



PROGRAMME FOR THE EARLY
DETECTION AND TREATMENT OF
MENTAL DISORDERS IN WOMEN
DURING THE PERINATAL PERIOD

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1. ABSTRACT

1.1. English

There is an ever-growing consensus among researchers that perinatal mental health issues are a global public health concern, with far reaching implications affecting women, babies, families, and healthcare systems. However, like many issues related to women's health, this topic remains heavily stigmatised and a taboo in many societies. The present project proposes a nursing-led, perinatal home visitation programme in Navarra, Spain. The main objective of this project is to design a public health intervention focused on the detection, early diagnosis, and treatment of perinatal health conditions for women in the region. The secondary aims are to complete a literature review around the subject of perinatal mental health and to gain an in-depth understanding of current guidelines and standard care provided. The project is divided into two parts: the research and literature review and latterly the proposed evidence-based perinatal mental health intervention.

1.2. Spanish

Existe un consenso creciente entre los investigadores sobre como los problemas de salud mental perinatal representan un problema de salud pública global, con implicaciones de amplio alcance que afectan a mujeres, bebés, familias y sistemas sanitarios. A pesar de esto, y como ocurre con otros muchos problemas relacionados con la salud de las mujeres, este problema sigue estando tremendamente estigmatizado y es todavía un tabú en muchas sociedades. El presente proyecto propone un programa de salud pública liderado por enfermeras mediante visitas perinatales a domicilio en Navarra, España. El principal objetivo de este proyecto es diseñar un programa de salud pública para la detección, diagnóstico precoz y tratamiento de los problemas de salud perinatal en la región de Navarra. El objetivo segundo de este proyecto es completar una revisión bibliografía actualizada sobre la salud mental perinatal y las actuales directrices y estándares sanitarios que se aplican. El proyecto está dividido en dos partes: una primera parte de investigación y estudio bibliográfico, y una segunda parte donde se propone una intervención de salud pública, basada en la evidencia científica actual, para mejorar la salud mental perinatal.

2. INTRODUCTION:

In most cultures around the world, the time during pregnancy and immediately after childbirth, or the perinatal period, has connotations of being a fulfilling, beautiful and enjoyable stage in a woman's life. Of course, it can be and frequently this is the case. However, one important aspect of perinatal health which is less regularly discussed is the issue of maternal mental health problems during this time, which remains a taboo area in many societies. Pregnancy and the birth of a baby not only induces hormonal and biological changes but also generates monumental social changes in the responsibilities, roles, expectations, and pressure on women. The World Health Organisation (WHO) highlights maternal mental health as being a key indicator in public health and states that it presents a serious challenge for health systems worldwide (1). Perinatal mental health (PMH) problems are those which occur during pregnancy and up to one year following birth. These issues can include depression, psychosis, anxiety, obsessive compulsive disorder, post-traumatic stress disorder, and eating disorders. The WHO reports that worldwide around 10% of pregnant women and around 13% of new mothers experience PMH issues (2). Globally, the most reported PMH condition is postpartum depression (PPD), which in the United States of America (USA) is found to affect between 10-15% of new mothers (3). Variations of prevalence have been observed between different countries (4), for example in the United Kingdom a prevalence of 13% (5) was reported whilst in France it was recorded at approximately 16% (6). Furthermore, PMH disorders are globally one of the leading causes of maternal morbidity following delivery (7).

The symptoms of PMH conditions can be broad and vary greatly in severity. Symptoms can include decreased appetite, poor concentration, fatigue, agitation, sleep disturbance (although this can be difficult to evaluate due to the nature of a new-born baby's sleep pattern), emotional lability, negative or intrusive thoughts, obsessive behaviours, overwhelming fears, feeling anxious, panic attacks, difficulty bonding with the baby, feelings of hopelessness, thoughts of self-harm or harming the baby and recurrent thoughts of death or suicide.

It is important to note that PPD is a separate and much more serious condition to the common phenomenon of postpartum blues, otherwise known as baby blues, which are described as feelings of sadness, mood swings, irritability, and tearfulness during the weeks in the immediate postpartum period. This is thought to affect up to 85% of women following birth to some degree, however the symptoms are transient, normally resolving with support and education (8). PPD, on the other hand is characterised by its more intense and chronic symptoms, with medical input and therapeutic interventions required to help improve the issue.

PMH conditions need to be taken seriously by healthcare professionals (HCP), healthcare authorities, society in general and governments/policy makers due to the serious implications these illnesses can have on the lives of women, their

babies, and their families. One stark statistic is that maternal suicide is the third direct cause of maternal mortality for the period of 6 weeks post-partum, and a leading cause for up to 1-year post-partum (9). These suicides are often linked to perinatal psychosis or previously underlying mental health issues aggravated by pregnancy or birth. This highlights the necessity for early detection and treatment of PMH problems.

2.1. The impact of perinatal mental health problems

2.1.1. Attachment and bonding

There is an abundance of research which place emphasis on the importance of good maternal mental health for the wellbeing of both the mother and the baby. Development in early childhood, especially during the first 2 years of life when the immature brain is in a phase of huge development, growth, and neuron pruning, has been found to depend largely on a stable connection between mother and infant (10). These connections are established through two main processes: attachment and bonding.

Attachment theory is a well-researched area of human psychology and parenting describing an emotional link between a child and their primary caregiver, typically the mother. Forming attachments is a developmental process and one which is instinctive to humans due to its intrinsic association with survival. It influences psychosocial, emotional, and cognitive development in childhood and normally occurs over the first 2 years of a child's life. Psychologists Mary Ainsworth and John Bowlby stated in one of their seminal pieces, "An Ethological Approach to Personality Development" (11) that the earliest attachments formed by children and their caregivers have a lasting impact on the child's future development into adulthood. They theorised that one purpose of attachment is to keep the infant close to the mother, therefore increasing the child's possibilities of survival. Furthermore, they insisted that the principal determinants of forming attachments were nurturance and responsiveness on the part of the caregiver. They go on to state that it is vital that the primary caregiver is available and responsive to the child's needs allowing for the development of feelings of security. This way the child learns that their caregiver is dependable and forms a base from which they can then begin to explore the social and physical world around them.

This process can be interrupted by the presence of PMH issues, causing difficulties in the attachment process and consequently the possibility of long-lasting developmental problems for the child.

As highlighted in a recent study by Galbally et al (12)., it is important to note that although there can be complications in the attachment

process when the mother is experiencing PMH problems, these effects can be palliated and eventually resolved if parental support is provided, the mental illness is treated, or the causal factors of the mental illness are identified and addressed. Therefore, it is necessary that HCP avoid blaming the mother for breakdowns in the attachment process and instead focus on restoring a healthy parent-child relationship.

Bonding is a term often erroneously used interchangeably with attachment, although it bears similarities in the fact that it also plays an important part of childhood development and is influenced by PMH. Bonding is described as visceral and emotional responses which can occur antenatally and typically strengthen during the first moments, days or weeks following birth. One practice shown to assist with parent-infant bonding, and which is now part of the UNICEF Baby Friendly Initiative is that of skin-to-skin contact (SSC) (13). This involves drying the baby and then placing them directly onto the bare chest of the mother and covering both with a warm blanket for at least one hour immediately after the birth. The sensory stimuli of touch, smell, and warmth as well as the infant latching to the breast to feed during SSC acts as a vagal stimulant which causes a release of maternal oxytocin, a hormone and neurotransmitter, which apart from other postpartum purposes, is pivotal to the bonding process and also is associated with inducing feelings of calmness and stress reduction (14). Bidelow and Power (15) carried out a longitudinal study assessing the short-term and long-term effects of SSC for mothers and their children. They found that mothers who had SSC reported fewer symptoms of PPD and that infants had lower levels of salivary cortisol, a physiological stress indicator, than in the control group of the study. 9 years later they observed that in the SSC group the mother-child dyad involved more engagement and reciprocity conversationally than in the control group. Their study underlines the key role of oxytocin, not only as part of the bonding process, but additionally in bolstering the mother's positive mood state and in enhancing maternal engagement and reducing stress.

2.1.2. Health of the child

PMH is inherently linked to the health of the baby, both in utero and postnatally, with evidencing showing that PMH conditions can produce adverse neonatal, infant and child health outcomes (16).

Studies have found women experiencing PMH illness to have a greater incidence of premature delivery (17,18). Diego et al. (17) propose that this could be due to pregnant women experiencing PMH issues often presenting with elevated levels of prenatal cortisol, which may impact foetal growth directly by reaching the foetus and also by

altering the placental environment, with evidence showing that between 10-20% of maternal cortisol can be passed via the placenta (19). The increase in cortisol levels present in the foetus is thought to interfere with growth by dysregulating the autonomic nervous system activity and stimulating foetal energy stores via glycogenolysis causing high calorie expenditure.

Findings for the association between PMH and low birth weight (LBW) are mixed. In high-income countries such as the UK (20) and the USA (21,22) there has been no association identified. Yet various studies have reported a link between poor maternal mental health antenatally and an elevated risk of LBW in low and middle-income countries such as Brazil and China (23,24). The explanation for this could be that women living in these areas who are from low socioeconomic groups and suffer from PMH issues are more likely to have additional risk factors affecting their health and that of their baby, such as malnutrition or undernutrition which is a known predictor of LBW in low and middle-income countries (25).

One recent study found that at 12 months old, babies with mothers who had symptoms of PPD and anxiety had an increased probability of experiencing problems in reaching their social and emotional developmental milestones (26). This emphasises the threat of PMH issues as a risk factor for child development and carries policy related implications, such as the need for early screening and detection of PMH conditions along with appropriate and accessible interventions.

Poor maternal mental health is a risk factor for physical, cognitive, and socioemotional development in later childhood, with effects known to last into adolescence and even into adulthood (27). During a study carried out analysing the long-lasting effects of PMH issues Plass-Christl et al. (28) found that children with mothers who suffered from PMH issues were at an increased risk of impaired health-related quality of life during adolescence, with their studying identifying girls be at a slightly higher risk than their male peers.

It has also been found that children whose mothers experienced PMH issues are at a higher risk of a phenomenon known as parentification (29,30). This is when there is a reversal in the caregiving structure, thus resulting in the developmental and psychological needs of the child being neglected.

Further studies assessing the negative impact of PMH conditions on the health of the child have found adverse consequences in the following areas:

- Increased admissions to neonatal care units (31)

- Higher rates of diarrhoeal diseases (32)
- Higher rates of infectious illness and hospital admissions (33)
- Diminished completion of immunization schedule (32)
- Early cessation of breastfeeding (34)

2.1.3. Social stigma

Social stigma remains a barrier in identifying and supporting women experiencing PMH issues. This can be in the form of external stigma, described as the negative appraisal from others; and internal stigma, in which individuals stigmatise their own identity or behaviours. The latter stigma can be particularly damaging to mothers as they may consider themselves to be a failure if they believe that they are not meeting their own expectations of motherhood.

Although there is an increasing understanding of the importance of recognising these issues, many women remain worried about being misunderstood and can feel guilty for experiencing negative thoughts during what is socially framed as a happy period of one's life. Moore et al. (35) noted that women delayed seeking medical advice regarding PMH symptoms due to fear of encountering judgemental attitudes from HCPs. And unfortunately, these concerns are not unfounded, with one study finding that 60% of participating midwives describing women with PMH problems as being "difficult" to interact with and viewing them as "potentially aggressive" (36).

HCPs have a duty to treat their patients in a non-judgemental and empathic manner, with this becoming even more important when dealing with PMH conditions where the woman could be feeling ashamed, embarrassed, and worried about discussing her experience.

2.2. Prevalence

2.2.1. Global prevalence of perinatal mental health conditions

The actual global prevalence of PMH problems can be hard to accurately ascertain due to a multitude of factors such as underreporting, failure to diagnose, and cultural differences. Added to this are the complications in terminology used and specific time references used during the perinatal period (37). In high-income countries where the nature, prevalence, and determinants of PMH have been extensively researched, the prevalence fluctuates between 7-20% (20,21,23,38). However, many studies agree with the higher figure, stating that PMH issues

affect approximately 1 in 5 women (39,40), and with the most reported conditions being depression and anxiety (41).

One systematic review in the USA showed that of the 18% of women who reported depressive mood antenatally, 13% met the diagnostic criteria according to the Diagnostic and Statistical Manual of Mental Disorders – IV (DSM-IV) to be classed as a major depressive episode (42), highlighting the severity that PMH conditions can have.

Abel et al. (41) studied the distribution of PMH issues in the UK and found that the prevalence was greater in areas with higher levels of deprivation, affecting up to 28% of women, whilst in areas with lower levels affecting 18%. This suggests that PMH issues are not evenly distributed through socioeconomic structure in many societies and that other social factors and health determinants may play a contributory role. Furthermore, Blake-Lamb et al. (43) support the theory that poor maternal outcomes are disproportionately represented in women from low socio-economic groups in their quasi-experimental trial, implementing the First 1,000 Days programme.

Meanwhile, in low and middle-income countries rates of approximately 20% and more have been reported (24,25,44), although there is a distinct dearth of research conducted in these areas.

2.2.2. Prevalence of perinatal mental health conditions in Spain

In Spain, the prevalence of PMH conditions is reported at between 9-26% (45–47). Despite what can be seen as a relatively low prevalence if one takes the lower figure, it is important to bear in mind the cultural differences which could be responsible for under-reporting, misdiagnosis, or failure to diagnose PMH conditions, thus these prevalence levels should be analysed with caution.

Marcos-Nájera et al. examined the risk factors surrounding PPD among immigrant and native pregnant women in Spain (47). Interestingly, they reported a lower prevalence (15%) amongst native women compared with the immigrant women (26%). They highlighted the one major risk factor as a lack of support from family and friends in the immigrant group. This is further evidence demonstrating that even in the same country not all social groups are affected equally by PMH conditions with the need for screening and interventions to be adjusted and directed accordingly to ensure they reach those at higher risk.

2.3. Risk factors

Various hypotheses have been put forward to explain the increase in susceptibility to mental health conditions during pregnancy and following birth (48,49). Many physiological and psychosocial changes occur during the perinatal period, requiring women to face a variety of new challenges. These changes include biological, such as hormonal and neurochemical modifications; psychological, such as personality type and ways of thinking; and social determinants, such as gender disparities in terms of level of education attained, social role, intimate partner violence, low autonomy, and disproportionate burden of unpaid work.

A non-exhaustive list of risk factors linked to high prevalence of PMH conditions include:

- Underage pregnancy
- Unwanted pregnancy
- Pregnancy as a result of rape
- Unsupportive or absent partner
- Previous stillbirth or miscarriage
- Poverty
- Alcohol or substance abuse
- Lack of financial resources
- Lack of practical support
- Intimate partner violence
- History of mental health conditions
- Low self-esteem
- Traumatic birth
- Maternal health complications during perinatal period
- Stressful life events
- Unemployment
- Low socioeconomic status

The presence of multiple risk factors is known to further increase the chances of poor PMH (50), with many cases the mental health issue being the result of a combination of elements, adding to the complexity of interventions and treatments required.

2.4. Barriers to accessing perinatal mental health services and hard to reach groups

Despite specialist PMH care being recommended in the UK by the National Institute for Health and Care Excellence (NICE) (51), many barriers to accessing these services exist. Throughout 2019, in the UK an estimated 60% of pregnant women could not access PMH

services (52) and 38% of women who were able to be referred had to wait over a month for an assessment (53).

2.4.1. Native vulnerable social groups

Non-migrant women from vulnerable social groups such as women with disabilities, ethnic minority groups, prisoners, and sex workers among others, often experience poor PMH outcomes and a lack of maternal health services (54).

One recent study analysed the experiences of women from ethnic minority groups with PMH issues within Europe (55). Interestingly, the only studies they could find to include in their systematic review were all from the UK. They concluded that women from ethnic minority groups experienced ongoing stigma, culturally insensitive interactions with HCPs, and dismissive attitudes from HCPs. They pointed out that there is a need for future studies assessing the specific needs of this population in a range of countries, with the apparent lack of international studies being concerning due to the far-reaching impact of PMH. Further research in other countries is vital to gain a deeper insight into the problem and to reduce health inequalities among vulnerable women suffering from PMH conditions.

2.4.2. Minority ethnic groups in Spain: Gypsies

The Roma gypsy community in Spain consistently have worse health outcomes than those of the general population and providing them with suitable healthcare assistance requires an understanding and empathy with their culture on the part of the HCP (56). There are higher rates of infant mortality (57), worse overall health status (58), and a life expectancy 7 years below the national Spanish average (59).

With respect to research addressing the health of women within this marginalised community there is lack of evidence looking specifically at PMH issues. Carrasco-Garrido et al. (60) studied the overall health of Roma gypsy women in Spain and found that compared to native Spanish women they had a poorer health profile, worse lifestyle, and inequality in the use of healthcare resources, especially concerning preventative healthcare measures.

The distinct scarcity of articles analysing the PMH of the Roma gypsy community in Spain is troubling due to the current overall evidence showing that this population are at an increased risk of suffering from adverse health conditions than the general population. HCPs should be acutely aware of the need to provide quality healthcare services to the entirety of the Spanish population with active public health

measures being taken to engage with pregnant Roma gypsy women and new mothers to understand their situation and needs in terms of PMH.

2.4.3. Migrant women

Nowadays, large numbers of people are leaving their native countries, with many people immigrating to the countries within the European Union (EU) (61). These can include refugees, asylum-seekers, economic migrants and all other reasons for migration and legal statuses. Due to this constant diversification of the EU population, it is becoming increasingly important that healthcare systems can meet the needs of all citizens, including those from the most vulnerable social groups. According to the United Nations (UN), migrant populations are increasingly composed of women of childbearing age (62), thus the perinatal health of this collective is of particular importance. Female refugees and undocumented women are more likely to have complex health needs, as a result of their difficult life circumstances and lack of resources, which could adversely affect their pregnancy.

For pregnant migrant and refugee woman it can be difficult to seek medical assistance for PMH issues due a variety of factors. Some may fear being reported to authorities if they do not have an official settled status in their country of residence, or due to a lack of entitlement to access local healthcare services. Other barriers are a lack of understanding of the local healthcare system, language and communicative difficulties, cultural differences, and limited or no financial resources (in countries with no public healthcare system). Therefore, self-care and emergency treatment are often the forms of care used by this collective.

2.5. Perinatal mental health Screening

Depending on the type of PMH condition which is suspected different forms of screening can be implemented. For example, for PPD one of the most widely used tools is the Edinburgh Postnatal Depression Scale (EPDS) (Appendix 1). It is routinely used in many countries globally, including the UK where postnatal assessments are carried out by Health Visitors, who are specially trained community nurses and midwives responsible for monitoring the health and wellbeing of mother and children up to 5 years of age. The EPDS consists of a 10-item questionnaire asking about recent depression and anxiety related symptoms. Scores range from 0-30, with those women meeting the diagnostic threshold (equal or more than 10-13) being referred for further intervention for PPD or anxiety disorder.

There is a more rigorous clinical diagnostic and classification tool, the DSM-IV (63) which takes the form of a structured clinical interview. It is mainly used in the USA, although it is available in a variety of different languages, including Spanish. Its purpose is to provide HCPs with a standardised framework to define and classify mental health disorders.

Although there are screening tools available it is of importance to note that HCPs who are working with pregnant women and new mothers should be vigilant and responsive during interactions and contacts unrelated to mental health so as not to miss an opportunity to help a woman struggling with an undiagnosed PMH condition. Also, mental health can change and fluctuate meaning that every scheduled perinatal patient appointment should be seen as an opportunity for the HCP to assess the woman's current state of PMH.

Another disorder specific screening tool is the Perinatal Post Traumatic Stress Disorder Questionnaire (PPQ) (64), which as its name indicate is used to detect PTSD during the perinatal period. The PPQ consists of 14 questions, using a Likert scale to indicate the patients score, which is then compared with the cut-off scores for clinical diagnosis. It has been verified for its psychometric properties in many languages including Spanish (65).

2.6. SARS-COV-2 and perinatal mental health

It has been over one year now since the WHO declared SARS-COV-2 as a global pandemic, during which over 3 million people have lost their lives and national preventative measures such as confinements, shielding and social distancing have forced people to miss out on vital social contact and support.

The pandemic has been particularly hard for expectant and new mothers, many of whom have had to attend hospital appointments alone, receive difficult news without the support of a relative, and in some case give birth without the comfort of a birthing partner (66). Social and emotional support is an important component in the promotion of good mental health in the perinatal period, with a lack thereof linked to an increment in preterm births and PPD (67,68).

Additionally, stress is a factor known to increase a woman's risk of suffering a PMH problem (69). For many people, the pandemic has added overwhelming feelings of stress and anxiety, but for pregnant women and new mothers who are already vulnerable to these conditions, the current situation has been crippling in some cases. Verreault et al. (70) found a strong correlation between high anxiety

during pregnancy and an increased probability of experience PPD. Thus, the stress generated by the current pandemic presents an increased risk for pregnant women and new mothers worldwide and will be an issue to be monitored by HCPs and healthcare systems for its long-term effects.

The preliminary evidence analysing the consequences of the SARS-COV-2 pandemic on PMH issues shows that there has been an increase in the prevalence of PMH conditions, with Chaves et al. (71) finding that in Spain 58% of pregnant women in their study reported depressive symptoms and 51% reported anxiety symptoms, thus confirming the psychological distress currently experience by pregnant women and new mothers.

3. OBJECTIVES:

3.1. Main objective: To design a public health intervention focused on the early detection, diagnosis, and treatment of PMH conditions for women in the region of Navarra, Spain.

3.2. Secondary objectives:

- To build a bibliographic base of evidence to guide and support the planning and implementation process of the programme for early detection and treatment of PMH issues.
- To obtain an in-depth understanding of the current situation regarding PMH in terms of screening, detection, diagnosis, treatment, interventions, and implications.

4. MATERIAL AND METHODS:

The systematic literature review was carried out using the criteria from the PRISMA Checklist (72) (Appendix 2).

4.1. Sources and data searches

The information has been gathered from books in the library of the Faculty of Health within of the Public University of Navarre, Pamplona, and via electronic databases “PUBMED”, “Cochrane Library” and “Google Scholar”.

4.2. Search strategy

The objective of this systematic literature review is to ascertain the current situations regarding perinatal mental health, gaining an insight into the gravity of the problem, diagnosis, assessment, risk factors and interventions/treatment. The searches were carried out in April 2021. The following search terms were used: “PUBMED” = (postnatal OR postpartum OR perinatal OR maternal OR puerperium OR puerperal period) AND (mental health OR depression OR psychosis) Filters: Free full text, Clinical

Trial, Meta-Analysis, Randomized Controlled Trial, Systematic Review, in the last 5 years.

“Cochrane Library” = (postnatal OR postpartum OR perinatal OR maternal OR puerperium OR puerperal period) AND (mental health OR depression OR psychosis) in Title Abstract Keyword - with Cochrane Library publication date Between Jan 2011 and Jan 2021 (Word variations have been searched).

In “PUBMED” the number of articles obtained through the aforementioned search terms were 745 and using the search terms cited in “Cochrane Library” the results were 84.

4.3. Inclusion and exclusion criteria

To ensure that the most recent and up to date evidence was included only studies published within that past 10 years were considered (less than 10 years since publication). Logistical constraints did not allow for translations, therefore only texts written in English or Spanish were considered for inclusion. Preference was given to studies with more rigour such as randomised controlled trials (RCT), literature reviews, meta-analyse, clinical guidelines and protocols. Finally, the aim of the studies had to be of interest and relevant to the topic of interventions in PMH.

4.4. Method of analysis

A narrative summary of the studies will be presented with the sub-categories of recurrent themes analysed and discussed.

5. RESULTS

5.1. Studies selected for literature review

The studies in this literature review have been selected according to the inclusion criteria previously outlined. The key details from the chosen studies can be found in Table 1. (Appendix 3).

5.2. Characteristics of the studies

15 studies were selected for this literature review including 9 RCTs (2 of which were cluster based), 4 systematic reviews, 1 non-randomised before and after trial and 1 cohort study. Of the 15 studies, most assessed maternal mental health outcomes during the

perinatal period, with 2 focusing on the experience and perception of the HCPs delivering the intervention and 1 with a primary outcome of monitoring child welfare and a secondary outcome related to PMH. 5 studies also included analysis of the cost-effectivity of the chosen intervention. 1 study differed in that it only addressed moderate to severe PMH conditions requiring hospitalisation to specialist units, whilst the majority of the studies looked at mild to moderate symptomology.

5.3. Characteristics of participants

5.3.1. Selective prevention programmes

Henderson et al. (73) studied the cost-effectiveness of PMH screening for women deemed to be at low risk of suffering PMH conditions. Low risk groups are not typically assessed in this area of research, with only 2 studies amongst those selected for the present literature review focusing on these women, with most choosing to focus on higher risk groups. Their findings show that in fact even with the additional costs of training health visitors (HV) to use Cognitive Behavioural Approaches (CBA), low risk women treated by these specially trained HVs had less HCP contacts and reported lower levels of PPD than the low-risk group who received standard HV care. Brugha et al. (74) also selected women who were typically considered “not at risk” of developing PPD to see if treating this population was a feasible option for a public healthcare system.

Sandner et al. (75) focused on disadvantaged, first-time mothers as their population due to the health inequalities and poor PMH outcomes often found in this group. They were successful in recruiting participants from disadvantaged groups, with many presenting socioeconomic risk factors (44% of participants were teenage mothers) or showing health related risk factors and adverse health behaviours (34% state smoking tobacco daily during pregnancy). Similarly, Goldfeld et al. (76) and Dodge et al. (77) included women experiencing adversity, with inclusion criterion being that they met 2 or more of the specified socioeconomic risk factors.

5.3.2. Universal programmes

Sheffield et al. (78) carried out a systematic literature review studying the efficacy, feasibility, and acceptability of yoga to improve PMH. Their review included 667 peripartum women from 13 separate studies, with the authors reporting diversity amongst socioeconomic groups, marital status, employment status and race/ethnicity. Molyneaux et al. (79) similarly included universal programmes in their systematic review which looked at the effectiveness of

antidepressants in preventing PPD. Coll et al. (80) also included women from different socioeconomic groups and backgrounds by recruiting participants from both public and private antenatal clinics in Brazil.

5.4. Exclusion criteria

Many studies had an exclusion criterion for mothers under 18 years of age (74,76,77,80,81), stating that this could be a confusion factor in the results. Another common exclusion criterion was mothers with a previous history of mental health issues (74,82), with Caramlau et al. specifying exclusion for women with a score of 23 or above on the EPDS, women who pose a suicide risk or a risk to their children, women receiving specialist psychiatric care or experiencing any mental illnesses (other than PPD) or women with learning difficulties (82).

5.5. Location of studies

Participants in the selected papers included women in the perinatal period from a range of different countries including Germany, the UK, Taiwan, Iran, the USA, Brazil, and Australia, allowing for an in-depth and globally minded approach to the issue of PMH.

5.6. Variables analysed

When assessing for PPD almost all the studies used the EPDS. This shows the validity of this tool and its universal usage, facilitating the comparison of results from a range of studies. However, the frequency and periods at which this test is carried out can differ. Some studies performed a baseline EPDS score antenatally (83,84), whilst others took the baseline results postpartum (73,79,80,82). Pan et al. (84) also used an additional assessment tool; the Five Facet Mindfulness Questionnaire (FFMQ). Brugha et al. (74) used a combination of the EPDS, State-Trait Anxiety Inventory (STAI), Satisfaction with Life Scale (SWL) and interviews to gain qualitative data.

To assess the primary outcome of levels of PPD Caramlau et al. (82) used both the EPDS and the 3 Whooley questions which are recommended in current NICE guidelines (85). Secondary outcomes were measured in terms of assessing maternal functioning including: Hospital Anxiety and Depression Scale, Parenting Sense of Competence Scale, Dyadic Adjustment Scale and the Emotional Support Questionnaire and Self-Efficacy. Meanwhile, Gillham and Wittkowski (86) used the Marcé checklist while assessing outcomes

related to moderate to severe PMH conditions requiring admission to specialist mother and baby units.

Appleby et al. (81) differed from the other studies in that not only did they look at clinical outcomes, but they also analysed variables related effectiveness from the HCP perspective on the additional CBA training received by HVs. Their study covered acceptability, attitudes, and counselling skills of HVs as well as viewing clinical records of patients to monitor for detection, treatment, and referrals for PMH conditions. Lastly, they also assessed cost effectiveness of the additional training based on the clinical outcomes studied. Henderson et al. and Caramlau et al. (73,82) also included variables related to cost effectiveness.

Sandner et al. (75) analysed the Pro Kind home visitation programme focusing on 4 variables, with maternal mental health being one of those elements:

- Increasing utilization of immunizations and preventive care
- Improving maternal health behaviour, e.g. healthy diet, breastfeeding, reduction of maternal smoking, child passive smoking, alcohol, and substance use
- Increasing maternal self-efficacy to improve her mental health and well-being
- Ensuring that mothers interact safely with the child and provide a safe environment

Likewise, Dodge et al. (77) were broader with their research aims, with PMH being a secondary objective, the primary being providing a protective and educational programme for mothers to reduce infant maltreatment.

5.7. Interventions carried out

5.7.1. Physical activity

Coll et al. (80) looked at the effects of an exercise plan for reducing the prevalence of PPD. The intervention consisted of a 16-week supervised aerobic and resistance programme, with classes lasting for 60 minutes, delivered 3 times per week. Likewise, Mohammadi et al. (83) used a low intensity exercise intervention, with three groups: control group, antenatal exercise group, and antenatal plus postnatal exercise group.

Another physical activity intervention was based around the use of yoga to improve PMH (78). Pan et al. Focused on a similar topic of mindfulness classes to promote good PMH (84).

5.7.2. Home visit programme

Some studies used interventions based around supportive home visits during the perinatal period (73–77,81). These visits were normally carried out by a specially trained nurse or midwife. The use of face-to-face assessments (FFA) can be particularly useful to HCPs in the detection of symptoms of poor PMH, which via telephone assessments risk being missed. Additionally, visiting the women in her own place of residence is useful in that the women can feel more comfortable in familiar surroundings rather than a clinical setting, and also for the HCP as they are able to carry out a holistic assessment of the general wellbeing and environment of the women and baby.

Cummings et al. (87) explored the use of listening visits carried out by health visitors (HV) during scheduled home visits. Listening visits are described in the NICE Antenatal and postnatal mental health clinical guideline (85) as a preventative, psychosocial intervention, based upon Rogers (88) non-directive counselling theory, for the prevention of mental health problems. The guideline states that HCPs delivering listening visits are “trained to help clients gain a better understanding of their circumstances and themselves”.

In studies based in the UK, home visit interventions were almost exclusively carried out by HVs. HVs are registered nurses or midwives who undertake additional training to become specialist public health nurses, with their focus being the health and wellbeing of mothers and babies/children aged 0-5 years of age.

HVs routinely screen all mothers at key points during the perinatal period to identify changes in mood as part of the UK “The Healthy Child Programme” (89), a public health plan with early intervention and prevention at its core. The full HV role description is available in Appendix 4.

Yonemoto et al. (90) undertook a systematic review of 12 studies using home visiting programmes during the perinatal period, hoping to resolve the questions “Do different schedules of postpartum home visiting programs reduce maternal/neonatal mortality and morbidities, and if they do, what is the optimal schedule for postpartum home visits?”.

5.7.3. Cognitive Behavioural Approach

Appleby et al (81) specifically studied a HV training intervention in the use of Cognitive Behavioural Approaches (CBA) to improve early detection and diagnosis of PMH conditions. Brugha et al. (74) as well used CBA training for community midwives to provide psychological care to women with depressive symptoms (according to the EPDS scores).

5.7.4. Peer support

Caramlau et al. used a peer support telephone service to assist women experiencing PPD, stating that individuals with a shared experience can often share advice and coping strategies of which HCPs may be unaware of. The most comprehensive definition of peer support within a healthcare concept is “the provision of emotional, appraisal and informational assistance by a created social network member who possesses experiential knowledge of a specific behaviour or stressor and similar characteristics as the target population” (91). They used HVs to recruit suitable peer-support workers using the following criteria:

- a) recently experienced PPD (i.e. within the last five years)
- b) fully recovered from depression
- c) an empathic and non-judgmental disposition
- d) could commit the time to participate in the training and provide the telephone support

Multiple assessments of mental health and social wellbeing were made, and their General Practitioners (GPs) were required to confirm the suitability of individuals identified for the proposed peer-support role.

Eligible peer-supporters were invited to attend a training programme lasting approximately eight hours, to develop their understanding of the role of the peer-supporter. The course included active listening skills, promoting successful behaviour change, and encouraging goal setting and decision making, all based around the principles of a peer-support telephone service for mothers developed by Dennis et al. (92). The training was provided locally, and crèche facilities were made available for peer-support workers to leave their babies if necessary.

5.7.5. Antidepressant medication

The intervention of interest in the systematic review carried out by Molyneaux et al. (79) were the use of antidepressants to reduce or prevent PPD. Their review included 2 studies with a total of 81 participants. The first study used the medication nortriptyline with the authors finding no statistical difference between the medication and placebo groups. The second study used the medication sertraline, with the results coming back as inconclusive as to its efficacy in preventing PPD. Molyneaux et al. state that the conclusions from their systematic review are limited due to few studies, small sample sizes and missing data due to dropouts. This shows a need for further and more conclusive research around pharmaceutical treatment options for PMH conditions.

5.7.6. Mother and baby units (MBUs)

Gillham and Wittkowski (86) undertook a systematic review of 23 studies assessing the outcomes of women moderate to severe PMH conditions being admitted to mother and baby units (MBUs). MBUs are specialist inpatient psychiatric care facilities for mothers and their infants up to 1 year after childbirth. They are commissioned to support the mother–infant relationship as well as stabilise maternal mental health. Currently, there are MBUs in the UK, France, Belgium, Germany, and Australia, the USA and India (93). Joint admission, hypothesised to be beneficial for both mother and infant, allows for the observation of the mother caring for her infant and for a thorough risk assessment. Consequently, MBUs have been recommended in clinical guidelines internationally, including the NICE Antenatal and postnatal mental health: clinical guideline (85). Overall, they reported improvements in maternal mental health, mother-infant relationship, and child development. However, there were poorer outcomes recorded amongst several specific groups of mothers, including those with a personality or psychotic disorder, severe depression, or high self-criticism. Additionally, they found that outcomes were influenced by variables indicating socioeconomic status, including education and employment.

6. CONCLUSION

Overall, the studies included in this literature review covered a wide variety of interventions but all with the aim of improving maternal mental health. Varying degrees of success was noted but in general these interventions had a positive effect on the outcomes measured.

Concerning the exercise intervention proposed by Coll et al. (80), the results of the study did not show any significant difference between the control group and the exercise group. Instrumental variable analysis carried out attributed this to the low compliance rate (engaging in at least 70% of the classes = 40% of participants). It is possible that such an intensive programme of 3 hours per week for 16 weeks could be difficult to maintain for pregnant women, many of whom have other commitments. This could be even more complicated if the women must travel to a certain location to attend the classes.

Yoga seems to present as a feasible option for improving mild symptoms of anxiety and stress during the perinatal period. However, it has proved to be ineffective for a single treatment approach for moderate to severe PMH conditions. It could be useful as a supportive measure alongside other interventions.

Home visitation programmes were a popular choice of intervention, and for good reason, with these studies showing positive results in terms of detection and treatment for PMH conditions, and also in cost-effectiveness, demonstrating that with early intervention women can receive timely support and treatment for a range of PMH conditions and prevent situations from escalating. Specific activities during home visits have been explored such as listening visits, screening of PMH conditions, welfare checks and supportive visits.

Home visit programmes mostly used HCPs to carry out the intervention, although a minority trialled peer support models. One group of HCPs of particular interest in providing specialist care during the perinatal period is that of the UK role of HV. These specialist public health nurses working with mothers and their families and offering support, empathy, and evidence-based care can deliver a range of interventions and gain the trust of their patients to help develop a good therapeutic relationship, a key element to engaging women in PMH programmes.

Antidepressant medication remains a useful tool in the treatment of several PMH conditions and can also be used in combination with other interventions. It does however present issues in that women may be reluctant to take medication, especially during pregnancy or if they are breastfeeding, due to unwanted side effects. Also, by prescribing pharmaceutical products for mental health conditions on occasions the issues can be masked rather than resolved, leading to long-term dependence on antidepressant medication.

MBUs are a treatment option, but only in cases of moderate to severe PMH conditions. Additionally, they are only fit for purpose if there is a robust screening service to detect women in need of this service and capacity to treat women in a timely manner.

With many studies excluding groups such as mothers under 18 years of age and mothers with a history of mental health issues, these collectives are underrepresented in the current research. Both of these populations are at an increased risk of suffering from PMH conditions and therefore there is a need for either their inclusion in general studies or specialist studies aimed at identifying their specific needs.

7. DISCUSSION

The evidence obtained in this literature review shows that despite an increase of research into this once neglected area of women's health, there are still uncertainties regarding the effectiveness of screening, detection, and intervention. The themes identified from the qualitative evidence highlight certain interventions as being valued by post HCPs and women, one of which being home visitation programmes.

These home visits can be versatile and meet the personal needs of each woman. Additionally, they offer an opportunity for a FFA to take place in a setting which is familiar to the woman and gives the HCP a chance to complete a holistic assessment of the physical, mental, and emotional needs of the woman and an insight into the environment in which she is living.

The specialist role of HVs has proved to be a valued, trusted, and cost-effective approach in the detection, diagnosis, and treatment of PMH conditions in the community. However, it does present a limitation that women suffering more severe PMH issues may require more intensive interventions which can be logistically difficult to provide and in some cases community treatment not being a viable option with women requiring hospitalisation in a specialist MBU.

The articles included came from a variety of locations. However, there was a distinct lack of PMH interventional studies based in Spain, demonstrating the need for further specific research analysing the Spanish population.

8. THEORETICAL PROPOSAL OF A PUBLIC HEALTH INTERVENTION PROGRAMME

8.1. Target population

The target population for the proposed intervention is all women in the perinatal period (any stage of pregnancy and up to 1 year postpartum) residing in the region of Navarra in Spain.

By addressing the specified population in its entirety, it is hoped that as many cases of PMH conditions can be detected and effective intervention provided in a timely manner to reduce the negative effects these mental health conditions can have on women, their babies and those around them.

It is important that this programme has the capacity to reach all socioeconomic groups in Navarra and especially groups that are typically at risk of social exclusion, such as immigrations, young mothers, Roma gypsies, black and minority groups, and those living just above the poverty line or in poverty.

8.2. Intervention details

8.2.1. Project: “Aquí Para Cuidarte”

This project consists of a home visitation programme to be carried out in the antenatal and postnatal period. The proposed programme will be called *Aquí Para Cuidarte* (in English: Here, to take care of you). This name highlights the importance of looking after the mothers PMH and wellbeing and implies the programmes key intervention of home visitations. The proposed logo for the programme can be seen in Appendix 5.

8.2.2. EEVP training details

The home visits will be carried out by specially trained registered nurses and midwives, who on completion of their additional training will be given the title of “Especialista en Visitas Perinatales”, or “Enfermera/o EVP” (EEVP), adapted from the UK role of HV. According to the Council for the Education and Training of Health Visitors, this public health nursing speciality is based around 4 main principles (94):

- Search for health needs
- Stimulate an awareness of health needs
- Influence policies affecting health
- Facilitate health-enhancing activities

This role has been based around the HV job description in Appendix 4 with the above principles also considered. The expected duties of this extended nurse position can be seen in Appendix 6.

The Institute of Health Visiting (IHV) recommend a ratio of 1 HV per 250 children to deliver comprehensive health improvement (95). Currently, the number of under 5-year-old living in Navarra is

approximately 30,000 (96). Therefore, this plan proposes the training of 120 EEVPs to serve the population of Navarra. Interviews will be held to select suitable candidates for the role. Once the applicants have been chosen, they will undertake 7 modules of study at postgraduate level based at the Public University of Navarra (UPNA) over a 6-month period. The course will be fully funded by the Government of Navarra at an approximate cost of €2000 per student based on current prices of the UPNA Postgraduate “Titulos Propios” (97).

8.2.2.1. Course Summary

- Identify and meet the needs of expectant and new mothers
- Build on existing knowledge as a registered nurse/midwife
- Learn practical and theoretical skills to excel as a valuable and respected community health specialist
- Provide specialist care in the prevention, early intervention, and public health issues associated with PMH conditions

8.2.2.2. Subjects

- Cognitive behavioural approach training
- Developing therapeutic relationships with clients
- Family centred public health
- PMH conditions: signs and symptoms, risk factors and local available treatment
- Management of common clinical conditions in the community
- Training in carrying out PMH screening
- Listening visit training

8.2.3. Home visit programme

The purpose of a home visitation programme is to provide support at home for mothers, babies, and families by HCPs or skilled attendants. However, a single clearly defined methodology for this intervention does not exist.

In high-resource settings healthy women and babies are frequently discharged from hospital within one or two days of the birth, and in low-resource settings women may be discharged within hours of the birth or give birth at home (98). Potentially, home visits in the first few days of the birth by HCPs or specially trained professionals such as HVs offer opportunities for assessment of the mother and new-born, health education, infant feeding support, emotional or practical

support and, if necessary, referral to other health professionals or agencies. Postpartum visits may prevent health problems developing or reduce their impact by early intervention or referral.

Home visits may involve not only the assessment of the mother and new-born for physical problems but also assessment of maternal mental health, family circumstances and the home environment. Depending on the context, home visits may take a non-judgmental and supportive role or a more directive approach in which the goals are to monitor family compliance with standards of parenting care and ensure the new-born's health and welfare. The type of approach used can influence the ability of the carers to engage mothers and new-borns, resulting in acceptance or rejection of the help offered and potential for further disengagement (99).

8.2.4. 4-5-6 model of health visiting

The proposed intervention is based on the Public Health England 4-5-6 model of health visiting (Appendix 7) (100) which describes the UK national health visiting offer to families and provides a framework for the service. The original model is based on 4 levels of services: Community, Universal, Universal plus, University partnership plus; 5 mandated contacts: Antenatal, New baby, 6-8 weeks, 1 year, 2-2 ½ years; and 6 high impact areas: Transition to parenthood, Maternal mental health, Breastfeeding, Healthy weight, Managing minor illness and accident prevention and Healthy 2-year-olds & school readiness.

8.2.5. Adapted pathway: 4-4-2

As this intervention is focused specifically on the perinatal period and on maternal mental health, the model has therefore been adapted to meet the requirements of the programme. The adjusted structure is a 4-4-2 model (Appendix 8), with 4 levels of services: Green pathway, Yellow pathway, Orange pathway, Red pathway; 4 mandated contacts: Antenatal, New baby, 6-8 weeks, 1 year; and 2 high impact areas: Support in transition to parenthood and Maternal mental health; the level of service section indicates the grade of intervention required, with Green meaning that PMH can be managed with the 4 mandated visits and standard community support; Yellow requiring further intervention in the form of additional visits or therapeutic activities managed by the EEVP; Orange indicating intervention required from specialist PMH services with support provided by the EEVP; and Red requiring immediate referral to emergency PMH teams along with continuing support from EEVP.

In this programme EEVPs will carry out 4 scheduled home visits (Appendix 9) which will be used to assess maternal mental health in a holistic and person-centred approach. The visits will be:

- Antenatal: 30-36 weeks gestation
- New baby: within the first week following birth
- 6-8 weeks
- 1 Year

The aims of these visits are to:

- Screen and assess for PMH conditions
- Offer treatment or referral for treatment of PMH conditions
- Provide emotional support during the postnatal period
- Carry out a holistic assessment of a women's surroundings during the perinatal period
- Build a good therapeutic relationship between EEVP and service user

The visits will be scheduled as 30-minute contact time, with the possibility to extend this time if necessary.

The visits will be carried out in the place of residence of the woman.

The following plan is suggested for each of the 4 visits, although this can be adapted according to the individual needs of the woman.

1) Antenatal visit: This is often the EEVP's first contact with the family and is crucial for developing the relationship. This visit is important because an effective first contact can positively impact on the mothers' long-term use of the service. The antenatal health promoting visit does not replace the care provided by midwifery services. Instead, it complements it by working across the antenatal service continuum encompassing hospital, primary care and community services. The main aims of the visit are to:

- Carry out a comprehensive and holistic assessment of the expectant mothers' needs: this includes obtaining a history of health or social concerns.
- Assess mental health and wellbeing of the mother. Maternal mental health is assessed using the initial screening questions.

In the past month have you been bothered by:

- Feeling down depressed or hopeless?
- Having little interest or pleasure in doing things?
- Worrying or feeling very anxious about things?
- Concerns about bonding with the baby?

If any of the answers are YES, then the EPDS tool should be carried out along with further immediate support or signposting.

This questioning is supported with observation, listening, paraphrasing and clinical judgement to determine if the mother is at risk. Further assessment will be carried out in the form of the EPDS if indicated.

- Support the transition to parenthood: Discuss skills to enhance parental capacity and change parenting attitudes and practices in a non-judgemental and supportive manner, such as referral to existing services like "Escuela de madres y padres" (101).
- Promote PMH health: provide information and advice on breastfeeding and nutrition, PPD, domestic violence, home and car safety, vitamins, smoking cessation, prevention of sudden infant death syndrome (SIDS), and local support networks.

Based on this contact, health visitors will be able determine which care pathway the woman requires, Green pathway (Universal), Yellow pathway (Universal plus), Orange pathway (Universal partnership plus) or Red Pathway (Emergency referral). This is demonstrated in Appendix 8.

2) New baby visit:

This contact will be carried out at home approximately 7 days following the birth of the baby.

The needs may have changed since the antenatal visit, so it is important for reassessment, particularly regarding mental health as PPD is known to affect a high number of women.

Based on the outcome of this visit, EEVPs can come up with a suitable care plan for follow-up of concerns and frequency of future contacts. It is possible that additional visits can be added to the programme depending on the individual needs of the woman.

3) 6–8-week visit:

During this visit reassessment is again vital as the health needs of the woman may have changed.

This visit is also used to further discuss health promotion such as safe sleeping, breast feeding, reducing accidents in the home, and any other issues the woman wishes to discuss.

4) 1 year visit:

Depending on the needs of the woman following the previous visits it will be decided if she needs further intervention, either in the form of home visits or a referral to specialist services. If not, then the next mandated visit is when the baby is 1 year old.

This is an opportunity to ensure that all is well with the child, mother, and family. Using a combination of assessment strategies including observation and questions the health visitor can support positive parenting and mother/infant attachment and promote maternal mental health. They can discuss accident prevention to ensure a safe environment for children to thrive, which can include home safety, car safety, safety in the sun, promote dental health, healthy eating/obesity prevention, and identify children who may be at risk of harm.

Additional visits:

Additional visits can be provided for women on the yellow and orange pathway, with the possibility also extended to women on the red pathway if deemed appropriate. The additional visits can be arranged with the EEVP and there is no limitation of frequency,

this will depend largely on the caseload of each nurse and the capabilities of the *Aquí Para Cuidarte* programme. The contents of these visits are adaptable, depending on the needs of the woman. They could be used as listening visits (described in Appendix 10), CBA sessions (described in Appendix 11), educational or informative visits, or welfare/supportive visits.

8.3. Variables analysed

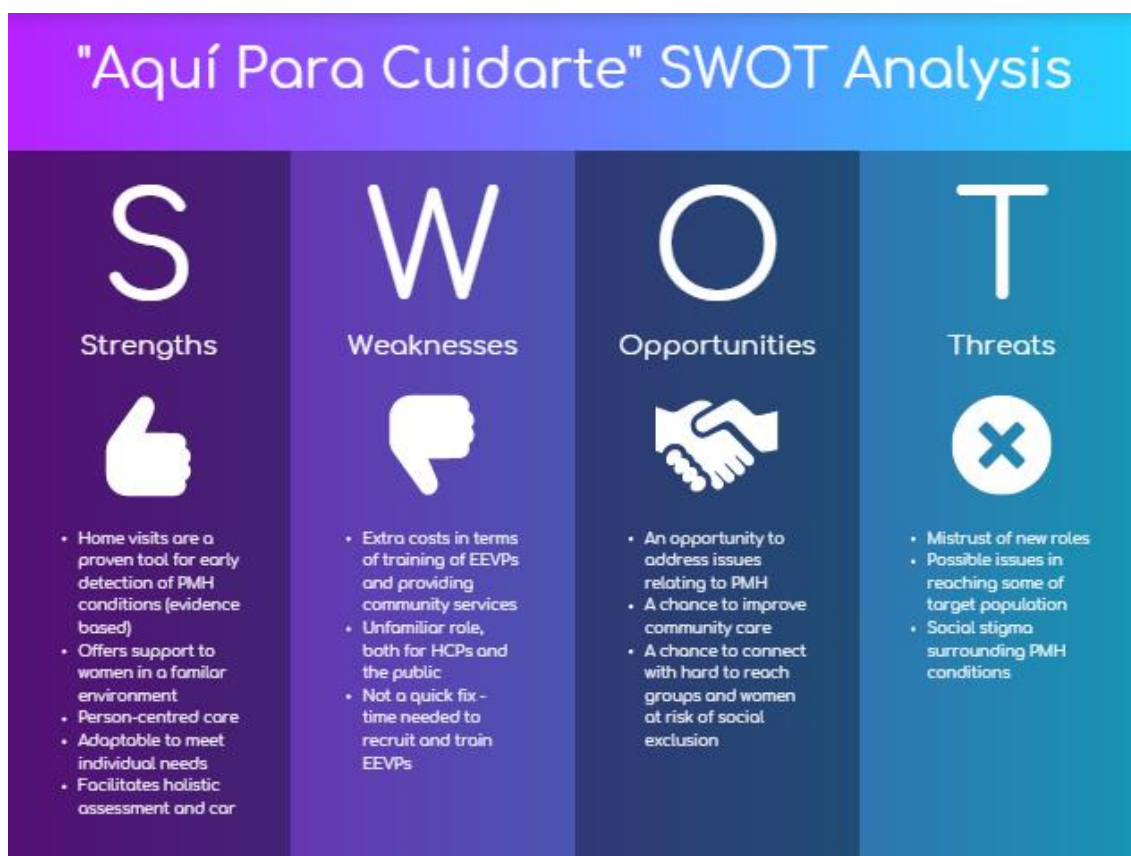
Principle outcomes: The main outcome measured will be levels of maternal depression reported using the EPDS. The initial screening questions will be asked to all women participating in the programme during all 4 planned home visits.

From the EPDS quantitative data can be collected and analysis made of levels of maternal depression, both during the antenatal and postnatal period. An RCT is planned to measure the effects of the programme on levels of PPD. From this study it will be possible to measure the impact of this intervention on this specific area of PMH.

Secondary outcomes:

- Questionnaires will be given to women participating in the programme to gather qualitative, in depth data about their experiences of PMH issues during the perinatal time and their satisfaction with the programme.
- Questionnaires will also be given to EEVPs to check their professional satisfaction with the programme and the confidence in their abilities to detect, diagnosis, treat/refer women experiencing PMH problems.

8.4. SWOT analysis



9. TIMELINE

The *Aquí Para Cuidarte* Project timeline has been developed and present in the form of a Gantt chart available in Appendix 12.

10. UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS 2030

Since 2015 the United Nations has been working towards 17 Sustainable Development Goals (SDGs) (102) with a diverse set of targets, but with an overarching aim of improving health, safety, equality, environment and living standards in all member countries.

This project addresses several of the SDGs and following its implementation would make a positive contribution towards achieving them.

10.1. Goal 3: Good health and wellbeing

Overall good health cannot be achieved without good mental health. The *Aquí Para Cuidarte* is a programme specifically designed to

improve, promote, and encourage good mental health and wellbeing during the perinatal period.

10.2. Goal 5: Gender equality

Historically, women's health has been overlooked in research and remains a taboo in many societies. This is true particularly regarding maternal mental health. For this reason, projects of this nature are vital to normalise conversations around women's health and reduce stigma experienced by women worldwide.

10.3. Goal 10: Reduced inequalities

Maternal mental health is a global public health issue, affecting women from different background and socioeconomic groups. However, it has been shown in many studies that the groups with the highest incidence of PMH conditions and with the worst mental health outcomes are those with lower socioeconomic status. Although this programme is aimed at all pregnant and new mothers with Navarra, special attention has been paid to engage with socially at-risk women, marginalized communities and hard to reach groups. It is hoped that by providing an intervention which is accessible for all, and its usage is encouraged in the aforementioned groups health inequalities related to maternal mental health can be reduced.

11. INFORMATION AND DISSEMINATION TO THE TARGET POPULATION

The dissemination of the proposed programme is based on the WHO Strategic Communications framework for effective communications (103). The WHO principles for effective communication are:

- Accessibility
- Actionable
- Creditable and trusted
- Relevant
- Timely

The WHO go on to state their communication goal, which is "To provide information, advice, and guidance to decision-makers (key audiences) to prompt action that will protect the health of individuals, families, communities and nations".

To publicise the *Aquí Para Cuidarte* project a dissemination plan will be implemented:

- Communication objectives: To deliver a clear message to the target population in a concise manner.

- Key messages: What the programme is, what it consists of, who it is aimed at, how it can benefit PMH, contact information.
- Target audiences: Women in the perinatal period residing in Navarra, Spain. HCPs working with women and families during the perinatal period, HCPs in primary and community care roles, HCPs such as midwives and gynaecologists/obstetricians.
- Tactics: Media campaign including short video, social media adverts, posters and information sessions (separate programme plan for the public and HCPs). An example of one of one of the informative posters aimed at the public can be seen in Appendix 13.

Hard to reach groups: It is vital that the information regarding the *Aquí Para Cuidarte* programme is received by women in hard to reach and socially vulnerable groups as they tend to have an elevated risk of PMH conditions. The Good Governance Institute (104) lists the following recommendations for opening up engagement:

1. Build trust – show that you’re listening by inviting people, traditionally hard-to-reach, to be involved in surveys and focus groups
2. Strive for representation – look to build diversity of background and mind on key committees – not just with engagement but also at the point decisions are made.
3. Engage with respected community leaders – work with those who are most able to engage and use their influence.
4. Learn about the groups – take the time to understand the key dynamics of groups and shift your approach according to this insight.
5. Find a form of engagement that works for different groups and individuals – consider a wide range of potential channels including visual, audio, online and, where possible, face-to-face engagement. Make it easy to engage with your organisation.
6. Go beyond digital engagement – consider the digital divide and what this means for your communities.
7. Make it beneficial to the communities you engage with – always engage on the benefits of engaging. And first engage on matters that are of most concern to the people you are trying to reach.

Informative group sessions about the programme will be held with socially vulnerable groups, with engagement and collaboration from respected members of these communities who will act as “Bridging

volunteers”, helping to open access to health promotion interventions for women in these populations. It is hoped that with the support of Bridging volunteers and community engagement the *Aquí Para Cuidarte* programme can help as many women during the perinatal period as possible.

12. RELEVANT LEGISLATION AND REGULATION

The United Nations states in Article 25 of the Universal Declaration of Human Rights (105), “Motherhood and childhood are entitled to special care and assistance...”, highlighting the need for specialist care for the mother and baby during the perinatal period. The programme, *Aquí Para Cuidarte* is in line with this article as it is focused on assisting women during this time.

In Spain, the General Healthcare Act (Ley 14/1986, de 25 de abril, General de Sanidad) (106) sets out to regulate standards for national healthcare and ensure the right to public health as stipulated in Article 43 of the Spanish Constitution (107).

Furthermore, the Servicio Nacional de Salud (SNS) states the basis for establishing a national framework to monitor and improve healthcare across the country with the Cohesion and Quality Act (LEY 16/2003, de 28 de mayo, de cohesión y calidad del Sistema Nacional de Salud) (108). Specifically, the department of the Agencia Nacional de Calidad from the SNS plays an important role in promoting quality standards and by assisting in the implementation of the Plan de Calidad para el Sistema Nacional de Salud, in collaboration with the Consejo Interterritorial del Sistema Nacional de Salud (CISNS) (109).

Originating in the second Conference of Regional Presidents and supported by specific funding, the Plan Nacional de Calidad has become the main tool for setting and disseminating quality norms and standards of practice, health indicators, clinical guidelines, best practice registries and adverse events registries. The plan is based around 4 key areas:

- **National health strategies:** To care for patients with prevalent diseases which entail a high social burden. Nine national strategies are already in place, they cover diseases such as cancer, ischaemic disease, diabetes, rare diseases, COPD, stroke, or specific services such as palliative care and mental health services.
- **Women’s health:** Implementation of a national strategy on care for normal delivery in childbirth, there is a specific strategy on

prevention and management of violence against women.
Collaboration with the Observatorio de Salud de las Mujeres.

- **Knowledge management:** Clinical practice guidelines, National health information systems
- **Process re-engineering:** Patient safety, Standards, and recommendations for sensitive health care units/departments in the SNS (including areas such as hospital maternity units and childbirth care)

This plan further highlights the need for improvements in mental health services, general women's health (especially during pregnancy), and patient safety monitoring in maternity care. The proposed programme, *Aquí Para Cuidarte*, addresses all of these issues and provides a useful improvement tool in PMH care.

Locally, in Navarra, a regional act was published in 2016 declaring the healthcare standards for maternity care, sexual health, and reproductive care (DECRETO FORAL 103/2016, DE 16 DE NOVIEMBRE, POR EL QUE SE ESTABLECE LA ORDENACIÓN DE LAS PRESTACIONES SANITARIAS EN MATERIA DE SALUD SEXUAL Y REPRODUCTIVA) (110). In Article 12, the functions of the Sexual and Reproductive Healthcare Centres are specified, with the perinatal care objectives focusing solely on the physical and practical wellbeing of the mother and baby. This highlights the need for local legislative change by including programmes aimed at supporting PMH. With the home visitation programme proposed in this document the area of PMH can be addressed and women can receive a person-centred, evidence-based intervention delivered by knowledgeable and supportive specially trained community nurses.

13. MATERIALS AND HUMAN RESOURCES

13.1. Programme Human Resources

The *Aquí Para Cuidarte* programme will require the following roles:

- Programme manager and clinical lead
- Assistant programme manager
- Recruitment staff x 2
- Head of EEVP training
- Training staff x 5
- Administration assistant x 2:
- Advertising specialist
- 120 EEVPs
- Community Bridging Volunteers

13.2. Recruitment and training of EEVPs

A recruitment campaign will be implemented to select candidates to undergo the 6-month postgraduate level training package required to deliver the *Aquí Para Cuidarte* Programme effectively. Materials and human resources for this stage are as follows:

Materials	Human resources
<ul style="list-style-type: none"> • Posters • Online and social media recruitment campaign • Information sessions with nurses/midwives to explain training and role – leaflets, PowerPoint presentation, meeting room 	<ul style="list-style-type: none"> • Manager for training programme • Social media/advertising expert • Administration assistant

An example of the posters to be used in the recruitment campaign can be seen in Appendix 14.

Once the nurse/midwives have been selected they will begin the 6-month training course. Materials and human resources for this stage are as follows:

Materials	Human resources
<ul style="list-style-type: none"> • Classrooms • Healthcare simulation training labs • Equipment to facilitate online classes (laptop, webcam with microphone) • Teaching material: books, journals, examples of assessment paperwork 	<ul style="list-style-type: none"> • Manager for training programme • Staff to teach the proposed subjects and assess students • University administration staff • Bridging volunteers (community members)

The Bridging Volunteers will be involved in the programme from the training stage. It is important they are engaged at an early stage so that they have a good knowledge of the programme, its objectives, the

interventions the EEVPs will carry out and how it will help the women in their community. It is also vital to have their input as to how the programme can help them and if any parts need to be adapted to better suit the needs of their community.

13.3. Publicity campaign to spread awareness of the role

This stage is crucial in disseminating information to the target population in Navarra about details of this programme and how it can help them. To ensure it reaches hard to reach groups it is important that the Programme Manager engages with charities, associations, and existing social support groups to connect with these communities. To make the campaign accessible to the migrant population the posters used will be published in several different languages including Arabic, Romanian, and Chinese. The posters will be displayed in all health centres, sexual and reproductive health centres, maternity units, and public libraries. A social media campaign will also be run, using advertisements on Facebook, Twitter, and Instagram. It is hoped that these methods will help to reach as many people as possible. The programme will also be recommended by HCPs, such as GPs, primary healthcare nurses, midwives, and gynaecologists.

14. EVALUATION

General evaluation of this public health intervention will be undertaken using the Centers for Disease Control and Prevention (CDC) Framework for Program Evaluation in Public Health (111) 6 step approach presented in Figure 1 and Figure 2.

Figure 1 – Recommended framework for programme evaluation:

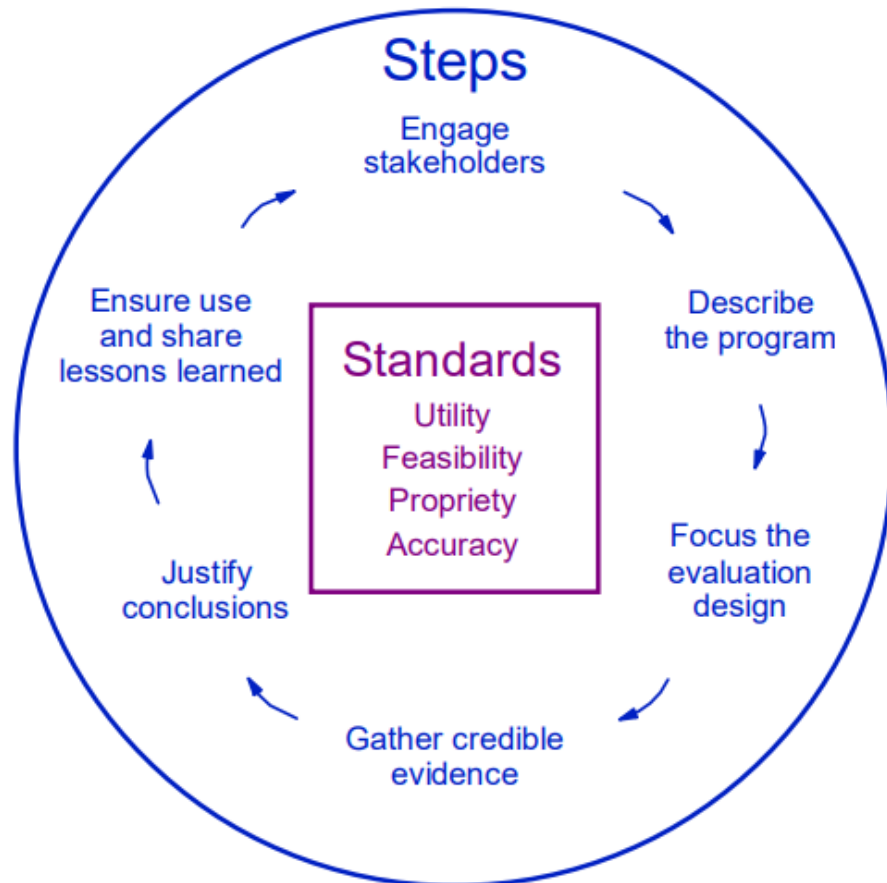
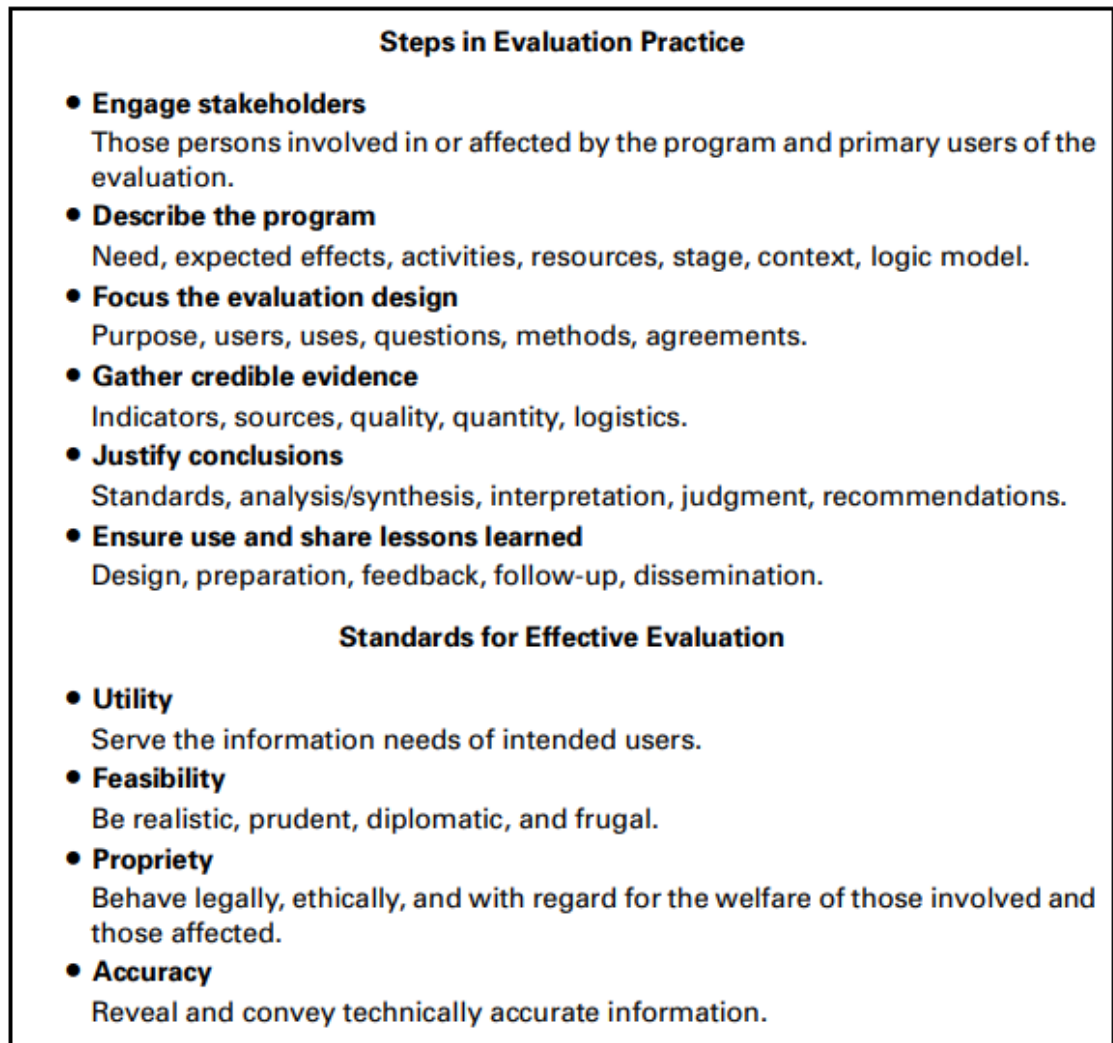


Figure 2 - Steps in evaluation practice and standards for effective evaluation:



Further evaluation of this programme will take place in the form of an RCT, looking at levels of PPD detected and treated effectively in a group receiving current standard care and a group receiving current standard care and the *Aquí Para Cuidarte* home visitation plan. This will give quantitative indicators which can be assessed. Satisfaction questionnaires will also be used to gather qualitative data about the success of the programme, one for the women using the service and one for the specially trained nurses delivering the care.

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17. APPENDICES

Appendix 1 – Edinburgh Postnatal Depression Scale (EPDS):

Edinburgh Postnatal Depression Scale¹ (EPDS)

Name:

Address:

Your Date of Birth:

Baby's Date of Birth:

Phone:

As you are pregnant or have recently had a baby, we would like to know how you are feeling. Please check the answer that comes closest to how you have felt **IN THE PAST 7 DAYS**, not just how you feel today.

Here is an example, already completed.

I have felt happy:

- Yes, all the time
 Yes, most of the time This would mean: "I have felt happy most of the time" during the past week.
 No, not very often Please complete the other questions in the same way.
 No, not at all

In the past 7 days:

- | | |
|---|--|
| 1. I have been able to laugh and see the funny side of things
<input type="checkbox"/> As much as I always could
<input type="checkbox"/> Not quite so much now
<input type="checkbox"/> Definitely not so much now
<input type="checkbox"/> Not at all | *6. Things have been getting on top of me
<input type="checkbox"/> Yes, most of the time I haven't been able to cope at all
<input type="checkbox"/> Yes, sometimes I haven't been coping as well as usual
<input type="checkbox"/> No, most of the time I have coped quite well
<input type="checkbox"/> No, I have been coping as well as ever |
| 2. I have looked forward with enjoyment to things
<input type="checkbox"/> As much as I ever did
<input type="checkbox"/> Rather less than I used to
<input type="checkbox"/> Definitely less than I used to
<input type="checkbox"/> Hardly at all | *7. I have been so unhappy that I have had difficulty sleeping
<input type="checkbox"/> Yes, most of the time
<input type="checkbox"/> Yes, sometimes
<input type="checkbox"/> Not very often
<input type="checkbox"/> No, not at all |
| *3. I have blamed myself unnecessarily when things went wrong
<input type="checkbox"/> Yes, most of the time
<input type="checkbox"/> Yes, some of the time
<input type="checkbox"/> Not very often
<input type="checkbox"/> No, never | *8. I have felt sad or miserable
<input type="checkbox"/> Yes, most of the time
<input type="checkbox"/> Yes, quite often
<input type="checkbox"/> Not very often
<input type="checkbox"/> No, not at all |
| 4. I have been anxious or worried for no good reason
<input type="checkbox"/> No, not at all
<input type="checkbox"/> Hardly ever
<input type="checkbox"/> Yes, sometimes
<input type="checkbox"/> Yes, very often | *9. I have been so unhappy that I have been crying
<input type="checkbox"/> Yes, most of the time
<input type="checkbox"/> Yes, quite often
<input type="checkbox"/> Only occasionally
<input type="checkbox"/> No, never |
| *5. I have felt scared or panicky for no very good reason
<input type="checkbox"/> Yes, quite a lot
<input type="checkbox"/> Yes, sometimes
<input type="checkbox"/> No, not much
<input type="checkbox"/> No, not at all | *10. The thought of harming myself has occurred to me
<input type="checkbox"/> Yes, quite often
<input type="checkbox"/> Sometimes
<input type="checkbox"/> Hardly ever
<input type="checkbox"/> Never |

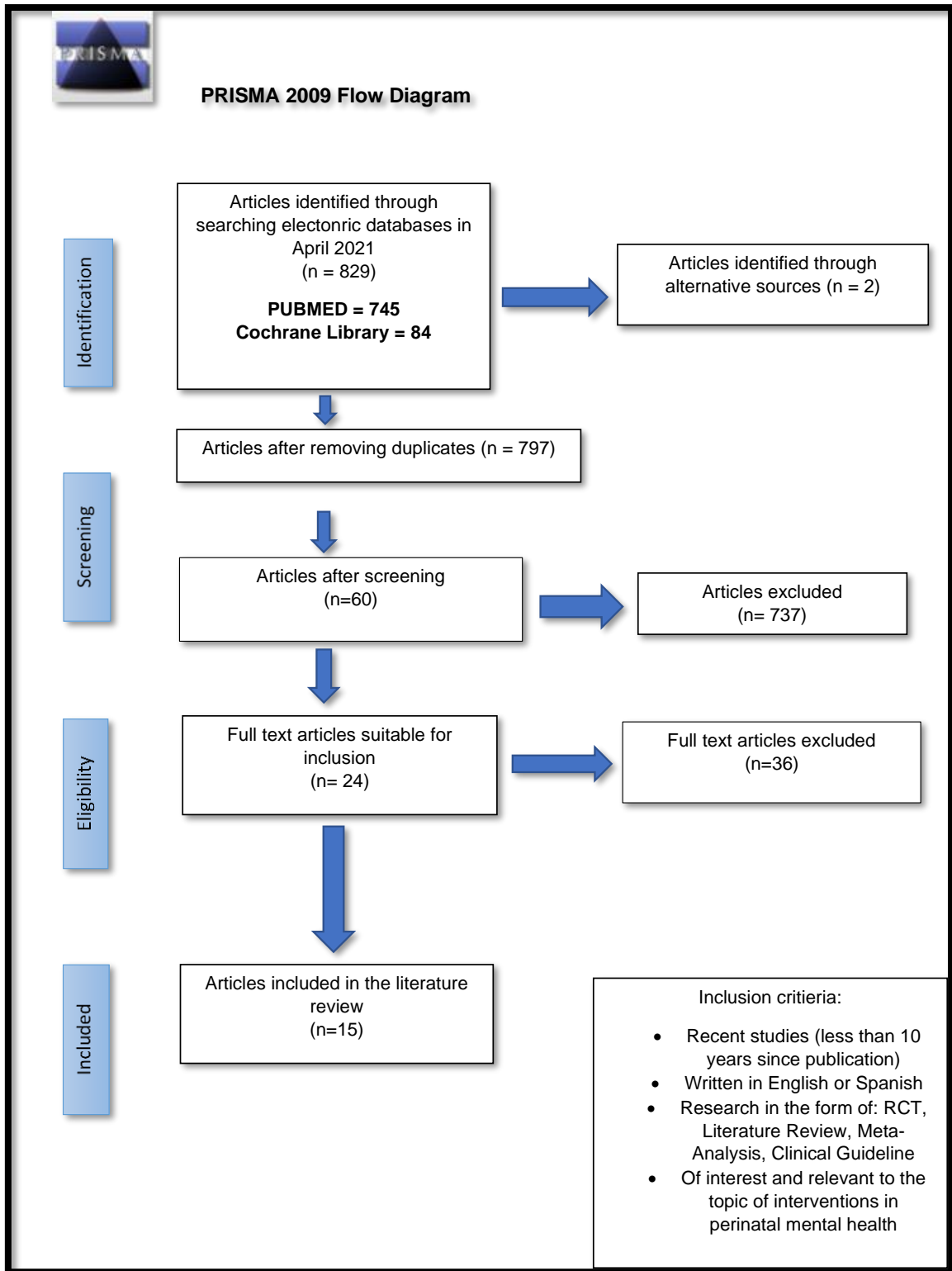
Administered/Reviewed by _____ Date _____

¹Source: Cox, J.L., Holden, J.M., and Sagovsky, R. 1987. Detection of postnatal depression: Development of the 10-item Edinburgh Postnatal Depression Scale. *British Journal of Psychiatry* 150:782-786 .

²Source: K. L. Wisner, B. L. Parry, C. M. Piontek, Postpartum Depression N Engl J Med vol. 347, No 3, July 18, 2002, 194-199

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Appendix 2 – PRISMA Checklist:



Appendix 3 – Table 1. Literature Review:

Author/s	Characteristics of study	Characteristics of participants	Intervention	Variables	Results/Key findings
Appleby L, Hirst E, Marshall S, Keeling F, Brind J, Butterworth T, Lole J.	Before and after design (not randomised). Aim: Analyse impact of brief training on skills and clinical practice of HVs.	n = 97, HV working in Manchester (United Kingdom)	Specialist training for HVs Topics covered: symptoms of PND, detection PND using the Edinburgh Postnatal Depression Scale (EPDS), and components of CBA.	Staff satisfaction, clinical practice, and cost effectivity.	Main changes in the counselling skills and clinical practice of HV. Cost of HV not affected but an increase in referrals to mental health services.
Brugha TS, Smith J, Austin J, Bankart J, Patterson M, Lovett C, Morgan Z, Morrell CJ, Slade P.	Cluster RCT Aim: Assess the feasibility and acceptability to pregnant women 'not at risk' of depression	n = 298, in the UK	Community midwives given CBA training and training on early identification of PPD	12 week & 34 week gestation EPDS and state anxiety with the State-Trait Anxiety Inventory (STAI) questionnaires.	Both the community midwives and the pregnant women found the programme helpful in qualitative findings. Midwives felt better equipped to deal with PMH issues.
Mohammadi F, Malakooti J, Babapoor J, Mohammad-Alizadeh-Charandabi S	RCT Aim: Effectiveness of home-based low-intensity workout	n = 127 pregnant women (26-32 weeks gestation), study based in Iran.	3 groups: 1 = no intervention 2 = receiving training for exercise during pregnancy 3 = receiving training for exercise during pregnancy and post-partum period until 2 months after delivery.	Depression measured using EPDS, baseline + 1-month post-partum, + 2 months post-partum.	Mean rank of the difference scores of depression and fatigue were not significantly different among the groups, both at 1- and 2-months post-partum (P > 0.05).

<p>Henderson C, Dixon S, Bauer A, Knapp M, Morrell CJ, Slade P, Walters SJ, Brughla T</p>	<p>Cluster RCT Aim: to assess the cost-effectiveness of HV training in the detection and treatment of PPD in low-risk women using a parallel cost-effectiveness analysis</p>	<p>Randomised 101 health centres to 1 of 3 groups (1 lost to follow up): 1: usual HV care (n = 38 clusters) 2. HVs trained in assessing postnatal for symptoms of PND and CBA to address postnatal psychological problems (n = 30 clusters)</p>	<p>HVs received brief training derived from CBT principles for group 2 and 3 (CBA and PCA groups). Training consisted of 1 day on clinical assessment skills; 5 days on psychotherapeutic approach; 4 half days of reflective practice/clinical supervision Developed skills in genuineness and listening</p>	<p>Baseline EPDS taken at 6 weeks postpartum. Then at 6, 12 and 18 months postnatally. Economic evaluation: Analysis carried out according to the NICE guidelines for technology appraisal.</p>	<p>Intervention groups had statistically significantly fewer HV visits focused on the mother than the control group Overall, total HV time spent with the mother/baby was 56 minutes lower in the CBA than control group</p>
<p>Pan WL, Chang CW, Chen SM, Gau ML.</p>	<p>RCT Aim: Evaluate efficacy of mindfulness-based childbirth and parenting programme in improving PMH</p>	<p>n =74, between 13 and 28-weeks gestation</p>	<p>Intervention programme: series of eight, 3-h classes held once weekly and 1 day of 7-h silent meditation</p>	<p>Primary outcome: perceived stress, was measured using the Perceived Stress Scale (PSS-10). Secondary outcome: EPDS</p>	<p>Significant differences in stress & depression observed in both groups. Stress scores & depression scores were significantly better in intervention than in comparison group at 3-months PP.</p>
<p>Sandner M, Cornelissen T, Jungmann T, Herrmann P.</p>	<p>RCT Aim: evaluate the effects of home visiting targeted towards disadvantaged first-time mothers on maternal & child health outcomes</p>	<p>n=755 expectant mothers</p>	<p>A home visit programme by the name of “Pro Kind”, modelled on a similar north American programme (Nurse Family Partnership – NFP).</p>	<p>Interviews and questionnaires carried out at baseline (antenatally) and then at 6, 12, and 24 months postpartum to record number of home visits in treatment group.</p>	<p>Better PMH in the treatment group – possibly due to the home visits acting as social and supportive service for the mothers.</p>

Goldfeld S, Bryson H, Mensah F, Gold L, Orsini F, Perlen S, Price A, Hiscock H, Grobler A, Dakin P, Bruce T, Harris D, Kemp L.	RCT Aim: measure effects of a Nurse Home Visiting programme (right@home), offered to pregnant women experiencing adversity, on maternal mental health.	n = 722 women enrolled in the trial, 255 of 363 (70%) intervention and 240 of 359 (67%) control group women provided data at 3 years.	Pregnant women experiencing adversity (≥ 2 of 10 risk factors) were recruited from 10 antenatal clinics across 2 states. Intervention comprised 25 home visits until child age 2 years.	1-year postintervention maternal self-report of mental health symptoms (Depression Anxiety Stress Scales) and positive aspects of mental health (personal well-being and self-efficacy).	Compared with controls, the intervention group reported better mental health
Sheffield KM, Woods-Giscombé CL.	Systematic literature review Aim: examine existing empirical literature on yoga and its effects on women's health and well-being during perinatal period.	13 articles met inclusion criteria. Total of 667 peripartum women across all studies.	Details extracted: purpose, psychiatric disorder, intervention (type, duration, frequency, and setting), sampling, variables, measurement scale, data collection and analyses, recruitment technique, attrition, findings, and demographics.	Primary outcome: depression and anxiety. Secondary Outcomes: pain, stress, maternal-foetal attachment, relationships, biomarkers, sleep, anger, fatigue, heart rate variability, birth outcomes, and mindfulness.	Results indicated that yoga interventions are generally effective in reducing anxiety and depression in pregnant women.
Dodge KA, Goodman WB, Bai Y, O'Donnell K, Murphy RA.	RCT Aim: Test implementation and impact of the Family Connects (FC) programme when administered by a community agency.	n = 936 456 births (46.5%) were randomized to the intervention and 480 (53.5%) were randomized to the control.	Intervention consisted of 3 parts: 3 PP visits Alignment of community resources Integrated data system documenting all contacts and visit info	Primary outcome: child protective services investigations for maltreatment Secondary outcome: the number of sustained community connections, maternal mental health and parenting behaviour.	The interventions group's rate of possible maternal anxiety or depression was 18.2% vs 25.9% for the control group (b= -7.70; 90% CI, -15.2 to -0.1; 95% CI, -16.6 to 1.3; P= .09).

Coll CVN, Domingues MR, Stein A, da Silva BGC, Bassani DG, Hartwig FP, da Silva ICM, da Silveira MF, da Silva SG, Bertoldi AD	RCT Aim: To assess the efficacy of regular exercise during pregnancy on the prevention of postpartum depression	n = 639 (mean [SD] age, 27.1 [5.1] years; mean gestational age, 16.5 [1.5] weeks) were randomly assigned to the intervention group (n = 213) or control group (n = 426)	16-week supervised exercise program including aerobic and resistance training delivered in 60-minute sessions 3 times per week	Postpartum depressive symptoms were assessed with the EPDS 3 months after birth. A score of 12 or greater was defined as screening positive for postpartum depression. P	Compliance with the protocol, defined as having engaged in at least 70% of exercise sessions, was low (40.4%). There was no significant difference in mean (SD) scores for postpartum depression between the intervention group.
Caramlau I, Barlow J, Sembi S, McKenzie-McHarg K, McCabe C.	RCT Aims: Mums4Mums study aims to evaluate the impact of telephone peer-support for women experiencing PPD.	Based in Warwickshire in the UK. n = 30 Women >16 years of age at the time of giving birth and who are experiencing depressive symptomatology	HVs identified potential participants to be trained as peer-supporters (n = 18). Eligible peer-supporters were invited to attend a training programme lasting approximately eight hours.	The primary outcome measure is depressive symptomology, which is being measured using the EPDS. Secondary outcome measures to assess maternal functioning.	Results pending completion of study.
Molyneaux E, Telesia LA, Henshaw C, Boath E, Bradley E, Howard LM.	Systematic Review Aims: Assess the effectiveness of antidepressant medication for prevention of PPD	Two trials n = 81 participants	1st study = nortriptyline vs placebo 2nd study = sertraline vs placebo	Women experiencing PPD up to 17 weeks after delivery.	1st study = No evidence found that nortriptyline effective in preventing PPD. 2nd study = Uncertain whether sertraline reduces risk of PPD.

<p>Yonemoto N, Dowswell T, Nagai S, Mori R.</p>	<p>Systematic review Aim: Assess outcomes for women and babies of different home-visiting schedules during the early postpartum period.</p>	<p>Included data from 12 randomised trials with data for more than 11,000 women. Trials carried out in countries across the world, and in both high- and low-resource settings.</p>	<p>3 broad types of comparisons: schedules involving more vs fewer postnatal home visits , schedules involving different models of care, and home vs hospital clinic postnatal check-ups.</p>	<p>Primary outcomes: 1. Maternal mortality at 42 days post birth. 2. Neonatal mortality. Secondary outcomes: Maternal outcomes</p>	<p>Increasing the number of postnatal home visits may promote infant health and maternal satisfaction and more individualised care may improve outcomes for women, although overall findings in different studies were not consistent.</p>
<p>Cummings, E., Whittaker, K.</p>	<p>Aim: Explore experiences of HVs carrying out listening visits, an intervention used to support women suffering mild-moderate depression and anxiety in the PP period.</p>	<p>n = 33 HVs, from one single UK NHS health trust.</p>	<p>Intervention: HVs completed surveys using an online questionnaire and follow-up interviews.</p>	<p>Quantitative data was analysed using SPSS to produce descriptive statistics. Answers to open questions within the survey were analysed using content analysis.</p>	<p>HVs value this intervention, but report that training in the use of therapeutic tools and wider knowledge of mental disorders would improve delivery.</p>
<p>Gillham, R., & Wittkowski, A.</p>	<p>Systematic Review Aim: To evaluate the psychological outcomes of mother and baby unit (MBU) admission.</p>	<p>n = 5,023 participants, including 215 control participants (4.3%).</p>	<p>Studies selected included an intervention of admission to an MBU.</p>	<p>Mother-infant outcomes: Rating scales of the mother–infant relationship Observational measures of the mother–infant relationship Parenting skills</p>	<p>Improvements in PMH, mother–infant relationship, and child development. Poorer outcomes for specific groups: Personality/psychotic disorder, severe depression.</p>

Appendix 4 – UK Health Visitor role:

UK Health Visitor role description (taken from <https://www.prospects.ac.uk/job-profiles/health-visitor>):

As a health visitor, you'll support children of pre-school age and their families, with the aim of giving them the best start in life. This includes working with parents to assess parenting skills, looking at the family and home situation and focusing on the development needs of young children.

You'll agree with parents what levels of support are required and provide any necessary guidance and advice.

You can meet with families in their homes, clinics or in a community setting, and will liaise with other healthcare professionals such as nurses, GPs, midwives, social workers and nursery nurses.

To become a health visitor, you'll first need to be a qualified and registered nurse or midwife and will then need to undertake an approved programme of training.

Responsibilities

As a health visitor, you'll need to:

- advise and inform new parents on issues such as feeding, sleeping, safety, physical and emotional development, weaning, immunisation and other aspects of childcare
- give support from early pregnancy and birth up to the child's fifth birthday - providing a gateway to other services as required
- identify risk factors and signs of concern and work with organisations to protect and safeguard children, as well as making sure families receive support during safeguarding arrangements
- manage parent and baby clinics at surgeries, community and Sure Start children's centres, and run specialist sessions on areas such as baby massage, exercise and child development
- provide emotional support regarding issues such as postnatal depression, bereavement, disability, family conflict and domestic violence
- support government initiatives to tackle child poverty and social exclusion and use specialist healthcare interventions to meet the needs of families
- maintain and update client records.

The role varies depending on the location and you may be given a specialist area to work in, high-risk or deprived groups such as addicts, the homeless or travellers.

Salary

Health visitors usually start at Band 6 of the NHS Agenda for Change (AfC) pay scale. This begins with salaries of £30,401 and rises to £37,267.

Team managers and health visitor specialists can earn up to £43,772 on Band 7 of the scale.

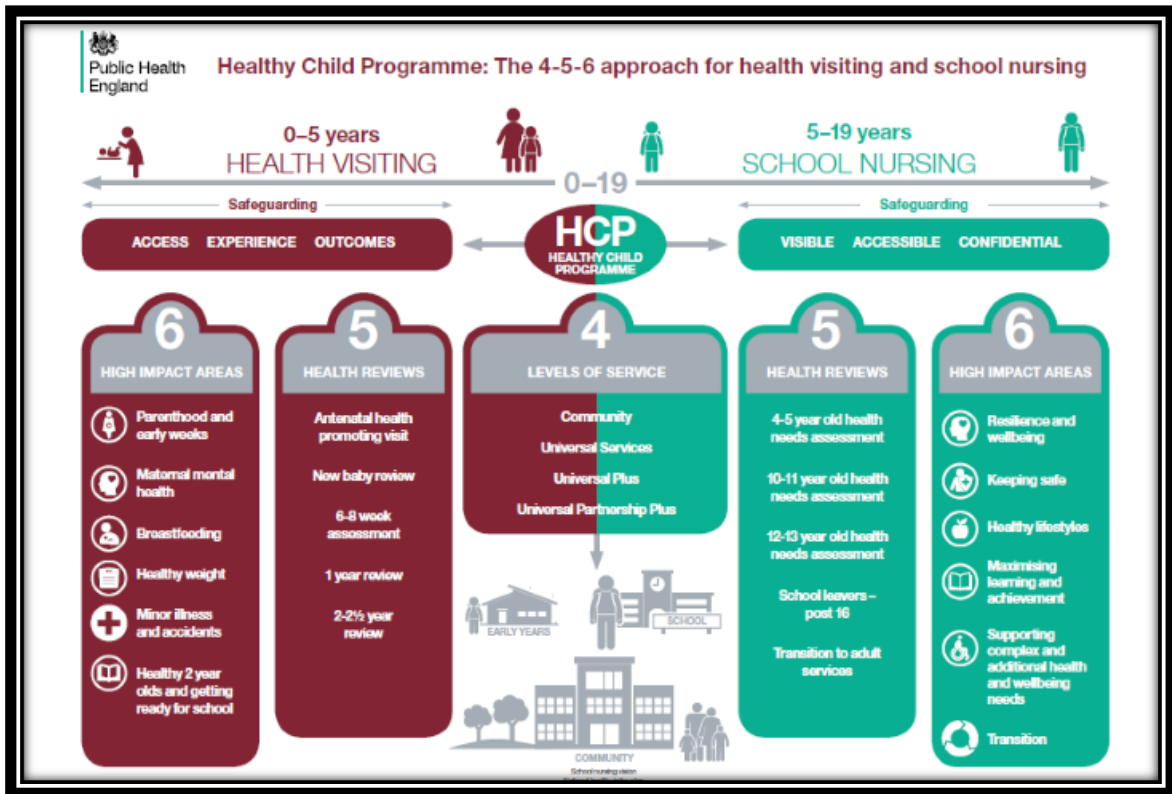
Appendix 5 – Logo design for Aquí Para Cuidarte programme



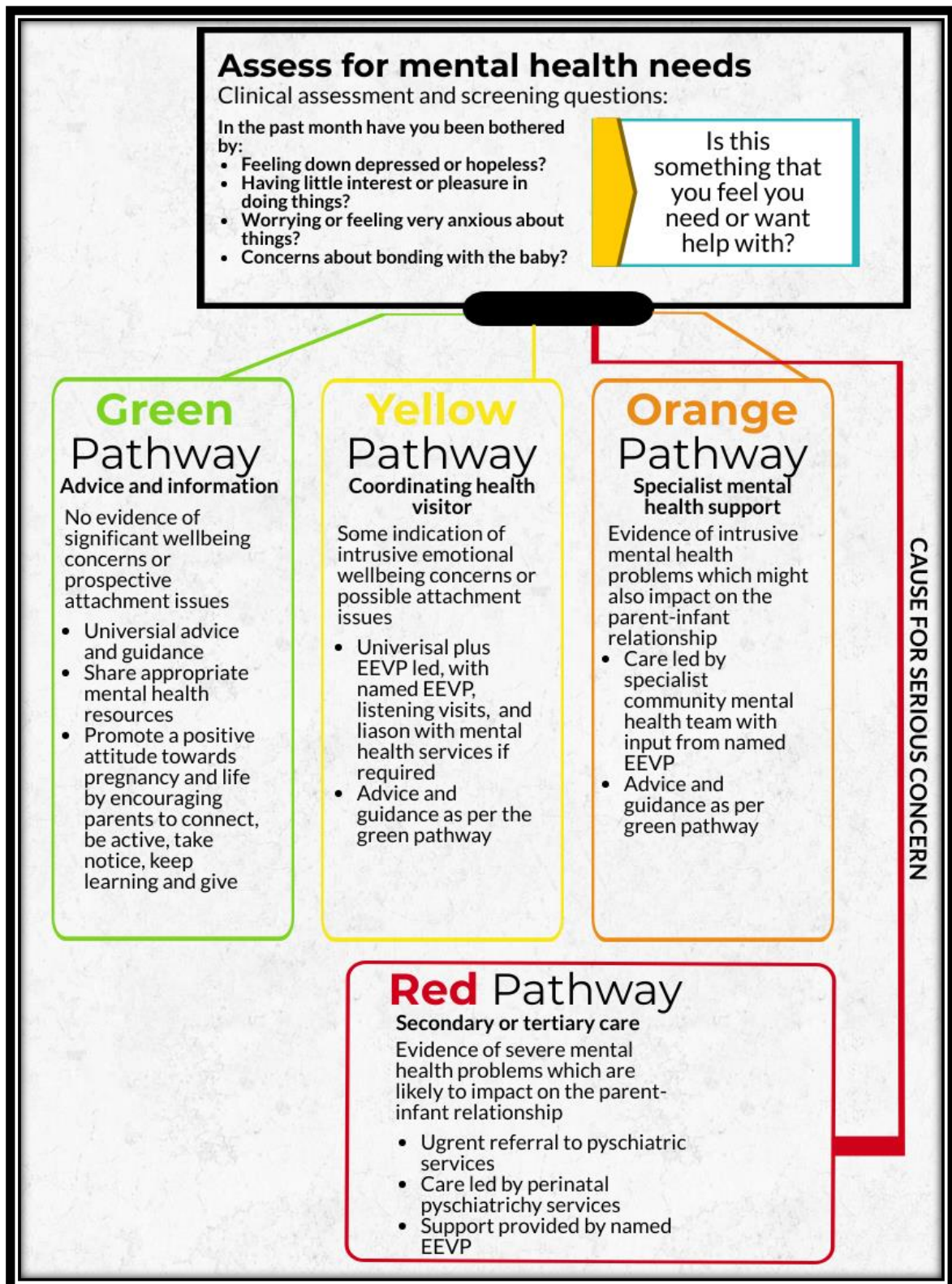
Appendix 6 – Role of the EEVP in the Aquí Para Cuidarte programme:



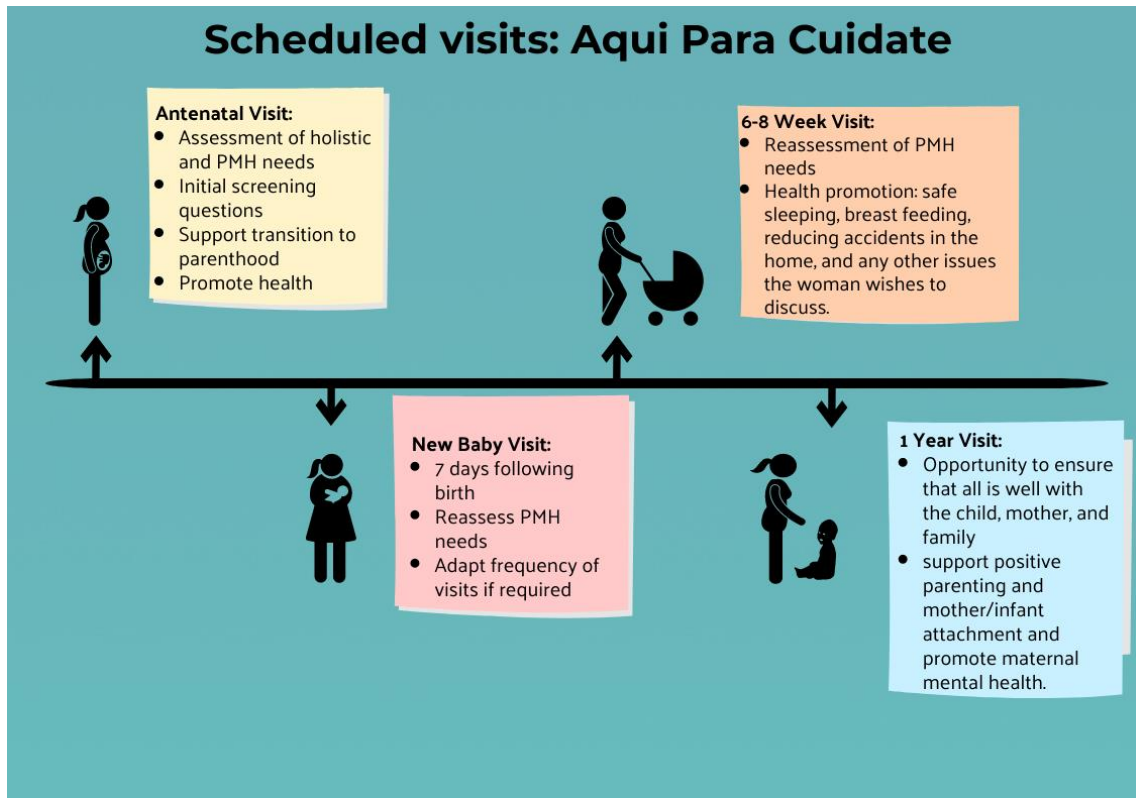
Appendix 7 - Public Health England 4-5-6 model of Health Visiting:



Appendix 8 – Adjusted 4-4-3 Health Visiting model:



Appendix 9 – Home Visit timetable:



Appendix 10 – Listening visits:



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Listening visits

The core techniques of this two-part non-directive counseling intervention are the exploration of a client's problems through reflective listening and collaborative problem solving. Reflective listening is a counseling technique providers use to help clients work through a difficult situation. In reflective listening the listener attends to all aspects of the client's verbal and nonverbal messages and reflects these messages back to the client. In reflecting back the client's message, the listener offers a link between the experience and the associated affect, emphasizing that the listener is genuinely interested in understanding the client's situation, is working in partnership with the client, and is not assuming the expert role.

”



“

Cognitive Behavioural Approach

Cognitive based approach (CBA) is a well established intervention for individuals experiencing anxiety or depression. It is based on a combination of cognitive and behavioural theories of human behaviour. The key premise is that emotional distress is maintained by maladaptive ways of thinking and processing information (cognitions and schemas), which are driven by individuals' experiences and beliefs. CBA guides and supports people to evaluate and alter maladaptive ways of thinking, leading to changes in emotional state and behaviour, in this way reducing symptoms of anxiety and depression. Since the introduction of CBA in the 1960s it has been adapted to meet the needs of a wide variety of populations and health conditions and a range of CBA interventions now exist.

”

Appendix 13 – Informative poster aimed at the public as part of the *Aquí para cuidarte* programme:



Aquí para cuidarte

Programa para cuidar la salud mental durante el embarazo y postparto



¿Qué es Aquí para cuidarte?

Es un programa de 4 visitas, con la opción de planificar más, domiciliarias con un@ Enfermer@ Especialista en Visitas Perinatales con el objetivo de escucharte, de ayudarte y evaluar tu salud mental

4 visitas

- Prenatal
- Recién nacido
- 6-8 semanas
- 1 año

(+ visitas adicionales según las necesidades de cada mujer)

Cuidando y mejorando tu salud mental

Queremos detectar, diagnosticar y tratar trastornos de salud mental en las mamás y pre-mamás. También queremos normalizar las conversaciones sobre la salud mental perinatal

Visitas domiciliarias

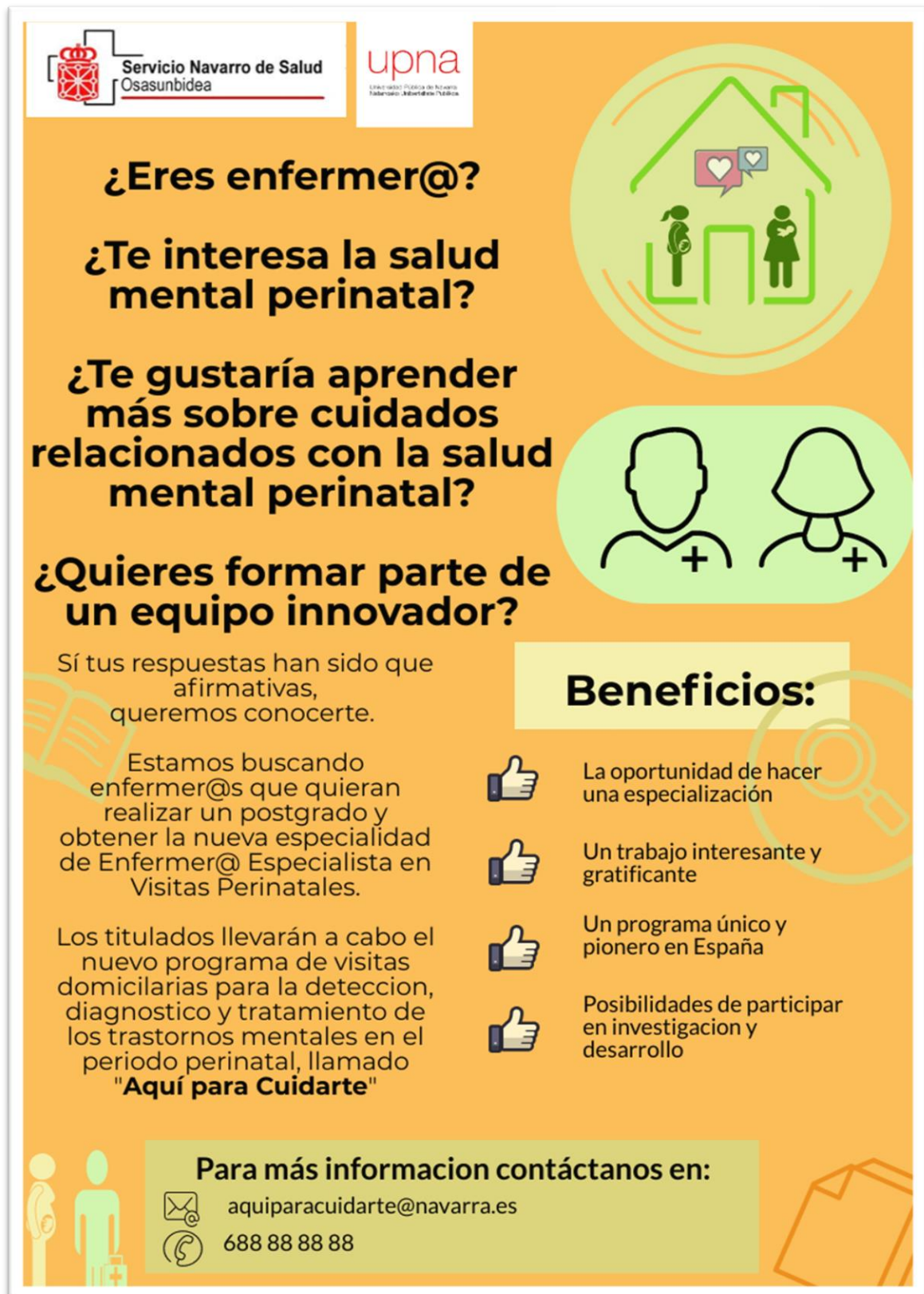
Siempre que sea posible queremos cuidarte en tu domicilio, nosotros vamos a donde estés

Puedes contar con un equipo profesional

Nuestro equipo está formado por Enfermero/as Especialistas en Visitas Perinatales

Tu salud mental nos importa y queremos estar aquí para todas las mamás y pre-mamás

Para saber más sobre Aquí para Cuidarte visita: www.navarra.es/aquiaparacuidarte o llámanos al 688 88 88 88



The poster features a warm orange background with white and green text and graphics. At the top left, there are logos for 'Servicio Navarro de Salud Osasunbidea' and 'upna'. The central text consists of four questions in bold black font, followed by a paragraph of text and a 'Beneficios:' section with four points. At the bottom, there is contact information and a small illustration of a family.

Servicio Navarro de Salud Osasunbidea

upna
Unidad Pública de Neurociencias
Investigación Biomédica

¿Eres enfermer@?

¿Te interesa la salud mental perinatal?

¿Te gustaría aprender más sobre cuidados relacionados con la salud mental perinatal?

¿Quieres formar parte de un equipo innovador?

Sí tus respuestas han sido que afirmativas, queremos conocerte.


Estamos buscando enfermer@s que quieran realizar un postgrado y obtener la nueva especialidad de Enfermer@ Especialista en Visitas Perinatales.


Los titulados llevarán a cabo el nuevo programa de visitas domiciliarias para la detección, diagnóstico y tratamiento de los trastornos mentales en el periodo perinatal, llamado "**Aquí para Cuidarte**".

Beneficios:

- La oportunidad de hacer una especialización
- Un trabajo interesante y gratificante
- Un programa único y pionero en España
- Posibilidades de participar en investigación y desarrollo

Para más información contáctanos en:

 aquiparacuidarte@navarra.es

 688 88 88 88

