Bonding and Attachment in the peri-natal period: Supporting rich and enjoyable relationships for life

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Foreword by Colwyn Trevarthen:

Pregnancy and birth are time for new love; of the parent for their coming baby, and of the new born for the parent's gentle holding and touching, familiar voice, and eyes full of delight. They are times that can confirm the mother's self-respect, and enrich all her relationships, including those with the father and the whole family. Whether we call it attachment or bonding it is joy in company, building hope for shared life in a family and strong development of the child. This joy and confidence will flourish and be remembered, provided it is protected from anxiety, anger and depression, emotions that weaken love and leave memories of fear. A midwife experienced in antenatal care and in relaxing the body and reassuring the mind at birth with affectionate concern for expressions of love can transform a time of risk into one of lasting wellbeing. In this paper we review evidence of the power of good perinatal care to strengthen intimate and growing relations.

Aim

This paper aims to provide a summary of the evidence around promoting positive early parent-infant relationships in the perinatal period for maternity care practitioners.

The paper contains key messages and practice points for maternity care practitioners to support the best possible start for maternal-infant and parent-infant relationships.

Contents

1. Key Messages

- Practitioners working in maternity services have a key role to play in supporting the development of the maternal-fetal/infant and parent–infant relationship.
- The period of pregnancy and birth is important to the development and maintenance of ongoing positive family relationships.
- Levels of maternal feelings towards the developing baby during pregnancy are associated with levels of maternal-infant bonding demonstrated in the early postnatal period.
- Maternal distress and anxiety during pregnancy, which may be caused by a number of environmental, social and financial factors, have a detrimental impact on the developing maternal-fetal and maternal-infant relationship and future child developmental outcomes.
- Women's feelings about their birth experience have an impact on their feelings towards, and relationship with, their new borns.
- Higher levels of maternal oxyticin appear to be linked with maternal-fetal bonding, lower rates of depression and, in the immediate postnatal period may facilitate the initiation of mothering behaviours.
- Maternal mental health problems in the postnatal period, including post traumatic stress disorder, may inhibit the development of a positive maternal-infant relationship.
- Postnatal depression in a primary caregiver has been found to have a negative impact on children's cognitive development.
- Women become mothers within the context of other relationships: with a partner and/or other family. This wider social context plays a key role in the ability of the woman to develop a positive relationship with her baby.
- Positive engagement of fathers in the antenatal period can increase health benefits for mothers as well as increasing practical support during pregnancy, birth and the postnatal period.
- Fathers who have been given space to personally develop their fathering role are less prone to postnatal depression and are more likely to develop a strong bond to their baby.
- The baby is an individual with abilities to respond, communicate and develop relationships from birth.
- Much of the development of the human brain, including the capacity for learning and emotional wellbeing, occurs both during the prenatal period and throughout the earliest years of life.

2. Practice points for practitioners

Maternity care practitioners can assist in the development of positive maternal-fetal, maternal infant and parent – infant relationships through:

- Recognising the environmental, social and financial factors in the parent's life which may be causing stress and anxiety and providing signposting to relevant partner organisations.
- Providing care that recognises and responds to distress and anxiety and assists women in developing physical, emotional and practical support networks and resilience.
- Developing parents' awareness of the needs and individuality of the developing baby.
- Encouraging parents to prepare for the arrival of a baby, both mentally and physically. Including guidance on equipment that may enhance parent child interaction such as forward facing buggies, slings.
- Encouraging parents to visualise and communicate and with their unborn baby during ultrasound scans, fetal auscultation and self palpation, and to become aware of the individual pattern of their baby's movements.
- Encouraging parents to recognise their developing baby as an individual who can communicate and build relationships both before and from birth. Encouraging them to talk and sing to their baby. If necessary, after birth, showing parents how responsive their new born is to them.
- Recognising and supporting the important role of a woman's partner and family, both in providing support for the woman and in developing a secure parent –infant bond.
- Providing Antenatal Education at accessible times and encouraging both parents to attend.
- Plan care holistically around the whole family.
- Address the needs of fathers/partner as individuals, taking time to speak with fathers/ partners about what they might enjoy doing with their baby and what they might feel apprehensive about.
- Encouraging skin to skin contact with mothers immediately after birth.
- Encouraging skin-to-skin contact with fathers/ partners, immediately after birth if the mother is unable. This can help build their confidence and begin the parent-infant bond.
- Providing 1:1 compassionate care during labour and childbirth.
- The provision of positive supportive care during labour and childbirth which reduces unnecessary medical interventions, enables women to have a sense of control, and ensures that they feel cared for as an individual throughout.
- Providing care that enhances natural childbirth and decreases unnecessary medical interventions to positively affect oxytocin production.

- Providing an environment that encourages quiet, calm interaction between parents and the new born.

- Enabling early parental bonding behaviours such as skin-to-skin contact and touching, talking, and singing to their baby.

- Encourage parents to continue to cuddle, hold and stroke their baby, and advise that you can't 'spoil' a baby by holding too much.

- Early identification and appropriate counselling if required following a difficult birth to facilitate the mother-baby relationship.

- Setting up services to meet the needs of the children of mothers with and without postnatal depression to support the development of good quality positive parent-infant interaction.

- Early recognition of postnatal depression and provision of appropriate and timely support for the women and family.

- Making services more amenable to partners and fathers who can play an important role in buffering the effects of maternal depression, and providing infants with a source of stability and security.

3. The crucial importance of the early years and relationships for life

Research shows that much of the development of the human brain, including the capacity for learning, occurs during the prenatal period and through the earliest years of life (Shonkoff & Phillips, 2000; Puckering, 2011). Health across the life course is also influenced by child development as well as child health (Hertzman & Power, 2004). Early childhood is the most effective and cost-efficient time to ensure that all children develop their full potential. Returns on investment in early child development are substantial (Engle et al., 2011; Heckman, 2007). Internationally, there is an increasing consensus among numerous groups of professions including developmental, family and clinical psychologists and public health researchers that safe, nurturing, and positive parent-child interactions provide the foundations for healthy child development (Collins et al., 2000; Coren et al., 2002; Dretzke et al., 2009; Gutman & Feinstein 2010; Stack et al. 2010; Stern, 2010; Trevarthen et al., 2006) and later mental health (Shaw & Vondra, 1995).

4. What is attachment?

NHS Health Scotland have produced a helpful briefing for professionals on attachment in 2012 which defines and describes attachment in a succinct summary:
http://www.healthscotland.com/documents/5755.aspx

Attachment describes the bond from a child towards their parent. Attachment develops over time through the developing relationship between the child and their parent. Attachment and care-giving work together to ensure the child's survival and wellbeing. The tendency of a child to form an attachment bond is considered to be biological and present from birth (Prior and Glaser 2006, Golding 2007).

The development of attachment occurs over four phases (Prior and Glaser 2006): birth to eight weeks, eight weeks to six months, six months to 36 months and from 36 months onwards.

Secure attachment is associated with enhanced self-esteem, self-confidence, resilience and emotional regulation. In contrast, poor attachment may lead to later relationship and emotional difficulties. Close physical contact may enhance attachment.

5. What is bonding?

Bonding describes the parent's relationship with the child. The terms bonding and attachment are sometimes used interchangeably to describe parental love and affection.

Klaus and Kennell (1976) introduced the term 'maternal bonding' to describe the idea that mothers are pre-disposed to form an affectionate bond to their baby prior to and during the sensitive period immediately following, birth.

Bonding and attachment are both ongoing processes that take place not only in the early days but continue throughout life. These processes can be enhanced through positive relationships and sensitive professional support.

6. The development of the maternal–fetal relationship in the antenatal period

A mother's feelings towards her baby develop throughout the antenatal period. Positive feelings may be enhanced or inhibited by a number of internal and external factors.

From the discovery of pregnancy, or even before conception, many women prepare themselves for motherhood through protective behaviours. These may take the shape of stopping smoking or drinking alcohol, dietary adaptations and seeking advice on medications (McPhail et al 2012). Many parents find it helpful to begin preparing for the baby's birth through preparing a room, buying clothes and equipment, choosing names, preparing other children for the baby's arrival and keeping a pregnancy log (Martin 2012).

A number of factors may assist or inhibit the development of positive maternal feelings towards the baby during pregnancy. These include;

- how supported the woman feels by her partner (Stapleton et al 2012),
- the woman's view of pregnancy and childbirth (Stanton and Golombok 1993);
- ideas about the motives, abilities and awareness of the infant from birth (Brazelton 1993); (Stern 1977; Stern, 2010);
- the woman's own personal history and emotional wellbeing, including antenatal depression and anxiety (Mikulincer, Florian 1999, McFarland J et al 2011).

Studies suggest a link between feelings of closeness to the baby antenatally and postnatal wellbeing including experiencing less postnatal depression (Goecke, 2012).

Some aspects of pregnancy and antenatal care may adversely affect the development of positive maternal-fetal bond during pregnancy. These include antenatal complications and hospitalisation (White et al 2008), previous pregnancy loss (Gaudet 2010, Blackmore et al 2011) and antenatal screening concerns (Lawson and Turriff-Jonasson 2006, Rowe et al 2009, Viaux-Savelon et al 2012).

There is good evidence to suggest a link between severe antenatal maternal stress and negative effects on infant development and emotional wellbeing (Bergman et al 2007, Sarkar et al 2008, Glover and Hill, 2012). It is thought that the impact on development results from exposure of the developing baby to high cortisol levels in utero (Hompes et al 2012). A recent systematic review of studies from 1990 to 2010 identified associations with maternal antenatal anxiety and cognitive, behavioural and psychomotor developmental problems in infants (Kingston et al 2012). Maternal stress and anxiety may be caused by concerns about the pregnancy or environmental, social and/or financial factors.

There does not appear to be an adverse impact on the development of attachment for women with a history of infertility, assisted conception and in vitro fertilisation (Hjelmstedt et al 2006, Fisher et al 2008).

There is some evidence that some aspects of antenatal care may support the development of feelings of connection in the mother towards the baby. These include;

- fetal heart auscultation and ultrasound scanning (Righetti 2005, Pretorious D et al 2006, Lee et al 2007).
- promoting awareness of baby's movements may further forge the maternal – fetal relationship (McPhail 2012).

Maternity care practitioners can support the development of feelings of connection with the growing developing baby through;

- **Encouraging women to become aware of the individual pattern of their baby's movements, to talk to their 'baby', play music and palpate themselves to feel the baby. (Bayrami 2011,Granier-Deferre 2011).**

And reduce maternal stress by;

- **Recognising the environmental, social and financial factors in the parent's life which may be causing stress and anxiety and providing signposting to relevant partner organisations.**
- **Providing care that recognises and responds to distress and anxiety and assists women in developing support networks and resilience.**

7. Partner influences on bonding and attachment

Partners are the main source of emotional support for many women. Factors that may assist or inhibit the development of positive maternal feelings towards the baby during pregnancy, include how supported the woman feels by her partner (Stapleton et al 2012).

Partners can also influence and support women's health behaviour and choices during pregnancy and the postnatal period.

Some evidence links particularly to fathers: documented health benefits for mothers and babies of fathers' positive engagement have included:

- experiencing less pain and emotional trauma during labour;
- successful and longer breastfeeding;
- lower parenting stress;
- smoking/alcohol consumption cessation during pregnancy;
- early identification, and/or 'buffering' babies from the effects, of postnatal depression

(Enkin et al. 1995, Teitler 2001, Wolfberg et al. 2004, Burgess 2008).

Where fathers are positively engaged and well prepared for fatherhood there are direct benefits for mothers in terms of the practical and emotional support that they receive during pregnancy, labour and the postnatal period.

The role of expectant fathers has continued to evolve over the last few decades. Men often want to be a different kind of father from their own. In particular, fathers today express a desire to be more actively engaged in caring activities, and to meet their children's emotional needs (Twenge et al. 2003, Wild 2005). Attendance of fathers at antenatal education has been associated with stronger father-infant attachment and positive emotional, social and cognitive development for babies (Lamb 2004); (Kiernan 2006; Barnes et al. 2008).

An NCT study in 1998 found that a third of the expectant fathers surveyed would have liked more involvement in their partner's pregnancy and care. Only 2 (of over 800) said they would have liked less involvement (NCT 2009). There is evidence that where fathers have been given space to personally develop their fathering role, they are less prone to postnatal depression and more likely to develop a strong attachment to their baby (Burgess 1997). Fathers' depression (like mothers') limits their ability to parent effectively (Huang and Warner, 2005)

Although there is some evidence of the development of a new connecting relationship during birth between some women and their partners which helps the transition to parenthood (O'Shea, 1998), it is important to remember that occasionally fathers can experience psychological trauma after the experience of watching their partner give birth (White, 2007). If the father is not supported this can contribute to poor family relationships that can affect the health of all family members.

Partners' relationships with mothers shape the roles played by partners and have significant impact on children. In practice, any individual parent's direct influence on child wellbeing and development is affected by wider family relationships (Flouri 2005, Lewis & Lamb 2007).

There is a substantial and evolving body of research that examines parenting roles, family relationships, and outcomes for children. Useful research summaries are provided in the reference section of this paper.

Maternity Care practitioners can engage with fathers/ partners by;

- Recognising and supporting the important role of a woman's partner, both in providing support for the woman and in developing a secure parent- infant relationship.
- Providing Antenatal Education at accessible times and encouraging both parents to attend.
- Plan care holistically around the whole family.
- Address the needs of fathers/partner as individuals, taking time to speak with fathers/ partners about what they might enjoy doing with their baby and what they might feel apprehensive about.
- Encouraging skin-to-skin contact with fathers/ partners, immediately after birth if the mother is unable. This can help build their confidence and begin the parent-infant bond.

8. The role of oxytocin in the maternal-fetal/infant relationship

Research into the role of oxytocin in human relationships, mental health and wellbeing is in a relatively early stage but is a rapidly expanding field.

The hormone oxytocin appears to be involved in the development of trust between humans (Krueger et al 2012) and their social interaction (Baskerville and Douglas 2010).

- Studies in pregnancy suggest a link between maternal oxytocin levels and maternal-fetal bonding and maternal-infant bonding (Feldman et al 2007, Levine et al, 2007).
- Maternal oxytocin levels postnatally appear to be linked with postnatal depression (Grewen, 2010), with lower levels of oxytocin associated with higher rates of depression.
- High levels of oxytocin in the immediate postnatal period may facilitate the initiation of mothering behaviours and therefore assist in bonding and attachment (Levine 2007).

If there is interference in the production of oxytocin in the immediate postnatal period, bonding may be affected. Disturbed release of oxytocin during labour and birth is followed by future changes in oxytocin release. If synthetic oxytocin (syntocinon) is used during labour to ensure adequate progress, natural oxytocin is suppressed (Uvnas Moberg, 2012 which can have a negative effect on breastfeeding (Jonas et al 2009, Olza et al 2012), and may affect bonding (Gerwen 2012) There is no oxytocin release pre-birth when a caesarean section is carried out, and oxytocin release is reduced for 48hrs after birth (Uvnas Moberg 2003).

Skin-to-skin contact contributes to the release of oxytocin. Skin–to-skin contact following a caesarean section will increase natural oxytocin, though the maternal levels will remain lower than after a vaginal birth. Babies who have experienced skin–to-skin have been found to cry less (Anderson et al 2003, Rojas et al 2003)

Skin to skin contact between a parent and baby increases circulating oxytocin and promotes bonding well beyond the immediate postnatal period.

Maternity Care practitioners can help the production of oxytocin by;

- Providing care that enhances natural childbirth and decreases interventions to positively effect oxytocin production.
- Encouraging skin to skin contact with mothers immediately after birth.
- Providing an environment that encourages quiet, calm interaction between parents and the new born.

9. Women's experiences of labour and birth: the impact on women's emotional wellbeing and bonding with their infants

Women have lifelong memories of their children's births (Simkin 1991, Beech and Phipps 2004). Women's feelings about their childbirth experience have a significant impact on their emotional wellbeing and their relationship with their baby (Bennington, 2012).

Positive childbirth experiences have been found to be linked to more positive feelings about motherhood, lower levels of parenting stress and anxiety (Takehara et al 2009). Poor intrapartum experiences have been found to contribute significantly to;

- perinatal mental health problems, including postnatal depression (Beck 2002, Leeds and Hargreaves 2008, Hunker et al 2009),
- post-traumatic stress disorder (Soderquist et al 2006, Davies et al 2008, Zaers et al 2008, Elmir et al 2010, McDonald et al 2011),
- fear of subsequent childbirth (Pang et al 2008, Nilsson et al 2010).

A systematic review of 137 studies of factors influencing women's evaluations of their birth experiences found that the strongest predictors of dissatisfaction with the birth experience were a lack of involvement in decision-making, insufficient information, obstetric interventions, and caregivers that were perceived as unhelpful (Hodnett 2002). Evidence continues to emerge about the detrimental impact of poor perceived intrapartum support on women's postnatal mental health:

> *'Regardless of the type of labor or the outcome of the labor, the quality of support a woman receives can make the difference in whether she recalls her experience as depersonalising and degrading or as one that increased her self-esteem and self-confidence'* (p:257, Hodnett, 1996).

The majority of women in the UK express the preference to give birth with as little medical intervention as necessary (RCOG 2001, Green et al 2003, Turner 2008). A systematic review of

studies suggests that only a small minority of women worldwide would prefer a caesarean birth to a vaginal birth (Mazzoni 2011). Studies have identified negative psychological consequences for some women of medical interventions in labour (Oakley 1980, O'Hara 1986, Green and Coupland 1990, Clement et al 1999). Research identifies clear links between the number of medical interventions during childbirth and women's perceptions of inadequate care during labour, and the development of acute post-traumatic symptoms in around 6% of women postnatally (Creedy et al 2000).

Unplanned events in labour, such as emergency caesarean section, are also linked to the development of perinatal mental health problems (Hunker et al 2009, Dencker et al 2010). However, it appears that the impact of these adverse events may be mediated and lessened by the provision of high quality intrapartum support that reduces feelings of being out of control, being alone, and fear (Tham et al 2010).

While other factors play an important role in the development of postnatal mental health problems, including woman's personal mental health history, stressful life events, a poor social support network, and perceived low levels of partner support, the nature of the childbirth experience represents a key risk factor. Conversely, if positive, the experience may serve as a protective factor:

> '*Positive experiences act as a buffer against later physical and emotional stress'* (p1, NCT 2002).

Studies have explored the relationship between birth experiences and the development of post-traumatic symptoms (Creedy et al 2000, Olde et al 2005, Stevens et al 2011a & b, Stramrood et al 2011, Yang et al 2011). Creedy et al 2000 found that 33% of women identified a traumatic birthing event and reported the presence of at least three trauma symptoms. More detailed post-traumatic symptom questions identified 5.6% of the women as meeting the DSM-1V criteria for acute post-traumatic stress disorder (PTSD) (The Diagnostic and Statistical Manual of Mental Disorders published by the American Psychiatric Association). Using multiple logistic regression techniques, the authors concluded:

> *'Antenatal variables (partner support, antenatal risk factors, state and anticipatory anxiety scores measured antenatally) did not contribute to the development of acute or chronic trauma symptoms. The level of obstetric intervention experienced during childbirth and the perception of inadequate intrapartum care during labor were consistently associated with the development of acute trauma symptoms'* (p104, Creedy et al 2000).

Maternity Care practitioners can help women have a positive birth experience by;

- Providing 1:1 compassionate care during labour and childbirth.
- Providing care that reduces unnecessary medical interventions, enables women to have a sense of control, and ensures that they feel cared for as an individual throughout

10. Fourth Stage of Labour – the immediate postnatal period

The fourth stage of labour is defined as the period immediately after birth (Simkin, 2012): a time of great adjustment for mother and baby. Time is needed for this adjustment and nothing should be rushed. The birth space should be quiet, warm and intrusions kept to a minimum.

Normal birth may facilitate biological changes which enhance brain development and therefore impact on behaviour (Simon-Areces 2012). However as discussed in section 7 synthetic oxytocin use and planned caesarean birth reduce or delay postnatal oxytocin release.

The importance of that skin-to-skin contact for mother and baby is now well established in maternity care as best practice (Unicef BFI 2012). One study has found that skin to skin contact for 25-120 minutes after birth was linked with more positive later maternal – infant interaction than those between mothers and babies that had been separated at birth (Bystrova et al 2009).

The significant number of physiological transitions that the neonate experiences in the first moments and hours of extrauterine life lead to a state of significant behavioural arousal, with neonates generally in an alert wide-awake state in the first hours (Nagy, 2011). From this very early stage, babies are an active agent in interpersonal interaction.

Neonates have been found to;

- show a preference for their mother's voice and face (DeCasper and Fifer, 1980; Slater and Quinn, 2001),
- engage in self-regulatory behaviours such as non-nutritive sucking (Marchini et al 1987)
- prefer direct gaze (Farroni et al 2002),
- react differently to a still or animated face (Nagy 2008),
- Imitate eye, face and mouth movements and hand and finger movements (Nadel and Butterworth, 1999; Nagy et al., 2005; Nagy, 2006).

Maternal medications may significantly affect the alertness of the new born and their ability to engage intimately and actively immediately after birth; this can also occur where there has been a difficult birth. Women who have experienced traumatic birth may experience problems with bonding (Ayres et al 2006). Therefore early identification and appropriate counselling may be required to facilitate the mother-baby relationship

Maternity care professional can support early attachment and bonding by;

- Providing an environment that encourages quiet, calm interaction between parents and the new born.
- Showing parents in this early period how responsive their new born is to them – identifying when the baby responds to their faces and voices and identifying imitation behaviours.
- Providing early identification and appropriate counselling may be required to facilitate the mother-baby relationship

11 The influence of postnatal depression on children's development and mental health

This work in the perinatal period can help support the beginning of the attachment relationship which will have impacts on the future health and wellbeing of the baby (Trevarthen et al., 2006). If primary caregivers are not 'attuned' to their baby in the first few months of life the child is more likely to show behavioural 'disturbances' both at home in the pre-school years and when entering school (Murray, 1992; Sinclair & Murray, 1998; Murray, Sinclair, Cooper, Ducornau, Turner, & Stein, 1999;). This adverse impact on child behaviour and development has been found in studies which have looked at the impact that maternal depression has on the maternal-infant interaction.

Specifically, associations have been found between mothers exhibiting signs of postnatal depression in the first months of a child's life, and the mother-child pair showing a less secure attachment when the child is a toddler, independent of 'maternal sensitivity' (Murray, Fiori-Cowley, Hooper, & Cooper, 1992). Maternal sensitivity being the measure of how well or not the mother responds the interactions and cues of the infant.

Postnatal depression in a primary caregiver has been found to have a negative impact on children's cognitive development (Sinclair & Murray, 1998) and socio-emotional development (Murray, Sinclair, Cooper, Ducornau, Turner, & Stein, 1999). This is probably influenced by the emotional availability of the mother for well attuned playful interaction (Stern 1977.) which can be related to postnatal depression.

It is important to distinguish between depression and parent child interaction. Depression is a risk factor for poor engagement/interaction. It is the quality of interaction which is impacted on as a result of depression (Murray, Fiori-Cowley, Hooper, & Cooper, 1996). Studies have found that where treatments focused solely upon treatment of postnatal depression there was no significant impact on;

- maternal management of early infant behaviour problems,
- security of infant-mother attachment,
- infant cognitive development,
- any child outcome at five years,

(Cooper, Gonzales, Gallo, Rost, Meredith et al., 2003; Murray, Cooper, Wilson, & Romaniuk, 2003).

Where mothers suffer from depression and anxiety during pregnancy and postnatally, maternity care providers can play an important role in minimising the potential impact of this on optimal infant –mother attachment.

Maternity care practitioners can reduce the impact of postnatal depression by:

- **Setting up services to meet the needs of the children of mothers with and without postnatal depression to support the development of good quality positive parent-infant interactions (Puckering, 2005).**
- **Early recognition of postnatal depression and provision of appropriate and timely support for the women and family.**
- **Making services more amenable to partners and fathers who can play an important role in buffering the effects of maternal depression, and providing infants with a source of stability and security.**

12. Conclusion and summary

The maternal – infant relationship begins as soon as the woman knows she is pregnant. Protective behaviours towards the baby and preparation of the family and home for the arrival are an important element in the development of maternal feelings. The developing relationship may be enhanced through some antenatal care practices including ultrasound scanning, fetal heart auscultation and discussing the baby's development and individual behaviour patterns in utero. A positive maternal –infant relationship during pregnancy and at the time of birth is associated with a lower incidence of postnatal depression. In contrast, depression and anxiety during pregnancy and postnatally may interfere with optimal maternal –infant bonding and infant development.

The relationship between an infant and its father play a different but equally important role in a child's growth and development, (Tiedje 2003) including emotional health and cognitive development. The role of fathers/partners can also be influential in the mother and baby's relationship development. Positive engagement can improve maternal –infant closeness as well as reducing perceptions of pain and emotional trauma during labour and lower parenting stress. Engaging fathers in antenatal care can help them support their partner as well as increasing their attachment to the baby.

The nature of the support offered to women by their caregivers during labour has consistently been identified in research as a key factor in their assessment of the birth experience. Being treated as an

individual, having a sense of control, and being involved in decision-making are also repeatedly identified as important.

The number and type of medical interventions during labour also appear to influence women's responses, particularly if a large number of interventions take place in a context where the support and relationship between the woman and her maternity care professional are also perceived as poor.

There are clear links between labour events and women's short-, medium- and long-term emotional wellbeing, with correlations between negative experiences and a number of postnatal mental health problems. A large body of evidence identifies the links between poor maternal mental health and attachment and relationship problems within the growing family.

Early childhood is a highly effective and cost-efficient time to ensure that all children develop their full potential. Research shows that the prenatal period and the earliest years of life are a crucial time for the development of the human brain, including the capacity for social and emotional learning (Shonkoff & Phillips, 2000; Puckering, 2011).

The literature clearly demonstrates the importance of the role of the midwife and other maternity care practitioners in promoting a positive pregnancy, birth and postnatal experience. This is important to providing the best start for the developing maternal- infant relationship and development of good quality positive parent-infant interactions.

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