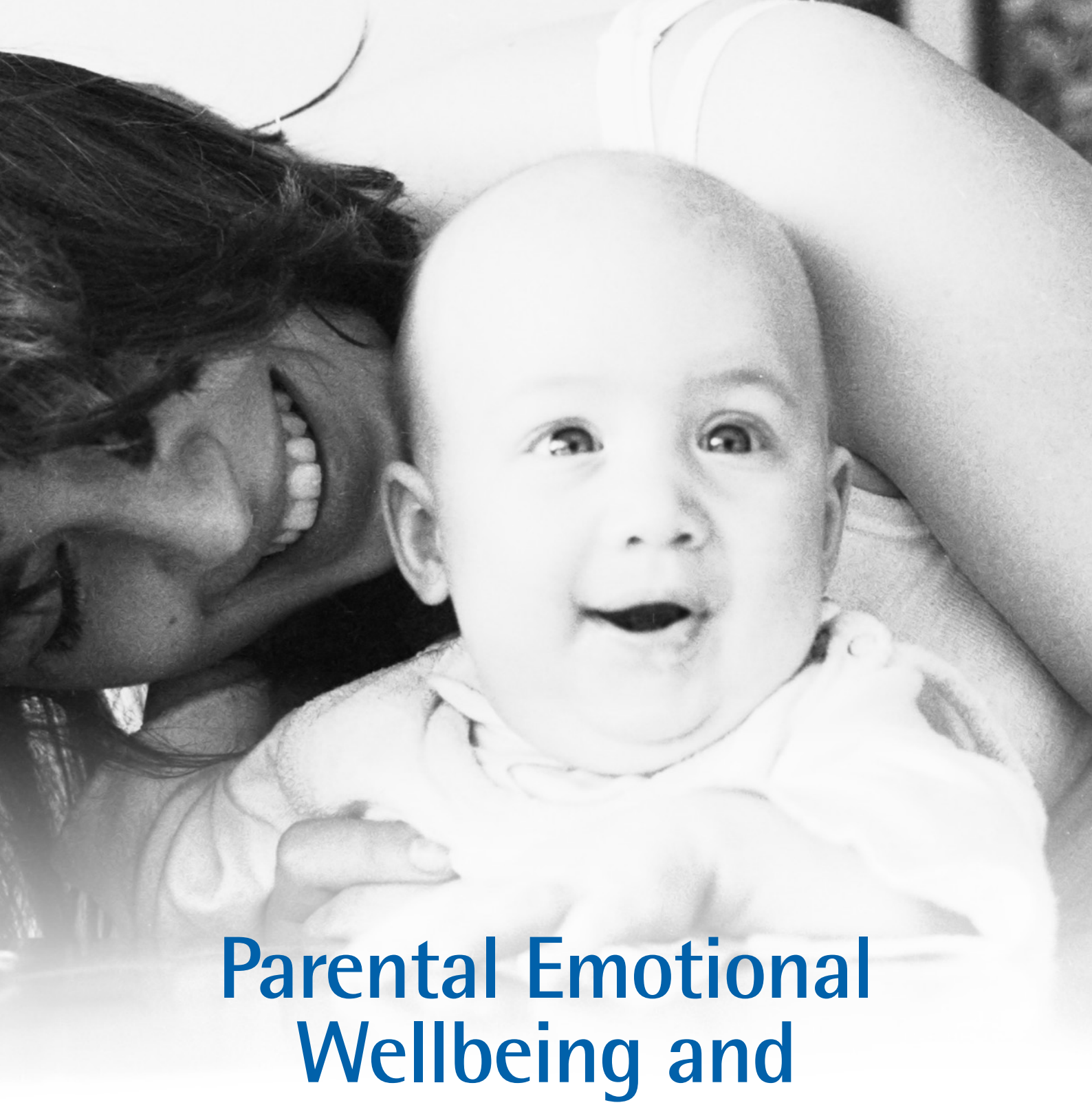

Parental Emotional Wellbeing and Infant Development

THE ROYAL COLLEGE OF MIDWIVES

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Foreword

Midwives, and those who work alongside them, are the frontline when it comes to NHS maternity care. Their high quality, holistic practice has long term benefits for mother and child. Their complex role encompasses prediction, prevention, detection, and treatment. They are also a gateway to accessing vital care and support within the NHS, social care and third sector.

However, we have a long way to go before we can be satisfied that women's mental health needs, and the associated needs of their babies and families, are being met during maternity to a degree that would achieve parity with their physical health needs. This is not for want of effort by midwives: they need better support in terms of policy, resources, training, and guidance.

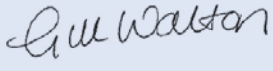
Midwives have always played a role in supporting the mental well-being of mothers and babies, but it is only recently that this has been formally acknowledged in policy and guidance, and even more recently that small steps have been taken to expand resources and training. Two important examples are the development of NHS specialist perinatal mental health services that can work closely with maternity services to improve pathways of care for mothers and babies; and the increasing numbers of specialist mental health midwives who can provide 'in house' expertise to support their colleagues in providing mental health care.

This guidance from the Royal College of Midwives provides valuable, focussed, clinically relevant and evidence-based information and advice on the inextricably linked issues of parental mental health, the parent-baby relationship, and infant development. It summarises key elements in the literature and implications for practice and covers the complex web of interrelated issues that must be considered.

It is not simplistically restricted to direct support and care but emphasises the crucial role of addressing key social factors that reduce risk - in particular domestic violence and support from partners, family, friends, and others. It refers throughout to the thoughtful and sensitive approach required, balancing the needs of mothers and babies, and recognising that enhancing a mother's psychological wellbeing and her relationship with her baby are an investment for the future.

The practice points in each section will enhance the work and impact of individual professionals and should contribute to reducing the barriers to care that currently mean that at least 50% of women and babies don't access the help they need. A recent NCT survey highlighted the most frequent barriers: fears of being judged as incapable of looking after their baby; shame and embarrassment; not recognising the need for help or that help is available; fear that professionals will not be sympathetic, understanding, or interested.

Mental illness is the most common serious health complication associated with maternity and a main cause of maternal death and maternity is the highest risk period in human lifetimes for psychosis and admission to psychiatric hospital. Although most children appear to be unaffected by maternal mental health problems, they are more likely to have later difficulties. This can be mitigated by supporting mothers and supporting mother's relationships with their baby. Midwives play a critical role in doing so, and in reducing this human suffering directly, through their interactions with individual women and families and by facilitating better support and care from others. This guidance will supportmidwives in this complex but invaluable task.



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Introduction

This guide provides midwives and maternity support workers (MSWs) with recent evidence about the impact of parents' emotional wellbeing during pregnancy and the transition to parenthood, and suggests evidence-based ways to support healthy parent-infant relationships. Each section provides an overview of recent theory and research, and includes practical suggestions about how all parents might be supported and a summary of the key messages.

Supporting parents' emotional wellbeing during the perinatal period is now recognised to be as important as the traditional focus on the physical health of the mother and child. Pregnancy, birth and the postnatal period is a time of major psychological and social change for parents-to-be as they negotiate their emerging roles as mothers and fathers. Expectant mothers care more for their own health when they have supportive partners (Fletcher et al., 2014), so it is crucially important to support the whole family to make healthy transitions to their new roles so that they care for each other as well as the new baby.

Evidence from a range of disciplines highlights the importance of supporting all parents in the transition to parenthood so that they can provide the warm, sensitive relationships that babies need for optimal development. Increasing evidence about early brain development and the way in which infants develop emotional and behavioural wellbeing within the context of their early relationships, has highlighted the particular importance of building bonds with the unborn baby, and responsive early caregiving.

It is recommended that this guide is used as a starting point for discussion between colleagues, and for further development of ideas to improve practice. These practices can be built into the care that is delivered particularly with high risk and disadvantaged families, where they can have a significant positive impact.

Contents

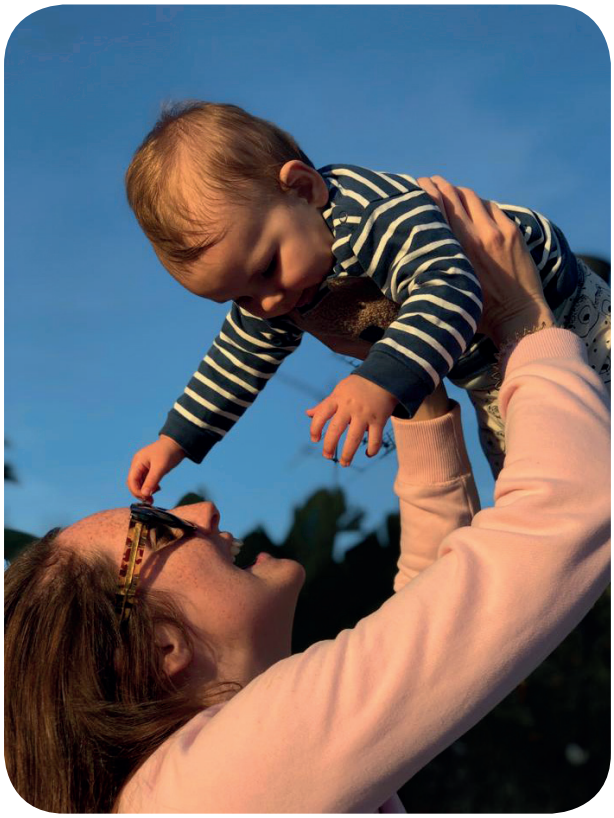
Antenatal care and the transition to parenthood

This section examines the 'transition to parenthood' within the context of diverse contemporary family structures now current in the UK. The importance of supporting the emotional health and wellbeing of the whole family is emphasised and the impact of changing and assisted conception rates is discussed.

Although the emotions (such as the mix of joy and turmoil) and the challenges experienced when becoming a new parent remain constant, the structure of contemporary families has changed over time, and as such, the transition to parenthood now needs to be considered in the light of the pressures and challenges facing 21st century families.

Key messages for midwives and MSWs

- It is not the family structure or form that is important for children's optimal growth and wellbeing; what matters is the psychological wellbeing of the parents, the quality of the parent-child relationship, and the psychological characteristics of the child.
- There have been significant changes to the nature of families in the UK, with conception rates changing for age groups, changing attitudes to marriage, new technologies enabling conception and an increase in same-sex couples and single people starting families.
- Research clearly shows that mothers' and babies' health is positively impacted when partners are included and involved.
- The 'transition to parenthood' refers to a period of normal psychological and social changes associated with pregnancy and the arrival of a new baby, which may be stressful. Parents appreciate being informed and prepared for the changes that will occur.
- Domestic violence and abuse can start and escalate in pregnancy. Practitioners have an important role listening to families and safely asking expectant mothers about their experiences to detect abuse.
- All parents, but first-time parents in particular, should be offered the opportunity to attend antenatal education classes that include components that are aimed at preparing parents for these psychological and role changes.



Adapting to parenthood

There is clear evidence that the transition to parenthood is a key time to engage expectant and new parents and help prevent relationship difficulties from developing, as well as working with families who are already experiencing difficulties. Focusing on the couple or co-parenting relationship in the transition to parenthood is more beneficial than focusing on parenting or mental health issues alone.

The 'transition to parenthood' describes the emotional and social changes that take place during pregnancy and the immediate postnatal period. This period is recognised to be a stressful time when both women and men are making significant psychological changes and adapting to the prospect and reality of their new roles as parents (Ammaniti and Gallese, 2014; Slade et al., 2009). Parents appreciate being reassured that experiencing a wide range of emotions – from joy, happiness through to anxiety, self-doubt and frustration – is normal.

The transition to becoming a parent can be challenging and may often involve feelings of loss of control, and disruption to relationships (Hanzak, 2005; Robertson and Lyons, 2003). During the transition to parenthood, many parents (including same sex parents) show an increase in relationship stress and a decline in satisfaction compared to couples who do not have children (Cowan and Cowan, 2000; Goldberg and Sayer, 2006). Specifically, many new parents engage in less positive interactions with one another and argue more, due in part to the exhaustion and continued sleep disturbances, while also having less time to spend together (Goodman, 2005; Halford et al., 2010).

Programmes to support the transition to parenthood

The Healthy child Programme (DH 2009) is a universal prevention and early intervention programme aiming to support expectant parents and reduce health inequalities for young children.

Group-based parenting programmes have been developed to prepare parents for their new roles, many of which are replacing the more standard 'antenatal classes'. For example, *Family Foundations* is a 10 week universal programme that teaches the couple strategies to support parental relationships during the transition to parenthood and to establish positive family routines. There is evidence from two RCTs showing that the *Family Foundations* programme reduces parental stress and supports healthy child attachment behaviours. Other innovative programmes include the NSPCC's Baby Steps Perinatal Programme and the Solihull Approach have developed population-based programmes (i.e. *Journey to Parenthood: Understanding your pregnancy, labour, birth and your baby*), which can be self-administered.

Conception rates and marriage

Research studies show that it is not the family structure or form that is important for children's optimal growth and wellbeing; what matters is the psychological wellbeing of the parents, the quality of the parent-child relationship, and the psychological characteristics of the child (Golombok, 2015). Families are changing and many of the 731,217 babies born in 2018 across the UK will grow up in less traditional family contexts than their parents experienced. In the UK, five out of six babies are born into families where both biological parents live together (ONS, 2016) and it is important to recognise the different ways families arise. For example:

- There is a marked increase in the number of stepfamilies with 40% of all marriages being remarriages for one or both partners (Lloyd and Lacey, 2012).
- In 2017, 51% of babies were born to parents who were married or in a civil partnership and 67% of those born outside of marriage or civil partnership had parents who lived together (ONS, 2017).
- Mothers and fathers are increasingly older, with fertility rates decreasing for every age group except for women aged 40 years and over, where the rate increased by 1.3% to 16.1 births per 1,000 women (ONS, 2017).
- The under 18 years conception rate in 2016 fell to 18.9 births per 1,000 women, the lowest recorded since statistics were first produced in 1969 (ONS, 2016).

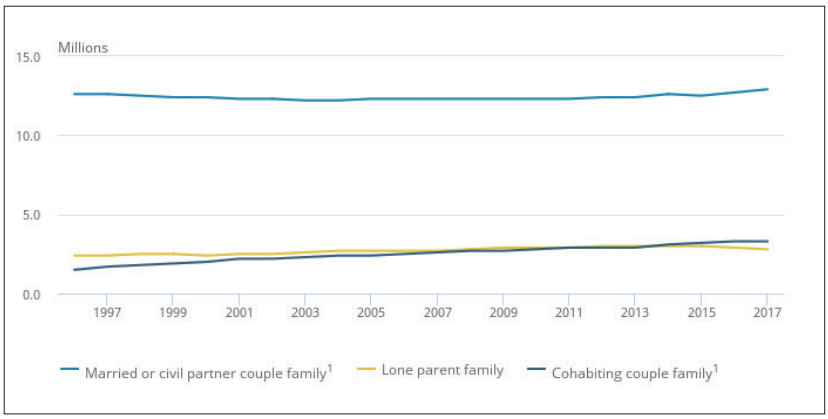


Figure 1. Families by family type, 1996 to 2017 – UK

Source: Labour Force Survey, Office for National Statistics. Licensed under the Open Government Licence v3.0. Note on Figure 1: Following the passage of marriage equality legislation for England and Wales (2013) and Scotland (2014), married couple families include both opposite sex and same sex married couples. Cohabiting couple families include both opposite sex and same sex cohabiting couples.

Assisted conception

Historically most research into the transition to parenthood has been conducted with biological parents in heterosexual relationships. However, delays to starting a family, a rise in the number of single parents, and an increasing number of same-sex couples becoming parents has been facilitated by assisted reproductive technologies. This means that others, such as egg donors, sperm donors and surrogate mothers, are now part of the transition to parenthood too. The uncertainty of assisted conception may heighten anxiety and cause significant stress, and so parents will benefit from extra time and understanding from those caring for them.

The importance of fathers and partners

There are good reasons for professionals such as midwives to intervene not only with mothers, but fathers as well. Studies increasingly indicate that engaged and supportive fathers have a major impact on the health and wellbeing of the mother (Fletcher et al., 2014) and baby (Opondo et al., 2016). When fathers are supportive, mothers are more likely to attend antenatal care, take more care of their health and deliver healthier babies (Fletcher et al., 2014). In England, the vulnerability of fathers' and partners' own mental health following the birth of a baby, and its impact on maternal mental health and the developing relationship with the baby has been recognised. Recently, NHS England announced that partners of pregnant women who are experiencing mental ill health will be offered their own mental health checks and signposted to professional support (NHS England, 2018).

Practice Points for midwives and MSWs on the transition to parenthood

- Build trusting respectful relationships where parents know they are listened to.
- Ensure every parent feels included regardless of family make-up.
- Engage parents in antenatal groups and classes which are focused on relationships alongside the physical birth.

Domestic abuse during the antenatal period

Domestic abuse in pregnancy is associated with a wide range of compromised physical outcomes (miscarriage, low birthweight, placental abruption and pre-term delivery), and also with postnatal depression (Donovan et al., 2016; Flach et al., 2011) and post traumatic stress disorder (PTSD) (Loring et al., 2001). Research studies have reported differing levels of psychological or physical violence during pregnancy and they highlight the importance of safely asking women about their experiences. 'Low level' inter-partner violence - defined as pushing, shoving, and slapping - are reported in around 25-30 per cent of couples (Halford et al., 2010). Another study found a prevalence of 17 per cent after analysing anonymous questionnaires sent to 500 women who had attended the antenatal booking clinic (Johnson et al., 2003).

Midwives in the UK have a responsibility to ask all pregnant women if they have ever experienced domestic abuse in the form of physical violence or emotional abuse, which includes being affected by coercive and controlling behaviour from a partner, in addition to other types of control such as financial abuse. Although such identification is very important, a number of barriers have been identified including consultations taking place in busy clinics or at home where there are no opportunities to see the woman alone, language barriers, and a fear of 'opening up' issues without knowing how to manage a positive disclosure (Stonard and Whapples 2016).

Health professionals need supportive training to gain confidence to ask the questions in a safe environment so that expectant mothers do not fear reprisal if they disclose such abuse. However, detection is only part of the solution and health professionals must be familiar with referral pathways and available interventions in their areas. Stonard and Whapples (2016) have constructed a referral pathway led by a specialist midwife for domestic violence who is routinely present at pregnancy wellbeing units. The pathway involves midwives channelling women into a consultation with the specialist midwife who can then give individualised help and support. Women identified the importance of privacy, trust and confidence in the midwife, and of having repeated opportunities for disclosure. The NICE guideline for 'Pregnancy and complex social factors' suggests pathways for care for all pregnant women experiencing domestic abuse, as well as other factors such as alcohol or drug misuse, difficulty reading or speaking English, being a recent migrant or asylum seeker, or being aged under 20 (NICE Guideline 2010).

Practice Points for midwives and MSWs on what to do if they suspect domestic abuse

Follow the NICE Guidelines CG 110 (2010) for care of pregnant women with complex social factors:

- Be available to listen, talk, understand and support.
- Ask women about domestic abuse sensitively, when the partner is not present, and provide multiple opportunities for disclosure.
- Provide flexible midwifery appointments and venues, and assurance that information will be confidential and not included in notes.
- Ensure that same sex independent interpreters and advocates are used for non-English speaking women.
- Offer support from a dedicated domestic abuse support worker.
- Contribute to the development of clear local protocols/referral pathways in consultation with social care and voluntary sector providers.
- Support should also involve referral to social services for an appropriate pre-birth assessment and intervention.

Alcohol and drug use in pregnancy

Alcohol and drug use pose high risks to the health of the unborn child and the mother, and it is as such crucial that that health professionals are aware of such issues, and that expectant mothers receive appropriate help and support. Knowing that these substances are harmful to the unborn child can be a powerful incentive for the woman to make positive changes and midwives should discuss these issues with women in a non-judgmental manner and support them to access help.

Substance/alcohol use in pregnancy usually co-exists with a range of other problems such as limited financial resources, poor accommodation and few support networks. Women who are misusing substances are more likely to have a history of abuse or neglect, and negative experiences of parenting during their own childhoods, and to have more negative representations of their unborn baby (Pajulo et al., 2001). Research shows a significant association between non-neural tube central nervous system anomalies and recreational drug use in the periconceptual period (David et al., 2014), and Fetal Alcohol Syndrome Disorder (FASD) is a major known cause of learning disability and can cause serious social and behavioural problems (BMA, 2016).

If alcohol misuse is suspected, the NICE Guidelines (2011, CG115) recommend identification through sensitive administration of the Alcohol Use Disorders Identification Test (AUDIT) tool. If drug misuse is suspected, practitioners should follow the recommendations on identification and assessment on drug misuse – psychosocial interventions (NICE Guideline, 2007). The NICE Guideline CG 192 (2018) clearly outline the assessment and care planning protocols that should be followed in pregnancy and the postnatal period.

Practice points for midwives and MSWs on the best approaches for working with pregnant women who abuse substances

Follow the NICE Guidelines CG 110 (2010) for care of pregnant women with complex social factors:

- Be available to listen, talk, understand and support.
- Ask women about substance/alcohol use sensitively, when the partner is not present, and provide multiple opportunities for disclosure.
- Follow the NICE Guidelines CG115 and CG 192.
- Provide flexible midwifery appointments and venues, and assurance that information will be confidential and not included in handheld notes.
- Offer support from a dedicated substance/alcohol misuse support worker.
- Contribute to the development of clear local protocols/referral pathways in consultation with social care and voluntary sector providers.
- Support should also involve referral to social services for an appropriate pre-birth assessment and intervention.

The developing relationship with the unborn baby

During the last two decades research has identified the importance of a mother's developing relationship with the unborn baby and its association with parenting in the postnatal period. Mothers experience a psychological re-organisation during pregnancy when they may reflect on their relationship with their own parents, and on their perceptions of themselves as potential mothers and develop representations (mental images) and attitudes towards their developing babies (Huth Bocks et al., 2004).

Key Messages for midwives and MSWs

- Maternal representations (mental images) about the baby during the mid-trimester of pregnancy indicate the mother's 'engagement' or bonding with their unborn baby.
- Women experiencing extremely negative representations or who are very 'disengaged' may benefit from referral to a specialist, evidence-based psychological therapy from a trained clinician (i.e. a parent-infant therapy service or perinatal mental health service).

A wide range of factors interplay to influence how mothers-to-be are able to bond with their developing baby, including:

- if the pregnancy is unwanted, unplanned or mistimed;
- substance/alcohol use;
- being in (or having a history of) a violent, abusive or high-conflict relationship;
- previous sexual, emotional or physical abuse;
- the type of caregiving relationship they experienced;
- unresolved trauma or loss; and
- anxiety, stress and depression or other mental health difficulties.

Some pregnant women may be reluctant to engage with their baby during pregnancy or be overwhelmed by negative feelings (e.g. of being invaded), particularly if the pregnancy was unplanned or unwanted. In addition, a difficult pregnancy with medical complications can have a negative impact on a woman's ability to develop a positive affectionate bond with her baby before the birth (Zager, 2009). Research studies have used the working model of the child interview (WMCI) to explore parents' representations of the child. A parent holding a balanced representation is accepting of the wide range of emotions (both positive and negative) and may have rich imaginings about the unborn child. Mothers with unbalanced or disrupted representations may have a relational style where emotional involvement is deactivated and they are less able to imagine the child as an individual with their own needs and personality (Slade and Sadler, 2019).

These mental representations lay the foundation for the mother's later relationship with the 'real' baby. Research suggests that mothers who have positive thoughts and feelings about the unborn baby have an increased likelihood of more optimal later interactions (Foley and Hughes, 2018). Most mothers adjust quickly from their 'imagined' baby to the 'real' baby, but occasionally this can be problematic if she is fearful about the unborn child or has unrealistic, idealised mental images (Raphael- Leff, 2005).

Ultrasound scans show that babies in-utero yawn, exercise, move about to get comfortable, grimace, have rapid eye movements, sleep and suck their thumbs (Piontelli, 2002). From around 20 weeks the unborn baby begins to respond to sound (Hepper and Shahidullah, 1994), and louder sounds can make the baby startle. As the unborn baby matures, he or she can recognise different voices and the parents' voices will be very familiar to the baby. A newborn can also recognise music that he or she heard in the womb, and if the mother watches a particular TV or radio programme, her newborn may respond to the music. Get parents to try it out – the feelings of fun and togetherness can be good for them and their baby (Underdown and Hogg, 2011).

Practice Points for midwives and MSWs to encourage interaction with unborn babies

- Take time, if the mother is comfortable, to explore with how she imagines this baby to be by sensitively asking questions such as 'What do you imagine the baby is like?' or 'Do you have a special name or nickname for the baby?'
- Notice if the expectant mother strokes her 'bump' and wonder with her about how such stroking might feel for the baby.
- Encourage positive images of the baby; acknowledge and explore further with the mother any negative images that emerge; sensitively encourage women who appear to be 'disengaged' to think about their baby.
- Disengaging from the infant may sometimes be a way of managing anxiety. Consider referral to the Specialist Mental Health Midwife (SMHM) or IAPT. Explorations that identify extremely negative images or that suggest the mother is extremely 'disengaged' should involve referral to a clinical psychologist.
- Encourage women with the following tips:
    - o Play your favourite music and notice whether your baby seems more active or whether they fall asleep.
    - o Play gentle, soothing music while you are going to sleep. See if s/he remembers it and falls asleep after they are born.
    - o Babies love nursery rhymes and songs and they respond to your voice – why not sing a few songs?
    - o When you feel a kick, put your hand on your stomach and say, "It's okay, I am right here!".
    - o Try sitting down and relaxing. Gently rub your 'bump' and ask your baby how he or she is.
    - o Get your partner to do the same and have a chat with your baby.
    - o As you go from one activity to another, talk to your baby as though she or he were right there in front of you. Say what you are doing. "Okay, let's see what we going to have for dinner. Are you hungry?".

Psychological wellbeing during pregnancy

The understanding around the prevalence and impact of maternal mental health upon women, families and children ahs grown significantly in recent years.

Key messages for midwives and MSWs

- Anxiety and depression during pregnancy are common (experienced by around 15% of women).
- Chronic anxiety and depression have an impact on the developing fetal brain and are associated with significant changes to fetal/infant physiology and behaviour, and long-term problems such as Attention Deficit Hyperactive Disorder (ADHD) and conduct disorder (CD).
- Most pregnant women who experience emotional problems during pregnancy do not seek help from their doctor, midwife or health visitor. They may feel stigma and shame and should be sensitively encouraged and supported to share their feelings.
- Pregnant woman experiencing chronic anxiety and/or depression should be provided with psychological support.
- Midwives should identify women who have at any time suffered from bipolar disorder or postpartum psychosis, or any other severe mental health problem, and recommend early referral to specialist perinatal mental health services to discuss prevention and coordinated care.

Evidence suggests that a significant number of women experience depression (around 12 per cent) and anxiety (around 13 per cent) during pregnancy and many will experience both. Depression and anxiety also affect 15-20 per cent of women in the first year after childbirth (NICE Guidelines, 2018)). During pregnancy and the postnatal period, anxiety disorders, including panic disorder, generalised anxiety disorder (GAD), obsessive-compulsive disorder (OCD), post-traumatic stress disorder (PTSD) and tokophobia (an extreme fear of childbirth), can occur on their own, coexist with depression or be exacerbated by pregnancy and/or childbirth. Psychosis can re-emerge or be exacerbated during pregnancy and the postnatal period. Postpartum psychosis affects between 1 and 2 in 1000 women who have given birth. Women with bipolar disorder are at particular risk, but postpartum psychosis can occur in women with no previous psychiatric history (ibid).

The importance of identifying mental health problems

Midwives need sufficient time to build trusting relationships with parents so that they feel safe to share mental health concerns. Identifying when expectant and new mothers have (or are worried about) mental health problems can be challenging and practitioners need considerable skill to form a trusting relationship where concerns can be shared. Reflective supervision and continuing professional development will enable practitioners to feel supported and confident to develop this sensitive work. Women may be fearful about disclosing issues because of the perceived stigma or fear about negative perceptions of them as a mother (i.e. that their baby could be taken into care). It is important that practitioners are careful to ensure that all relevant professionals share information about any past or current mental health problem (NICE Guidelines, 2018).

Anxiety and depression are under recognised during the perinatal period and the NICE Guideline CG192, (2014) (updated 2018) suggest that the Whooley questions should be asked as part of a general discussion about mental health and wellbeing at the expectant mother's first contact. It is important to ask about any history of mental

health problems that they have experienced themselves or that close relatives have experienced. See the NICE guidelines for more detail about using other screening instruments such as the Edinburgh postnatal Depression Scale (EPDS). These tools are only useful when administered by skilful practitioners who can reassure the mother that any disclosure will be met with sensitive caring support (Howard et al., 2018). Women should then be asked about their mental health at every subsequent contact with a health professional and, if a mental health problem is suspected, she should be referred to her GP or a mental health professional. In the case of severe mental illness it is preferable to refer promptly to a specialist perinatal mental health service for assessment and treatment (NICE Guideline, 2018).

Consequences for children of women with antenatal maternal mental health problems

A number of studies have indicated the effects of the environment on the unborn child and there is an increased risk of a range of neurodevelopmental and physical problems if a mother experiences mental health problems.

Persistently high levels of stress hormones, such as cortisol, are known to have damaging effects on the development of neural pathways in the fetal brain (Berens and Nelson, 2019). Early life stress and prenatal stress are transmitted to the baby in a variety of complex ways including gene methylation (Monk et al., 2012) or epigenetic changes in the oxytocin and dopaminergic systems; these can give rise to altered gene expression with consequences for the functioning and connectivity of neural circuits which can confer risk for physical and psychiatric disorders in later life (Monk et al., 2012).

Stein et al., (2014) reports that antenatal depression had an effect on premature delivery and low birthweight, the latter especially in lower income countries. Antenatal depression was not, however, found to be associated with pre-eclampsia, APGAR scores or admission to neonatal intensive-care units. Other research shows antenatal stress is associated with an increased risk of children experiencing asthma (Khashan et al.,2012) and an increased risk of a range of neurodevelopmental problems including attention deficit hyperactive disorder (ADHD) and conduct disorder (O'Connor et al., 2002; Glover and O'Connor 2006; Glover and O'Connor 2002; Hecht et al., 2016; Khashan et al., 2008) and cognitive difficulties (La Plante et al., 2008). Children are also more likely to show symptoms of anxiety and/or depression that may endure until adolescence and early adulthood (Pawlby et al., 2009; Pearson et al., 2013). Evidence, therefore, indicates that stress, anxiety and depression in pregnancy can sometimes have harmful effects that may continue throughout the infant's lifespan (for reviews see Slade and Sadler 2019; Murray et al., 2019) although this is influenced by its timing, magnitude and/or chronicity. Although most research has focused on maternal mental health, there is growing evidence that the mental health of fathers is also associated with child development disturbances (Stein et al., 2014).

Practice Points for midwives and MSWs to support women experiencing mental health problems

- Being a good listener can be helpful if a woman is feeling anxious or depressed – this takes time but it is important to build trust so she has confidence in sharing her feelings, even when they are negative. Explore existing or potential social support networks.
- Follow the NICE guidelines' recommendation that women should be asked, by a non-judgemental and supportive health professional, at all contacts in pregnancy and after birth about their emotional well-being. Women should be given time to respond to the structured questions and health professionals should be clear about their local referral pathways.
- Offer referral to specialist midwifery services. Specialist perinatal mental health midwives co-ordinate care for specific women experiencing mental ill health and work to train and empower colleagues (see the RCM's Specialist Mental Health Midwives: *What they do and why they matter*).
- Offer referral women to evidence-based psychological therapies by trained clinicians (in England this is IAPT where there are mild to moderate mental health difficulties and specialist perinatal mental health services for moderate to severe mental health difficulties).
- Undertake further training to ensure confidence in how answers should be interpreted and used for treatment planning and onward referrals.

Birth and supporting early bonding

This section focuses on parents' experiences of birth and the impact of birth experiences on the developing relationship with the baby. It also examines the evidence about the importance of bonding and what midwives can do to promote the early maternal-infant relationship.

Key messages for midwives and MSWs

- A positive experience of birth raises a mother's confidence and self-esteem, supports the developing relationship with the baby, aids her adjustment to motherhood and gives confidence for subsequent deliveries.
- Close body contact in the immediate post-birth period has benefits for mother and baby.
- A significant proportion of women (and their partners) may experience the birth process as traumatic, and so women who are at high risk of being traumatised by the birth should be identified prior to delivery, and provided with additional emotional support during the delivery.
- During the delivery, there should be increased focus on emotional support and communication, pain management, enhancing the partner's role, and maximisation of empowering the mother, in recognition that PTSD may be a direct result of the birth process.
- Women need specialist support to recover from PTSD and should be referred for specialist NICE-concordant psychological therapy by a trained clinician (this may be a trained specialist mental health midwife, an IAPT practitioner or a perinatal psychologist).
- Midwives should give women the opportunity to talk about their birth experiences.

The impact of positive birth experiences

A positive experience of birth raises a mother's confidence and self-esteem, supports the developing relationship with the baby, aids her adjustment to motherhood and gives confidence for subsequent deliveries (Ekström and Nissen, 2006; Goodman et al., 2004). Women delivering their first babies reported that they were more confident when they felt seen and confirmed as unique individuals by both practitioners and their partners (Nilsson, 2013). When consistent practitioners sensitively responded to the individual support needs, woman often reported that they had a positive experience, even if the birth was protracted or with medical complications (Nilsson, 2013). Caring for the physical health and safety of mother and baby will always be paramount, but there is increasing recognition of the significant health benefits when practitioners focus on individual emotional needs during the birth.

Promoting Bonding in the immediate post birth period

Overviews of the evidence from humans and other mammals suggest that close body contact of the infant and his/her mother during the immediate post birth period influences the physiology and behaviour of both (Winberg, 2005) and that this takes place as a result of a range of mechanisms including behavioural programming, secretion of neuroendocrine substrates and activation of sensory cues, in addition to changes brought about as a result of breast feeding (Dageville et al., 2011). Skin-to-skin contact between mother and baby after birth reduces crying, improves mother-infant interaction, keeps the baby warm, and the extra tactile,

olfactory and thermal cues may stimulate babies to initiate breastfeeding more successfully. Newborn babies tend to be in a heightened state of alertness within the first two hours of life, and this should be recognised as an important time for initiating successful mother and child interaction (Puig and Sguassero, 2007).

The close body contact of the infant and his/her mother during the immediate post birth period influences the physiology and behaviour of both.

Practice point for midwives and MSWs the development of parent-infant relationships

Encourage both parents to have skin-to-skin contact with their baby soon after birth, and where possible, at other opportunities as well. Skin-to-skin care is one of the best ways of getting to now the baby regardless of the method of feeding.

Suggest the following to mothers:

- Place the baby on your tummy, with his or her head near your breast.
- Gently stroke and caress your baby.
- Ask for you and your birth partner to be left undisturbed so you can gently stroke the baby and talk together.
- Allow the baby to focus on you and your partner's face and let them enjoy gazing.

Other popular methods of promoting closeness between parents and babies include the use soft baby carriers and attending cues-based infant massage. While there is little evidence to support their use, there is no evidence that they do harm.

Traumatic experiences of birth and PTSD

Childbirth is a major emotional, physical and social experience and although most women in the UK have safe and satisfying birth experiences, a significant minority of women have 'traumatic' experiences of giving birth. Not everyone who experiences a traumatic birth will develop PTSD but it is important for practitioners to also realise their experience of a 'routine' birth may not match that of a mother:

"A birth that might be objectively routine to staff can be experienced as subjectively traumatic by a mother who has encountered numerous interventions, unmanageable pain, poor communication and feelings of being disrespected, abandoned and unheard."

(Speier, 2018)

Research into post-traumatic stress syndrome (PTSD) following childbirth is relatively new in comparison with studies of post-natal depression, which has a long research history. There is significant overlap in depression and PTSD symptoms, which can sometimes lead to misdiagnosis. In addition, identification, support and treatment can be further complicated when the two conditions co-exist.

The evidence suggests that 3-4 per cent of women meet the full diagnostic criteria for post traumatic stress disorder (PTSD) following childbirth with significantly more women who do not meet all the criteria but who suffer from sub-clinical levels (Yildiz et al., 2017; Speier, 2018).

The prevalence increases to 15.7 per cent in high-risk groups (McKenzie-McHarg et al., 2015). Risk factors include previous mental health problems, prior trauma (including sexual abuse), previous traumatic birth or neonatal loss. Perinatally, risks are also increased for women who develop pre-eclampsia, HELP syndrome (hemolysis, elevated liver enzyme, low platelet), pregnancy loss and in mothers who are separated from their infants on the neonatal unit (Ayers et al. 2016; Yildiz et al., 2017).

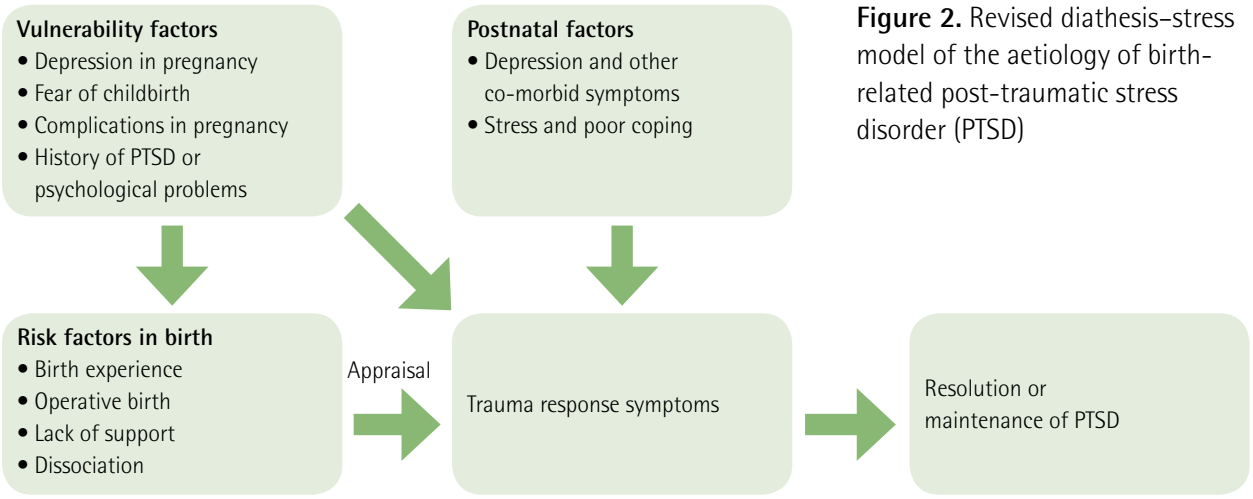


Figure 2. Revised diathesis–stress model of the aetiology of birth-related post-traumatic stress disorder (PTSD)

Reflecting on practice

Becoming a parent is naturally a highly emotionally time and research shows that women's perception of the sensitivity of the care received is a significant. Practitioners' communications and manner can significantly affect the amount a woman feels in control during the delivery and her ability to make decisions (Salter 2009; Eliasson et al., 2008). Patterson et al., (2019) conducted a systematic review of women's and midwives subjective experiences of care provider interaction and reported that the quality of provider interaction was a significant factor in the development of post childbirth PTSD. Being informed and involved in decision-making are potentially protective against a traumatic birth experience (Goodall et al., 2009). Staff require effective training about PTSD identification and management, and time to engage with high quality reflective supervision, which is essential to protect and champion their own mental health needs (Poote and McKenzie-McHarg, 2015).

Symptoms of PTSD

NICE Guideline NG 116 (2018) on PTSD specifies that traumatic events in childbirth may trigger PTSD for some parents and the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM) (American Psychiatric Association 2013) redefined the criteria for diagnosing PTSD. Symptoms of PTSD Include:

- flashbacks to the experience;
- nightmares about the experience;
- avoidance of reminders of the trauma;
- irritability and low mood;
- hypervigilance (watching out for danger/ being easily startled);
- significant distress or impairment;
- emotional numbing (trying to block feelings about what happened);
- intense fear and helplessness as well as duration of symptoms;
- numbness, anger, depression, and chronic sleep problems.

PTSD also contributes to feelings of isolation, affecting the woman's relationship with her partner and family, and her relationship with her baby. Many of the women traumatised by childbirth, therefore, experience feelings of intense fear about their own death or that of their baby, or of being physically damaged (Anderson and McGuiness, 2008), and this may be accompanied by feelings of fear, terror, and helplessness (Elmir et al., 2010).

Partners experiencing PTSD

Fathers may experience extreme distress as a result of childbirth but the prevalence of PTSD in men is difficult to quantify because studies have often relied on questionnaires rather than implementing the full diagnostic criteria (Etheridge and Slade, 2017). Occasionally both parents may experience PTSD and practitioners may need to consider individual and couple psychological support needs (Nicholls and Ayers, 2007).

What are the possible consequences?

The possible consequences of PTSD are wide-ranging. Emotional detachment challenges the mother's capacity to form a balanced representation of her baby and traumatised women often describe their babies as less easy to soothe and more distressed (Parfitt et al., 2014). PTSD due to birth trauma is linked to ongoing fear of childbirth, relationship and sexual difficulties, and difficulties with the mother-infant relationship (Ayers et al., 2006; Nicholls and Ayers, 2007), and difficulties with breastfeeding (Beck et al., 2011).

Preventing and alleviating PTSD – the evidence for different interventions

Debriefing is standardised, structured intervention and is used to describe a variety of post birth discussions, but there is debate about its effectiveness and purpose. One review found that a single debriefing before a woman left hospital could possibly be harmful if there was no follow-up (Gamble et al., 2002). Most women need time to make sense of their traumatic experience before they can safely process their feelings about what has happened. While psychological debriefing needs to be timely, a personal communication with the Birth Trauma Association suggests that women often value the opportunity to have an empathic practitioner talk through and explain their notes with them.[1]

Birth review/afterthoughts provide an opportunity for women talk about their experiences of the birth and how they are feeling about it. Despite the evidence about formal 'debriefing' following childbirth being mixed, it is suggested that women may benefit from a non-structured interactive 'birth review' where they can discuss their labour, ask questions, and explore their feelings (McKenzie-McHarg et al., 2015).

The Rewind Technique is a short intervention where specially trained practitioners aim to support the neutralising of strong emotions that are attached to the birth trauma memory. There is no evidence to support the use of this technique which should not be used in isolation from other therapy.

Psychological therapy can be beneficial for women who still have trauma symptoms 6-weeks after the traumatic birth and they have not benefited from a birth review appointment. NICE guidance recommends that trauma-focused cognitive behavioural therapy (CBT)[2] or eye movement desensitisation and reprocessing (EMDR)[3] may improve PTSD status (Leann et al., 2010).

Practice points for midwives and MSWs to support women who experience their baby's birth as traumatic

Read the following quote from a woman:

"Not only does PTSD isolate me from the outside world, it isolates me even from those I love…That is the real problem with PTSD. It separates people at the time when love and understanding are most needed. It's like an invisible wall around the sufferer." (Beck et al., 2011).

- Midwives should take a careful history of any fears, anxieties, previous trauma history, mental health problems or any other predisposing factors (Speier, 2018).
- MSWs can use their time with women to offer support and reassurance.
- Creating a birth flow chart where contingencies for specific risks are outlined and listed may help to contain, and manage fears and expectations (McKenzie-McHarg et al., 2015).
- Parents need time to be properly listened to and heard and for each fear or risk to be addressed.
- Screening tools to identify PTSD are not currently being recommended but some researchers (Ayers et al., 2018) are developing scales and clinical tools that will be tested for validation.

[1] See https://www.birthtraumaassociation.org.uk.

[2] CBT is a psychological talking therapy that helps people to challenge and change their own negative ways of thinking. See https://www.nhs.uk/conditions/cognitive-behavioural-therapy-cbt/.

[3] EMDR is a specialised interactive psychotherapeutic therapy where the person being treated recalls traumatic events while also performing eye movement to desensitise and reprocess how the memories are stored in the brain (Sandstrom et al., 2008).

Supporting healthy relationships in the postnatal period

Introduction

This final section focuses on the importance of the postnatal period including recent findings about the 'social' baby, and the impact of early parenting on the baby's neurological development. It examines the specific aspects of parenting that have been shown to be important in terms of the baby's development, and concludes with an examination of the factors that impact on early parenting.

Key messages for midwives and MSWs

- Babies are born ready to relate and are socially interactive from birth.
- Babies are born with immature brains, the development of which is significantly influenced during pregnancy and the postnatal period by the parent-infant relationship. Connections between neurons as a result of social interaction become permanent if they are used often.
- Parents play a key role in helping infants to regulate their physiological, emotional and behavioural states during early infancy.
- Adapting to caring for a new baby can be challenging for both parents, and feelings of inadequacy and their changing roles in the relationship can add more stress.
- Midwives and MSWs have a key role to play in helping parents to negotiate their new roles and relationships as parents and develop a safe nurturing bond with their babies.
- Key aspects of the parent-infant relationship include attunement, reciprocity containment, marked mirroring and reflective function.
- Children who experience strong and secure relationships will be better able to experience, regulate and express emotions in a way that enables them to learn and participate in society in a more productive way.
- Perinatal mental health difficulties, substance misuse, domestic violence and abuse and difficulty adjusting to new roles can have a deleterious impact on the parent-infant relationship and later development.

The impact of parent-infant interaction on the developing brain

At birth, the baby's brain contains approximately 100 billion neurons. The neurons rapidly make connections as a result of social interaction. The connections or synapses are made across the fluid filled spaces between the neurons. Connections that are used frequently become covered in a fatty myelin sheath that speeds up the messages between neurons. Connections that are not often used are pruned away. This 'use it' or 'lose it' process of brain development can be seen in the way language is acquired. While neonates can hear the inflections from all languages, by one year of age, the connections for their native language(s) have been reinforced at the expense of others. The baby's brain grows rapidly in size, weighing approximately 400g at birth and 1000g at 1 year. Much of this is due to the neural connections and figure 3 is a diagram of the density of connections at 2 3, 6, and 12 months, from left to right (adapted from Penn, 2008).

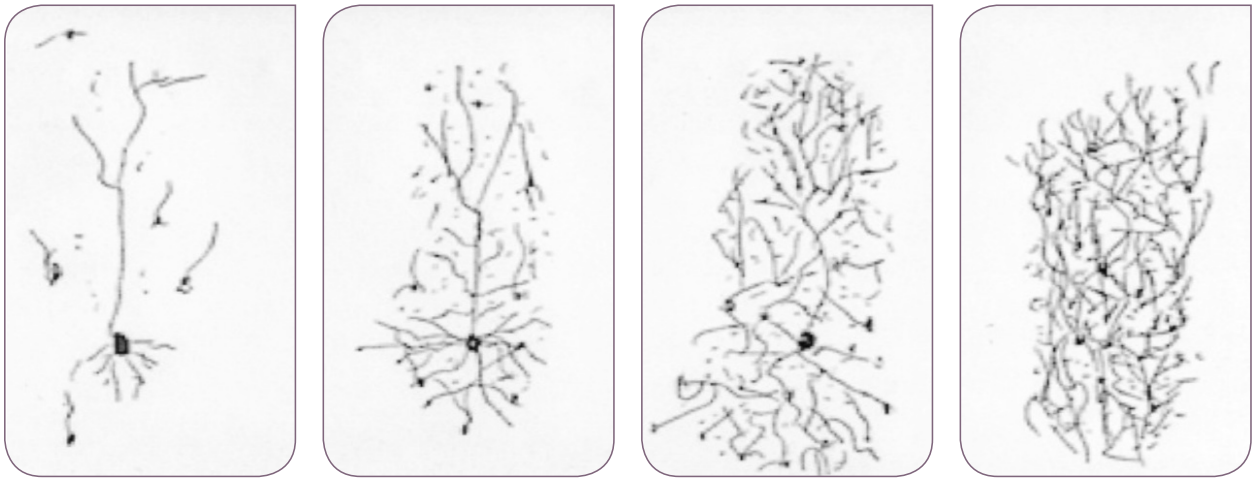


Figure 3. A demonstration of the density of neural connections at 2 months, 3 months, 6 months and 12 months. *Adapted from Penn (2008)*

Children's brains develop most rapidly antenatally and in the early years of life. During these years many millions of neural connections are made and then pruned, and the architecture of the brain is developed. The brain is more 'plastic' or adaptable at this time, which is why early experiences make such a big difference – they literally shape the development of children's brains. The parent-infant relationship is one of the most significant environmental factors influencing early brain development (see Schore, 1994 and Gerhardt, 2015 for summaries of this research). For example, the babies of depressed mothers show atypical frontal brain activity, such as reduced joy, interest and anger (Dawson et al., 1999). If an emotional environment causes a child to feel unsafe or fearful, this will be reflected in how the brain develops to deal with stress in later life (Berens and Nelson, 2019). In contrast, children who experience strong and secure relationships will be better able to experience, regulate and express emotions in a way that enables them to learn and participate in society in a more productive way. Learning to manage emotions and behaviour is a key developmental task in early infancy.

"Human relationships, and the effect of relationships on relationships, are the building blocks of healthy development. From the moment of our conception to the finality of death, intimate and caring relationships are the fundamental mediators of successful human adaptation."

'(Shonkoff and Phillips, 2000:27)

Babies are born socially interactive

Babies enjoy looking at the face of their carer, and will watch and follow the faces around them. As the baby's visual capacities develop over the first few weeks they begin to focus more and to listen intently. Babies engage best with their parents when they are in a 'quiet alert' state. Suggest to parents that they watch their baby to see how quickly they move from one behaviour state to another. Young babies usually move from one state to another quite quickly.

Practice points for midwives and MSWs on sleep/wake states and soothing

Share with parents these different sleep/ wake states so that they can get to know their baby

Quiet alert state	Wide eyed with a bright face, little body movement – ready for interaction. Prepare parents to expect the baby to look away and take some time out, and to offer time and space during the interaction for the infant's response.
Active alert state	Alert but fussy, may cry or may be soothed. Lots of limb movements and may be more sensitive to light and noise. Sometimes babies may show they are over stimulated through physical signs such as hiccupping, yawning, sneezing, squirming, throwing their head back as they move from this state.
Crying	Lots of body activity, grimaces and intense crying. Baby needs calming.
Drowsy – dozing beginning to wake	Pre-awake state. Eyes open but glazed or heavy lidded. Occasionally may startle, body movements generally smooth. May fall back to sleep or move into alert state.
Light sleep state	Eyes closed or fluttering. Maybe be rapid eye movements under the lids. Easily roused may make sucking or smiling movements.
Parents play a key role in helping infants to regulate their physiological, emotional and behavioural states. Ask the new parents to notice how their baby likes to be soothed	
Being held while you walk about? Sucking on their fingers? Gentle rocking in the pram?	Being close to you in a baby carrier? Soft singing? Have a favourite cuddling position?

Key aspects of early parenting

During the first months, babies who receive consistent sensitive care will usually begin to form a healthy secure attachment with their caregiver. Sensitivity and warmth in response to infants have been identified as crucial elements in healthy interactions, and this is conveyed through eye contact, voice tone, pitch and rhythm, facial expression and touch. The key components of a sensitive relationship are highlighted in figure 4 below.

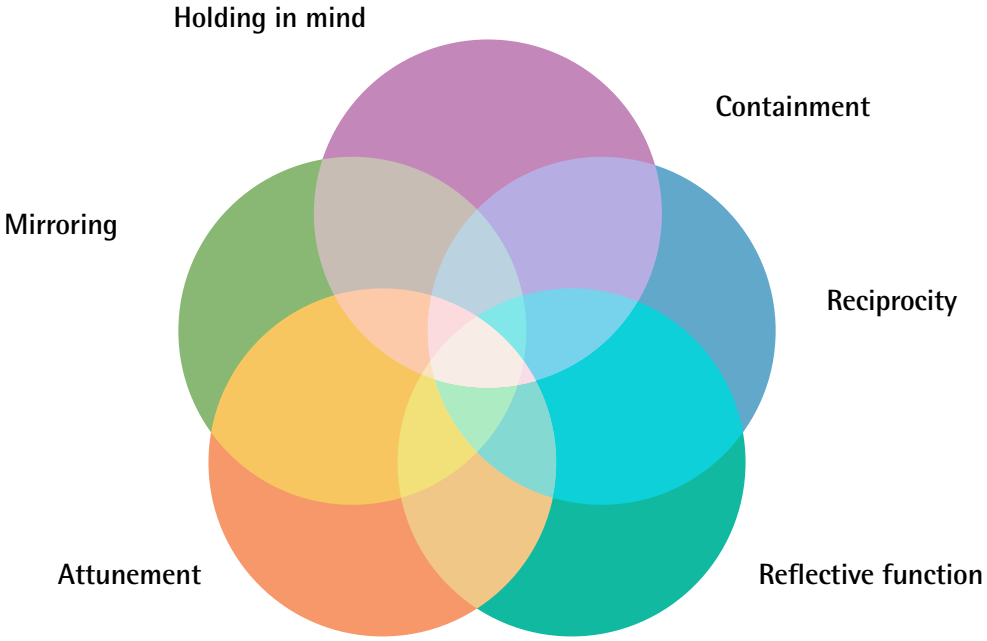


Figure 4. Key aspects for early parenting

Attunement (Stern, 1985) refers to an empathetic sharing of emotions between parent and infant. However, parents and infants are not attuned all the time and it is through healthy 'ruptures' followed by 'repairs' to attunement that much learning about interaction, and the regulation of emotions and behaviour takes place.

Reciprocity (Brazelton et al., 1974) involves turn-taking, and occurs when an infant and adult are mutually involved in initiating, sustaining and terminating interactions. When babies fail to elicit responses or are overwhelmed by intrusive responses, they will eventually stop trying to engage.

Marked mirroring (Gergely and Watson, 1996) happens when a parent shows a contingent response to an infant such as looking sad when the baby is crying. When parents mirror the emotion, babies recognise that their feelings are understood.

Containment (Bion, 1962) occurs when the adult tries to take on board the infant's powerful feelings and make them more manageable using touch, gesture and speech. A mother rocking a crying infant and saying sensitively, 'there, there, I know you have a hunger pain in your tummy but I am just going to feed you now', is helping the baby to manage his or her emotions both now and in the future.

Reflective function (Slade, 2005) refers to the parent's capacity to understand their baby's behaviour in terms of their internal states and feelings, and highlights the importance of parents recognising their baby as an individual with their own likes/dislikes and personality traits, rather than just in terms of their physical characteristics and behaviour. Infants need to have their individual gestures and behaviours accepted and to be celebrated as individuals, and continuity of carers is essential so that these intimate relationships can be established.

Practice points for midwives and MSWs on parental interaction

Encourage parents to talk and sing with their baby by sharing the following with them:

- Babies interact best when they are in the quiet alert state.
- When baby looks ready, hold him or her facing you and see if they make eye contact.
- Babies needs lots of time to respond, so pause and wait until they are ready to engage.
- Babies also spend lots of time looking away because too much interaction can be very intense for them. Wait for them to come back in their own time.
- The very best activity for a baby is looking at their parent's face and listening to their voice.
- Try singing softly to baby then pausing and watching for a reaction then singing some more (tell them not to worry if they can't sing in tune – their baby will still love being close to them!).
- Practitioners should model talking to the baby and highlight how the baby may be feeling, for example 'does that feel a bit chilly with your coat off?'

Babies don't come with an instruction manual, encourage parents to watch, wait and wonder:

- Watch quietly what their baby is doing, noticing his signals and cues.
- Wait for him or her to initiate an action or interaction.
- Wonder about what their baby might be feeling, and talk to their baby about what they think their baby may be feeling.

Babies learn to feel safe and secure when their parents respond in a timely way to their cries for comfort. Encourage parents to enjoy caring for their baby and having cuddles as often as they can. Babies will learn how to soothe themselves by gradually beginning to recognise that it is okay to be alone in the cot because a responsive parent is not far away. They will only begin to feel this way, however, if parents have responded promptly to their cries for attention. Some babies give a short protest cry when they are first put in their cot, and parents should be helped to recognise this.

Factors that negatively impact on early parenting

Babies enjoy looking at the face of their carer, and will watch and follow the faces around them. As the baby's visual capacities develop over the first few weeks they begin to focus more and to listen intently. Babies engage best with their parents when they are in a 'quiet alert' state. Suggest to parents that they watch their baby to see how quickly they move from one behaviour state to another. Young babies usually move from one state to another quite quickly.

The development of emotional and behavioural regulation is the key task of early infancy, and this is learnt through every day interactions with consistent, sensitive caregivers.

Parent-infant interactions are shaped by a complex interplay of factors relating to the parent, the child, their relationship and their environment. However, parents who face many challenges, such as poverty, insecure housing or those who have experienced trauma or adverse childhood events themselves may find it more difficult to be emotionally available and able to be reflective and attuned with their baby (Piccolo and Noble, 2019). Parents may be traumatised if they are separated from their baby for any reason and this may have an impact on interaction (Shah et al., 2019).

Struggling to adapt to changing roles

The postnatal period involves further emotional and psychological transitions for new parents.

Factors such as adapting to the needs of a new baby, tiredness, and the loss of other identities that are associated with the arrival of a new baby, means women make complex physical and psychological changes during the postnatal period (Milgrom et al., 2008). Some women struggle with these changes, and it is suggested that as many as one in five women may experience difficulties in being emotionally available to their baby, and this can be associated with very strong feelings of guilt, shame and inadequacy (Tronick, 2007).

The closeness that many couples experience during pregnancy is often expected to continue after the baby is born. Following childbirth, however, there is frequently a polarisation of goals and expectations as men and women negotiate their new roles (Belsky and Kelly, 1994). It has been suggested that this experience of polarisation is influenced by the 'motherhood constellation' which, is a temporary period in which the mother is pre-occupied with several themes (Stern, 1985). One of these, the 'life growth theme', is biologically driven, making the mother's need to keep the baby alive her top priority. Couples are often unprepared for these fundamental changes in sense of self, and without the recognition and acceptance that these transitional changes will affect their relationship, there may be resentment and blame. For example, after childbirth the mother may seem more concerned with the man as a father than as a sexual partner. This fundamental change can cause disunity, and couples may need to mourn the loss of their close relationship before they can celebrate their new roles.

In addition, there may be deep tensions between the cultural aspirations of a contemporary woman living in the developed world and the experience of deep biological drives associated with motherhood (Stern, 1995). For some these tensions may be exacerbated by feelings of having transitioned from being a 'competent woman' in control of her life to an 'incompetent', inexperienced mother. As support networks loosen and traditional rituals decline, the challenge to health professionals lays in supporting the transition of mothers, fathers and partners to new social roles (Ammaniti and Gallese, 2014; Slade et al., 2009).

Postnatal depression

Depression and anxiety affect 15-20 per cent of women in the first year after childbirth (NICE Guidelines, 2018). Research into maternal postnatal depression indicates that long-term effects can include compromised emotional and cognitive functioning and a greater likelihood of depression in adolescence (e.g. See Murray et al., 2019; Pawlby et al., 2008; Pawlby et al., 2009). It is also sometimes associated with insecurity of attachment in early childhood (i.e. around 18 months postpartum) (see Murray et al., 2019). Suicide remains a leading cause of maternal death in the postnatal period (Knight et al., 2018).

As discussed in the earlier part of this document in relation to mental health in the antenatal period, there has been a growing emphasis in recent year on the importance of access to psychological and psychiatric interventions that can help women with mental health problems across the maternity pathway. Healthcare professionals must listen to women's concerns, encourage dialogue and respect their autonomy. Most importantly, midwives and MSWs in their conversations need to proactively engage with women and personalise their care to overcome the stigma that still surrounds poor mental health (RCOG, 2017; RCM, 2017). The practice points below and in the section on *Psychological Wellbeing in Pregnancy* should be read in tandem

Practice points for midwives and MSWs on identifying maternal mental health problems in the postnatal period

Practice Points in the Psychological Wellbeing in Pregnancy section of this document are relevant in the postnatal period too.

- Be aware that many women downplay their mental health condition. Stigma, shame and fear can prevent women from opening up. Build trust and offer non-judgmental support.
- Women should be asked about their mental health at every contact with a health professional and, if a mental health problem is suspected, she should be referred to her GP or a mental health professional.
- In the case of severe mental illness it is preferable to refer promptly to a specialist perinatal mental health service for assessment and treatment (NICE Guideline, 2018). It is important to ask about any history of mental health problems that they have experienced themselves or that close relatives have experienced.
- These questions must be administered by skilful practitioners who can reassure the mother that any disclosure will be met with sensitive, caring support.

Studies indicate that 5-10 per cent of fathers experience perinatal depression (Paulson and Bazemore, 2010; Paulson et al., 2016) and the figure increases substantially when their partner is depressed. Paternal depression can have similar effects to maternal depression in terms of its impact on perceptions of infant temperament, and a greater likelihood of emotional and behavioural problems (Ramchandani et al., 2005; Ramchandani et al., 2008). There are, as such, compelling health reasons to actively engage both parents from the earliest point of contact (Domoney et al., 2018).

It is important to create a helping relationship where the mother and her partner feel confident to talk about feelings so that appropriate help and support can be offered. Adults who are uncomfortable with their own feelings may find it too challenging to help the baby manage his or her feelings. Listening visits and encouraging mothers and/or fathers and partners to join supportive groups may help. For example, one study indicated that attending an infant massage group helped early interaction between mothers with depression and their infants (et al., 2001).

Substance misuse

The effects of drug misuse during the postnatal period are extensive, and substance misuse on the part of one or both parents is associated with high rates of child maltreatment (Boris et al., 2019). Parents who misuse substances often have chaotic, unpredictable lifestyles and may struggle to provide their children with safe care as a result of a wide range of parenting problems (summarised in Suchman et al., 2005). For example, a recent review of independent observations of mother-infant dyads found an association between substance dependence and poor sensitivity and responsiveness to infants' emotional cues (Hatzis et al., 2017).

There is also recognition that where the parent's mind is occupied by drug dependency, parent-infant interaction may be compromised as a result of emotional unavailability, incongruent mirroring and dyadic dysregulation (Söderström and Skårderud, 2009). This type of interaction may have consequences in terms of the child's developing neurological system, and their later capacity for emotional regulation (e.g. Beebe and Lachmann, 2014). These findings are corroborated by research drawing on the perspectives of parents who are misusing substances, which found 'a lack of understanding about basic child development issues, ambivalent feelings about having and keeping children, and a lower capacity to reflect on their children's emotional and cognitive experience' (Suchman et al., 2005).

Referral services for substance misuse

Family Drug and Alcohol Court (FDAC) is a court-based intervention available in some places in England and in Armagh in Northern Ireland for parents whose drug use may be harmful to their children. Parents meet with the same judge every two weeks while receiving intensive support from a multi-disciplinary team offering substance misuse services, assistance with tackling social problems and video interaction guidance (VIG) to support early interaction. Evaluation showed that 35 per cent of FDAC mothers stopped misusing and were reunited with their children compared to 19 per cent who had been through ordinary care proceedings (Harwin et al., 2014).

Parents under Pressure is a non-court based approach that is being developed across all parts of the UK, and involves the delivery of an individualized, modular parent training programme, and one study found that up to one-third of substance dependent parents of children under 2 years of age could be supported to improve their parenting using this program (Hatzis et al., 2017).

Domestic violence and abuse

Accurate statistics regarding the number of babies witnessing domestic abuse are difficult to obtain but Radford (2011) reports that 1 in 5 children aged between 11 and 17 years stated that, as young children, they had experienced domestic abuse between adults in their home. Babies are also at risk of abuse specifically directed at themselves and one Scottish Study (Barlow and Minns, 2000) that examined the incidence and demography of non-accidental head injury (NAHI) in a prospective population-based study of paediatric units in Scotland found that NAHI occurred with an annual incidence of 24·6 per 100 000 children younger than 1 year. Cases were more common in urban regions, and during autumn and winter months, and occurred almost exclusively in young infants, with a median age of 2·2 months (Ibid).

A recent review of the developmental effects of exposure to intimate partner violence in early childhood has concluded that infants who hear or see unresolved angry conflict or a parent being hurt may develop symptoms of PTSD, which will manifest in eating problems, sleep disturbances, lack of typical responses to adults, and loss of previously acquired developmental skills. The extent of this this varies according to the extent to which the violence impacts on the parenting relationship, and on the mother's maternal sensitivity, mental health and stress (Carpenter and Stacks, 2009; Thompson et al., 2019). There is also evidence of an impact on children's capacity for emotional regulation, including an increase in developmental and behavioural problems (Schechter et al., 2019).

Conclusion

Babies are born socially interactive and the way in which their psychological, emotional and social development unfolds is largely dependent upon the nature of their early relationships. Infants have an innate drive to connect with others, and the perinatal period is a key window of opportunity to promote the type of sensitive caregiving that will optimise their neurological, and emotional development. The bond between baby, mother and family begins in utero. Midwives, health visitors and other perinatal practitioners therefore have a unique opportunity to work with parents and babies, from the earliest antenatal contact, to set the foundations for healthy emotional wellbeing and development. This guide should be used as a basis for further discussions and training with regard to promoting the emotional wellbeing of parents and babies during the perinatal period, and raising awareness about the continuing advancements in understanding about infant development during pregnancy and the postnatal periods.

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