professional support (subtheme six). Of twenty-seven women who provided their opinion in open text during pregnancy, and twenty-five women after giving birth, an emphasis of family support in maintaining good mental health during pregnancy was reflected in a variety of responses (n=13 during pregnancy and n=16 after giving birth):

> *A healthy relationship with spouse and family members, the need for members in the society to understand the mental changes a women go through during pregnancy. (R- 82888645)*
>
> *After been through postnatal depression in my opinion and experience good to be around with the parents and get emotional support through them. (R- 82548182)*

Some responses were linked to women's perceptions of their own well-being (subtheme two) and why PMH is important (key-theme one). For instance, ten women (n= 10) believed that maintaining physical wellbeing is important in maintaining mental health during this stage:

> *First of all, need to start from your home. Do some yoga so you can relax and can have a peaceful mind. Walk and exercise whenever you can. (R- 82247667)*

The need for a good quality of life during the postnatal period was emphasised by some respondents (n=5):

> *Good amount of sleep and own preferred ways to relax (R- 82888645)*
>
> *Go for walks with the baby and spend more time with the baby. Have a good sleep (R- 83120886)*

Some responses were related to the need to share emotions (subtheme seven), during the postnatal stage (n=8):

> *A well-balanced diet, a good exercise routine, a healthy relationship with spouse and family members, the need for members in the society to understand the mental changes a women go through post-delivery, friends or other people who are keen listeners to share a relax conversation with ((R- 82888645)*

A friend capable of listening and helping me with my emotions (R-83092277)

The participants explained that sharing emotions was important to them. The act of sharing their thoughts provided release and improved communication within their support groups.

Some women (n=7) during pregnancy and after giving birth (n=5), observed the importance of maintaining good mental health during pregnancy through resilience and positive thinking, attributing to the innate nature of the condition. These responses formed the subtheme, ‘wellbeing for women and families’ under the key-theme one.

Depends on individual circumstances. Take pregnancy as a part of life and enjoy the situation. (R- 82226243)

Think your baby is the best asset you have earned in your life. (R-82832423)

Certain ambivalent phrases were also identified through their responses:

Enjoy your baby rather than consider it to be a burden (R-83843923)

Some women (n=4) believed spirituality, as well as religion (faith), impacted on the maintenance of good mental health:

Spiritual well-being - e.g., mindfulness, yoga and meditation (R- 82873204)

One woman mentioned that being involved in post-natal group sessions would help maintain good mental health after delivery:

In addition to the above activities, get involved with post-natal group sessions etc. (R- 83542182)

The next question (Q16) which focused on access to mental health support was fragmented into 6 sections (Q16/ Q16a/ Q16b/ Q16c, Q16c.i, Q16c.ii). In Q16, women were asked if they were able to access mental health support during their perinatal stage.

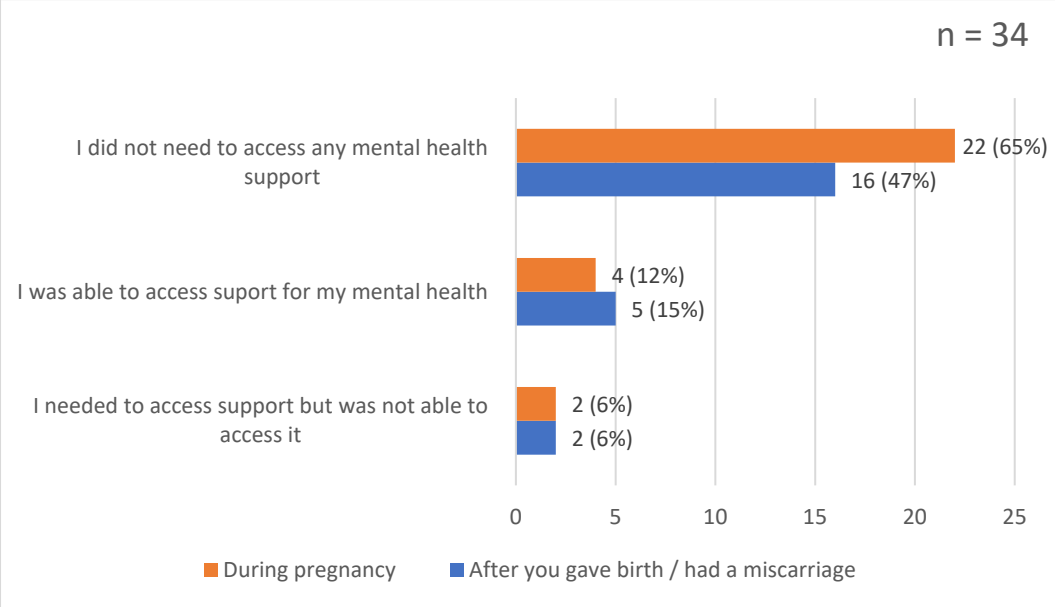

Figure 4.8 Access for support

As shown in Figure 4.8, the majority (n=22) during pregnancy and n=16 after delivery, reported that they did not need to access mental health support with a smaller proportion (n=9) had accessed support for mental health. Out of four women who previously reported a miscarriage and a stillbirth, two reported that they had not needed to access support whereas one had accessed support. One had not responded to the question. Four women had identified that they were not able to access support even when they had needed it. In 16a the women were asked to explain the reason they did not access support even though they declared they needed this. These responses relate to how women accessed professional support (subtheme five). Two women declared they were busy adapting to the new routine of motherhood:

I was too busy adjusting to the new surroundings I did not look for support (R-83092277)

One respondent reported that she was unaware of how to access support and had not been provided with any information about mental health by any healthcare professional:

I was not aware of the access routes (R- 83542182)

One woman reported that she was unable to access PMH support due to physical pain:

In pain before and after baby was born (R- 83136401)

Women who accessed support were further asked (in Q16b) to explain the support they received. Out of six responses one said the information she received was about the foetus development and the other mentioned non-professional support, she received from primary social groups (parents). Four responses highlighted the support they received from healthcare professionals was on self-management:

Speaking to the health visitor during her home visits post-surgery helped immensely. (R-82888645)

Support with managing my mental health (R-83091842)

No response had mentioned a particular support service they accessed.

Next (in Q16c), women were asked if the support they accessed were helpful or unhelpful.

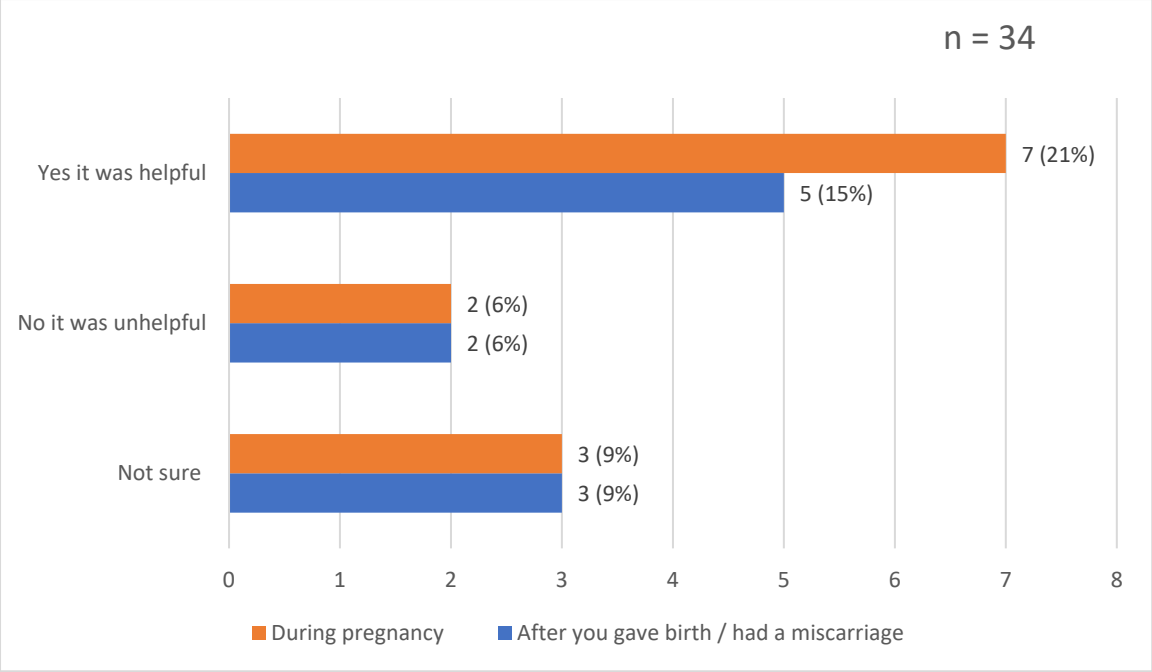

Figure 4.9 Helpfulness of the support women accessed

As displayed in Figure 4.9, twelve in total found the support they accessed was helpful. Two found the support that they accessed was unhelpful. Six responses indicated that they were not sure if the support they received was either helpful or not.

Then, they were asked (in Q16.i) to explain why they found the support was either helpful or unhelpful, which informed the subtheme 'access to professional support'. Of eight women who provided their opinion, the majority (n=4) found the support provided was helpful as expert advice guided women to maintain their mental health:

> *It helped me maintain my mental health by giving me the right advice and guiding me (R- 83091842)*

Some respondents (n=2) reported that the help they accessed for PMH was reassuring:

> *Just knowing that there was a health visitor/GP and midwife during the first few weeks post-surgery was immensely helpful. (R- 82888645)*

However, one respondent indicated that the support accessed was not helpful due to inadequate information she was provided with:

> *Not enough info (R- 83384881)*

Next, the respondents were asked (in Q16.ii) what could have improved the PMH support. Of the seven women who provided their opinion, five respondents had acknowledged the need of improving the involvement of the professionals by tailoring support for individual needs:

> *Making it more aware and talking more about it and explaining the support available and how to access (R- 83136401)*
>
> *Frequent contact of midwife (R- 83080886)*
>
> *Better reach to individuals who did not obtain any support (R- 83091842)*

The women's perceptions of accessing non-professional support were detailed in sub-theme six. For instance, family support during the perinatal stage was further echoed as one respondent declared that she did not expect any professional support as she received the support she needed from her partner:

> *I did not need any support as my partner was with me and he helped me in every situation (R- 8290375)*

The final question (Q17) of the survey was designed to seek Sri Lankan women's opinions about barriers to accessing mental health provision. They were asked what issues Sri Lankan women at the perinatal stage would face in accessing PMH support, which identified some key barriers to sharing emotions (subtheme eight). Of twenty-three open text responses, a proportion of responses (n=12)

emphasised barriers in acceptance and the lack of awareness due to Sri Lankan social stigma towards PMHI:

> *In my opinion the services offered and the assistance available in the UK is more than satisfactory. What needs to be changed is the mindset of Sri Lankan women who themselves are reluctant to accept and recognize that they need help, and that it is normal to go through hormones changing the mentality of a pregnant women. Once they are ready to accept and normalize that, all the help they need is readily available in the UK (R- 82888645)*
>
> *Social taboos on mental health in Sri Lanka as a nation may hinder women in accessing support. (R-82892826)*
>
> *Feeling embarrassed about the mental health issues. (R-82489242)*

The participants demonstrated that social stigma was the dominant barrier to sharing their emotional concerns and that hindered them from accessing support for their PMH.

Several respondents (n=6) also highlighted the language barrier in accessing mental health support:

> *I think some pregnant women have difficulty with the English Language. So, they can't really express how they feel. (R- 82247667)*

The social isolation was the other indicator they (n=2) observed preventing Sri Lankan women from accessing support in the UK:

> *Not enough time to access website or no facility as families are by themselves in the country with no one to help (R-83120886)*

Similarly, one woman had identified the tendency of Sri Lankan women finding support among closed social networks rather than seeking professional support:

> *Most Sri Lankan women may find more support amongst their friends or family (R-82873204)*

4.7 Chapter Summary

The study findings relate to the views and opinions of Sri Lankan women living in the UK about their perinatal mental health. The views and opinions provided by Sri Lankan women about PMH, how they accessed information and if they accessed professional and non-professional support based on their experience was captured. Merging of the quantitative and qualitative component led to key findings surrounding the Sri Lankan women living in the UK. Merging data found that majority of the sample were Sinhalese educated women between the age of 30-40 years. Nine women in total reported that their mental health was worse or much worse during their perinatal stage. The majority of women reported that they preferred the topic of PMH to be discussed and to receive support from within their primary social group. The majority of women were asked about their PMH and received information from their HCP. A small number of women accessed support in relation to their PMH and a minority reported that they felt that support from HCP needed to be tailored to their PMH needs. The need for sharing emotions during the perinatal stage was highlighted. Social stigma was perceived as a dominant barrier to accessing support.

5.1 Chapter Overview

This section synthesises the findings into a broader context with reference to relevant literature. The overarching purpose of this study was to examine the views and opinions of Sri Lankan women who were living in the UK about perinatal mental health (PMH). The sociodemographic factors of the participants are presented based on age, education and occupation. Four key themes related to; Women's view about why PMH is important (1), their perception about accessing information (2), their access to professional and non-professional support for PMH (3) and how Sri Lankan women share their emotions about PMH (4) are discussed in relation to published literature around the topic.

5.2 Sociodemographic factors of the respondents

The trends identified through the findings in relation to sociodemographic factors among the sample population are discussed under perinatal age and Sri Lankan women, education and PMHI and employment during perinatal period and Sri Lankan women.

5.2.1) Perinatal Age and Sri Lankan women

A higher average age range of childbearing among the respondents was observed through the quantitative findings. This trend is higher than the average age of childbearing of women living in Sri Lankan context (20-30 years of age) (UN, 2019). Nilaweera, et al. (2016) involved 50 Sri Lankan women in Victoria (Australia) had reported a similar trend where the average age among Sri Lankan mothers in the postnatal stage was reported as 32 years (Nilaweera, et al., 2016). It was observed

that 38 women (76%) were between 25-35 years of age and 11 (22%) were above the age of 35 years compared to two women (1%) below the age of 24 years at perinatal stage in Nilaweera et al. (2016) study. Evidence shows that women with advance maternal age have higher risks of developing postpartum depression due to biological changes (Muraca and Joseph, 2014; Upadhyay et al., 2017). Similarly, research shows older women are more likely to have pregnancy complications such as multiple births, which could attribute to PMHI (Jacobsson, 2004; Londero et al., 2019).

In a systematic review carried out on a population of Indian women in the Indian context, the neighbouring country to Sri Lanka, four papers out of 28 recognised that higher maternal age is risk factor in developing PPD compared to three papers supporting lower maternal age as a risk factor in developing PPD (Upadhyay et al., 2017). Yet on the contrary, Palfreyman's (2021) questionnaire study, carried out on 868 urban women at the perinatal stage in Sri Lanka indicated a correlation in suicidal ideation during pregnancy with younger age. However, these settings (Sri Lanka and India) are completely different to the UK although the studies did involve SA women.

Supporting Palfreyman's (2021) findings, a recent comparison study conducted by Estrin et al. (2019) on 545 (57 women between the age of 16 to 24 and 488 women 25 years or over) perinatal women with multiple ethnicities (White, Black African and Caribbean, Asian and mix) in London (UK) showed a high prevalence of PMHI among young women (n=23, 40.4% of young women between 16 to 24 years had symptoms of PPD compared to n=123, 25.4% of women above 25 years of age) compared to women over 25 years of age. A study conducted by Estrin et al. (2019) showed younger women at the perinatal stage were more likely to experience abuse or lack of social support and unemployment. As the sample is small, the findings of this study

do not show an association between higher average age of childbearing and increased susceptibility to PMHI among the respondents.

5.2.2) Education and PMHI

The majority of the sample for this study included educated childbearing women. A similar educational level was identified by Lansakara et al. (2010) on postpartum health with 350 migrant women (20 Sri Lankans including 124 SA in Victoria, Australia) and 207 (59.1%) migrant women in the study had obtained a degree. However, in Nilaweera et al. (2016) study carried out on 50 Sri Lankan women on postpartum health in Victoria Australia, the trend was slightly skewed towards women without a degree which is 13 women (26%) compared to 12 (24%) women with a degree. No significant difference was identified in Nilaweera et al. (2016) and Lansakara et al. (2010) studies in relation to PMHI and level of education. However, migrant women in both studies presented high susceptibility to develop PMHI. Estrin et al.'s (2019) comparison study involving 545 women of all ethnicities in London (UK) did not show any direct relationship between level of education and PMHI despite a culminative risk coupled with other sociodemographic aspects such as younger age, low-income status and unplanned pregnancy in susceptibility to experience abuse.

5.2.3) Employment during the perinatal period and Sri Lankan women

The sample of this study included a higher number of women who were unemployed however over half of the women who reported feeling worse during their perinatal stage were employed full/part time. On the contrary, a questionnaire-based study conducted by Ginja et al. (2018) involving 492 first time antenatal women of all ethnicities in England showed that 424 (86.2%) women who were employed had a higher level of social support and the social support significantly associated with mental wellbeing during perinatal stage. Palfreyman's (2021) study conducted on Sri

Lankan women however, investigated that employment status of spouse had a significant influence (p <0.05) on PMHI. On the contrary, evidence also showed that women in general not being employed due to unpaid childcare responsibilities can have an adverse effect on mental health (Xue and McMunn, 2021).

Discussion of the main themes

5.3 Why Sri Lankan women living in the UK perceive PMH is important

Findings extracted from both quantitative and qualitative strands of the study demonstrated that Sri Lankan women viewed PMH is an important aspect of their well-being which needed to be recognised and to be discussed more broadly in the UK. This theme is presented under two sub themes: The importance of PMH due to its prevalence and the importance of PMH for the wellbeing of women and their families

5.3.1) The importance of PMH due to its prevalence

Respondents acknowledged that it was vital to maintain good mental health during perinatal stage. It was also observed that one-in-four women experienced psychological distress during the perinatal stage and hence recognised PMH was important. The study conducted by Palfreyman (2021) involving Sri Lankan women in an urban suburb in Sri Lanka observed a slightly higher prevalence, nearly one-in-three (n= 296/1000, 29.6%) reported depressive symptoms during antenatal stage. As mentioned by Navodani et al. (2019) in their comparison study, conducted on migrant women (n= 243 including n=21 Sri Lankan women) and Australian born women (n=1115) in Victoria (Australia), about one-in-five (n=42, 17.2%) migrant women showed depressive symptoms compared to one-in-eleven (n=98, 8.8%). Australian-born women. This trend was higher in a comparison study conducted by Insan et al.

(2020) in Bradford (UK) on SA women originally from Pakistan, India and Bangladesh (n=4310) and White British women (n=3514), detected that about one-in-two SA women (n= 1891 women, 43.3%) had depressive symptoms compared to one-in-three White British women (n=1267 women, 36.1%, $p<0.0001$) in the UK. However, findings of Insan et al.'s (2020) study cannot be generalised as Bradford is one of the most deprived areas in the UK (Insan et al., 2020). Similarly, there were no representation of Sri Lankan women in the study.

5.3.2) Importance of PMH for the wellbeing of women and their families

Well-being is a positive emotion of happiness and contentment, and it increases the motivation to function well in a society (WHO, 1948; Ruggeri et al., 2020). The perception of wellbeing varies according to many factors such as age and culture (Larson, 1999). According to the respondents in this survey, good PMH was reported as influencing psychological wellbeing. According to the qualitative responses, PMH was coined with psychological wellbeing, as a means of achieving happiness and the mental wellbeing of a mother has a great impact on her family.

Devastating effects of PMHI on the wellbeing of women and their families as well as health care costs were identified in a systematic review conducted by Watson et al. (2019) which focussed on ethnic minority women in the UK. As shown by the MBBRACE report, many adverse effects can result from women at the perinatal stage who do not manage their physical and psychological wellbeing (Knight et al., 2020).

The respondents were aware that PMH related to self-management strategies, for instance, physical activities, nutrition, spiritual activities, resilience and self-management, and positive thinking to maintain good mental health could improve psychological wellness. An anonymous online questionnaire study conducted by Dib

et al. (2020) in the UK involving 1329 women with infants aged ≤ 12 months (n= 1251 White women and n=73 ethnic minority women) to examine the impact of Covid on PMH and coping strategies identified that 930/1329 (70%) women who were distressed due to the pandemic were able to cope with self-management strategies. Physical activities, relaxation techniques such as enjoying the warm weather were investigated as the most used self-management strategies in Dib et al.'s (2020) study.

5.4 Sri Lankan women's perception about accessing information related to PMH

Sri Lankan women's perception about accessing information about PMH is discussed under two subthemes;- Access to formal information and informal information. Formal approaches refer to information provided by healthcare professionals (HCP) whereas informal approaches refer to information women received through family, friends and via the internet.

5.4.1) Access to formal information

The findings gathered from both qualitative and quantitative strands showed that the respondents preferred information provided by the HCP rather than other sources of information. However, it was observed that 41% (n=14) of women in the survey reported that they did not receive any formal information during their perinatal stage regarding PMH. Many women who received information from HCPs found this was useful in increasing awareness about PMH. Similarly, some women reported that receiving information from HCPs encouraged them to speak about the topic of PMH. The reason provided was that this topic had been given a wide recognition within the British healthcare system which contrasts with the healthcare system in Sri Lanka. According to Hamangama (2021), PMH services remains largely neglected in Sri

Lankan healthcare system as physical health such as nutritional aspects have been prioritised as a middle-income country.

In relation to the access to formal information, this study highlights that this information mainly reached respondents who had the ability to communicate in English. The NICE (2014) guidelines demonstrate that women with language preferences should have equal access to information, yet this study highlights that translated and accessible information may not be available to Sri Lankan women during the perinatal phase. A systematic review conducted by Watson et al. (2019) lends some support in relation to this finding as three papers of 15 included in the review identified that language was a constant barrier for migrant women to access information. In consensus with the findings, Nilaweera et al. (2016) in their study on postpartum care among Sri Lankan women in Victoria, Australia similarly investigated that 27 (54%) women relied on formal support whereas 42 of women (84%) relied on informal sources of information gathered through their close social networks. Similarly, a recent systematic review carried out by Higginbottom et al. (2020) in the UK investigated migrant women who received information from HCPs about PMH had a positive perinatal experience as they were better prepared compared to migrant women who did not receive formal information. Higginbottom et al. (2020) similarly identified that language was a major barrier for migrant women to access information in the UK.

The study identified that one-in-five (n=7, 21%) respondents who received formal information about PMH reported it was not useful. They stated in text that the information would have been more useful if the HCP making them aware of the available information from a variety of mechanisms such as translating information into

Sinhalese and Tamil and increased verbal explanations and signposts. The respondents in this study also preferred follow-ups of HCP in relation to receiving information about PMH.

Health professionals' reliance on written information has been identified by Mayers et al. (2020) in their interview based qualitative study conducted in the UK. Nineteen (48%) of women with multiple ethnicities in their study highlighted that despite readable information, for instance, booklets being routinely provided, the verbal signposting of HCP seemed to be poor. In comparison, a questionnaire-based study carried out by Henderson et al. (2018), out of 4924 women at perinatal stage in the UK (4103 indigenous women, 155 women from European Union-EU, and 666 women from other countries) a different interpretation was identified as 3829 (97%) indigenous women understood the information provided by the HCP whereas 34 (85%) women from the EU and 121 (94%) women from other countries residing in the UK understood the contents of the information provided by HCP. On the contrary, Nilaweera et al. (2014) recognised that out of 5427 SA women identified in 15 papers, a lack of informational support and poor relationship with healthcare professional discouraged help seeking behaviour leaving them more susceptible to PMHI. Therefore, it is clear that interactions with HCPs are pivotal for women who experience PMHI, and this becomes increasingly important if the woman is from a minority ethnic population.

5.4.2) Access to informal information

In this study, it was observed that many women had not accessed informal information. This trend contradicts the findings of the study carried out by Nilaweera et al. (2016) where Sri Lankan women in their survey-based study preferred relying

on information provided by a family member (n=45, 90%) rather than information provided by HCP (n=37, 74%). The difference of the two sample sets was that most women in this study had achieved a degree or above (n=21 women, 62%) compared to the sample population (n=24 women, 24%) of Nilaweera et al. (2016). It would be interesting to examine the role of educational achievement in the access to formal information.

Exploring barriers to accessing services, the systematic review conducted by Smith et al. (2019) about PMH services in the UK observed the key barrier in accessing both formal and informal information was that women and their families had a poor understanding and education about PMI and as a result they were not intended to seek formal information related to PMI. This concern was exacerbated among SA communities in the UK despite why SA women did not intend to seek professional support was not discussed in depth (Smith et al., 2019). However, Smith et al.'s (2019) study mainly focused on perinatal women in general and hence had acknowledged that the systematic review could have an under-reporting while there could be unidentified barriers of women in accessing PMH support in the UK.

5.5 Sri Lankan women's access to professional or non-professional support for PMH

In this section, Sri Lankan women's access to support for PMHI is discussed under two subthemes;-Sri Lankan women's access to professional support and Sri Lankan women's access to non-professional support.

5.5.1) Sri Lankan women's access to professional support

The findings of this study identified that one-in-three (n=3, 33%) women who felt their mental health was worse during their perinatal stage, reported that they did not access support to improve their mental health. The qualitative detail was reflected in findings where two of the women explained that although they felt worse, they did not access support due to the physical pain and exhaustion experienced postnatally. One respondent reported that she was unaware of how to access PMH support although she felt worse during her perinatal stage. It is of interest that Smith et al. (2019) in the systematic review conducted on PMH services in the UK, 11 out 15 papers identified that insufficient knowledge of HCP about care pathways had prevented them referring women to appropriate services.

Although it was observed through the findings that women in this study had made HCP contact, it is a concern why two women, who declared that they needed help, had not been able to access professional support for their mental health. Jankovic et al. (2020) compared indigenous women (n=355,719, 60%) and SA women (n= 63,655, 9.5%) from India, Pakistan, Bangladesh and other Asian backgrounds (please note that, Sri Lankans are often categorized as other Asians) in the UK and identified that inpatient perinatal mental health admissions among women from other Asian backgrounds at the perinatal stage was significantly lower (n=17, 2.4%) compared to indigenous women (n= 442, 62%) and SA women (n=67, 9.5%) from India, Pakistan and Bangladesh in the UK. There is a lack of clear understanding around the role of belonging to a specific ethnic minority group and access to PMH support.

The current study gathered from both quantitative and qualitative data observed that respondents from Sri Lankan ethnic minorities (Tamil, Muslim and Burgher) were

more likely to experience psychological distress compared to the Sinhalese majority who responded to the survey. Most Sri Lankan ethic minority women fled to the UK as refugees and most of them had been exposed to discrimination and multiple vulnerabilities in pre and post migration (Beiser et al., 2015). However, the findings of this study cannot be generalised due to small sample size and poor representation of Sri Lankan ethnic minority groups.

Kanagaratnem et al. (2020) involved 51 Tamil women refugees originally from war-torn areas in Sri Lanka and now living in Canada in a qualitative study and observed that they were a fragmented community with elevated susceptibility to PTSD. However, Kanagaratnem et al. (2020) did not predominantly focus on women at the perinatal stage. Published literature in relation to Tamil refugee women at perinatal stage is scarce. However, supporting the findings of Kanagaratnem et al. (2020), a systematic review conducted by Fellmeth et al. (2018) on migration and PMH among women from low- and middle-income countries had identified considerably higher rates of depressive symptoms among refugee women and asylum seekers at the perinatal stage (48.2%) from low- and middle-income countries compared to other migrant women (15%) at the perinatal stage.

The findings of this study recognised that HCPs need to inquire more often about Sri Lankan women's PMH. Some of the open-ended questions from this study highlighted that some Sri Lankan women expected HCP to open up conversations and speak more about their PMH. WHO (2021) commented that women in general are more reluctant to disclose mental health issues related to domestic issues unless the HCP directly inquire about them. This may mean an opportunity to discuss these issues is missed and this has been observed by Watson et al. (2019) through 15

papers gathered between 2003 to 2016 on migrant women in the UK and PMH. In their systematic review, HCPs failed to recognise migrant women's symptoms or behaviours indicating abuse and avoided asking questions related to PMH. Similarly, the findings of Redshaw and Henderson's (2016) survey in the UK, incorporating 4571 women also showed that HCP missed opportunities to offer advice and question women related to PMHI and this was less frequent among Asian women (n= 331, 75.7%) compared to other ethnic minority women (130 Black women 84%, 87 mixed ethnicity, 84%) in the UK.

In relation to Making Every Contact Count, Public Health England (2016) policy, a study investigated that HCPs failed to provide opportunistic interventions in 16,473 cases out of 32,946 (50%) of occasions revealing that the service delivery has not been changed over decades despite appropriate research on PMH involving on migrant women (Keyworth et al., 2018). However, in an HCP centred interview-based study carried out in Ireland, conducted with 10 general practitioners (GPs) identified that infants become the priority in postnatal visits and maternal PMHI is poorly recognised during the postnatal visits as a result (Noonan, et al., 2018). Noonan et al. (2018) also highlighted that GPs encounter many difficulties in understanding psychological stress among migrant women due to their cultural differences and diverse perceptions about mental health. Furthermore, Noonan et al. (2018) stated that SA women tend to conceal their PMH concerns despite why SA women tend to conceal their PMH concerns were not discussed in depth (Noonan et al, 2018). Noonan et al. (2018) recommended more culture specific training for GPs in relation to opportunistic interventions. However, excluding views of the midwives and health visitors is a limitation of the study (Noonan et al., 2018). Studies involving HCPs in relation to PMHI among migrant women in the UK remain scarce suggesting that

opportunistic health promotion, information giving or questioning about PMHI warrants further investigations.

5.5.2) Sri Lankan women's access to non-professional support

In both quantitative and qualitative findings of the survey, there was a strong emphasis on respondents relying more on non-professional support during their perinatal stage. It was evident from both quantitative and qualitative components that the respondents trusted their partner, family and friends' support over professional support during the perinatal stage. The support provided by parents during the postpartum period was emphasised in both components. The qualitative component highlighted that woman in this study appreciated support from their primary social group, using words such as 'trustworthy', 'supportive', 'close' 'understanding' and 'helpful' to describe this support from their partner, family and friends. The qualitative data further identified that respondents were less likely to seek professional support if they received support from their partner and family.

This study recognised that reliance on family for bringing up an infant created a perception that the foundation of PMH emerged from the home. This trend of reliance on family was identified by studies carried out on Sri Lankan women in Australia (Lansakara, 2009; McCallum et al., 2011; Nilaweera et al., 2016), and reflects the Sri Lankan tradition that it is the responsibility of a new mother's family to guide, care and support throughout the perinatal stage (Nilaweera et al., 2016). The latest trend is that woman's relatives (mostly the woman's mother) would visit the country where the woman resides, mostly during the third trimester and live in until the woman is independent enough to look after her offspring (Nilaweera et al., 2016). As investigated by Nilaweera et al. (2016), from 50 Sri Lankan women recruited to their study, 40

women (80%) had at least one relative who visited to provide postpartum support. The study conducted by Nilaweera et al. (2016) identified that the relatives were the key postpartum support for both the mother and the baby during the perinatal stage.

The preference to informal support received through mothers and mother-in laws were equally identified by Kandaswamy et al. (2020) in their interview-based study carried out on 17 SA grandmothers in Canada and this study demonstrated the support received by grandmothers had positive health benefits on both mother and her baby during perinatal stage. According to the perspectives of SA grandmothers in the qualitative study conducted by Kandaswamy et al. (2020), the support grandmothers provide in healthy habit building such as focussing on nutrition during pre-conception phase, enriched environment surrounded with positive relationship during pregnancy and support in healing and adaptation during postpartum phase increased mental health wellbeing of mothers at perinatal stage. Supporting Kandaswamy et al. (2020), a recent UK based study conducted by Ginja et al. (2020) to examine the rural and urban differences in perinatal mental health support including 129 women from rural areas which included 128 (98.5%) indigenous women and one (0.8%) from Asian communities and 156 from urban counterparts which included 150 (90.9%) indigenous women and 6 (3.6%) women from Asian and Black communities, identified that women from rural areas were more susceptible to develop PMH issues. The results of the questionnaire-based study conducted by Ginja et al. (2020) showed women from urban areas received more social support from partner and family (n=48, 79.2%) which impacted their PMH wellbeing compared to women from rural areas (n=28, 36.4%). However, the study mostly represented indigenous women from rural and urban areas and the representation of Asian women from rural areas was poor (n=1). Therefore, the results cannot be generalised.

The women in this study provided an emphasis on the partner's support in maintaining good mental health and this support from their partner was both for emotional support as well as support in coping with daily tasks during their perinatal stage. A similar finding was seen in a questionnaire-based study conducted by Nilaweera et al. (2016), where they investigated Sri Lankan women in Victoria (Australia) shown that 25 (50%) of the women received daytime support from their partner in infant-care, 36 (64%) received support in night-time infant care and 41 (82%) received emotional support from their partners during the first two months postpartum. Despite the majority of women in Nilaweera et al.,'s (2016) study receiving support, relationship issues with the spouse during the postnatal stage were observed in the study. Bandyopadhyay et al. (2010) found migrant women with less English proficiency were satisfied with the level support received by their partners (n=92, 50.5%) compared to indigenous women (n=3036, 31%).

In contradiction to the findings of this study, the systematic review conducted Nilaweera et al. (2014), nine papers (five quantitative and four qualitative) out of 15 had identified dilemmas in support such as detachment and emotional issues in relationship with the partner among SA women in HIC predominantly during their postpartum stage. In three articles out of nine of the review, the migrant women in HIC (Australia and United States of America) presented with relationship issues compared to indigenous women which increased susceptibility to develop PMHI. However, none of these studies identified by Nilaweera et al. (2014) mentioned about domestic and physical abuse by partners. Relationship issues with partners was equally identified by Lansakara et al. (2010) and Navodani et al. (2019). Similarly, Palfreymon (2021) in his study investigated that 433/1000 (44.3%) Sri Lankan women in the Sri Lankan context at the perinatal stage had experienced partner violence which increased

susceptibility to PMHI. However, the sample of Palfreymon's (2021) study was confined to one urban district in Sri Lanka limiting the generalisability.

5.6 How Sri Lankan women share their emotions about PMH

The reported need to share emotions about PMHI which was highlighted in the survey is now demonstrated under two subthemes;- The need to share emotions with primary social groups and the barriers to sharing emotions.

5.6.1) The need to share emotions with primary social groups

The respondents of this study expressed that sharing their emotions with trusted people helped their PMH. As highlighted mainly through the qualitative responses stress reduction was framed around communication, being heard, and sharing emotions with peers. Women who reported sharing emotions with friends commented this was important as stress relief during perinatal stage.

As highlighted by a systematic review carried out by Prajapati and Leibling (2021), women in SA societies are responsible in strengthening family ties. However, divulging their feelings and psychological concerns with someone outside their comfort zone is an act which is often frowned upon by SA societies (Prajapati and Liebling, 2021). In another systematic review conducted by McCarthy et al. (2021) on the women's experience and perception of anxiety and stress during perinatal stage, 11 out of 13 qualitative papers included in the review recognised the importance of sharing emotions between close social networks. The papers identified that the understanding behaviour of partner, family and friends significantly reduced the levels of stress and anxiety of women during their perinatal stage. Although the review conducted by McCarthy et al. (2021) had not predominantly focus on SA women in

the UK, the included papers had a variation of diverse ethnicities (Indigenous, Black, Asian, African, Mixed) and socio-economic status enhancing its generalisability.

In this study, 47% women who thought the topic of PMH should be discussed with friends further explained in text that listening and often keeping contacts with friends, even just over the phone, during perinatal stage was important. Root (2019) posited that language plays a dominant role in building up trust as communicating with someone's mother tongue is a subconscious act (Root, 2019). Root (2019) study based on 88 participants in United States examined emotional intelligence and cultural sensitivity and identified that language structures how people conceptualise the world and according to Root (2019), a South Asian perception of the world would be different to Western thought. Applying this to Sri Lankan women, there would be a tendency to share emotions with native friends as emotional communication would not be compatible with an indigenous professional from the UK.

As highlighted by research, establishing trust is fundamental in sharing emotions (Weber et al., 2004; Reis, 2017). Women in this survey who chose to share their emotions with primary social groups thought they were '*trustworthy*' and that it was important to share their feelings '*with those that matter very much*'. The quotes indicate that they thought their emotional concerns were accepted among their friends. A Spanish study conducted on 1131 migrants showed a strong association ($p<0.05$) between native friends' support in reducing levels of stress and elevating life satisfaction among migrant communities, although the Spanish study does not show that emotional support received from native friends improved existing mental health symptoms (Hombrados-Mendieta et al., 2019).

5.6.2) Barriers in sharing emotions about PMHI

The qualitative findings of this research identified that barriers for Sri Lankan women in sharing emotions revolved around less familiar secondary social groups (for example, HCP). The dominant barrier in sharing emotional stresses was attributed to the social stigma pertaining to mental health among the Sri Lankan society. Responses to the open-text question inquiring about the barriers to accessing support, 52% women endorsed that social stigma in Sri Lankan societies hindered accessing support, leading to *"women being more likely to hide their mental issues as a result"*.

Another response explained that 'Culture says mental health is not a thing (R-83136401)'. These quotes demonstrated the stigma pertaining to PMHI in Sri Lankan society and that the subject is taboo, which may help to explain why 718 had accessed the survey and only 34 took part. This statistic may also help to explain why two women who felt worse during their perinatal stage reported that they did not want to access support for their mental health. Studies conducted on PMH among SA women also identified dilemmas in acceptance of mental health issues based on social stigma (Fonseca et al., 2015; Amarasuriya et al., 2018; Ford et al., 2019). The same phenomenon was identified by a cross-sectional questionnaire study conducted on stigma and perception on PPD in rural suburb in Sri Lanka (Amarasinghe et al., 2019). In their study, 374 (60.7%) of 624 Sri Lankan pregnant women strongly agreed that they were not susceptible to PMHI whereas 280 women (55.9%) normalised symptoms (low mood and exhaustion) of PPD and 260 (49.5%) women of the study normalised suicidal ideation. Similarly, Amerasinghe et al. (2019) indicated that 499 (80%) respondents reported PMH symptoms would normally resolve without treatment whereas 108 (18%) women did not wish to be a friend of an affected women due to stigma pertaining in Sri Lankan society. Despite a rich sample size (n=624), the study

conducted by Amarasinghe et al. (2019) had some concerns in generalisability. For instance, differences in contexts and socio-economic status between participants and differences in service delivery between Sri Lanka and the UK leads to issues in generalisability. However, the study carried out by Amanrasighe et al. (2019) favours the findings of this survey on social stigma preventing women accessing support.

Interestingly, spiritual involvement was reported as impacting on PMH as some women (n=4, 12%) in the survey viewed that 'meditation, mindfulness, yoga, and gospel music' could improve mental health during the perinatal period. One respondent reported that she accessed mental health support through 'religious observances' although she had not accessed professional support for mental health. In support of these findings, a systematic review conducted on immigrant women in Canada by Chaze et al. (2015), of 4661 migrant women included in 24 papers identified South, and East Asian migrant women were more reliant on religion and spirituality compared to other migrant women, and that religious and spiritual beliefs were a strong facilitator of coping with PPD. Yet on the contrary, Ran et al. (2021) in their systematic review incorporating 11 studies conducted mainly on South and East Asian women (n= 5196 women pooled from 8 papers) identified cultural factors such as religion and spirituality contributed to more stigmatising attitudes towards people with mental health issues. Their findings identified South, and East Asians rely on Karmic theory where mental illnesses is identified as a form of punishment due to bad behaviour in a previous birth. Hence, according to the review conducted by Ran et al. (2021), many people with mental health issues from these communities tended to seek support through spiritual healers and temples where the expectation was a positive mental health outcome, rather than seeking professional support. Although the sample size of this current research is small, the findings reflect those of Ran et al. (2021) and

highlights the need of HCP developing cultural sensitivity about PMHI for Sri Lankan women is important.

5.7 Chapter Summary

Overall, this chapter discussed the findings in relation to wider literature that focussed around four key themes related to why Sri Lankan women living in the UK perceive PMH is important (1), Sri Lankan women's perception about accessing information related to PMH (2), Sri Lankan women's access to professional and non-professional support for PMH (3) and how Sri Lankan women share their emotions about PMH (4). The majority of respondents thought PMH was important and should be discussed more. Many accessed and found formal information useful. There was a reliance of non-professional support where women expressed that they wanted to share their emotions about PMH with peers. However, social stigma from the Sri Lankan community created barrier to sharing emotions.

6.1 Chapter Overview

This concluding chapter provides a personal reflection about the process involved in undertaking this research. The reflection will explore the strengths and limitations of this study. The chapter includes recommendations about what needs to happen in relation to education, research, health care practice or policy to support Sri Lankan women more when experiencing PMHI. Finally, contribution to the pool of knowledge is identified.

6.2 Personal reflection about engaging with an MRES

The aim of this research was to examine the views and opinions of Sri Lankan women living in the UK about PMH. The author's personal reflections are subjective and hence this section will be narrated in first person using *I* and *me*. I am a Sri Lankan migrant woman who recently completed the perinatal stage. As a Sri Lankan migrant who experienced fertility issues it was evident for me that perinatal stage is challenging especially for migrant women who are away from family, relative and friends. The struggle I went through during my perinatal stage made me want to focus the research on perinatal mental health among Sri Lankan women in the UK.

As I become involved in the research process, I felt many Sri Lankan women in the UK held their cultural and gender norms despite of living in a developed country. Hence, sensitive aspects such as PMH were not preferred topics to be widely spoken by Sri Lankan women in the UK. The challenges in recruiting PPIEs and participants signified the sensitive nature of the topic. This issue of reluctance to discuss matters

related to mental health and challenges in the recruitment of SA women has been identified in many studies previously, for instance, Quay et al. (2017) and Sheridan et al. (2020). I believe, less representation of Sri Lankan women in sensitive research decreases the opportunities to identify their culture specificities despite their healthy migrant effect.

By conducting this research, I felt that Sri Lankan women in general living in the UK are susceptible to develop PMHI despite the socio-economic status and ethnicity (Sinhalese, Tamil or Muslim). Although there are certain limitations such as smaller sample size in my study, I feel empowered and privileged to conduct the first research, to my knowledge, on PMH among Sri Lankan women in the UK and believe that the qualitative aspect permitted them a voice through this research. Having my own two-year-old as I write this dissertation, this research enabled me to alter my perceptions of every mother going through their perinatal stage and to develop an empathetic view while this research expanded my knowledge about PMH. I believe my familiarity and subjectivity of the Sri Lankan context could enhance the cultural sensitivity of the study and the relationship of the ethnicity was the basis of reflectivity throughout the research process. To enhance the reflexivity, I consulted the supervision team at times when concerns on biases arose.

6.3 Strengths and limitations of the study

To the author's knowledge this is the first study about PMH among Sri Lankan women in the UK. As a result of translating the surveys into Sinhalese language this research was able to approach some hard-to-reach Sri Lankan women in the UK. Also, by conducting an anonymous online survey, it was able to get an understanding into PMH of Sri Lankan women in the UK. Anonymity protected participants who were

commenting about a taboo subject is a strength of this study. The questionnaire development was designed ethically and supported sensitive research. Most importantly, the PPIE consultation at all stages provided a relevant perspective to support the development of design, sample, data collection and ethical considerations. Hence, the PPIE group facilitated sensitive and ethical research.

However, there were number of limitations of this study to acknowledge. The study was small and cannot be generalised. It was intended that Sri Lankan women participated from all the four nations (England, Wales, Scotland, and Northern Ireland) would be included. As the study processed, the snowball sampling occurred in response to poor response rate where women who participated encouraged others within their own networks to take part. This created a potential self-selecting bias.

Due to author's language barrier and the limited time frame, the surveys were not able to be translated into Tamil language, one of the national languages and hence the representation of Tamil and Muslim women was relatively low. The flyer was not circulated in Hindu temples, and this could have also impacted the low representation of Sri Lankan Tamil women in the UK. Women who could not read or write English or Sinhalese languages were not able to complete the survey. The research was time defined by Master of Research degree, which is a period of 12 months. Therefore, designing the research, PPIE consultation, data collection and analysis had to adapt to the limited time frame.

The decision of including of women with computer literacy with access to internet was made by the PPIE (see Appendix 6). However, excluding women who were not computer literate and had no access to internet was a limitation of this study. Differences in response sizes of both quantitative and qualitative data, for instance, a

nonresponsive drop-out in qualitative component where the respondents skipping certain open-ended questions was a challenge in data merging. However, according to Creswell and Creswell (2018) this limitation is inherent in convergent mixed methods designs.

6.4 Recommendations to policy and practice

6.4.1) Education

This dissertation recognised that the subject of PMH is taboo in Sri Lankan culture. A combination of culturally informed psychoeducation about PMH at individual, family, group and community levels are recommended to reduce the stigma pertaining to PMHI. For instance, there is a need to develop education for the Sri Lankan community about how important PMH and PMHI are to the women and their partners and families. Education could take place in religious centres such as Buddhist and Hindu temples, churches and mosques and Sri Lankan community centres in the UK and could be run by culturally sensitive health promotional interventions in the future. Accepting and combining Sri Lankan cultural and spiritual belief systems, for example spiritual and complimentary treatment-based education (such as meditation, yoga and mindfulness) for PMHI may help Sri Lankan women to effectively engage in psychoeducation about PMH. Sri Lankan women tended to have a high level of education in this study. However, despite the level of education, women are prone to be internalised, and accepting the social norm due to social pressures and self-stigmatising in which how the society perceive themselves becomes how they perceive about themselves. Hence, there is a need of educating women not only to reduce stigmatisation but also to increase self-esteem.

6.4.2) Healthcare policy and practice

It is evident that HCPs may not be aware of social conventions or taboos within Sri Lankan culture in relation to PMHI and there is a need for raised cultural sensitivity. Health professionals need raised awareness about how to tailor support for Sri Lankan women's PMHI needs. This should be achieved by strengthening a culturally competent primary care service. Providing in-service training for HCP would improve the understanding of Sri Lankan women's culture specificities. Incorporating family members of women who are at perinatal stage in consultations would benefit as family has a major influence on women's PMH in Sri Lankan societies. By implementing clearer policies to address stigma would benefit HCP to address Sri Lankan women's PMHI and their needs. Providing support across the social spectrum would benefit to reduce social stigma pertaining to mental health in Sri Lankan culture. Pregnancy is a period where women have multiple contacts with healthcare services, and this would be the best opportunity to detect and support women who are most vulnerable. The importance of HCP establishing a healthy relationship with Sri Lankan women was a recurrent theme in many of these women's accounts. Therefore, it is recommended to advocate HCP to establish trust and closeness combined with an empathetic approach, or 'seeing through the eyes of those affected' would facilitate HCP to understand Sri Lankan women's vulnerabilities (Heazell, 2016, p.615). Increase opportunistic interventions for Sri Lankan women at perinatal stage would also facilitate women to divulge their mental health concerns.

6.5 Recommendations to research

Global migration is an ever-increasing trend, hence research with diverse approaches in relation to sub-groups such as Sri Lankan women should be given a focus. There is no reliable large-scale data to examine how Sri Lankan women use

perinatal mental health services in the UK even though Sri Lankans are the eighth biggest SA migrant population, this had been substantially neglected in health research. Therefore, a larger study needs to be designed that involves Sri Lankan women nationally. Future research needs to include divorced and single mothers from Sri Lankan societies, Sri Lankan Tamils from war torn areas and Sri Lankan women with language barriers as these women had not been represented in this study. Studies in addressing social stigma towards PMHI focused on Sri Lankan women are recommended as previous research had observed cultural differences in stigma depending on unique circumstances of women from different geographical contexts (Flanagan et al., 2014). Community-based participatory research (CBPR) incorporating all the relevant stakeholders (from women, their families to health visitors, midwives, and GPs') in equal ways throughout the research process as well as PPIE involvement in research would be suitable approaches to raise awareness about PMHI and thereby destigmatise PMHI within the community. However, recruitment issues were apparent in this study and need to be addressed in any future research involving Sri Lankan women.

6.6 Contribution to knowledge

As far as the author knows, there are no studies addressing PMHI in the UK where the researcher has translated information into Sinhalese as this study does. Furthermore, PMH is not a topic investigated in relation to Sri Lankan women in the UK. This research appears to be the first piece focused predominantly on the views and opinions of Sri Lankan women about PMH in the UK.

6.7 Overarching conclusion of the dissertation

This research highlights the importance of PMH among Sri Lankan women in the UK. To the author's knowledge, this research is the first specific study conducted on PMHI on Sri Lankan women living in the UK. This study also appears to be the first mixed methods research specifically designed on Sri Lankan women's PMH in HIC. Every Sri Lankan woman living in the UK is susceptible to develop PMH issues although this topic had not been given a focus in society due to its sensitive nature. As identified by previous literature on Sri Lankan women in HIC, the culture and gender norms, language barriers, lack of social support and lack of cultural sensitivity in existing perinatal health services in HIC account for much of the risks of women developing PMHI. Culture most importantly seems to exert a dominant influence upon the development of PMHI among Sri Lankan women in the UK and accessing support. Existing perinatal health services may fail to adequately capture Sri Lankan women who are experiencing PMHI due to their culture specificities.

Much work lies ahead in order to address PMHI among Sri Lankan women in the UK. Health professionals need raised awareness about how to tailor support for Sri Lankan women's PMHI needs. As endorsed by many of these respondents, PMH needs of Sri Lankan women might be better met if interventions are delivered considering them a mono-ethic group with distinctive characteristics. The HCP recognising and accepting their culture specificities would also facilitate Sri Lankan women to establish trust and closeness. Efforts in effective PMH management should accompany appropriate preventative measures and opportunistic approaches. Partner and family support would be a modifiable target for intervention to improve PMH outcomes among Sri Lankan women in the UK. Similarly, future research on migrant PMH should focus on culture sensitive subjective approaches where patients'

views, and opinions should be largely considered. The findings of this study therefore would contribute to a deeper understanding about PMHI among Sri Lankan women in the UK. This research fills a significant knowledge gap in the existing literature.

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Appendixes

Appendix 1

Mapping of the relevant papers adapting Briggs (2015) Manual for Scoping Reviews

The rational

The prevalence of perinatal mental health issues among immigrant women in the UK is significantly higher than that of indigenous women. According to the latest statistics at least 14% of people living in the UK are born abroad. Compared to the UK born, majority of migrants are more likely to be aged between 26 to 64 years and belonged to the active workforce in the UK. Among those, Sri Lankan immigrant population is estimated to be around 127000 to 200000. Due to its smaller proportion Sri Lankans living in the UK are unknowingly assimilated to the subgroup of South Asian cultures in the UK. Therefore, this population is substantially neglected in the health research perspectives. Higher prevalence of perinatal mental health issues among immigrant community is a major public health concern in the UK. Failure to address this important health concern could have a knock-on effect on individuals at a micro level, and the economy and the wider population at macro and meso levels. In order to have a greater understanding of this phenomenon therefore, the author utilises the Sri Lankan women living in the UK as a model. The author herself is a Sri Lankan immigrant who recently completed her perinatal stage.

The objectives

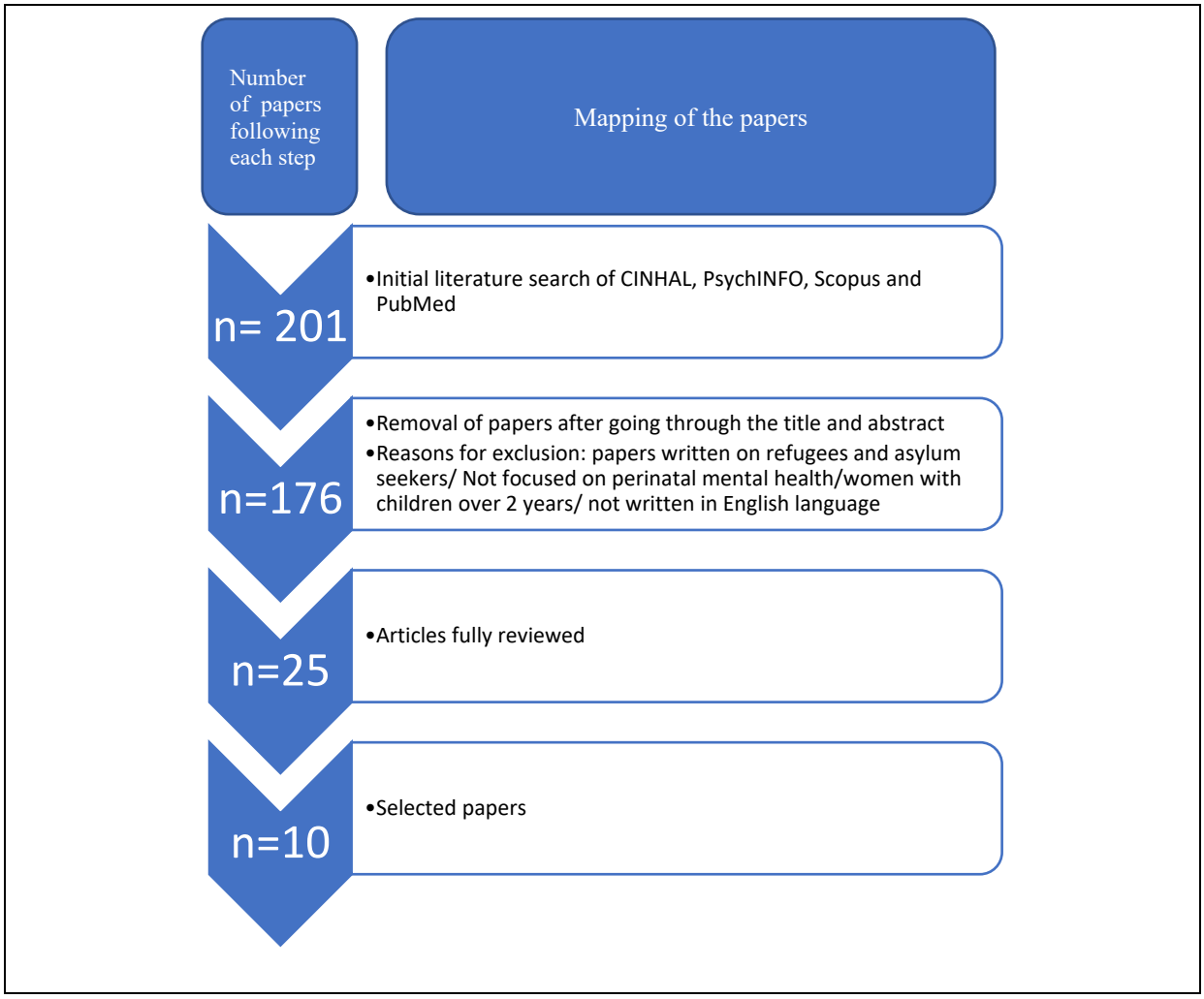
To map the available evidence to gain an i**nsight into perinatal mental health issues among immigrants through Sri Lankan Women living in the UK**. Similarly, through this research the author attempts to **give Sri Lankan women living in the**

UK a voice and provide an insight of **how existing services in the UK should be tailored** for their mental health needs.

Identifying relevant studies

The search strategy was underpinned by key inclusion criteria. Mapping of relevant papers adapted Brigg's (2015) manual for scoping reviews which included PCC (Population, Concept, Context) elements.

Diagram of mapping the papers



Appendix 2
Critical Appraisal

Critical Analysis Skills Programme (CASP) tool was reformatted for the purpose of critical analysis

Perinatal Mental Health Issues among Sri Lankan Women living in high-income countries

Record here the reference for the paper to be analysed:

Sri Lankan-born women who have given birth in Victoria: a survey of their primary postpartum health-care needs

Nilaweera, I., Rowe, H., Nguyen, H., Burns, J., Doran, F. and Fisher, J., 2016. Sri Lankan-born women who have given birth in Victoria: a survey of their primary postpartum health-care needs. *Australian journal of primary health*, *22*(2), pp.133-139.

Concept	Strengths	Limitations
Journal: Is this peer reviewed?	Yes	
Title: Is the title clear? Does the title reflect the content of the article?	Yes, clear and indicates the QUANT traits of the study	A bit too long for a title
Authors: are they qualified in the field/ topic written about?	Yes, Affiliations provided	
Abstract: Is this easy to understand?	The abstract indicates their aims, methods and results and the conclusion. Informative	The recommendations could have been clearer (i.e., 'A two-pronged approach…' could be illustrated)
Literature review section: Is this current? Does the review inform you about why the topic is important?	Yes, current and well-articulated. The importance of this study resonates through the literature review. Reiterates the objectives maintaining the focus	The authors have highlighted a study that has been conducted on Bangladeshi mothers' needs in the UK. It poses a question if that can be applied to this study as maternal needs are often culture-specific
Aim: Is there a clear aim visible?	Yes, to describe the support and needs of primary care	Doesn't specifically discuss maternal mental health needs

Concept	Strengths	Limitations
	among Sri Lankan mothers at PNS	
Methodology which includes:		
Design: is there a clear expression of the design?	Yes, they have very clearly demonstrated their study design.	However, many concerns can be raised. The surveys were conducted in Sinhalese and English. Therefore, a lower representation of the Tamils and Muslims is evident. Doesn't indicate utilising a standardised survey method and standardising the Sinhalese translations. Similarly, the surveys were conducted via phone and email. Therefore, it also poses a question of maintaining the anonymity of the participants.
If RCT: Is the randomization process clear? Was there any problems with the randomisation process?		
Compliance to the trial: Were the researcher's ideas compiled with?		
Setting: Is the setting the same as your environment? Is the study sat in the same country you work in? Does the setting influence the findings positively or negatively?	The study was conducted in Victoria, Melbourne	
Sample: What is the sampling approach? Is this justified for the research design? Is the sample generalisable? Does that matter?	Yes, the sample comprised migrant Sri Lankan women living in Victoria Melbourne.	The samples do not specifically represent their mental health needs although they provide more of a generalised view on maternal health

Concept	Strengths	Limitations
		services. While Sinhala representations were 96% a low representation of Tamils and Muslims(4%) was evident.
Data Collection: How was the data collected? Where there any positive or negative influences to how data was collected?	The survey has comprised semantically differentiated scales (ie. ….In the first two months did you feel any difficulty in trying to 1.) soothe your baby 2.) settle your baby 3) feed your baby…) prevents the participates from getting monotonous and getting into a rhythm of ticking boxes	The survey instruments were pre-coded, and no open-ended question was provided. However, an optional space had been provided to elaborate on certain questions and they haven't specified how these additional comments were rated.
Ethical considerations: Was the data kept confidential? Were the participants protected? Were participants able to decline?	Ethical consideration had been granted from relevant authorities and the participants.	However, the ethical requirement doesn't highlight throughout the process.
Analysis: Are you able to understand how the researchers analysed the study? Did they use a recognised, validated process?		No, they do not indicate much about the analysis. They have not mentioned how the survey was scaled or analysed
Results: Were the results easy to understand? Were the results presented in a way that was appropriate for that type of research?	Yes, clear. The focus is well maintained.	Although the study generalised Sri Lankan women living in Victoria, the results majorly representation well educated employed Sinhalese women who can communicate in English. Therefore, this clearly shows a selection bias
Discussion:	The discussion has placed into the context of other	Although the authors see conducting the

Concept	Strengths	Limitations
Was the research placed into the context of other studies/ theories? Was the discussion informative? Do you understand about the gaps in knowledge? Was the literature used current?	studies and a comparison between Sri Lankan and Australian Health care services also has been provided. They also have identified the need for a comparison study on Sri Lankan born women in Australia and Australian-born women placing an opportunity for future studies	study in both Sinhalese and English as a strength, the rigour of the study would have been enhanced if the Tamil language was equally used as the opening paragraph has presented Sri Lanka as a multicultural country. However, a justification has not been provided for this bias.
Conclusion: Does the conclusion reflect the findings and the discussion?	Yes, the conclusion reflects the findings.	
Key arguments generated from your analysis:		
	YES	**NO**
Would you say this study was robust enough to base your opinion/ practice on?	Yes, to my knowledge, this is one of the very few studies that have been conducted on SRI LANKAN women at PN stage living in high-income countries. Although it focuses on maternal health in general certain aspects can be applied to my research focus.	

Record here the reference for the paper to be analysed:

Birth Outcomes, Postpartum Health and Primary Care Contacts of Immigrant Mothers in an Australian Nulliparous Pregnancy Cohort Study

Lansakara, N., Brown, S.J. and Gartland, D., 2010. Birth outcomes, postpartum health and primary care contacts of immigrant mothers in an Australian nulliparous pregnancy cohort study. *Maternal and child health journal*, *14*(5), pp.807-816.

Concept	Strengths	Limitations
Journal: Is this peer reviewed?	Yes	
Title: Is the title clear? Does the title reflect the content of the article?	Yes. Although the title has generalised SA women, there is a major Sri Lankan representation in this study.	
Authors: are they qualified in the field/ topic written about?	Yes	
Abstract: Is this easy to understand?	Yes, the abstract opens with the objectives of the study. This study unravels some novel findings.	Does not mention about the limitations of the study
Literature review section: Is this current? Does the review inform you about why the topic is important?	Yes, a contemporary focus. The literature review is very well argued and brings out literature that compliments their standpoint as well as literature that contradicts.	This study had been carried out from 2005 to 2009 and had utilised literature which had been published before this period of time. Therefore, the literature cited in this article is outdated. Similarly, the review doesn't elaborate much on the physical and psychological nature of nulliparous mothers in general.
Aim: Is there a clear aim visible?	Very clear aims.	
Methodology which includes:		
Design: is there a clear expression of the design?	Yes, a longitudinal study. Demonstrates	However, in recruiting migrants

Concept	Strengths	Limitations
	the inclusion/exclusion criteria, method of data collection (questionnaires) and the pilot study etc	they have taken the level of education as a proxy to represent English language fluency among immigrants whereas native-born women did not have any limitations. Therefore, this may a selection bias is evident.
If RCT: Is the randomization process clear? Was there any problems with the randomisation process?		
Compliance to the trial: Were the researcher's ideas compiled with?		
Setting: Is the setting the same as your environment? Is the study sat in the same country you work in? Does the setting influence the findings positively or negatively?	The study was conducted in Victoria, Melbourne. However, the result can be generalised	
Sample: What is the sampling approach? Is this justified for the research design? Is the sample generalisable? Does that matter?	A very rich sample size of n=1507 nulliparous women during and after birth. Out of 209 migrant women, 20 women represent Sri Lanka	However, out of the 1507 participants, 1072 were Australian women whereas only 209 migrant women were included in this study. Underrepresentation of the samples, especially those who didn't speak English are not represented
Data Collection: How was the data collected? Where there any positive or negative influences on how data was collected?	Standardised questionnaires to assess physical and psychological needs. The study procedures, information materials and questionnaire	Utilising questionnaires alone to gather data on migrant women from non-English speaking background could

Concept	Strengths	Limitations
	were piloted to assess the relevance	have led to issues in misinterpretations.
Ethical considerations: Was the data kept confidential? Were the participants protected? Were participants able to decline?	Yes, obtained by the university, hospitals and the participants	
Analysis: Are you able to understand how the researchers analysed the study? Did they use a recognised, validated process?	They have utilised validated tools for analysis. The process of the analysis appears rigorous.	They have utilised EDPS to assess depressive symptoms with a cut-off mark of ≥13 indicating probable clinical depression. Therefore, the participant with the mild symptom (≥ 11) may not have been detected.
Results: Were the results easy to understand? Were the results presented in a way that was appropriate for that type of research?	The results were easy to understand. Discussed in table form and further elaborated in the context.	Although the results have well compared the prevalence of mental health issues between the native-born and the immigrants, the causation for these significantly different outcomes could have been more illustrated
Discussion: Was the research placed in the context of other studies/ theories? Was the discussion informative? Do you understand about the gaps in knowledge? Was the literature used current?	Yes, informative. Discussion unravels some novel findings. According to the results of the study, it shows that single time psychological screening to identify MHI is not sufficient for immigrant women. They have an elevated risk of developing/ presenting symptoms after 2 weeks postpartum. Similarly, they were less emotionally satisfied with their	The results could have been illustrated in graphs rather than in tables as this is a comparison study.

Concept	Strengths	Limitations
	partners within the first 3 months post-partum.	
Conclusion: Does the conclusion reflect the findings and the discussion?	Similarly opens new avenues for future research	
Key arguments generated from your analysis:	An interesting and unique research approach. Although there were certain limitations this article it broadens up the knowledge on perinatal mental health issues among migrant women.	
	YES	**NO**
Would you say this study was robust enough to base your opinion/ practice on?	Yes	

Record here the reference for the paper to be analysed:

Life with a new baby: How do immigrant and Australian-born women's experiences compare?

Bandyopadhyay, M., Small, R., Watson, L.F. and Brown, S., 2010. Life with a new baby: How do immigrant and Australian-born women's experiences compare?. *Australian and New Zealand journal of public health*, *34*(4), pp.412-421.

Concept	Strengths	Limitations
Journal: Is this peer reviewed?	Yes	
Title: Is the title clear? Does the title reflect the content of the article?	The title indicates the article is about perinatal mental health	The title has qualitative traits however the study was a quantitative approach
Authors: are they qualified in the field/ topic written about?	Yes, Affiliations provided	
Abstract: Is this easy to understand?	The abstract indicates their aims, methods and results and the conclusion. Informative	However, the findings were based on PRISM survey conducted between 2000 to 2002 which is out dated by the time this article was published in 2010.
Literature review section: Is this current? Does the review inform you about why the topic is important?	Yes, situates well in relation to published literature.	There are issues in generalisability based on currency and context.
Aim: Is there a clear aim visible?	Yes, clearly indicated in the abstract	Doesn't specifically discuss about maternal mental health needs
Methodology which includes:		
Design: is there a clear expression of the design?	Yes, they have very clearly demonstrated their study design.	However, there are certain issues in research methods utilised in this study.
If RCT: Is the randomization process clear? Was there any problems with the randomisation process?		

Concept	Strengths	Limitations
Compliance to the trial: Were the researcher's ideas compiled with?		
Setting: Is the setting the same as your environment? Is the study sat in the same country you work in? Does the setting influence the findings positively or negatively?	The study was conducted in Victoria, Melbourne.	Cannot be generalised due to issue in currency and the context
Sample: What is the sampling approach? Is this justified for the research design? Is the sample generalisable? Does that matter?	Yes, there is a representation of Sri Lankan women which is 4%. The larger sample size (n=10.440) is a strength of this study.	The samples do not specifically represent their mental health needs although they provide more of a generalised view on maternal health services. Women up to 3 months postpartum are only represented.
Data Collection: How was the data collected? Where there any positive or negative influences to how data was collected?	The mental health aspect of the cohort was assessed using EPDS (Cox et al., 1996) and Short Form 36 (SF-36) a well-validated instrument developed by RAND, Research And Development (Hays and Sherbourne,1992), used widely across the country to assess both physical and mental health aspects.	A qualitative component had not been included in the study is a limitation. Women lost the opportunity to express themselves.
Ethical considerations: Was the data kept confidential? Were the participants protected? Were participants able to decline?	Ethical consideration had been granted from relevant authorities and from the participants.	However, in this study, the categorisation of the migrant sample groups refers to 'immigrant women proficient in English' whereas the migrant women with less proficiency were referred as 'immigrant women less proficient in English'. It is unknown if this categorisation had been demonstrated in the consent forms and participant information

Concept	Strengths	Limitations
		sheets as this term could be lexically discriminating the women with less proficient in English who participated in the study
Analysis: Are you able to understand how the researchers analysed the study? Did they use a recognised, validated process?	Yes, statistical analysis is indicated	However, better is analysis is clarified further.
Results: Were the results easy to understand? Were the results presented in a way that was appropriate for that type of research?	Yes, clear.	Although percentages were clearly indicated, the results were not indicated in numbers.
Discussion: Was the research placed into the context of other studies/ theories? Was the discussion informative? Do you understand about the gaps in knowledge? Was the literature used current?	The discussion has places into the context of other studies. The mix findings are presented clearly showing no researcher bias to support the hypothesis.	
Conclusion: Does the conclusion reflect the findings and the discussion?	Yes, the conclusion reflects the findings.	
Key arguments generated from your analysis:		Bandyopadhyay et al.,'s (2010) was based on he results gathered from PRISM survey one of the largest surveys conducted between 2000 to 2003.Hence, the findings are outdated. Similarly, the data collection methods

Concept	Strengths	Limitations
		utilised standard questionnaires such as EPDS which is argued to be less sensitive on migrant women. Women in this study lost the opportunity to express themselves.
	YES	**NO**
Would you say this study was robust enough to base your opinion/ practice on?		

Record here the reference for the paper to be analysed:
Common maternal health problems among Australian-born and migrant women: A prospective cohort study

Navodani, T., Gartland, D., Brown, S.J., Riggs, E. and Yelland, J., 2019. Common maternal health problems among Australian-born and migrant women: a prospective cohort study. *PLoS One*, *14*(2), p.e0211685.

Concept	**Strengths**	**Limitations**
Journal: Is this peer reviewed?	Yes	
Title: Is the title clear? Does the title reflect the content of the article?	Yes. The title reflects the content of the article	This study focuses on common maternal health problems
Authors: are they qualified in the field/ topic written about?	Yes	
Abstract: Is this easy to understand?	Yes, the aims, research methods and the findings are clearly demonstrated.	
Literature review section: Is this current? Does the review inform you about why the topic is important?	Yes, clearly demonstrated the existing research gaps highlighting the need of conducting this research	However, there are some concerns in literature incorporated in the study. Majority of the are clearly out dated (for instance published between 1998 to 2008), however, it also demonstrates that the topic had not been given a focus in latest research.
Aim: Is there a clear aim visible?	Very clear aims.	
Methodology which includes:		
Design: is there a clear expression of the design?	Yes, a quantitative longitudinal survey design utilising standard questionnaire to examine mental health aspects. The design	However, by not adding a qualitative component the team was unable to examine the

Concept	Strengths	Limitations
	enabled to gather information from a large number	phenomenon in depth
If RCT: Is the randomization process clear? Was there any problems with the randomisation process?		
Compliance to the trial: Were the researcher's ideas compiled with?		
Setting: Is the setting the same as your environment? Is the study sat in the same country you work in? Does the setting influence the findings positively or negatively?	The study was conducted in Victoria, Melbourne. Hence the results cannot be generalised.	
Sample: What is the sampling approach? Is this justified for the research design? Is the sample generalisable? Does that matter?	A very rich sample size of n=1507 nulliparous women during and after birth. Austrian-born women (n=1115) and migrant women (n=243 including n=21 Sri Lankan women)	Smaller representation of Sri Lankan women
Data Collection: How was the data collected? Where there any positive or negative influences to how data was collected?	Data was gathered through a self-administered questionnaire and computer assisted telephone interviews.	It is unknown if computer assisted telephone interviews led to a bias.
Ethical considerations: Was the data kept confidential? Were the participants protected? Were participants able to decline?	Yes, obtained by the university, hospitals and the participants. Data management and preservation had been given dominant focus to protect participants confidentiality.	
Analysis: Are you able to understand how the researchers analysed the study? Did they use a recognised, validated process?	Standard descriptive statistical packages were utilised to analyse data.	However, the cut-off score to detect severe depression in this study was set to ≥13 in both antenatal and postnatal

Concept	Strengths	Limitations
		stages although a Danish study had observed the cut-off is different in every trimester as the symptomatology contrasts based on each trimester (Smith-Nielson et al., 2018).
Results: Were the results easy to understand? Were the results presented in a way that was appropriate for that type of research?	The results were clearly demonstrated, and links were further provided to access additions findings	
Discussion: Was the research placed into the context of other studies/ theories? Was the discussion informative? Do you understand about the gaps in knowledge? Was the literature used current?	Yes, informative. Discussion is placed into the context of other studies and theories.	The discussion mostly focuses on migrant women with proficiency in English language from non-English speaking backgrounds. However, much focus is not given on women with less English language proficiency living the HIC which is a limitation of the discussion
Conclusion: Does the conclusion reflect the findings and the discussion?	Similarly opens new avenues for future research	
Key arguments generated from your analysis:		Sri Lankan representation was relatively low in this study and the study

Concept	Strengths	Limitations
		did not mainly focus on PMHI. There are certain ethical issues in collecting data. Excluding women with less English language proficiency is also a limitation of the study
	YES	**NO**
Would you say this study was robust enough to base your opinion/ practice on?	Yes, this is the latest article publish on maternal mental health with a visible representation of Sri Lankan women in HIC	

Appendix 3

Checklist of Questions for Designing a Mixed Methods Procedure (Creswell and Creswell, 2018)

Yes, the basic definition is provided in page 43/44	Is a basic definition of mixed methods research provided?
Yes. Provided in page 42/43/44	Are the reasons (or justification) given for using both quantitative and qualitative data in your study?
Yes, provided in the methodology in page 42/43	Does the reader have a sense for the potential use of mixed methods research?
Yes, provided in page 42/43/44	Are the criteria identified for choosing a mixed methods design?
Yes, the convergent mix-methods design is identified and defined in page 43	Is the mixed methods design identified?
Yes, the visual model is displayed in Figure 3.1 in 50	Is a visual model (a diagram) presented that illustrates the research strategy?
Yes, provided in page 47/49	Are procedures of data collection and analysis mentioned as they relate to the chosen design?
Yes, sampling strategy in provided in page 45/46/47	Are the sampling strategy for both quantitative and qualitative data collection mentioned for the design?
Yes, in page 49/50	Are specific data analysis procedures indicated for the design?
Yes, in page 49/50 and the joint display analysis attached in Appendix 10 further demonstrates how data were triangulated	Are the procedures for validation mentioned for the design and for the quantitative and qualitative research?
Yes, data merging took place in results section in page 57/78 and synthesis took place in discussion from 79/99.	Is the narrative structure of the final study or dissertation or thesis mentioned, and does it relate to the type of mixed method design being used?

Appendix 4
PPIE Involvement

GRIPP2 Short form (Table 3.1)

Topic	Item
Aim	Four Sri Lankan women with different social backgrounds in the Sri Lankan community living in the UK were approached through personal connection to inform the design of the study.
Method	They were contacted via the telephone to gain their opinions on the proposed study in view of the potentially sensitive research topic. Their views and feedback were further sought in designing the questions for the survey. The survey was also pre-tested by the PPIE members. The four women were also contacted over the phone to gain comments on the flyer and the social media information that was circulated in the data collection phase.
Results	Although due to her familiarity the author's initial thought was to collect data through face-to-face interviews, the comments of the PPIE members led to the decision to collect data through anonymous surveys using both open and closed text. By conducting an anonymous survey therefore certain issues such as response biases (for instance, social desirability), issues in recruitment were thought to be reduced to an extent.

	The PPIE group comments were extremely favourable about the anonymous survey method.
Reflections/Critical Perspectives	Consulting PPIE members steered this research towards an appropriate and culturally sensitive approach. However, it was challenging to find women to act as PPIE members and although the researcher contacted about 10 Sri Lankan women, only 4 agreed to act in this role. The author believes that this difficulty to find PPIE is as a result of this being a sensitive/taboo topic within the community. Due to the language proficiency of the researcher all women consulted as PPIE were Sinhalese and residing in the UK. Therefore, a lack of representation of Tamil and Muslim women (categorised as Sri Lankan) could lead to a limitation of the research.

Appendix 5
Social Media Groups where the flyer was circulated

Name of the Group	Number of members
Sri Lankans in the UK	10,200
Api Sri Lankans	65,644
Sri Lankan Community in the UK	861
Hounslow Smashers	500
Sri Lankan community in the UK	1400
British Sri Lankan Art Forum	605
Sesath UK	10,281
Sri Lankans in London	2675

Appendix 6
Ethical Approval Letter

Edge Hill University

Dear Rashmi
Study title: Title- Exploring the views and opinions of Sri Lankan Women about mental health from pregnancy to two years after their childbirth when living in the UK: a mixed method survey about perinatal mental health (Lay title-A survey of Sri Lankan Women about mental health from pregnancy to two years after their childbirth when living in the UK)
REC reference: ETH2021-0191
On the 16th July 2021, the Health-related Research Ethics Committee approved your ethics application for the project entitled "Title- Exploring the views and opinions of Sri Lankan Women about mental health from pregnancy to two years after their childbirth when living in the UK: a mixed method survey about perinatal mental health (Lay title-A survey of Sri Lankan Women about mental health from pregnancy to two years after their childbirth when living in the UK)" for the period 1st August 2021 - 16th January 2022.
Please note that should your project extend beyond these dates, you must request an extension by contacting the REC Secretary.
Additionally, should there be any planned changes to the project, you must notify the REC Secretary. In the case of major changes, it is possible that a new ethics application will be required.
The Principal Investigator is responsible for ensuring that all data are stored and ultimately disposed of securely in accordance with the Data Protection Act (2018) and as detailed within the approved proposal.
For studies involving the NHS:
1. (NHS studies only) NHS Research governance processes must be adhered to. If required, an application must be made to the HRA for approval for the research to be conducted in the NHS. NHS R&D departments (in Trusts where data is being collected) may also need to be approached for Trust permission to proceed.
2. If the project requires HRA approval and/or NHS ethical approval, please submit the confirmation of approval from the relevant Committee to Haplo using the project amendment function, before commencing the study.

APPROVED DOCUMENTATION
The study documentation that has been reviewed and approved is detailed below, any changes to these documents should be agreed with HREC before use and the version control updated:
Survey questions v2 07.07.21
PIS v 2 07.07.21

Flyer v2 07.07.21
Risk assessment v2 07.07.21
DMP v2 07.07.21
Proposal v2 07.07.21
Yours
Mary O'Brien
HREC Chair

Ethics ETH2021-0191: Rashmi Danwaththa Liyanage (High risk)

Appendix 7

Survey Question

Survey Questions

You are being invited to take part in an anonymised short online survey to gather the views and opinions of Sri Lankan Women about mental health from pregnancy to two years after their childbirth when living in the UK. Before you decide if you are happy to take part, it is important that you have read the information sheet and discuss it with others if you wish. Please click on the link below to go through the information sheet of the study

Links to the Participant Information Sheet
https://admin.onlinesurveys.ac.uk/account/edgehill/preview/exploring-the-views-and-opinions-of-sri-lankan-women-about-2?referer=dashboard

To take part you should be: -

- **A Sri Lankan lady living in the UK**.
- **16 years or over**
- **Pregnant, given birth or had a miscarriage or stillbirth within the last 24 months** in the UK

Completing the anonymised questions and clicking submit at the end of the survey means that you have consented for us to use your responses as a part of our study. The results of this project will be published in relevant journals and will be presented in academic conferences. We will also write a short summary to share on relevant social media community groups where the flyer was circulated. You will not have to answer any questions you do not want to, and you can end the survey at any time. We will not be asking for any information which will identify who you are, **please do not share any information such as your name, address, or phone number**. If you have any concerns about your mental health, there are support links at the end of the survey.

Let's start…

The first six questions are about you.

1.) Please tick all the statement/s which best describes you

Category	Options
I'm a Sri Lankan lady living in the UK	
I'm 16 years or over	
I am pregnant	
I have given birth to a baby during the last 24 months	

I was pregnant, but had a miscarriage during the last 24 months	
I was pregnant but my baby was still born during the last 24 months	
None of the above	Thank you for your interest in this study, however, this survey is just focussed on Sri Lankan women living in the UK who are pregnant, have given birth to a baby during the last 24 months or who have had a miscarriage or still birth during the last 24 months. So, please do not answer any more question. However, if you feel you have any concerns about your mental health, please scroll down to find support links at the end of the survey

1b.)

Category (this will be a pop-up logic if the woman selects 'I have given birth to a baby during the last 24 months' above)	**Age in months**
If you have given birth, please let us know your baby's age	

2.) Please tick which of the following best describes your ethnic background

Category	**Please tick one only**
Sri Lankan Sinhalese	
Sri Lankan Tamil	
Sri Lankan Muslim	
Sri Lankan Burgher	
I prefer not to say	
Other	

Please specify if you ticked other

3.) What is your age?

Age	**Please tick one only**
16-20	
21-30	
31-40	
41-50	
51 years and above	
I prefer not to say	

4.) What is the highest level of education you have completed?

Category	Please tick one only
Primary	
Secondary	
Vocational training	
Degree level or above	
Other	

If you ticked other, please specify

5.) Please tick which of the following best represents your employment status?

Category	Please tick one only
Never worked	
Working now Full time	
Working now part time	
I'm on maternity leave	
I'm temporarily away from work	
Other	

If you ticked 'other', please specify

<u>These questions focus on your opinions of mental health, you can skip any questions you do not want to answer</u>

6.) Compared to before you were pregnant, please tick which best applies to your mental health at the following times.

My mental health is**:**

Category	During pregnancy (please tick only one)	After you gave birth/ had a miscarriage (please tick only one)
Much better than before I was pregnant		
Better compared than before I was pregnant		
About the same		
Worse than before I was pregnant		
Much worse than before I was pregnant		
Not applicable		

7.) Do you feel the topic of mental health in Sri Lankan women who are pregnant or have just had a baby in the UK **should be discussed by the following**? (For each category, please tick one only)

	With my partner	With my family	With my friends	In my community	Nationally
Yes					
No					
Not sure					

7a.) Please explain the reason for your answers

8.) Which of the following healthcare professionals **asked about your mental health**? Please tick all that applies.

Category	During pregnancy	After you gave birth/ had a miscarriage
General Practitioner (GP)		
Health Visitor (HV)		
Midwife (MW)		
Other		
None		

8.a) If you ticked **other** can you tell us who else which other professionals asked about your mental health?

<u>These questions are about accessing information about mental health during pregnancy or after giving birth</u>

9.) Which of the following healthcare professionals **provided you with information** about mental health? Please tick all that applies.

Category	During pregnancy	After you gave birth/ had a miscarriage
General Practitioner (GP)		
Health Visitor (HV)		
Midwife (MW)		
Other		
None		

9.a) If you ticked **other** can you tell us which other professionals provided you with information about your mental health?

10.) If you were provided with **information** about mental health, can you tell us what information you were provided with?

11.) If you were provided with information about mental health can you tell us **how useful** this information was to you?

Category	Pick one
Useful	
Not useful	
Not sure	
I was not provided with any information	

11.a.) If you found it **useful or not useful** could you, please tell us **why**?

12.) Were there **any other places** you **accessed information** about mental health during pregnancy or after 2 years of birth?

13.) In your opinion, what would help to **improve access to information** about mental health for Sri Lankan women?

Please comment

<u>These questions are about your opinions of accessing support services</u>

14.) In your opinion, what would help you to **maintain good mental health** during your pregnancy? **Please comment**

15.) In your opinion, what would help you to **maintain good mental health** after you have given birth? **Please comment**

16.) If you needed mental health support, were you able to **access it**? (Please tick only one for each category)

Category	During pregnancy	After you gave birth/ had a miscarriage
I **did not need** to access any mental health support		
~~I~~ **was able** to access support for my mental health		
I **needed to** access support but was **not** able to access it		

16.a.) If you were **not** able to access **support**, could you please explain why

16.b.) If you did **access support**, could you tell us **what** kind of support you accessed?

16.c.) Were you **satisfied** with the **support for mental health you accessed**? (Please tick only one for each category)

Category	During pregnancy	After you gave birth/ had a miscarriage
YES, it was helpful		
NO, it was unhelpful		
Not sure		

16.c.i.) Could you please explain **why** you found the support **helpful or unhelpful**?

16.c.ii.) **What** could have made **this support better**?

17.) In your opinion **what issues** may Sri Lankan women in the UK who are pregnant or have given birth face when accessing mental health support?

Please comment

Thank you for answering the questions in this survey, please see below some links to support services.

Links to support services

1.) NHS helpline and online service- For urgent mental health advice
Contact- 111
Website- https://111.nhs.uk/

2.) MIND- Mind is a charity which provides advice and support to anyone who suffers from mental health concerns.
Contact: 0300 123 3393 (Monday to Friday, 9am to 6pm)
Website- https://www.mind.org.uk/about-us/what-we-do/

3.) Samaritans- This is a registered charity providing emotional support to anyone who is emotionally distressed, struggling to cope and at risks of suicidal thoughts.
Contact: 116 123 (free 24-hour helpline)
Website- https://www.samaritans.org

4.) PANDAS- PANDAS Foundation UK offers support to every parent who is affected by perinatal mental health issues.
Contact: 0808 1961 776 (11am-10pm everyday)
Website- https://pandasfoundation.org.uk

5.) CALM- A registered charity runs a free confidential and anonymous helpline and webchat service offering support and information to anyone who struggles or in crisis
Contact: 0800 58 58 58 (daily, 5pm to midnight)
Website- https://www.thecalmzone.net/

6.) APNI- Association of Postnatal Illness (APNI) provide support for women who suffers from postnatal issues.
Contact: 0207 386 0868 (Daily, 10am to 2pm)
Website- https://apni.org

7.) Netmums- This is a peer support service that provide advice and information for both mothers and fathers about parenting.
Website- https://www.netmums.com/

8.) Best Beginnings- Free NHS accredited baby buddy app provides 24/7 support for parents who feels anxious and overwhelmed
Contact: 020 7443 7895
Website- https://www.bestbeginnings.org.uk/ [1]

[1] For readability purposes, the original survey and the participant information sheet are presented in Microsoft Word versions in this dissertation.

Appendix 7(a)

Participant Information Sheet

A survey of Sri Lankan Women about their mental health from pregnancy to two years after their childbirth when living in the UK

I am a student at Edge Hill University doing a research project to find out what Sri Lankan women think about Perinatal Mental Health. All Sri Lankan ladies living in the UK who are pregnant, have given birth, had a miscarriage or a stillbirth during the last 24 months are invited to take part.

Before you decide to take part in this survey it is important for you to understand what the project is and what taking part involves. Please ask about anything that is not clear to you through contacting the email addresses supplied below.

1. What is the purpose of this research?

Perinatal mental health is important to women. The perinatal period runs from pregnancy to two years after childbirth. This study aims to explore Sri Lankan women's views and opinions about perinatal mental health when they are living in the UK. I hope this study may help Sri Lankan women's views to be understood and heard.

2. Do I have to take part?

No, you do not have to take part. It is completely your choice to take part in this survey or not.

3. What do I have to do if I decide to take part?

If you would like to take part this should take 15-20 minutes. This is an anonymous survey, and we will not ask you to share any personal details. When you press submit at the end of the survey your answers will be sent to the researcher. Your consent will automatically be granted by clicking submit. As this is an anonymised survey, once you have submitted your answers, we will not be able to withdraw your responses.

The University is committed to ensuring compliance with current data protection legislation. Therefore, the university confirms that all data collected is used fairly, stored safely, and not disclosed to any person unlawfully. The University is a data controller and, in some instances, a data processor of this data.

4. What are the possible benefits and risks of taking part?

We do not think there are any disadvantages or risks from taking part in this project. However, answering the questions may mean you think about something upsetting that has happened to you during pregnancy and/or childbirth. If you are upset, we are sorry that you feel like this, to help support links are provided at the end of the survey.

There will be no direct benefits of taking part in this project. However, we hope to gain a better understanding about the views and opinions of Sri Lankan women in relation to perinatal mental health.

5. What if something goes wrong?

If you have any questions or concerns about this project, please contact the research team on the contact details provided below. If you feel that your concern is not handled to your satisfaction, then you should contact the secretary of Research Ethics Sub-Committee at Edge Hill University (research@edgehill.ac.uk, see below for more information).

6. What will happen to the results of the research project?

The results of this project will be published in relevant journals and presented in academic conferences. A short summary will be shared on relevant social media community groups where the flyer was circulated. The results gathered from anonymous data of will also be available for data sharing for future research purposes, on request to the research team. In line with General Data Protection Regulation (GDPR) and Edge Hill University Privacy Policy confidentiality of the participants will be maintained by conducting anonymous surveys using Online Surveys.

7. How and where will anonymous data be retained?

During the data collection phase, the information will be preserved within Amazon Web Service (AWS) in the Republic of Ireland. By the end of the data collection phase the data will be securely transferred and stored on the University server. Once data has been exported, the data on the AWS will be deleted. After completion of the research, the anonymous data will be stored for 10 years and will be available on request to access via the Edgehill University Research Data Repository for future use.

8. Who has reviewed the project?

This project has been approved by the Edge Hill University Health Research Ethics Committee (HREC) (Reference number: ETH2021-0191).

9. Contacts for further information

Principal Investigator- Rashmi Danwaththa Liyanage, Faculty of Health, Social Care and Medicine, Edge Hill University, UK. email- PMHStudy@edgehill.ac.uk

Director of Studies- Dr Lesley Briscoe, Faculty of Health, Social Care and Medicine, Edge Hill University, UK, email Briscoel@edgehill.ac.uk

University Research Ethics Sub-Committee (URESC)- Phil Bentley, URESC Secretary, Edge Hill University, UK, email research@edgehill.ac.uk

Thank you for taking time to read about this research

Appendix 8

Flyer

Sri Lankan women in the UK!

Would you like to share your anonymised views and opinions about mental health during pregnancy and after childbirth?

Are you a Sri Lankan lady 16 years of age or over, living in the UK?

Are you pregnant, given birth, had a miscarriage or stillbirth within the last 24 months?

We would like to invite you to take part in a confidential online survey. This project is the first in the UK to seek the views and opinions of Sri Lankan women on their perinatal mental health and we would really like to hear from you....

- Simply access the link below to share your views in a quick anonymous online survey
- The survey takes about 15-20 minutes to answer all the questions
- This survey will not be asking any personal details that will identify you
- By clicking the submit button you will be giving us permission to use your answers

Picture by courtesy of Durga Harischandra

Access more information and the online survey at:

□□□□□- https://edgehill.onlinesurveys.ac.uk/utfchkua9d

□□□□□□□□□□ □□□□□□□□□□□□ - https://edgehill.onlinesurveys.ac.uk/utqfy7bqm6

English- https://edgehill.onlinesurveys.ac.uk/a-survey-of-sri-lankan-women-about-mental-health-from-preg

For more information click- https://edgehill.onlinesurveys.ac.uk/a-survey-of-sri-lankan-women-about-their-mental-health-fro

Contact the principal investigator at PMHStudy@edgehill.ac.uk for more information

Edge Hill University

www.edgehill.ac.uk

REC Reg No- ETH2021-0191

2 The painting in the flyer was specifically designed for this study and owned by the author to minimise concerns relating to copyrights.

Appendix 8(a)

Links to the survey

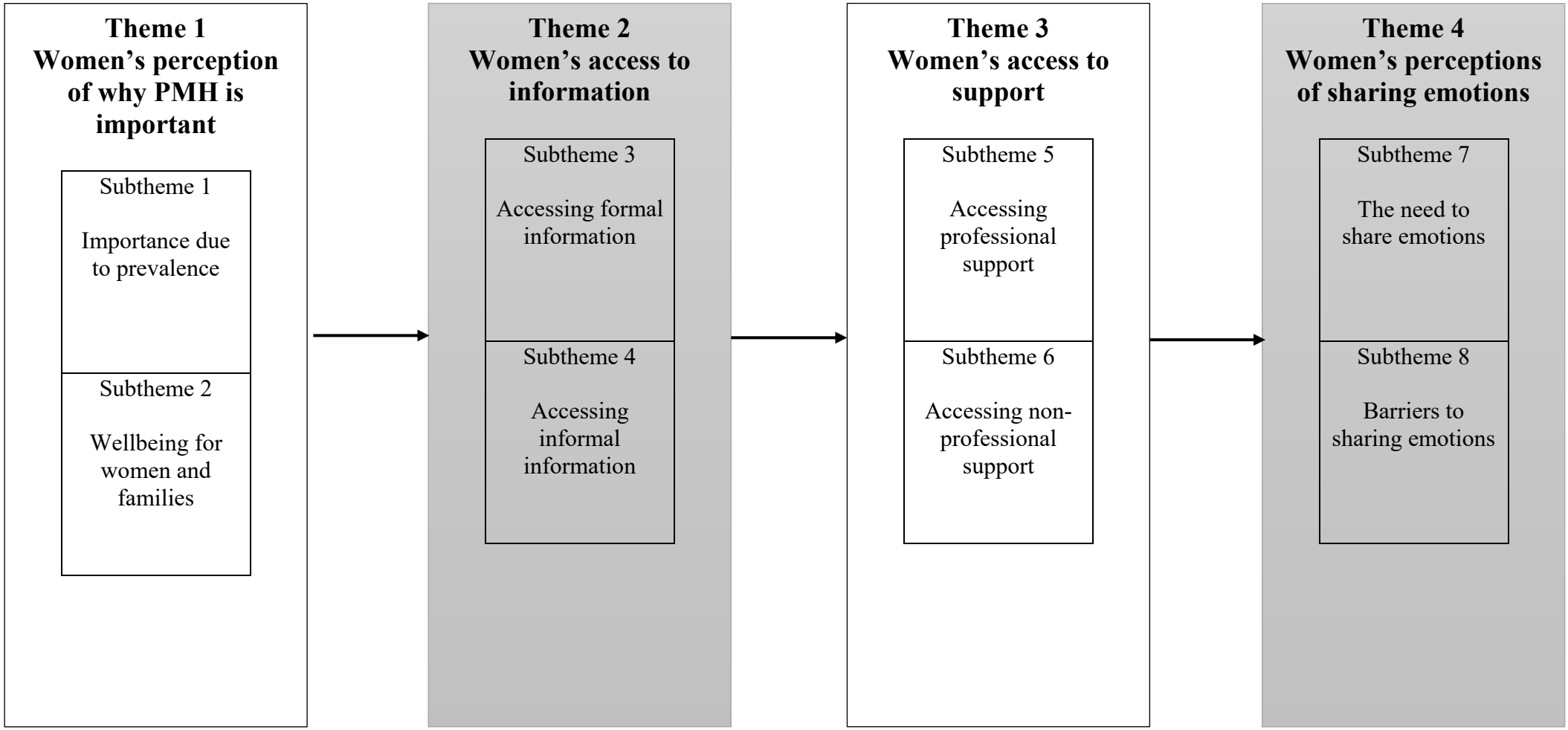
Twitter- https://twitter.com/EHU_FHSCM/status/1422927230825545729?s=20

Facebook- https://www.facebook.com/EHUFHSCM/photos/a.1718113405074291/3069592563259695/?__cft__[0]=AZXMptCptf8IrjSn-Fr5KkggEfmC_1JMCVyoaNVrUbMvRdlx9JBLL7rL_ygNdE3mdwfqep-cw2DFOVsTCbgi8VOn67kES-sFUuxo2lWZ1QbS4vHHivG-PEubwGZHwNGvu7a7Dp2wVcjtWhijlJuozhg4sK9IU6SR3kbpNfv7KGc_gDRa0CZS0AbuHqD4kabTFas&__tn__=%2CO%2CP-R

Appendix 9

Thematic analysis

Thematic map of themes emerged from survey responses



Appendixes for thematic analysis of the qualitative strand

Coded findings under each qualitative question

Q7a. Explain the reasons for your answer

Number of responses = 24

Research Objectives	Key-themes	Sub-theme		Codes	
Examine the reported views and opinions of Sri Lankan women in the UK about perinatal mental health Examine views about what maintains good perinatal mental health for Sri Lankan	Divulging concerns with primary social groups (Kin and close friends)	The sense of security to discuss matters with partner and family	The role of friendship during perinatal stage	<u>The sense of security to discuss matters with partner and family</u> partner and family most helpful partner and family are the closest important to share your feelings with those that matter support from family and friends is much higher than the support she receives from the community distresses easily understood by her family and friends partner family more helpful and trustworthy People around me have the highest impact from the effects and vice versa	<u>The role of friendship during perinatal stage</u> Partner and friends are close people support from family and friends is much higher than the support she receives from the community partner and friends for support

women in the UK				lady's partner & her family Because she definitely needs a good mental health from home husband and family were very much looking forward to it	
	Acknowledgment of difficulties encountered during perinatal stage	Challenging Stage		<u>General view about perinatal stage</u> feel overwhelmed tough times cope with all changes instead of keeping it inside and worrying reducing the stress	
	The importance of emotional wellbeing during this stage		The importance of emotional support during this stage		<u>The importance of emotional support during this stage</u> more confident and strength. building up a good communication between others Sharing emotions release tensions improve better communication with my family giving emotional support talking to someone help me with my problems

	The need of increasing cultural and national awareness due to its taboo nature towards PMHI	Taboo nature towards PMHI in Sri Lankan Society	The need of increasing cultural and national awareness	Taboo nature towards PMHI in Sri Lankan Society promote this back home in Sri Lanka less well discussed in our own country due to age old taboos	The need of increasing cultural and national awareness Not enough awareness spoken nationally to increase awareness very important Mental health is such a pivotal part Everyone should be aware important to share your feelings nationally to make others aware important topic to be spoken more widely in a nation where mental health plays a key role in societal well being, we should take the opportunity to discuss our own mental health More awareness needs to be raised

10. If you were provided with information about mental health, can you tell us what information you were provided with?

Research Objectives	Key-theme	Sub-theme	Codes

Examine Sri Lankan women's opinions about access to professional PMH support in the UK	Formal information about perinatal mental health provided through booklet, online and verbally	Information provided through leaflets	Online support	Information provided verbally	<u>Information provided through leaflets</u> Some leaflet about mental health Information about the mind relaxing gave me some booklets Got some flyers Leaflets	<u>Online support</u> Access to websites with information and contact numbers	<u>Information provided verbally</u> To be happy during the pregnancy to have a balanced diet By health visitor Foetus development consciously Toddler psychology Informed about Access to local mental health support Numbers to contact/support told that after giving birth I might experience symptoms of depression. asked to reach for help Gave all contact numbers of help line for mental health Taught in anti-natal clinics
	Sri Lankan women's misinterpretation of assess	Completing health assessment checklists			Filling questionnaires about mental health Online mental evaluation activities Did some check list		

	ment tools as informati on		Inquired about my mental health
	Unwillin g to divulge any PMH concern s with any seconda ry social group	Did not receive any	Not sure Did not ask about it and not wanted to talk about with others N/A

11a.) If you found it useful or not useful could you, please tell us why?

Research Objectives	**Key-theme**	**Sub-theme**	**Codes**
Examine Sri Lankan women's opinions about access to professional PMH support in the UK	Information was useful as it increased awareness	Increase awareness	Good to be aware. Very important for yourself as well as people who are around you. I would know what to look out for and take immediate assistance. Adjust with the current situation. Take necessary precautions.
	PMH being recognised by the system itself	Moral support PMHI been recognised	Important whenever I was in low mood. Her advice adapted to maintain my mental health. Moral support. Good to know my mental health was recognised.

	improved confidence		
	Preference for professional advice	Professional advice	get professional advice

12 Were there any other places you accessed information about mental health during pregnancy or after 2 years of birth?

Number of responses= 19

Research Objectives	**Key-theme**	**Sub-theme**	**Codes**
Examine Sri Lankan women's access to nonprofessional support for PMH in the UK	Not received from any other places	None	No x 10
	Online support	Websites	NHS online app The Internet Yes babycentre.co.uk Online resources
	Through social networks	Friends Social networks	Office network. Talk to my friends. Friends who have already given birth before.
	Other	Books	Reading books

		Religious places	religious observances

13. In your opinion, what would help to improve access to information about mental health for Sri Lankan women?

Number of responses= 21

Research Objectives	Key-theme	Sub-theme		Codes	
Examine Sri Lankan women's opinions about access to professional PMH support in the UK Examine Sri Lankan women's access to nonprofessional support	How Formal information could be tailored	The need of making Sri Lankan women aware of available information	The requirement of translating information into Sinhalese/ Tamil	The need of making Sri Lankan women aware of available information Information, leaflets and links to websites should be made known to women Well explained by the midwife. make the person understand how important it is for their well-being	The need of translating information into Sinhalese/Tamil Language barrier, low income (may be information in Sinhalese) Translated in to Sinhalese and Tamil language

for PMH in the UK					
	The involvement of healthcare professionals in improving access	Midwife, health visitors and GP should provide information		Midwife should provide such information at booking and follow up Information from the clinic. Antenatal classes antenatal clinics Provision of brochures and leaflets by the health visitors and midwives GP can ask about it Availability of info before hand Continuous support via telephone and text to ensure women know of continued support	

	Increasing awareness among primary social groups about PMHI	The awareness of primary social groups	The importance of media sources in promoting awareness	Breaking taboo nature	The awareness of primary social groups Acknowledgement / understanding by partners and family Talking about it with other mothers Sri Lankan peer support groups Family support support in religious centres	The importance of media sources in promoting awareness Media should play a major role in promo ting mental health support Advertisements and documentaries should be telecasted Publish on web sites	Breaking taboo nature matter without looking at traditional implications if people were more open about the topic

14. In your opinion, what would help you to maintain good mental health during your pregnancy?

Number of respondence= 27

Research Objective	**Key-theme**	**Sub-theme**	**Codes**
Examine views about what maintains good perinatal mental health for Sri Lankan women in the UK	Supportive family background	Supportive partner and family Ability to express emotions with families Pleasant home environment Reliance of partner and extended family	a healthy relationship with spouse and family members need to start from your home supportive partner, ability to talk about feelings spend quality time with family and relatives Love and support from your family Peaceful environment stable income Communication

	Maintaining physical wellbeing	Nutrition Physical fitness	Well-balanced diet good exercise routine Do some yoga fulfil hidden pregnancy cravings healthy meal rest
	Self-realisation, resilience, and positive thinking	Enjoying the pregnancy journey Being mindful about the situation Accepting physiological changes and adapting accordingly Spiritual wellbeing	Take pregnancy as a part of life and enjoy the situation Staying happy and positive thinking enjoy the pregnancy keep away from over thinking reading Listen to gospel music Mindfulness Meditation leisure activities

	Increasing professional and social support	Increasing awareness about PMHI among the community and the society Increasing professional support	the need for members in the society to understand the mental change Professional support: midwives support of health official

15. In your opinion, what would help you to maintain good mental health after you have given birth? Please comment

N=25

Research Objective	**Key-theme**	**Sub-theme**	**Codes**
Examine views about what maintains good perinatal mental health for Sri Lankan women in the UK	Supportive family background as women are heavily reliant on partner and extended family	Supportive partner and family Family support in housework Reliance on extended family in childrearing	A healthy relationship with spouse and family members Support/ love from partners and family Supportive family capable of helping me do daily tasks She definitely needs a support from home support with bringing up baby

	Good quality of life	Plenty of rest in own preferred ways Nutrition Physical fitness	Well-balanced diet a good exercise routine Good nutrition Take as much as rest Have a good sleep Time alone Good amount of sleep Own preferred ways to relax
	Support in emotional well-being	Emotional support Peer support in venting emotions	Keen listeners to share a relax conversation. Involved with post-natal group sessions. Talking to people. Friend capable of listening and helping me with my emotions. Good to be around with the parents and get emotional support through them.
	Being mindful and thinking positive	Cherishing the birth of the child Being mindful about the situation	Enjoy your baby rather than consider it to be a burden Thinking positive as much you can Think your baby is the best assert Enjoy the life with the child

			Spend more time with the baby Focus
	Increasing professional and social support	Increasing awareness about PMHI among the community and the society Increasing professional support	The need for members in the society to understand the mental change Any health care support after given birth All concerned.

16a. If you were not able to access support, could you please explain why

N=5

Research Objective	**Key-theme**	**Sub-theme**	**Codes**
Examine Sri Lankan women's opinions about access to professional PMH support in the UK	Exhaustion in adapting to the new routine	Too busy	I was too busy adjusting to the new surroundings I did not look for support Busy
	Physical pain	Pain	In pain before and after Baby was born
	Lack of awareness in accessing	Not aware	I was not aware of the access routs

Out of 5 responses 2 women mentioned they were busy in adapting to their routine whereas one respondent mentioned about the physical pain she had gone through following her childbirth as a reason for not been able to access. One had reiterated that she was unaware of the pathway to access mental health support.

16b. If you did access support, could you tell us what kind of support you accessed?

N=6

Research Objective	Key-theme	Sub-theme	Codes
Examine Sri Lankan women's opinions about access to professional PMH support in the UK	Support of healthcare professionals to improve PMH	Support in manging PMH	Improve my mental well-being. Support with managing my mental health. Speaking to the health visitor during her home visits post-surgery helped immensely.

16ci. Could you please explain why you found the support helpful or unhelpful?

N=8

Research Objective	Key-themes	Sub-theme	Codes
Examine Sri Lankan women's opinions about access to professional PMH support in the UK	Useful as expert advice guided women to make correct decisions Being aware of receiving professional support following	Right advice guided women to make correct decisions Knowing in advance receiving	It helped me maintain my mental health by giving me the right advice and guiding me. Knowledge in advance helpful for decision making during stressful situations Just knowing that there was a health visitor/GP and midwife during the first few weeks post-surgery was immensely helpful. It's helpful as I was able to defeat my stress after the delivery.

	childbirth boosted women's confidence	professional support was helpful	
	Not useful due to inadequate information provided by the healthcare professionals	Inadequate information	Not enough info

16c. ii. What could have made this support better?

N=7

Research Objective	**Key-theme**	**Sub-theme**	**Codes**
Examine Sri Lankan women's opinions about access to professional PMH support in the UK	Improve the professional involvement by tailoring support to suit individual need	Frequent contacts Making aware of available support	Professional could have been better. Frequent contact of midwife. Better reach to individuals who did not obtain any support. Making it more aware and talking more about it and explaining the support available and how to access. More sessions or info.

Out of 7 responses two were irrelevant.

Q17. In your opinion what issues may Sri Lankan women in the UK who are pregnant or have given birth face when accessing mental health support?

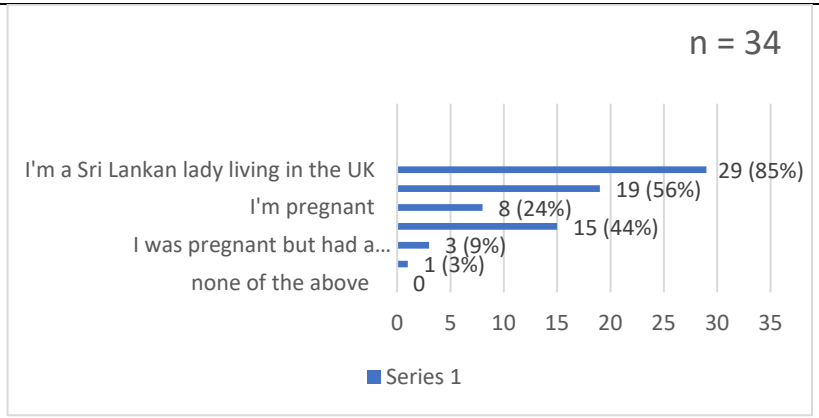
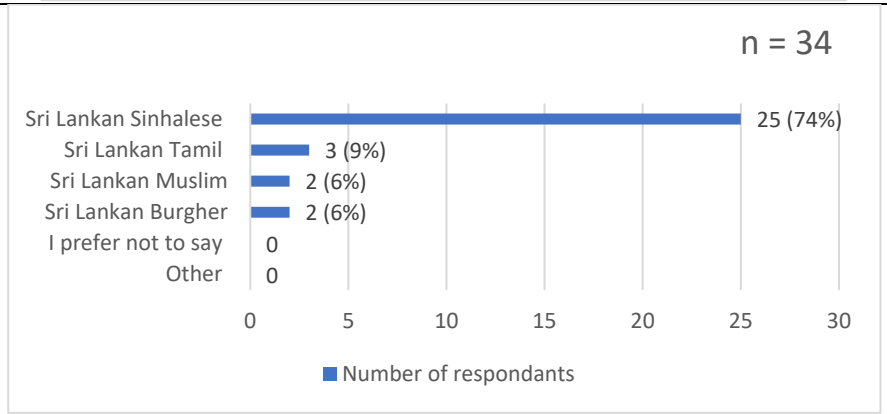
N=23

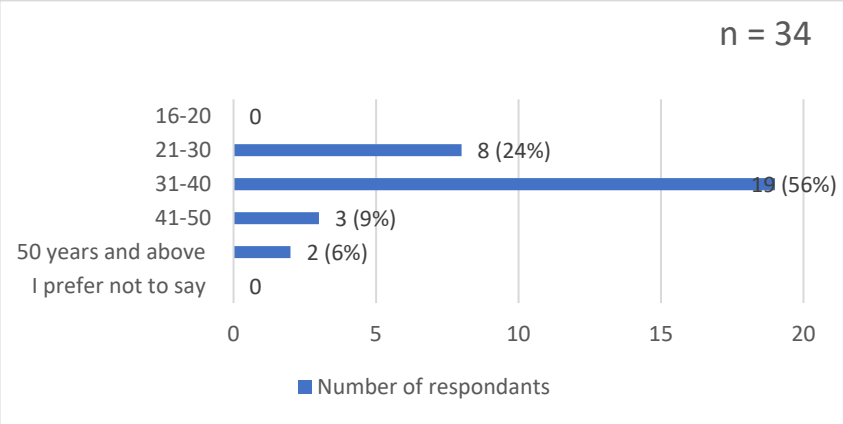
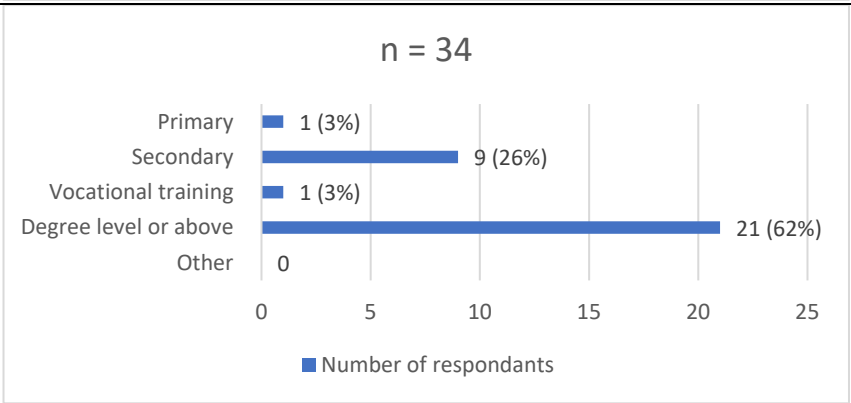
Research Objective	**Key-theme**	**Sub-theme**	**Codes**
Examine the reported views and opinions of Sri Lankan women in the UK about perinatal mental health Examine Sri Lankan women's opinion about access to professional PMH support in the UK	Sri Lankan Societal stigma towards PMHI	Issues in acceptance of PMHI Cultural Stigma Fear of being socially excluded/withdrawn due to PMHI	Mindset of SRI LANKANwomen who are reluctant to accept they ned help Normalization Acknowledgement of the problem Feeling embarrassed about the mental health issues. Social taboos on mental health in Sri Lanka Afraid to communicate Not happy to disclose the issues People with psychiatric issues are not socially recognize Culture says metal Health is not a thing Culture issues
	Lack of awareness about PMHI and PMH services in the UK	Lack of awareness about PMHI Lack of awareness about existing services	Not knowing what facilities are available They don't know how to access support Lack of awareness

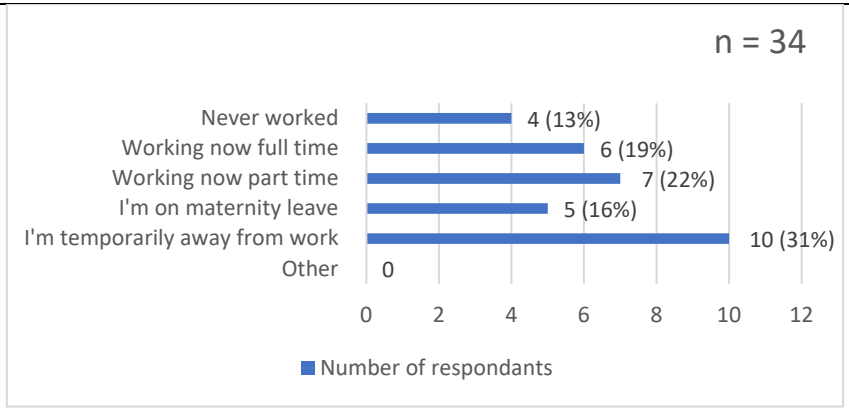
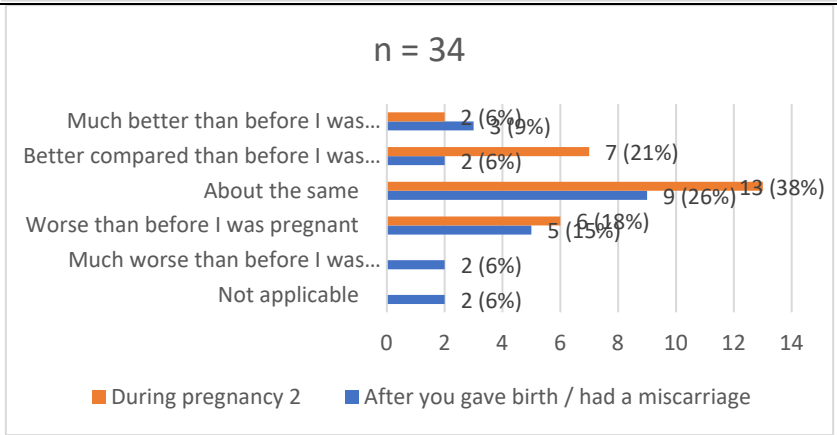
			Perhaps difficulty in accessing services due to lack of understanding the problem
	Language barriers	Language barriers Inability to communicate with healthcare professionals	Difficulty with English Language Incapability of communication Difficulty in communicating problems Most Sri Lankan women may find more support amongst their friends
	Lack of financial and social support	Pressures on household budgets Social deprivation	Economic barriers Employment issues Not enough time to access website or no facility Families by themselves in the country, no one to help Lack of support
	No major concern seems to have in existing services in the UK	Services in the UK have offered its best	Services offered and assistance available in the UK are more than satisfactorily. Everything was fine

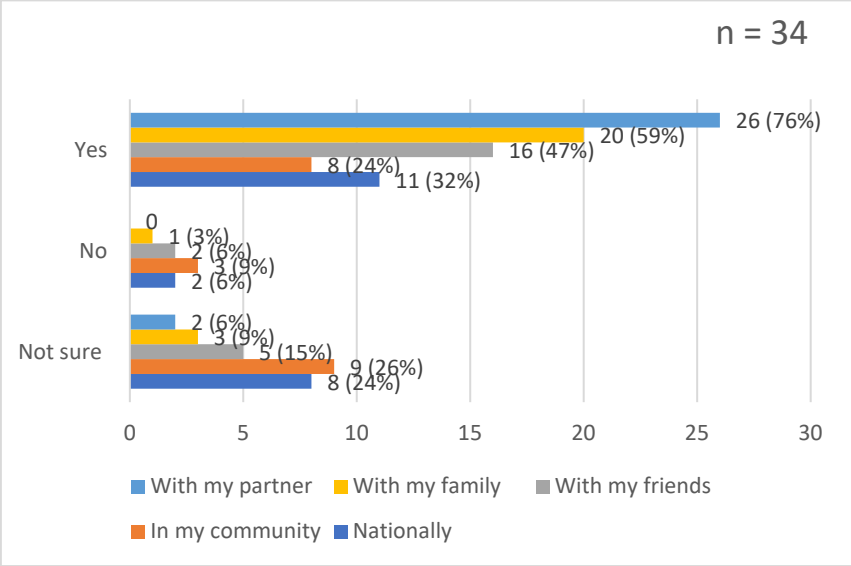
Appendix 10

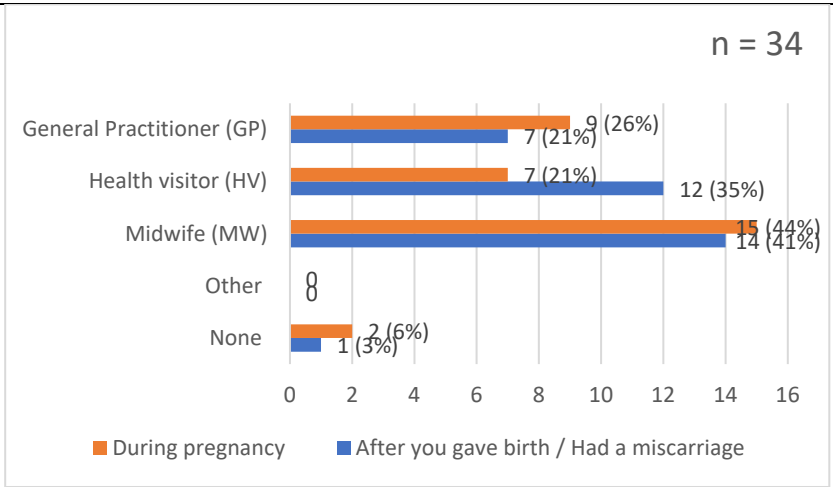
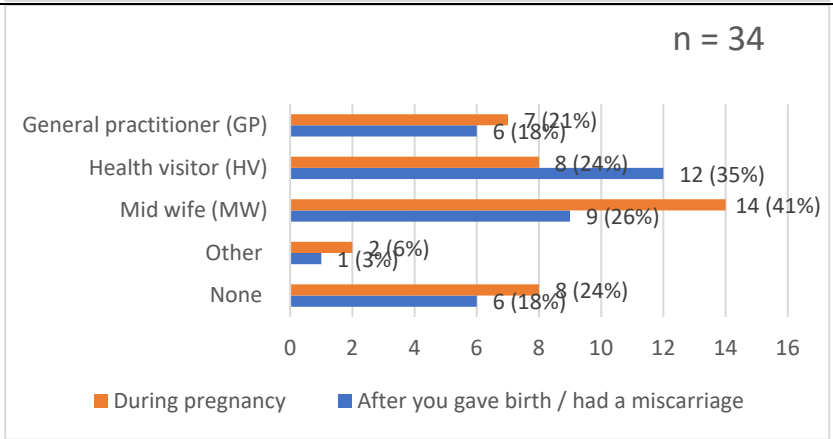
Joint display

Question	Quantitative	Qualitative
1.Please tick all the statement/s which best describes you		
2. Please tick which of the following best describes your ethnic background		

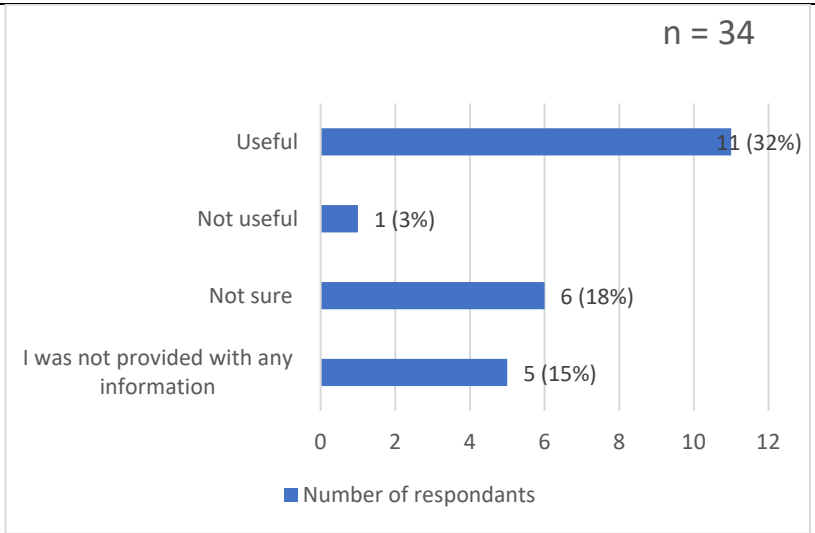
3. What is your age?		
4. What is the highest level of education you have completed?		

5. Please tick which of the following best represents your employment status?		
6. Compared to before you were pregnant, please tick which best applies to your mental health at the following times. My mental health is:		

7. Do you feel the topic of mental health in Sri Lankan women who are pregnant or have just had a baby in the UK should be discussed by the following? Please explain the reason for your answers		**Primary social groups (partner, family and friends) x 23** *Sharing emotions helps me to release tensions in my mind, and it also helps me to improve better communication with my family. (R- 82489242)* *I feel like talking to someone about it will help me with my problems instead of keeping it inside and worrying by myself (R- 83091842)* **Community and nationally x 8** *"Mental health is such a pivotal part in a woman, whether they have had a pregnancy or not. It is less well discussed in our own country due to age-old taboos. However, in a nation where mental health plays a key role in societal well-being, we should take the opportunity to discuss our own mental health and promote this back home in Sri Lanka as well" (R- 82892826)*

8. Which of the following healthcare professionals asked about your mental health? Please tick all that applies.		
9. Which of the following healthcare professionals provided you with information about mental health? Please tick all that applies.		**Other x1** *"A friend of my husband who is a doctor" (R- 83091842)*
10. If you were provided with information about mental health, can you tell us what		**Booklets/online information/verbal x18**

information you were provided with?		*Given me some leaflet about mental health (R- 82247667)* *Leaflets, access to websites with information and contact numbers if in need of a person/service to discuss. (R-82888645)* *I was told that after giving birth I might experience symptoms of depression. And that it was quite common after giving birth. I was asked to reach for help if that ever happened. (R-83091842)* **Checklist/mental health assessments x 3** *Did some checklist (R- 82488716)* *Filling questionnaires about mental health to identify the levels of mood. Online mental evaluation activities (R-82478156)"* **None** *Did not ask about it and not wanted to talk about with others" (R- 82914491)*

11. If you were provided with information about mental health can you tell us how useful this information was to you? 11.a. If you found it useful or not useful could you, please tell us why?		**Useful in increasing awareness x 5** *It was good to be aware of to avoid problems. (R- 82256613)* *I still haven't given birth, but after I do, I would know what to look out for and take immediate assistance if needed. (R- 83091842)* **Useful in increasing self-esteem x 4** *Though I have not used the services they recommended it felt good to know that my mental condition was recognized and that I had access for assistance if I ever needed (R- 82888645)* *Her advice was quite important whenever I was in low mood, her advice intuited me to maintain my mental health (R- 82530680)* **Preference to professional advice x1** *When you have a query, you can get professional advice (R- 83120886)*

12. Were there any other places you accessed information about mental health during pregnancy or after 2 years of birth?		**No x10** **NHS online x 4** **Primary social networks** *Spoke to my friends. They were very supportive. They managed to deal with it (R-82914491)* **Through books and religious observances x 2** *Reading books (R- 82530680)* *Religious observances (R- 82873204)*
13. In your opinion, what would help to improve access to information about mental health for Sri Lankan women?		**The need of HCP making Sri Lankan women aware of available information by other means x 9** *Information, leaflets, and links to websites should be made known to women. (R- 82888645)*

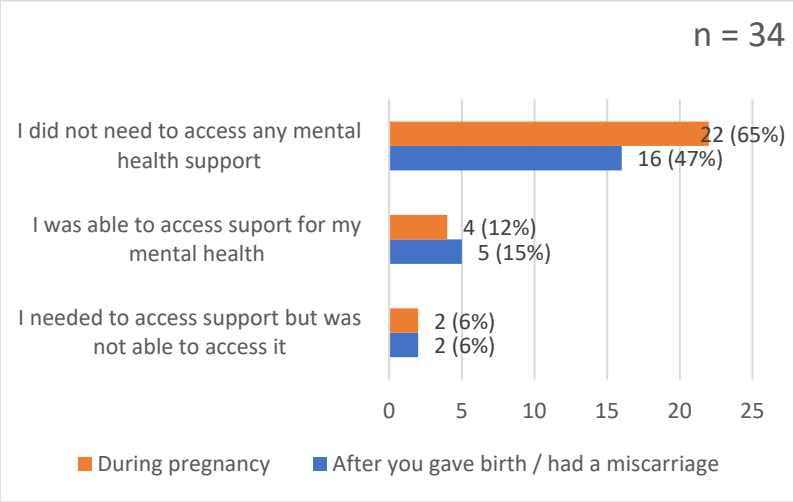
		Information should be translated into Sinhalese and Tamil languages. (R-82977727) *Continuous support via telephone and text to ensure women know of continued support as not all women are forthcoming to seek help. (R- 82892826)* *Look at the matter without looking at traditional implications and make sure to make the person understand how important it is for their well-being (R-82909375)* **Increasing awareness among families x 5** *Acknowledgement/understanding by partners and family. Talking about it with other mothers who have had the problem. (R- 82256613)* **Women who were satisfied with the information received x1** *As I personally experienced, I was given all the support and information from my health visitor and midwife. I didn't feel there should be a special*

		attention of being a SRI LANKANwoman. (R- 82478156)
14. In your opinion, what would help you to maintain good mental health during your pregnancy? Please comment 15. In your opinion, what would help you to maintain good mental health after you have given birth? Please comment		**Family support (n=13 during pregnancy/ n=16 after birth)** *A healthy relationship with spouse and family members, the need for members in the society to understand the mental changes a women go through during pregnancy. (R- 82888645)* *After been through postnatal depression in my opinion and experience good to be around with the parents and get emotional support through them. (R- 82548182)* **Maintaining physical wellbeing x10** *First of all, need to start from your home. Do some yoga so you can relax and can have a peaceful mind. Walk and exercise whenever you can. (R- 82247667)* **a good quality of life x 5**

		Good amount of sleep and own preferred ways to relax (R- 82888645) *Go for walks with the baby and spend more time with the baby. Have a good sleep (R- 83120886)* **sharing emotions x 8** *A well-balanced diet, a good exercise routine, a healthy relationship with spouse and family members, the need for members in the society to understand the mental changes a women go through post-delivery, friends or other people who are keen listeners to share a relax conversation with ((R- 82888645)* *A friend capable of listening and helping me with my emotions (R- 83092277)* **Resilience and positive thinking (n=7 during pregnancy/ n=5 after birth)** *Depends on individual circumstances. Take pregnancy as a part of life and enjoy the situation. (R- 82226243)*

		Think your baby is the best assert you have earned in your life. (R-82832423) **Ambivalence x 2** *Enjoy your baby rather than consider it to be a burden(R-83843923)* **Spiritual activities x 4** *Spiritual well-being - e.g., mindfulness, yoga and meditation (R- 82873204)* **professional support x 2** *Professional support: midwives/GP/ health visitor (R- 82892826)* **post-natal group sessions x 1** *In addition to the above activities, get involved with post-natal group sessions etc. (R- 83542182)*

16. If you needed mental health support, were you able to access it?



16.a. If you were not able to access support, could you please explain why

Did not access- exhaustion x 2

I was too busy adjusting to the new surroundings I did not look for support (R- 83092277)

Physical pain x 1

In pain before and after Baby was born (R- 83136401)

Unaware x 1

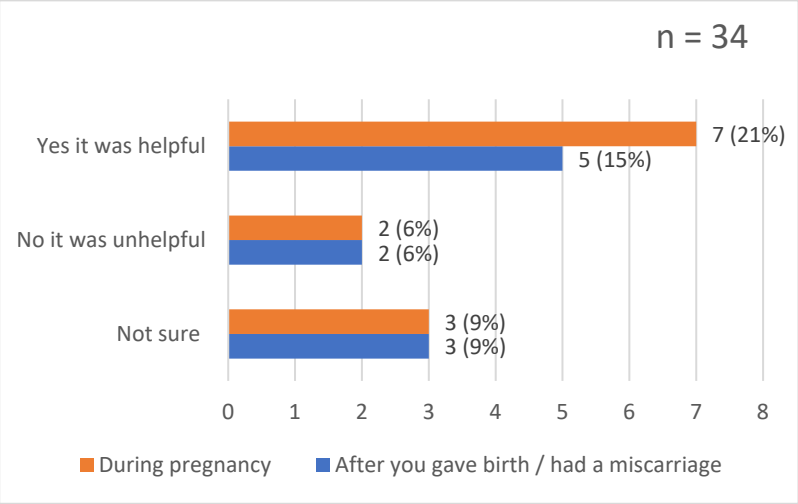
I was not aware of the access routes (R- 83542182)

16.b. If you did access support, could you tell us what kind of support you accessed?

Support in self-management x 4

Speaking to the health visitor during her home visits post-surgery helped immensely. (R-82888645)

Support with managing my mental health (R-83091842)

16.c. Were you satisfied with the support for mental health you accessed? 16.c.i. Could you please explain why you found the support helpful or unhelpful?		**Helpful x 4 (preference to expert advice)** *It helped me maintain my mental health by giving me the right advice and guiding me (R- 83091842)* **Helpful x 2 (reassuring)** *Just knowing that there was a health visitor/GP and midwife during the first few weeks post-surgery was immensely helpful. (R- 82888645)* **Not helpful x 1 (inadequate support)** *Not enough info (R- 83384881)*

16.c.ii. What could have made this support better?		**Tailoring the support for individual needs x 5** *Making it more aware and talking more about it and explaining the support available and how to access (R-83136401)* *Frequent contact of midwife (R-83080886)* *Better reach to individuals who did not obtain any support (R- 83091842)*
17. In your opinion what issues may Sri Lankan women in the UK who are pregnant or have given birth face when accessing mental health support?		**Social stigma x 12** *In my opinion the services offered and the assistance available in the UK is more than satisfactory. what needs to be changed is the mindset of Sri Lankan women who themselves are reluctant to accept and recognize that they need help, and that it is normal to go through hormones changing the mentality of a pregnant women. Once they are ready to accept and normalize that, all the help they need is readily available in the UK (R- 82888645)*

		Social taboos on mental health in Sri Lanka as a nation may hinder women in accessing support. (R- 82892826) *Perhaps difficulty in accessing services due to lack of understanding the problem and not knowing what facilities are available (R- 82226243)* *Feeling embarrassed about the mental health issues. (R- 82489242)* **Language barrier x 6** *I think some pregnant women have difficulty with the English Language. So, they can't really express how they feel. (R- 82247667)* **Social Isolation x 2** *Not enough time to access website or no facility as families are by themselves in the country with no one to help (R- 83120886)* **Tendency of Sri Lankan women finding support among closed social networks rather than seeking professional support x 1**

		Most Sri Lankan women may find more support amongst their friends or family (R- 82873204)