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AIMH UK BEST PRACTICE GUIDANCE (BPG) **NO 1**

Improving Relationships in the Perinatal Period: What Works?

Dear AIMH Member and IJBPE Subscriber,

Welcome to the first edition of the AIMH UK Best Practice Guidance (BPG) series, which is part of a new collaboration between AIMH UK and IJBPE.

We are very excited about this new initiative, which is aimed at providing practitioners who work with families during the perinatal period with state of the art evidence about 'what works' to support the development of infant mental health during the perinatal period. All of our BPGs will be based on the best available evidence, and will present data from recent systematic reviews and randomized controlled trials that have examined the area of interest.

The focus of the first in the Best Practice Guidance series is on the Transition to Parenthood (TtP). We look explicitly at why the TtP is important and what the evidence tells us about some of the innovative methods of working that have been developed over the course of the last decade to support the couple in the transition to parenthood.

We focus on the effectiveness of preparation for parenthood programmes that begin in pregnancy and the aim of which is to improve the couple relationship or their capacity for co-parenting. This particular guideline does not therefore summarise the effectiveness of programmes that are delivered in the postnatal period only (e.g. parenting or home-visiting programmes). The guideline concludes by examining the key implications for your practice.

We hope that you will put the information in these supplements to good use in terms of developing your practice and implementing evidence-based ways of working.

In the meantime, why don't you email and tell us what you think about this initiative and other areas of practice you would like our subsequent BPGs to address?
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Improving Relationships in the Perinatal Period: What Works?

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Aim of this Overview

The aim of this overview is to examine what the evidence tells us about some of the innovative methods of working that have been developed over the course of the last decade to support the couple in the transition to parenthood.

The paper only includes evidence about 'what works':

- from systematic reviews and randomized controlled trials
- from studies that have examined the effectiveness of preparation for parenthood programmes that begin in pregnancy and the aim of which is to improve the couple relationship or their capacity for co-parenting.

Studies that examine the effectiveness of any programmes that are delivered in the postnatal period only have

INTRODUCTION

Antenatal education, including 'childbirth education programmes', 'prenatal/antenatal classes', and a range of other prenatal/antenatal groups are aimed at preventing the complications of pregnancy and ensuring the wellbeing of mother and child. They are underpinned by a recognition of the importance of preparing women for childbirth, and in particular of their achieving optimal physical health during pregnancy (including diet and nutrition, and limited exposure to a range of teratogens including alcohol, tobacco and other drugs) and of the benefits of receiving good social support. While traditional antenatal education has been aimed at preparing parents-to-be for pregnancy and labour, recent research about the psychological and biologically-driven processes that both men and women face as part of what has been defined as the 'transition to parenthood' (TtP), has raised questions about the focus of 'traditional' antenatal programmes, and their adequacy in supporting parents (Schrader-MacMillan et al., 2009).

RELATIONSHIP DECLINE IN THE TRANSITION TO PARENTHOOD

The transition to parenthood has been identified as a time of potential stress for the pregnant couple, due largely to the impact that a pregnancy and newborn baby has on the couple relationship (for a comprehensive discussion see http://www.encyclopedia.com/topic/Transition_to_Parenthood.aspx). Perhaps most importantly, it is the time during which couple relationship satisfaction can become diminished, and relationship breakdown can occur. For example, there is evidence to suggest that marital satisfaction is stable during pregnancy but very often declines significantly over the transition to parenthood for both partners with higher levels of variability post-birth (Lawrence et al., 2008). Factors affecting such satisfaction include TtP general factors such as premarital satisfaction and division of labour, and TtP specific factors such as violation of prenatal expectations (e.g. about their competency as a parent, how the baby will affect the marriage etc), pregnancy planning, infant characteristics (e.g. health, sex, temperament and behaviour) and length of marriage (for an overview, see Lawrence et al., 2010).

Although such relationship dissatisfaction does not necessarily lead to divorce or separation i.e. there is no difference in divorce rates for couples with children compared to those without (Office for National Statistics (ONS) 2012), the high levels of family discord that are accompanied by such relationship dissatisfaction cause problems in terms of the long-term adjustment of the children. For example, research suggests that destructive parental conflict is associated with higher levels of emotional insecurity in young children including reports of fear and avoidance (Davies et al., 2002).

Pregnancy and the postnatal period are key opportunities to prepare parents for their new roles

There is also evidence that relationship problems before the birth of the baby can affect the wellbeing of the mother, with consequences for the foetus/unborn baby. For example, the Norwegian Mother and Child Cohort study found that dissatisfaction with the partner relationship is a significant predictor of maternal emotional distress in pregnancy, and that a positive relationship has a protective effect against some stressors (Gunn-Mette et al., 2011). Stress, anxiety and depression in pregnancy have been found to be strongly associated with significantly compromised outcomes for both the foetus and child (Glover, 2014).

SENSITIVE DEVELOPMENTAL PERIODS

In 'Fair Society: Healthy Lives', Marmot (2010) suggests that giving every child the best start in life is one of the key mechanisms for equalising the life chances of children and reducing social adversity. The two time-points that are identified as being key to achieving this – pregnancy and the first two years of life – represent 'sensitive developmental periods', during which there is significant 'biological embedding of adversities' (Marmot, 2010), in part as a consequence of the infant's early relationship experiences.

'Sensitive developmental periods' refer to biological time-points during which the effects of experience on the brain are particularly strong, and when certain types of experience need to be present. This input is also described as 'experience-expectant' and involves basic sensory and motor functions, including visual and language systems. Although the precise mechanisms by which the experience-expectant development occurs are not yet well known (Twardozs & Lutzker, 2010), it is now accepted that if an infant's development is not occurring normally during this period, it can have long-term implications for the child's later wellbeing (Shonkoff, 2009).

The biological embedding of social adversity refers to the way in which adverse factors, including relationships, nutrition, and the physical/chemical and built environments, can interact with the child's genetic predisposition either during sensitive periods in the development of the brain or other organs, or through the cumulative effects of damage over time, resulting in disruptions to the functioning of key organs, with significant consequences in terms of later functioning (Center on the Developing Child, 2013).

Shonkoff (2009), in a seminal paper published in the Journal of the American Medical Association, summarised the evidence about the ways in which social adversity disrupts developing brain architecture and other organ systems and regulatory functions. He highlighted the long-term consequences of this in terms of children's learning (i.e. linguistic, cognitive and socio-emotional skills), behaviour (adaptive vs maladaptive responses) and physiology (i.e. hyper-responsive/chronically activated stress response). This paper demonstrated the ways in which the impact on physiology is associated with stress-related chronic disease, unhealthy lifestyles and widening health disparities.

WHAT DOES THE EVIDENCE TELL US ABOUT GROUP-BASED, RELATIONSHIP-FOCUSED PARENT EDUCATION INTERVENTIONS IN THE PERINATAL PERIOD?

Two systematic reviews have explicitly examined the effectiveness of interventions delivered during the perinatal period with the aim of improving the transition to parenthood (Pinquart & Teubert, 2010; Petch & Halford, 2008). Pinquart and Teubert (2010) examined the effectiveness of interventions that began in pregnancy and that had an explicit component aimed at improving the couple relationship. The review included 21 controlled studies (16 of which were RCTs) of couple-focused interventions that targeted heterosexual expectant and new parents. Eighteen interventions were universal in terms of their focus on prevention of couple adjustment problems, and three studies were delivered on a selective basis to parents at risk of poor outcomes. Seven interventions were delivered before birth, seven after birth, and eight included both before and after-birth components. The mean number of sessions was 11.4 (range 1–82). The results of the meta-analysis showed small effects on couple communication, psychological well-being and couple adjustment. The results of analyses to examine the impact of factors such as programme duration showed that the outcomes were improved where the intervention included more than five sessions, had an antenatal and postnatal component, and was led by professionals rather than semiprofessionals. One of the main drawbacks of this review is that it focuses only on programmes that uniquely address the couple relationship during the transition to parenthood. This means that it does not include studies of interventions that may have focused on other aspects of the transition to parenthood.

Pinquart & Teubert (2010)
Content: Review of 21 controlled studies of interventions starting in pregnancy and with an explicit aim to improve the couple relationship
The more successful interventions:
- included more than five sessions
- had an antenatal and postnatal component
- were led by professionals rather than semi-professionals.

Petch and Halford (2008) examined the effectiveness of universal interventions (i.e. couple or parenting programmes, the latter of which are not reported further here), and selective interventions for high risk couples (e.g. home-visiting programmes - not reported further here; and other non-home-visiting interventions). They identified eight RCTs that

evaluated the effectiveness of universal psycho-education programmes aimed at improving the transition to parenthood, three of which were delivered exclusively during the antenatal period, the remainder being provided both ante and postnatally. The intensity of the interventions ranged from minimal additional support (e.g. an extra antenatal class offering information and group discussion on couple adjustment) through to 24 weekly group sessions. The focus of these programmes included: couple communication and relationship skills (n=5 studies), and parenting adjustment/competence/interaction (n=3 studies); or mental health (n=3 studies).

Couple relationship satisfaction was improved in three of five studies, and one further study that compared two interventions found that the mother-focused parenting programme prevented declining relationship satisfaction in women but not men. Couple communication was assessed and found to be improved in two studies. Mental health was improved in two out of three studies in which it was assessed. Only one study comparing a mother-focused and couple-relationship focused intervention examined the effects on co-parenting practices, and this found high parenting adjustment in both conditions.

Petch & Halford (2008)
Content: Review of effectiveness of universal psycho-education programmes aimed at improving the transition to parenthood
- Couple satisfaction improved in 3 out of 5 studies
- Mother-focused parenting programme prevented declining relationship satisfaction in women but not men
- Couple communication improved in 2 studies
- Mental health improved in 2 out of 3 studies
- Mother-focused and couple-focused interventions were equally effective in enhancing parenting adjustment.

The limitations of this review are that the data from the included studies was not combined to produce an overall estimate of the effectiveness of this group of programmes. In addition, the authors draw attention to the fact that:
- Most of the included parents were highly educated;
- There were no effects for the lowest dose couple programme (e.g. one additional hourly session per week);
- Long-term effectiveness was only assessed in one study, which showed sustained effects over five years following an intensive programme of 24 weekly sessions that involved approximately 50 hours of professional contact per couple.

Since the publication of these reviews, the effectiveness of a number of other transition to parenthood programmes has been examined using RCTs. Family Foundations is a group-based programme that can be delivered both on a universal or targeted basis (i.e. has modified versions for high risk couples and teen parents). The programme involves a 16-hour intervention that is delivered in eight, two-hour sessions (four in the ante and four in the postnatal periods). An RCT that included 169 heterosexual, first-time pregnant couples found significant programme effects on co-parental support, maternal depression and anxiety, distress in the parent-child relationship, and infant self-regulation. The programme showed more impact for lower-educated parents (Feinberg & Kan, 2008). Evidence of continued effectiveness at one year post-intervention was found for all domains (i.e. couple relations, parent well-being, parenting quality, and child outcomes). Intervention effects on mothers' parenting were mediated by co-parenting quality, and effects on child self-regulation were mediated by the combination of co-parenting quality and parenting quality (Feinberg et al., 2009). At three-year follow-up, the results showed an impact on parental stress and depression, co-parenting, and harsh parenting for all families. Among families of boys, programme effects were found for child behaviour problems and couple relationship quality (Feinberg et al., 2010).

Feinberg & Kan (2008; 2010)
Content: Family Foundations group-based programme
RCTs conducted by the programme designers found positive results for:
- co-parental support
- maternal depression and anxiety
- distress in the parent-child relationship
- infant self-regulation

At three year follow-up, findings showed continuing positive effects on:
- parental stress and depression
- co-parenting
- harsh parenting

The Danish Prevention and Relationship Enhancement Program (PREP) (Trillingsgaard et al., 2012) targeted first-time couples and involved the delivery of communication skills training. However, the results of an RCT comparing this programme with a) an information-based control group; and b) care as usual, found no differences between any of the groups, and the authors concluded that none of the interventions prevented the decline in relationship satisfaction during the transition to parenthood.

A further study of the effectiveness of brief (i.e. six hour) psycho-educational transition to parenthood groups, targeting high-risk pregnant couples, examined two interventions that both involved four 90-minute sessions, two of which were delivered pre-birth and two after. One intervention focused on relationship quality and the second on the co-parenting relationship. These two brief interventions were compared with an information-only control arm (Doss et al., 2014). The results of an RCT involving 90 heterosexual

couples showed that women and high-risk men in both the couple and co-parenting interventions showed less decline in relationship satisfaction and other areas of relationship functioning. Women also reported improved co-parenting in both intervention groups and perceived themselves to have experienced less stress during the first year after birth.

In the UK, the effectiveness of a two-hour, universal psycho-educational adjunct to existing antenatal classes has been evaluated (Daley-McCoy et al., 2015). The intervention focused on promoting realistic expectations about becoming a parent, and the development of communication skills to optimise effective problem solving. The course was midwife-led and consisted of five weekly evening sessions that lasted for two hours, one of which involved a group exercise in which the participating couples explored what a day in the life of a new parent might involve and in particular, common areas of disagreement among new parent couples. It also included discussions within couples about their individual expectations of new parenthood, which were used to help them to develop communication and problem-solving skills. The results of a feasibility cluster RCT (i.e. antenatal classes were randomized rather than individuals) involving 83 couples showed that the intervention was both feasible in terms of delivery, acceptable to parents, and that there was evidence of less deterioration in relationship quality for women, less deterioration in couple communication for men, and a significant improvement in psychological distress for both.

Promising approaches that have not yet been tested using rigorous research designs include a Mindfulness Based Childbirth and Parenting (MBCP) programme, which comprises a formal adaptation of the Mindfulness-Based Stress Reduction programme. This programme is designed to promote family health and well-being through the practice of mindfulness during pregnancy, childbirth, and early parenting. The results of a small, one-group evaluation showed statistically significant increases in mindfulness and positive affect, and decreases in pregnancy anxiety, depression, and negative affect from pre- to post-test.

UK DEVELOPED PROGRAMMES

One of the key limitations of the evidence to date is that while the UK has developed some of the most innovative methods of working to support parents through the transition to parenthood, none of these programmes has yet been subject to rigorous evaluation using a randomized controlled trial.

UNIVERSAL PROGRAMMES

The Solihull five-week programme, 'Journey to Parenthood: Understanding pregnancy, labour, birth and your baby', combines traditional antenatal information with preparing families to have a relationship with their baby, and is currently being evaluated. A pre and post measures pilot study of 26 fathers and 34 mothers found that mums' and dads' feelings of attachment increased, mums' anxieties related to pregnancy, labour and birth decreased, and mums' intentions to breastfeed increased. Intention to stop smoking, and general anxiety and depression did not change for either parent.

The Family Links 'Welcome to the World' programme involves an eight-week group for expectant couples, delivered weekly from around 22 weeks of pregnancy. Topics include empathy and loving attentiveness, infant brain development, healthy choices, managing stress, promoting self-esteem and confidence, and effective communication. Results of a one-group pre and post evaluation with 111 parents-to-be across 28 settings showed statistically significant improvements in parental mental health (for both parents) and some small improvements (i.e. not statistically significant) in parental attachment to the baby (https://familylinks.org.uk/why-it-works#Welcome-to-the-World).

TARGETED PROGRAMMES

'Baby Steps' (NSPCC) is an interactive group programme based on theory and research into the transition to parenthood and infant mental health for use with targeted groups of parents including immigrants. 'Baby Steps' starts with a home visit in the seventh month of pregnancy followed by six weekly group sessions before the baby is born. After babies are born, the family is visited again at home, and a video of interaction is taken if parents wish and a reflective review is offered so parents can identify their baby's cues; this is followed by three more group sessions. Groups are led by a practitioner from health and one from children's services (e.g. health visitor or midwife and a family support worker). The interactive sessions include films, group discussions and creative activities designed to build confidence and communication skills. There is a strong focus on building relationships between couples and between parents and their babies. 'Baby Steps' covers six themes:

- the development of my/our unborn baby
- changes for me and us
- my/our health and wellbeing
- giving birth and meeting my/our baby
- caring for my/our baby;
- who is there for us? – people and services (https://www.nspcc.org.uk/services-and-resources/services-for-children-and-families/baby-steps/)

A survey of 148 parents using a range of standardized tools administered before, during and after the programme showed improved knowledge, lower rates of caesarean section, and of prematurity and low birth-weight than in the general population of parents giving birth. Parents

had better relationships with their babies, both during pregnancy and after the baby was born, and their relationship with their partners improved. Parents' emotional wellbeing improved and they reported a decrease in anxiety and an increase in self-esteem. The 'Baby Steps' programme was found to be an important source of support. Groups of parents, who had limited access to other forms of information and support, particularly benefitted from 'Baby Steps' (https://www.nspcc.org.uk/services-and-resources/research-and-resources/2015/baby-steps-evidence-relationships-based-perinatal-education-programme/).

Couple dissatisfaction impacts emotional security in young children

IMPLICATIONS FOR PRACTICE

The research clearly shows that many men and women experience difficulties during the transition to parenthood, and pregnancy and the immediate postnatal period have been identified as key periods for preparing parents for their new roles. Evidence regarding the biological embedding of social adversity emphasizes the particular importance of supporting parents who may be experiencing significant social problems.

The current National Institute for Health and Care Excellence (NICE, UK) guidelines, 'Antenatal Care: Routine Care for the Healthy Pregnant Woman' (2008) emphasise the importance of woman-centred care and informed decision-making, and women being offered opportunities to attend particpant-led ante-natal classes but there are currently no recommendations regarding the content or delivery of such classes. The most recent national survey of women's experience of maternity services (Redshaw & Heikkila, 2010) found that two-thirds of women were invited to an antenatal class (ANC) with 87% of first time mothers, but only 50% of women who had previously given birth, being offered a class. The survey found that younger white women were more likely to have been offered a class. There was also geographical variation with 73% of women in the North East being offered a class but only 62% of women in the East Midlands. In terms of uptake, around 12% of multiparous women, compared with 67% of first-time mothers, attended a class. In terms of organization and availability, only 67% of respondents indicated that partners were welcome; 64% that the classes were conveniently located; 59% that classes were provided at the right stage of pregnancy, and 53% that they were at a convenient time of day. Under half of the respondents felt that the classes covered the topics that women wanted (45%) or that there were a sufficient number (42%). This suggests that existing antenatal education is not meeting the needs of many pregnant women. The survey also found that around 12% of parents paid to attend an ANC.

The evidence suggests four key areas on which antenatal education should focus:

- preparation for new roles
- the partner relationship
- the parent-foetal/infant relationship
- co-parenting

Practitioners and commissioners should ensure that whatever programme is implemented addresses all of the above issues. The evidence also points to the importance of ensuring that both parents attend the programme. Many men have felt excluded or marginalized in traditional parentcraft classes, and many existing programmes continue to target the pregnant woman.

Both parents should be encouraged to attend parenting programmes

The evidence also suggests that TtP programmes should be provided by a professional although this does not necessarily need to be a midwife. Many of the UK based programmes that target high-risk groups (e.g. 'Baby Steps') are very often provided by two professionals, one of whom is from health (e.g. midwife or health visitor) and the other from social care (e.g. family centre worker, social worker etc.).

Although it is currently unclear whether it is better for the traditional antenatal class to be supplemented by adjunctive sessions that address the wider transition to parenthood (see for example, Daley-McCoy et al., 2015) or be replaced by programmes that more fully address the above issues, the evidence strongly suggests that at least five sessions should be provided, although there is some evidence of effectiveness with a smaller number of sessions when provided on a universal basis. Key issues for parents include the amount of time required to attend the course, in addition to how convenient it is in terms of timing and location.

KEY PRACTITIONER POINTS

THE CHALLENGE

- Most TtP programmes are characterized by the provision of groups for couples in pregnancy (typically 4 x 2 hour sessions); some also continue into the postnatal period.
- Most TtP programmes are broadly psycho-educational in focus, the aim being to prepare couples not only for the birth but also for their new roles as parents by increasing knowledge and skills. Most courses focus on the partner relationship, co-parenting and mental wellbeing.

WHICH TtP PROGRAMMES IMPROVE OUTCOMES FOR PARENTS?

- The evidence suggests that both brief and more extensive programmes can produce changes in partner relationship satisfaction, co-parenting behaviour and mental wellbeing, but that the more effective programmes include more than five sessions, involve an antenatal and postnatal component, and are led by professionals rather than semi-professionals.
- Many of the most innovative UK-developed programmes (e.g. 'Journey to Parenthood: Understanding pregnancy, labour, birth and your baby' – Solihull Programme; 'Welcome to the World' – Family Links; 'Baby Steps' – NSPCC) have not yet been evaluated using rigorous research; however, preliminary evaluations suggest that they are promising approaches.

IMPLICATIONS FOR PRACTICE

- This evidence strongly suggests that all antenatal classes should:
  a) include material that is specifically designed to prepare parents for the transition to parenthood;
  b) target both parents;
  c) be provided by a professional, although this does not necessarily need to be a midwife.

REFERENCES

Center on the Developing Child (2013) How Early Experiences get into the Body: A Biodevelopmental Framework. Available at: http://developingchild.harvard.edu/resources/multimedia/interactive_features/biodevelopmental-framework/ <accessed May 14th, 2014>.

Daley-McCoy, C., Rogers, M., Slade, P. (2015) Enhancing relationship functioning during the transition to parenthood: A cluster-randomised controlled trial. Archives of Women's Mental Health, 18, 5 , 681-692.

Davies, P.T., Harold, G.T., Goeke-Morey, M.C., Cummings, E.M., Shelton, K. et al. (2002) Child emotional security and interparental conflict. Monographs of the Society for Research in Child Development, 67(3),i-v, vii-viii, 1-115.

Department of Health (DH) (2009) Healthy Child programme: Pregnancy and the first five years of life. London, DH.

Doss, B.D., Cicila, L.N., Hsueh, A.C., Morrison, K.R., Carhart, K. (2014) A randomized controlled trial of brief co-parenting and relationship interventions during the transition to parenthood. Journal of Family Psychology, 28, 4483-494.

Feinberg, M.E., Kan, M.L. (2008) Establishing Family Foundations: Impact of a transition to parenting program on co-parenting, depression, parent-child relationship, and infant regulation. Journal of Family Psychology, 22, 253-263.

Feinberg, M.E., Kan, M.L., Goslin, M. (2009) Enhancing Co-parenting, Parenting, and Child Self-Regulation: Effects of Family Foundations 1 year after birth. Prevention Science, 10,276-285.

Feinberg, M.E., Jones, D.E., Kan, M.L., Goslin, M. (2010) Effects of Family Foundations on Parents and Children: 3.5 years after baseline. Journal of Family Psychology, 24,532-542.

Glover, V. (2014) Maternal depression, anxiety and stress during pregnancy and child outcome; what needs to be done. Best Practice & Research Clinical Obstetrics & Gynaecology, 28(1),25–35.

Gun-Mette, B Rosand, Slinning, K., Eberhard-Gran, M., Røysamb E., Tambs, K. (2011) Partner relationship satisfaction and maternal emotional distress in early pregnancy. BMC Public Health,11,161.

Lawrence, E., Cobb, R.J., Rothman, A.D., Rothman, M.T., Bradbury, T.N. (2008) Marital Satisfaction Across the Transition to Parenthood. Journal of Family Psychology, 22(1), 41-50.

Lawrence, E., Rothman, A.D, Cobb, R.J., Bradbury, T.N. (2010) Marital satisfaction across the transition to parenthood: Three eras of research. In: Schulz, M.S., Pruett, M.K., Kerig, P.K., Parke, R.D. (Eds.) Strengthening couple relationships for optimal child development: Lessons from research and intervention. Decade of behavior (science conference). (pp. 97-114). Washington, DC, US: American Psychological Association, xvi, 244 pp. http://dx.doi.org/10.1037/12058-007

Marmot, M. (2010) Fair Society: Healthy Lives: The Marmot Review, London, University College.

NICE (2008). Antenatal Care: Routine Care for the Healthy Pregnant Woman. Available at: http://www.nice.org.uk/guidance/cg62/chapter/1-Guidance <accessed March 8th, 2016>

Office for National Statistics (ONS) (2012) Available at: http://www.ons.gov.uk/ons/dcp171778_351693.pdf <accessed Jan 20th, 2016>

Petch, J., Halford, W.K. (2008) Psycho-education to enhance couples' transition to parenthood. Clinical Psychology Review, 28,1125–1137.

Pinquart, M., Teubert, D. (2010) A Meta-Analytic Study of Couple Interventions During the Transition to Parenthood. Family Relations, 59, 221–231.

Redshaw, M., Heikkila, K. (2010) Delivered with Care: A national survey of women's experiences of maternity care. Oxford, UK, National Perinatal Epidemiology Unit.

Schrader McMillan, A., Barlow, J., Redshaw, M. (2009) Birth and Beyond: A review of evidence about antenatal education. London, UK, DH.

Shonkoff, J. (2009) Neuroscience, Molecular Biology, and the Childhood Roots of Health Disparities: Building a new framework for health promotion and disease prevention. JAMA, 301(21), 2252-9.

Trillingsgaard, T., Baucom, K. J.W., Heyman, R. E. and Elklit, A. (2012), Relationship Interventions During the Transition to Parenthood: Issues of Timing and Efficacy. Family Relations, 61: 770–783.

Twardozs, S., Lutzker, J.R. (2010) Child maltreatment and the developing brain: A review of neuroscience perspectives, Aggression and Violent Behavior, 10(15), 59-68.