ASSESSING PARENTING CAPACITY IN PSYCHIATRIC MOTHER AND BABY UNITS: A CASE REPORT AND REVIEW OF LITERATURE

Julie Hammond¹ & Maurice Lipsedge²

¹King's College London, School of Medicine, London, UK ²South London and Maudsley NHS Foundation Trust, London, UK

SUMMARY

Aims and hypothesis: This review aimed to improve infant risk assessments in the context of maternal mental illness by identifying key predictors of poor parenting outcomes.

Background: Inadequate parenting as a result of severe and persistent mental illness is a common reason for courts terminating parental rights. However, the current practice of parenting capacity assessments in the setting of perinatal psychiatry is fraught with risks and uncertainty. A well-recognised flaw in the assessment process is the lack of valid and reliable tools that have been specifically validated for assessing parenting capacity in mothers with a history of mental illness and the potential risk of harm to their infant. To date, there is only one instrument available.

Methods: A systematic search of Medline, PsycInfo and Embase via the Ovid interface was conducted between September and December 2014. Citation snowball sampling was also used to identify further relevant studies. An additional search was performed in Google to access grey literature.

Results: A total of 38 citations were identified, of which 8 publications focusing on the populations of England, France and Belgium met the eligibility criteria of this review. Evidence from existing research suggests that poor parenting outcomes in maternal psychiatric illness are strongly associated with correlates of socio-economic inequalities. However, evidence regarding the long-term implications of such factors is weak as only one follow up study and no longitudinal studies were identified in this review.

Conclusion: Our review suggests that the use of standardised empirically validated risk assessment tools would benefit the current practice of parenting assessments by improving the process by which collected information is analysed. This would enhance the accuracy of decision-making, and improve the safeguarding of the infant. Further research is needed on medium to long-term parenting outcomes, particularly regarding its relations to: the type of maternal psychiatric disorder; the quality of maternal relationships; previous attachment experience; psychiatric illness or behavioural disorder in the partner and neonatal/infant medical complications. This would more accurately reflect the dynamic nature of parenting and would help to determine the effectiveness of specific interventions addressing risk factors associated with poor parenting outcomes.

Key words: parenting capacity assessment - mother baby unit - mental illness - psychiatric diagnosis - psychotic disorder - parenting outcome - social service intervention - separation at discharge

* * * * *

BACKGROUND

There is a growing body of evidence to suggest that a substantial proportion of women with psychotic disorders are mothers (Howard et al. 2001, McGrath et al. 1999), and contrary to popular belief many of these women are able to successfully rear children with the appropriate social support (Seneviratne et al. 2003). However, for a significant minority of mothers with severe and persistent mental illness, the unpredictable nature of psychotic symptoms places the infant at considerable risk of neglect, harm and psychological upset (Hipwell et al. 2000, Lewis 2007). In situations where mental health and social service professionals are concerned about a mother's capacity to provide safe and appropriate care for her child, clinicians are often called upon to perform parenting assessments to determine parental competency, motivation, and safety and may be required to act as expert witnesses in child protection cases (Appleby & Dickens 1993, Gopfert et al. 1996, Harlow et al. 2007).

Attachment theory emphasises the significance of early life experiences, such as quality of mother-infant interaction, in shaping social, emotional and cognitive development (Bowlby 1977, Swain et al. 2007). Maternal mental illness may adversely affect the infant-caregiver relationship and the emotional state of the infant through its effects on social cue perception, communication skills, impulsivity and emotional availability (Oyserman et al. 2005, Phelan et al. 2007). Furthermore, the social and environmental risks associated with poor mental health, such as poverty (including poor housing), domestic violence, substance abuse, single-parent status, social isolation and stigmatisation, and increased stress can further undermine parenting abilities (McPherson et al. 2007, Mowbray et al. 2002). Because of this, children of mothers with psychiatric illness have a higher risk of an unstable early foundation, and are therefore especially vulnerable to environmental stressors and the development of psychiatric disorders in adulthood (Dean et al. 2010, Donatelli et al. 2010, Higgins et al. 1997, Niemi et al. 2005, Sutter-Dallay et al. 2011, Wan et al. 2008).

Since the work of Main (1958) and his successors (Baker et al. 1961, Bardon et al. 1968, Fowler & Brandon 1965, Glaser 1962, Main 1958), it has become increasingly recognised that disrupting mother-infant relations during periods where the mother is hospitalised for the treatment of psychotic episodes can negatively impact the course of the mother's recovery and future parenting capacity. Thus, for those mothers who are considered by health and social services to present an identified or potential risk to their child as a result of mental illness, the mother and infant may be referred to specialist mother and baby units (MBU) for an assessment of the risk of harm to the infant (NICE 2007).

The Children Act (2004) of England and Wales emphasises the paramount importance of protecting and promoting child welfare and safety, and although birth mothers automatically have parental rights, occasionally the local authority may determine that a mother is unable to adequately care for her child and arrange either for social services supervision or separation of the mother and baby on discharge (Howard et al. 2004, Howard et al. 2003, Seneviratne et al. 2003). Figures on the rates of separation (including voluntary placement, foster care, court-ordered care or adoption) reported in perinatal research vary considerably, ranging from 5 to 50% of cases (Abel et al. 2005, Buist et al. 2004, Kumar et al. 1995, Poinso et al. 2002, Salmon et al. 2004, Whitmore et al. 2011). The decision to terminate parental rights is usually reached following a comprehensive assessment of parenting by a multidisciplinary team of occupational therapy, social work, childcare and mental health professionals. This process may take from several weeks to several months.

The complexity of assessing the adequacy and safety of parenting behaviour in the context of severe and persistent maternal psychiatric disorder has been well acknowledged in the perinatal literature. A well-recognised flaw in the current assessment procedure is the lack of valid and reliable tools that have been specifically validated for assessing parenting capacity in mothers with a history of mental illness and potential risk of harm to their infant. Assessments of parenting capacity have typically relied on the ecological framework provided by the Department of Health's 'Framework for the Assessment of Children in Need and their Families' (Department of Education, 2013; Department of Health, Department for Education and Employment, and Home Office, 2000) to assess risk of harm in perinatal psychiatric settings. The framework provides a conceptual map guiding parenting assessments (See Appendix 1), but can have the reductive effect of producing lists of strengths and weaknesses under a limited range of headings (Dorsey et al. 2008). Checklist measures have traditionally been deemed as inappropriate in the context of parenting assessment due to the emphasis placed on observations of the strengths and weaknesses in mother-child interactional behaviour as opposed to identifying personal characteristics that have been itemised into high-risk checklists (Reder & Lucey

1995). However, the use of an unstructured approach to parenting assessments means that there is currently a great deal of variation in both the consistency and rigour of approaches used to decide outcomes in assessments, whereby decisions may be subject to bias, which brings into question the validity of this technique in predicting the risk of future harm to the child and the likelihood of mother-infant separation post discharge.

Furthermore, multiple strands of evidence have identified that although the current framework provides a sound basis by which practitioners can gather quality information about children and their families, it fails to specify the method by which data collected should be analysed (Helm 2010, Holland 2010, Horwath 2009, Turney et al. 2011). As a result, practitioners often face difficulties with regards to judgements of child maltreatment risk when analysing information from complex cases. This is consistent with findings from recent research which has highlighted the need for further work in the field of assessment to improve the accuracy of decision-making in child protection cases, where it has been reported that assessments of child maltreatment risk is 'only slightly better than guessing' (Dorsey et al. 2008). There has also been increased recognition of the need to move toward empirically validated 'Structured Clinical Judgment' (Hart 1998a, Hart 1998b) where by professionals are supported in the decision-making process by the use of standardised evidence-based tools that can help practitioners to systematically analyse data collected and accurately inform judgements on the risk of harm to a child (See Appendix 2). There is currently only one 'actuarial' risk assessment tool (Louis et al. 1997) available for assessing risk to infants in the presence of maternal psychiatric illness. However empirical evidence in support of its reliability, validity and impact is scarce.

The current paper aims to improve upon the rigour of infant risk assessment in the context of maternal mental illness. More specifically, this paper sets out to identify key predictors of poor parenting outcomes following discharge from the MBU that can be used to inform the development of assessment tools for the identification of 'at risk' infants. A case study is also presented here to illustrate some of the methodological difficulties encountered in the current practice of parenting assessments in perinatal psychiatry. Finally, this paper concludes with a discussion of the implications of a standardised risk assessment tool for policy, training and clinical practice.

FACTORS ASSOCIATED WITH PARENTING OUTCOMES POST-DISCHARGE

Methods

The population of interest in this review were mothers with psychotic disorders who had been admitted with their baby to an MBU. Poor parenting outcomes were primarily defined as the need for social services intervention and mother-infant separation at discharge. Decisions regarding whether a mother should retain custody of her child following admission to an MBU are based on routine assessments of the mother's clinical state and parenting skills prior to discharge. Accordingly, this review also investigated the following three variables associated with parenting skills as secondary outcome measures: "problems in emotional response", "practical problems in baby care" and "perceived risk of harm to the child". For the purpose of this review, social service intervention was defined as infants discharged with mothers a) on the 'at risk' register or b) on a care/supervision/ child protection order. Mother-infant-separation referred to a) infants discharged into foster or statutory care or b) infants made subject of an adoption order at discharge from the

A systematic search of empirical literature was performed between September and December 2014. The aim of the search was to gather sufficient literature regarding the risk factors for and protective factors against poor parenting outcomes in cases of maternal psychiatric disorders following discharge from the MBU. The search terms were refined following a review of relevant literature and the final search terms were searched within titles of articles:((psychotic OR mental OR psychiatric) AND (mother OR maternal OR women)) OR mother and baby AND (social service OR adopt* OR separat* OR foster care OR parenting outcome OR parenting concern).

The bibliographic databases searched were Medline, Embase and Psycinfo via the Ovid interface. Additional citations were attained by manually searching references of journal articles retrieved from the search of bibliographic databases. Further relevant studies from grey literature were accessed using a modified version of the search strategy (See Figure 1). The search was limited to the inclusion of primary studies published in the English language. There were no limits on the date of publication. Quantitative studies were limited to those describing statistically significant associations with a p value less than 0.05. All references were managed using the bibliographic software, Refworks.

The screening framework used for selection of studies included in this review is shown in Figure 1 (PRISMA 2011). A narrative synthesis was consequently carried out based on the objectives of the review. Ethical approval was not required for this review as all data accessed were retrieved from public domain.

RESULTS: Risk factors for poor parenting outcomes

The context, design, measures and statistical tests of the studies selected for the final stage of the review process are detailed in Table 1. Thirty-one citations were identified during the search of bibliographic databases. Citation snowballing identified one additional record and a search of grey literature also yielded six further materials. A total of 11 full text articles were assessed for eligibility in accordance with the study criteria depicted in Figure 1. This resulted in the exclusion of three studies, primarily due to issues with data retrieval. Eight studies remained for the final stage of the review (Abel et al. 2005, Buist et al. 2004, Glangeaud-Freudenthal et al. 2013, Howard et al. 2004, Howard et al. 2003, Salmon et al. 2003, Seneviratne et al. 2003, Whitmore et al. 2011).

The publication dates of the studies included in the review ranged from 2003 to 2013. All studies were quantitative in design. Five of the studies were cross-sectional studies, two were case-control, and 1 was of cohort design. Figures regarding rates of social service supervision and mother-infant separation on discharge from the MBU varied between 6 to 32% and 9.5 to 14.8%, respectively.

Studies identified by the search varied widely with regards to sample size, context, study design, method of statistical analysis, and on measures of poor parenting outcome. There was a large degree of overlap between the risk factors identified and each of the parenting outcomes variables. A summary of the factors associated with parenting outcomes are presented in Figure 2, while a narrative synthesis of key findings is presented below to capture the heterogeneity of research.

Type of maternal psychiatric disorder

Maternal psychiatric disorder was independently associated with all five outcome measures included in this review (Buist et al. 2004, Glangeaud-Freudenthal et al. 2013, Howard et al. 2004, Howard et al. 2003, Salmon et al. 2003, Seneviratne et al. 2003, Whitmore et al. 2011). In particular, women with schizophrenia had a markedly increased risk of poor parenting outcomes across all measures. Personality disorders, bipolar disorder and behavioural disturbances were also independently related to many measures of poor parenting outcome. Depressive illness was significantly related to better parenting outcomes on measures of separation at discharge, social service involvement, emotional responsiveness and problems in practical baby care (Howard et al. 2004, Howard et al. 2003, Seneviratne et al. 2003).

These findings are consistent with evidence from previous literature that has shown that these disorders affect mother's parenting skills as well as the development of secure attachment (Appleby & Dickens 1993, Blehar et al. 1977). Women with schizophrenia are at a particular disadvantage; a follow up study by Hipwell, of mothers with schizophrenia one year after birth found that full recovery in the majority of women was not reported until 3-6 months after discharge (Hipwell 1992). However, this is not always the case, Abel et al. found that having a mentally healthy partner, family stability, and access to high quality social and financial support may help to protect against the need for social service intervention at discharge and are protective against poor parenting outcomes (Abel et al. 2005).

Table 1. Characteristics of the studies included in the systematic review

Study	Sample and Background	Parenting outcome measures	Study Design	Statistical test
Abel et al. 2005	239 mothers with schizo- phrenia admitted across eight MBUs in England	 Social services intervention at discharge 	Cross-sectional	Descriptive statistics, multivariate modified Poisson regression
Buist et al. 2004b	90 mothers admitted to psychiatric MBUs in Australia	Protective services involvementMother-Infant Separation	Cross-sectional	Descriptive statistics, correlation coefficients
Howard et al. 2003	1197 women admitted to MBUs in the UK	 Social service supervision 	Case - Control	Descriptive statistics, correlation coefficients, stepwise linear regression coefficient
Howard et al. 2004	1255 mothers admitted to MBUs across the UK	 Social services supervision Problems in emotional response Practical problems in baby care Perceived risk of harm to the child 	Case - Control	Descriptive statistics, correlation coeffi- cients, stepwise linear regression coefficient
Glangeaud- Freudenthal et al. 2013	1018 women with postpar- tum psychiatric disorders jointly admitted with their infants to 16 MBUs in France and Belgium	 Mother-infant separation at discharge 	Cross-sectional	χ^2 test, Multivariate binary logistic regression coefficients
Salmon et al. 2003	1081 inpatients of MBUs or facilities in the UK	 Practical problems in parenting Problems in emotional response Perceived risk of harm to infant 	Cross-sectional	Descriptive statistics, correlation coefficients, stepwise linear regression coefficient
Seneviratne et al. 2003	61 mothers admitted with their infant to a MBU in South London	Mother-infant separation at dischargeChild's legal status at follow-up	Cohort	T-test, χ^2 test, Multi- variate binary logistic regression coefficients
Whitmore et al. 2011	462 mothers admitted to a MBU in Birmingham	Social services involvementMother-infant separation at discharge	Cross-sectional	T-test, χ^2 test

Social class

Five research papers reported a positive association between low social class and poor parenting outcomes (Abel et al. 2005, Buist et al. 2004b, Glangeaud-Freudenthal et al. 2013, Howard et al. 2004, Howard et al. 2003, Salmon et al. 2003). Low social class was independently related to social service intervention at discharge (Abel et al. 2005, Howard et al. 2004, Howard et al. 2003), poor emotional response to infant (Howard et al. 2004, Salmon et al. 2003), practical problems in baby care (Howard et al. 2004, Salmon et al. 2003) and separation at discharge (Buist et al. 2004, Glangeaud-Freudenthal et al. 2013). The negative relationship between socioeconomic position and child health and wellbeing has been well documented (Kumar 1993, Oakley et al. 1994, Spencer 1996). Children whose parents work in unskilled, low paying jobs are reportedly three times more likely to experience poor mental health than children whose parents work in professional, high paying jobs (Meltzer et al. 2000). The exact mechanism for this is unclear, but the dominant theory argues that parents from lower social class backgrounds experience greater social adversity and are at increased risk of psychological distress due to exposure to stressful

circumstances, which can have a detrimental effect on parenting abilities (Ghate & Hazel 2002). Furthermore, there is evidence to suggest that there is a strong positive correlation between levels of stress and use of physical discipline, which is of particular importance in the context of maternal mental illness due to the precarious nature of mother's temperament during acute episodes of illness (Barnes 2004, Ghate & Hazel 2002).

Psychiatric illness or behavioural disorder in partner

This review identifies the need to recognise and better facilitate the involvement of the partner in the process of parenting assessments and parenting interventions in the period during and after mother's admission to the unit. The findings from the review highlight the strong influence of the partner's individual characteristics on parenting outcomes. Psychiatric illness or behavioural disorder in the partner was independently related to social services involvement after admission to the MBU (Abel et al. 2005, Howard et al. 2004, Howard et al. 2003), practical problems in baby care (Howard et al. 2004, Salmon et al. 2004, Salmon et al. 2003), staff-rated risk of harm to infant (Howard et al. 2004, Salmon et al. 2004, Salmon et al. 2004, Salmon et al. 2004, Salmon et al. 2003), and mother-infant

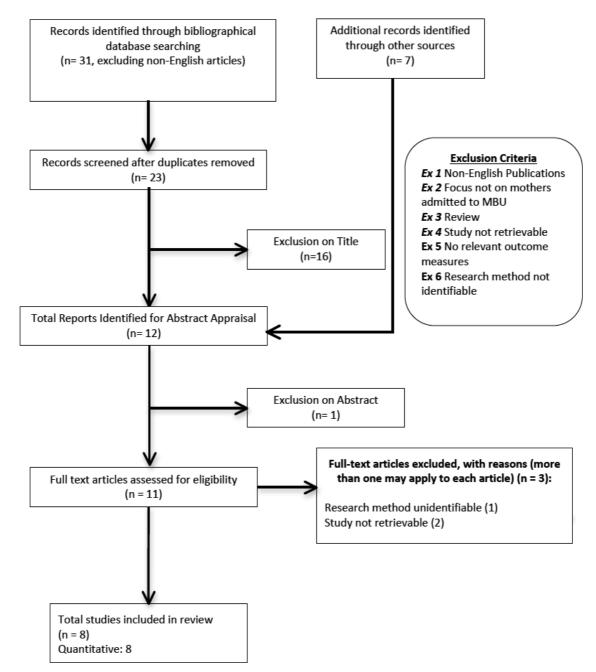


Figure 1. Results of screening process for literature review

separation at discharge (Buist et al. 2004b, Glangeaud-Freudenthal et al. 2013). Mothers in a relationship predominately rely on their partner for emotional support, however when a partner becomes mentally unwell, this support mechanism maybe disrupted (Holopainen 2002). The loss of social support from the partner may lead to an increase in parenting stress experienced by mothers and distort their perceived ability to care for their baby. Moreover, risks to the infant may further be compounded by the symptoms of psychotic disorder exhibited by the partner, particularly if it involves delusions or hallucinations concerning the baby (Lundberg 2000). There is also an increased risk of domestic violence and child abuse and neglect in this situation (Lewis 2007, Lundberg 2000).

Quality of relationships

Findings from the review demonstrate the strong influence that the role of social support has on parenting outcomes, with five studies reporting negative associations between quality of social relationships with partner and/or other networks and all poor parenting outcomes measures (Abel et al. 2005, Buist et al. 2004b, Glangeaud-Freudenthal et al. 2013, Howard et al. 2004, Howard et al. 2003, Salmon et al. 2003). A large body of research suggests that mothers who are capable of forming high quality supportive relationships with their partner and other family and social networks are more likely to be successful at parenting (Abel et al. 2005).

The formation of good quality relationships in adulthood is reflective of a secure attachment style, whereby numerous studies comparing secure and insecure attachment styles have found that more securely attached adults tend to be more affectionate, perceptive, and involved in their parenting role (Belsky et al. 1986, Cowan et al. 1996, Feeney 2002, Ward & Carlson 1995). For example, a study on parent-child interactions and adult attachment style reported that individuals with a history of secure attachment demonstrated more positive parenting behaviour (Cowan et al. 1996). Moreover, research suggests that adults with secure attachment styles are better skilled at adopting secure attachment relationships with their infant as a result of positive parenting behaviour (Rholes et al. 1997). Good relationships are also associated with increased access to social support, which is another factor that is perceived as important in combating stress in motherhood (Gage & Christensen 1991).

Mother's ethnic origin

The need to further explore the impact of the mother's ethnicity on parenting outcomes is highlighted by review findings. It has been claimed by two studies that mothers of African-Caribbean ethnicity, have an increased risk of poor parenting outcomes, but the strength of evidence supporting this is weak (Howard et al. 2004, Whitmore et al. 2011). A study of admissions to mother and baby units in the UK reported that mothers with an African-Caribbean ethnic background had a higher risk of social services intervention and separation than other ethnic groups in univariate analyses, but no multivariate analysis was reported in this study (Whitmore et al. 2011). However, another study also reporting on data retrieved from UK mother and baby unit admissions found that when confounding variables were controlled for in multivariate analysis, ethnicity was associated with no other measures of poor parenting outcome a side from perceived risk by staff to child (Howard et al. 2003). This finding is supported by work by Kumar et al. (1995) on one MBU in South London that found that outcome at discharge was not associated with ethnicity. The univariate association reported by Whitmore et al. (2011) may be explained in part by the high prevalence of single parents in African-Caribbean families compared with other ethnic groups (Office for National Statistics 2007), a factor that shares strong correlations with poverty and social class, which may have confounded the results.

Marital status

Single marital status was found to have significant associations with decisions to discharge mother and baby separately (Whitmore et al. 2011) and social services supervision at discharge (Howard et al. 2004, Howard et al. 2003, Whitmore et al. 2011). The current review confirmed earlier findings that single status is associated with increased levels of parenting stress, a risk factor for poor parenting as it may interfere with the quality of mother-infant interaction (Copeland & Harbaugh 2005). In particular, single mothers have been identified as a group who are particularly vulnerable to

pressures of parental responsibilities and psychological distress as a result of exposure to additional stressors resulting from adverse socio-economic circumstances (Avison 1997, Fundudis 1997, Mercer 1995). Studies comparing lone parents and co-parenting families have revealed that single mothers experience greater financial restraints (Mercer 1995), receive less social support (Cairney 2003, Weinraub& Wolf 1983) and report higher levels of stress and social isolation (Cairney et al. 2003, Weinraub & Wolf 1983) than their married counterparts.

These findings are supported by Belsky's (1984) theoretical model of the Determinants of Parenting, which proposes that parenting ability is determined by the psychological resources of the parent, individual child characteristics, and contextual sources of stress including socio-economic circumstances, social networks and marital relations (Belsky 1984a, Belsky 1984b). The significance of marital status should however be interpreted with caution as the quality of the relationship was reported by one study in this review to also contribute to social service intervention at discharge (Abel et al. 2005). Thus, the quality of the mother partner relationship should also be taken into account, as mothers with abusive husbands or partners may inadvertently further perpetuate the risk of harm to the infant by remaining in the relationship.

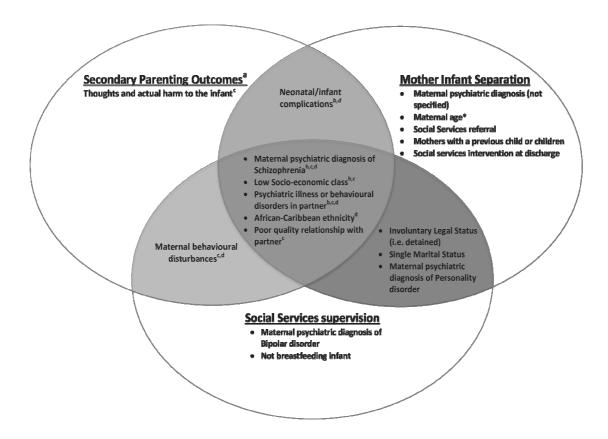
Neonatal medical complications

Two studies reported significant associations between neonatal medical complications and the parenting outcomes of mother-infant separation (Glangeaud-Freudenthal et al. 2013), problems with practical baby care (Howard et al. 2004) and perceived risk of harm to the infant (Howard et al. 2004). One might expect this finding considering that neonatal/ infant complications and the associated early separations have been linked in the perinatal literature with problems both in establishing early attachment and caring for the baby in many parents (Feldman et al. 1999, Poehlmann & Fiese 2001). Furthermore, research suggests that the stress of medical illness in the infant may significantly impair coping mechanisms that might otherwise have compensated for the incongruous emotions, passivity or irritability of mothers with psychiatric disorders (Appleby & Dickens 1993, Glangeaud-Freudenthal et al. 2013). Concerns for the baby's safety and perceived fragility of the infant by the mother may also result in higher levels of stress and anxiety, all of which may result in a cascade of negative interactions particularly in the context of psychotic disorder, thus increasing the risk of harm to the infant (Figure 2.).

CASE PRESENTATION

The parenting assessment process at the Mother and Baby Unit

Ms. L was recruited from the Mother and Baby Unit at the Bethlem Royal and Maudsley Hospital. The MBU,



Key: ^aIncluding "problems in practical baby care", "problems in emotional response to infant", "staff-rated risk of harm to infant"; ^bAssociated with problems in practical baby care; ^cAssociated with problems in emotional response to infant; *Conflicting evidence

Figure 2. Venn diagram of the risks factors associated with poor parenting outcomes

an in-patient psychiatric unit, admits women who develop or have a relapse of a serious mental illness during the perinatal or postnatal period. In contrast to other MBUs, the unit does not admit acutely unwell patients. The MBU provides parenting assessments for courts and local authorities in cases where there are concerns about parenting capacity and safeguarding of the baby owing to maternal mental illness. Assessments are multidisciplinary in which the team as a whole function as a single expert witness whereby reports and recommendation represent the consensus view of the team. The parenting assessment framework used at the MBU, although based on the Department of Health's (2013) Assessment Framework, has been modified to reflect the areas commonly required as part of the assessment by referring agencies. These include:

- Assessment of practical parenting skills.
- Assessment of the parent's abilities to understand the child's emotional needs and provision of interactions.
- Assessment of the parent's abilities to adapt to the child's changing developmental needs.

- Assessment of Attachment.
- Assessment of the child's development.
- Assessment of the parent's own experiences of being parented and how this may impact on her parenting of her child.
- Risk assessments of mother's psychiatric history, including assessment of insight into mental health and how these may impact on parenting.
- Assessment of support networks and support needed in the community.
- Assessment of parent's day-to-day living skills and abilities to live independently.
- Assessment of parent's abilities to work with professionals.
- Assessment of parent's abilities to protect and safeguard her child and comment on parent's ability to parent the child in the long term.

All persons presented in the case below have been anonymised. In accordance with the Data Protection Act (1998), written consent was obtained from the patient prior to the completion of the case report.

Case Presentation

Ms. L, a 19-year-old single mother of two children -Francesca, 4 ½ years and Kaitlyn, 3 months - was referred to the Mother and Baby unit for assessment of and assistance with parenting skills, following a 2month stay at a psychiatric inpatient unit. Ms. L's mental state had been stable in pregnancy but rapidly deteriorated following Kaitlyn's birth, where she presented to the inpatient unit in a manic state and expressed paranoid delusions about social care professionals wanting to remove her daughter from her care. Ms. L had a psychiatric history of multiple hospitalisations for psychotic episodes and has been given the diagnoses of Emotionally Unstable Personality Disorder, Attention Deficit Hyperactivity Disorder (ADHD), and Bipolar Affective Disorder. She also has a history of violent and threatening behaviour, including criminal damage and assault, which had led to several arrests.

Ms. L had previously been admitted to a residential MBU unit following the birth of her first child at the age of 14. Her local authority had expressed concerns about neglectful behaviour and inconsistent childcare and a Care Order was requested. Ms. L, undertook a parenting assessment with Francesca at this time, however it was concluded that she was unable to adequately care for Francesca and she was removed from her care and made subject of an adoption order.

At the time of admission to Bethlem Royal Hospital Mother and Baby Unit, Ms. L was assessed as having a slightly elevated mood and there were concerns initially that she may have still been hypomanic; however this was later determined to not be the case. Throughout the course of the parenting assessment, Ms. L's mood remained stable and there was no evidence of any psychotic process. An ongoing issue which presented itself throughout the duration of her stay had been Ms. L's pattern of sleep. In the early weeks of the assessment, Ms. L had some difficulty adjusting her pattern of sleep to be able to care for Kaitlyn but in subsequent weeks this improved. Ms. L again experienced difficulties towards the end of her stay as she became anxious about the possible outcome of the assessment. She identified at the time that lack of sleep was one of her risk factors for becoming unwell and she recognised the importance of developing a good sleep routine for both herself and for Kaitlyn.

Prior to the parenting assessment, Ms. L had spent limited time caring for Kaitlyn due to her admission to the acute psychiatric unit shortly after Kaitlyn had been born, during which time Kaitlyn had been placed in foster care. As a result, in the first couple of weeks of the parenting assessment, she sought reassurance from staff that she was carrying out baby care correctly. She quickly adjusted and structured her general routine around the needs of Kaitlyn while on the MBU. She was competent in all aspects of practical care for Kaitlyn and remained affectionate and attentive to Kaitlyn through-

out the assessment. She has been observed speaking and singing to her and these interactions appeared to be natural and spontaneous. Kaitlyn responded positively. Feedback from Video playback near the end of her stay described Ms. L as very aware and mindful of Kaitlyn's needs. Kaitlyn's development was evaluated as within the normal limits of chronological development on standardised measures of cognitive, language and motor development, based on the Bayley Scales of Infant toddler Development Third Edition (Bayley-III, 2006, Harcourt Assessment, Inc).

Ms. L had little to no access to family support. She has a difficult relationship with her mother, her only attachment figure. She reported having an unstable childhood with twenty-three changes of placement and primary carers between the ages of four and a half and sixteen years of age. Due to Ms. L's personal history of poor attachment whilst growing up, she has a tendency to form unhelpful attachments and hence is prone to abusive relationships. Nevertheless, Ms. L has formed some healthy attachments with supportive figures at the Church, her pastoral supporters and her current closest confidante, Ms P, and describes them as sources of practical and emotional support.

Ms. L's insight into her recent mental health improved over the course of the parenting assessment and she valued the importance of her mental state remaining stable so that she could care for Kaitlyn. She identified the precipitants of her current admission as sleep deprivation and stress, and she was also able to identify early signs that her mental health could be deteriorating to include reduced sleep, deteriorating mood, not caring for herself and feeling unmotivated.

Ms. L has good independent living skills and demonstrated that she was able to adequately manage the practicalities of caring for both herself and Kaitlyn. Ms. L has had significant difficulties in the past in maintaining positive relationships with professionals. However, whilst admitted to the MBU, she has demonstrated that she can work well with staff and has now developed entirely appropriate interactions, although on occasion, particularly in the first few weeks of admission, she appeared to be dismissive and hostile to staff.

The parenting assessment concluded that Ms. L was committed to caring for her daughter and wants the best for her. Thus, it would be unlikely that Ms. L would cause deliberate harm to Kaitlyn. However, long-term risks to Kaitlyn were in the context of any significant deterioration in Ms. L's mental state and her vulnerability to forming unhealthy intimate relationships involving domestic violence. It was recommended that oversight by professionals and the right social support networks within the community would need to be in place if such situations arose and consideration be given to Kaitlyn's welfare and long term needs. Ms. L was discharged with Kaitlyn to the care of the community mental health team.

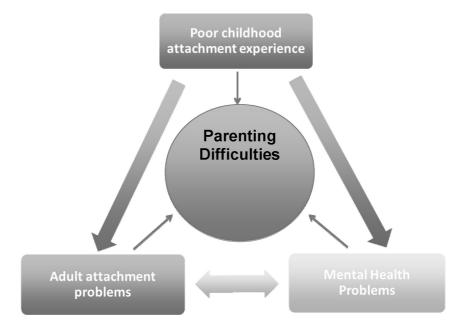


Figure 3. Conceptual model of impact of negative childhood attachment experience on parenting difficulties in the context of maternal psychiatric illness

Outcome

In the period following discharge from the MBU, Ms. L became volatile and aggressive, and eventually she disengaged from the community mental health team and social services. This led to the removal of Kaitlyn from her care and Kaitlyn was made subject to an adoption order shortly afterwards.

Comment

According to the risk factors identified from the literature searched, Ms. L, would have been classified as high risk for poor parenting outcomes, as even after her psychiatric diagnoses had been accounted for, she displayed 10 out of the possible 15 additional risk factors. Ms. L's case highlights the need for a more comprehensive assessment procedure by which assessors are able to successfully distinguish between risks to the infant that can be attributed to mental illness itself and risks that will fluctuate with the severity of the mother's mental health problems. This case suggests that parenting difficulties can precede any illness effects and that amelioration in mental state may not necessarily correlate with medium-term improvements in parenting outcomes. In this case, the separation of Ms. L and Kaitlyn is likely to be the result of her poor childhood attachment experience which has compounded her risks of poor mental health and attachment difficulties in adulthood, both of which are interrelated and independently associated with poor outcomes in parenting. A model of the processes involved is proposed in Figure 3. These mothers will need extensive intervention both during and after discharge from the MBU to encourage treatment engagement and adherence, and to improve the sustainability of positive parenting behaviours.

DISCUSSION

To our knowledge, this is the first review to bring together the available knowledge and literature on the risk factors associated with poor parenting outcomes in the context of maternal mental illness. The risks for adverse parenting outcome in maternal mental illness were predominately associated with social and environmental factors. The interdependent, dynamic association between factors associated with poor parenting outcomes, was also highlighted in the review findings. These finding suggests that parenting outcomes are strongly influenced by a broader social context, therefore interventions targeting the social inequalities faced by mothers with mental illness may help to improve parenting outcomes.

Methodological Considerations for Future research

There were a number of methodological weaknesses in the evidence collected. The studies focused primarily on populations in the UK (N=5), although the populations of France, Belgium and Australia were also reported on (N=2,1,1). No other populations were reported on in the literature identified, however this may be explained by the fact that MBUs are not included in perinatal provisions in many countries, in which case this finding is actually representative of the worldwide distribution of MBUs. Research on the process of decision-making in parenting assessment in the context

of maternal psychiatric disorder is sparse and only seven studies were found to meet the study's inclusion criteria. The limited number of studies included in this review restricts our ability to draw conclusions on the pathways involved in this process and further work into this field of research is needed. Furthermore, five of the studies selected were cross-sectional in design, restricting our ability to draw conclusions as to the direction of causality. There were no longitudinal studies and only one follow up study was identified in this review. Further research of medium and long – term parenting outcomes is needed if the dynamic nature of parenting is to be effectively monitored, which would help to increase our understanding of the parenting process in the context of maternal mental illness and help inform clinical decisions regarding parenting abilities. Moreover, such studies would also allow for the effectiveness of specific interventions addressing risk factors associated with poor parenting outcomes to be better assessed.

Methodological limitations of this review

There was a great deal of variation between sample sizes used in the studies collected making it difficult to perform between study comparisons and draw conclusions on true effect sizes. The search terms used in this review were selected to include as many relevant studies as possible on the factors that influence poor parenting outcomes at discharge from MBU, but there may be other documents which have not been collected

in this review. Restricting the search of literature to that of studies published in the English language also poses the risk that some potential important research may have been missed, limiting the generalisability of the findings.

CONCLUSION: Implications for policy, training and future practice

The multi-dimensional nature of parenting makes it a difficult construct to measure and these difficulties are compounded by the presence of mental health problems. However, even in situations when mental ill heath appears to have resolved, parenting difficulties can persist. Our review findings suggest that the current practice of parenting assessment, even in what appears to be optimal treatment settings, would benefit from the use of standardised empirically validated risk assessment tools. In particular, improvement in the process by which data is analysed and subsequent conclusions are drawn, may help ensure better safeguarding of the infant. Such tools should take into account the substantial degree of overlap and interdependency between social and environmental risk factors for poor parenting and risk factors for mental illness, illustrated in Figure 4. Furthermore, researchers and policy makers may use the evidence gathered in this review to inform the design and development of effective interventions specifically targeting populations of mothers at risk of poor parenting outcomes.

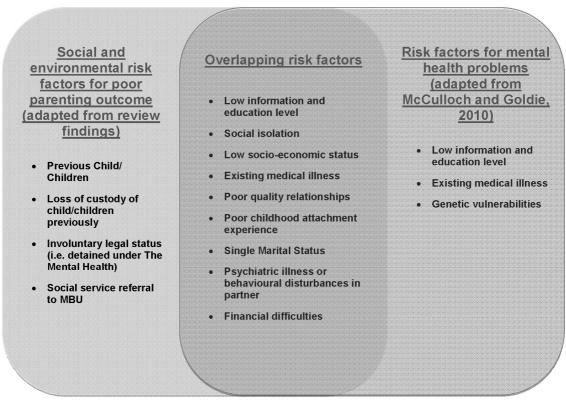


Figure 4. Diagram depicting the neutrally overlapping factors associated with poor parenting outcomes and the development of mental health problems (McCullouch & Goldie 2010)

Assessment Framework



Appendix 1. Framework for the Assessment of Children in Need and their families (adapted from Department of Health 2013)



Appendix 2. Graphic depiction of Structured Clinical Judgement process (adapted from Shlonsky and Wagner 2005)

Acknowledgements:

We thank Dr Gertrude Seneviratne for all her cooperation and support with this research and Professor Ramesh 'Channi' Kumar for all of his work in this field which has inspired all those who work with mothers

Conflict of interest: None to declare.

References

- 1. Abel KM, Webb RT, Salmon MP, Wan MW & Appleby L: Prevalence and predictors of parenting outcomes in a cohort of mothers with schizophrenia admitted for joint mother and baby psychiatric care in England. J Clin Psychiatry 2005; 66:781-789.
- Appleby L & Dickens C: Mothering skills of women with mental illness. BMJ (Clinical Research Ed.) 1993; 306:348-349.

- 3. Avison WR: Single motherhood and mental health: Implications for primary prevention. CMAJ Canadian Medical Association Journal, Journal De L'Association Medicale Canadienne 1997; 156:661-663.
- 4. Baker A, Morison M, Game J & Thorpe J: Admitting schizophrenic mothers with their babies. The Lancet 1961; 278:237-239.
- Bardon D, Glaser YI, Prothero D & Weston DH: Mother and baby unit: Psychiatric survey of 115 cases. BMJ 1968; 2:755-758.
- 6. Barnes J: Place and parenting: A study of four communities: The relevance of community characteristics and residents' perceptions of their neighbourhoods for parenting and child behaviour in four contrasting locations. final report of the families and neighbourhoods study (FANS) submitted to the NSPCC. part 1: Quantitative results. (). London: NSPCC, 2004.
- 7. Belsky J, Hertzog M & Rovine M: Causal analyses of multiple determinants of parenting: Empirical and methodological advances. In M. E. Lamb, A. L. Brown &

- B. Rogoff (Eds.), Advances in developmental psychology (vol. 4, chap. 4) (). Hillsdale, NJ: Erlbaum, 1986.
- 8. Belsky J: The determinants of parenting: A process model. Child Development 1984; 83-96.
- 9. Blehar MC, Lieberman AF & Ainsworth MDS: Early faceto-face interaction and its relation to later infant-mother attachment. Child Development 1977: 182-194.
- 10. Bowlby J: The making and breaking of affectional bonds. British Journal of Psychiatry 1977; 130:201-210.
- 11. Buist A, Minto B, Szego K, Samhuel M, Shawyer L & O'Connor L: Mother-baby psychiatric units in Australia the victorian experience. Archives of Women's Mental Health 2004; 7:81-87.
- 12. Cairney J, Boyle M, Offord, DR & Racine Y: Stress, social support and depression in single and married mothers. Social Psychiatry and Psychiatric Epidemiology 2003; 38:442-449.
- 13. Copeland D & Harbaugh BL: Differences in parenting stress between married and single first time mothers at six to eight weeks after birth. Issues in Comprehensive Pediatric Nursing 2005; 28:139-152.
- 14. Cowan PA, Cohn DA, Cowan CP & Pearson JL: Parents' attachment histories and children's externalizing and internalizing behaviors: Exploring family systems models of linkage. Journal of Consulting and Clinical Psychology 1996; 64:53.
- 15. Dean K, Stevens H, Mortensen PB, Murray RM, Walsh E & Pedersen CB: Full spectrum of psychiatric outcomes among offspring with parental history of mental disorder. Archives of General Psychiatry 2010; 67:822-829.
- 16. Department of Education: Working together to safeguard children. (). London: The Stationery Office, 2013.
- 17. Department of Health, Department for Education and Employment, and Home Office: Framework for the assessment of children in need and their families. (). London: The Stationery Office, 2000.
- 18. Donatelli JL, Seidman LJ, Goldstein JM, Tsuang MT & Buka SL: Children of parents with affective and nonaffective psychoses: A longitudinal study of behavior problems. American Journal of Psychiatry 2010; 167:1331-1338.
- 19. Dorsey S., Mustillo SA, Farmer EMZ & Elbogen E: Caseworker assessments of risk for recurrent maltreatment: Association with case-specific risk factors and rereports. Child Abuse & Neglect 2008; 32:377-391.
- Feeney JA: Early parenting and parental attachment: Links with offspring's attachment and perceptions of social support. Journal of Family Studies 2002; 8:5-23.
- 21. Feldman R, Weller A, Leckman JF, Kuint J & Eidelman AI: The nature of the mother's tie to her infant: Maternal bonding under conditions of proximity, separation, and potential loss. Journal of Child Psychology and Psychiatry 1999; 40:929-939.
- 22. Fowler DB & Brandon RE: A psychiatric mother and baby unit. Lancet 1965; 1:160-161.
- 23. Fundudis T: Single parents: Risk or resource? Child and Adolescent Mental Health 1997; 2:2-14.
- 24. Gage MG & Christensen DH: Parental role socialization and the transition to parenthood. Family Relations 1991; 332-337.
- 25. Ghate D & Hazel N: Parenting in poor environments: Stress, support and coping Jessica Kingsley Publishers, 2002.
- 26. Glangeaud-Freudenthal NMC, Sutter A, Thieulin A, Dagens V, Zimmermann M, Debourg A, Poinso F: Predictors of

- infant foster care in cases of maternal psychiatric disorders. Archives of Women's Mental Health 2013; 16:S15.
- 27. Glaser YIM: A unit for mothers and babies in a psychiatric hospital. Journal of Child Psychology and Psychiatry 1962; 3:53-60. doi:10.1111/j.1469-7610.1962.tb02038.x
- 28. Gopfert M, Webster J, Pollard J & Nelki J: The assessment and prediction of parenting capacity: A community-oriented approach. In M. Gopfert, J. Webster & M.V. Seeman (Eds.), Parental psychiatric disorder: Distressed parents and their families (). Cambridge, England: Cambridge University Press, 1996.
- 29. Harlow BL, Vitonis AF, Sparen P, Cnattingius S, Joffe H & Hultman CM: Incidence of hospitalization for postpartum psychotic and bipolar episodes in women with and without prior prepregnancy or prenatal psychiatric hospitalizations. Archives of General Psychiatry 2007; 64:42-48. doi:64/1/42 [pii]
- 30. Hart SD: Psychopathy and risk for violence. In D. Cooke, A. E. Forth & R. D. Hare (Eds.), Psychopathy: Theory, research and implications for society (pp. 355-375). The Netherlands: Kluwer, 1998a.
- 31. Hart SD: The role of psychopathy in assessing risk for violence: Conceptual and methodological issues. Legal and Criminological Psychology 1998b; 3:121-137.
- 32. Helm D: Making sense of child and family assessment: How to interpret children's needs. (). London: Jessica Kingsley, 2010.
- 33. Higgins J, Gore R, Gutkind D, Mednick S, Parnas J, Schulsinger F & Cannon T: Effects of child rearing by schizophrenic mothers: A 25 year follow up. Acta Psychiatrica Scandinavica 1997; 96:402-404.
- 34. Hipwell AE: Postpartum mental illness and the psychological development of the infant. (Unpublished PhD Thesis). University of London, London, 1992.
- 35. Hipwell AE, Goossens FA, Melhuish EC & Kumar R: Severe maternal psychopathology and infant-mother attachment. Development and Psychopathology 2000; 12:157-175.
- 36. Holland S: Child and family assessment in social work practice. (). London: Sage Publications, 2010.
- 37. Holopainen D: The experience of seeking help for postnatal depression. Australian Journal of Advanced Nursing 2002; 19:39.
- 38. Horwath J: The child's world the comprehensive guide to assessing children in need. London: Jessica Kingsley, 2009.
- 39. Howard L, Thornicroft G, Salmon M & Appleby L: Predictors of parenting outcome in women with psychotic disorders discharged from mother and baby units. Acta Psychiatrica Scandinavica 2004; 110:347-355.
- 40. Howard L, Shah N, Salmon M & Appleby L: Predictors of social services supervision of babies of mothers with mental illness after admission to a psychiatric mother and baby unit. Social Psychiatry and Psychiatric Epidemiology 2003; 38:450-455.
- 41. Howard L, Kumar R & Thornicroft G: Psychosocial characteristics and needs of mothers with psychotic disorders. The British Journal of Psychiatry: The Journal of Mental Science 2001; 178:427-432.
- 42. Kumar R, Marks M, Platz C & Yoshida K: Clinical survey of a psychiatric mother and baby unit: Characteristics of 100 consecutive admissions. Journal of Affective Disorders 1995; 33:11-22.
- 43. Kumar V: Poverty and inequality in the UK: The effects on children. (). London: National Children's Bureau, 1993.

- 44. Lewis GE: Saving mothers' lives 2003-2005. in the seventh report of the confidential enquiry into maternal deaths in the united kingdom. (). London: CEMACH, 2007.
- 45. Louis A, Condon J, Shute R & Elzinga R: The development of the louis MACRO (mother and child risk observation) forms: Assessing parent-infant-child risk in the presence of maternal mental illness. Child Abuse & Neglect 1997; 21:589-606.
- 46. Lundberg KS: A comparison of depressed and nondepressed male perpetrators of partner violence, 2000.
- 47. Main TF: Mothers with children in a psychiatric hospital. Lancet 1958; 2:845-847.
- 48. McCullouch A & Goldie I: Introduction. In I. Goldie (Ed.), Public mental health today: A handbook (). Brighton: Pavillion Publishing Ltd, 2010.
- 49. McGrath JJ, Hearle J, Jenner L, Plant K, Drummond A & Barkla JM: The fertility and fecundity of patients with psychoses. Acta Psychiatrica Scandinavica 1999; 99:441-446.
- 50. McPherson M, Delva J & Cranford JA: longitudinal investigation of intimate partner violence among mothers with mental illness. Psychiatric Services 2007; 58:675-680.
- 51. Meltzer H, Gatward R, Goodman R & Ford T: Mental health of children and adolescents in great britain TSO London, 2000.
- 52. Mercer RT: Becoming a mother: Research on maternal identity from rubin to the present Springer Publishing Company New York, 1995.
- 53. Mowbray C, Oyserman D, Bybee D & MacFarlane P: Parenting of mothers with a serious mental illness: Differential effects of diagnosis, clinical history, and other mental health variables. Social Work Research 2002; 26:225-240.
- 54. NICE: Antenatal and postnatal mental health. UK: Department of Health, 2007.
- 55. Niemi LT, Suvisaari JM, Haukka JK & Lonnqvist JK: Childhood predictors of future psychiatric morbidity in offspring of mothers with psychotic disorder: Results from the Helsinki high-risk study. The British Journal of Psychiatry: The Journal of Mental Science 2005; 186:108-114. doi:186/2/108 [pii]
- 56. Oakley A, Hickey D & Rigby A: Love or money? Social support, class inequality and the health of women and children. The European Journal of Public Health 1994; 4:265-273.
- 57. Office for National Statistics: Focus on families. New York: Palgrave MacMillan, 2007.
- 58. Oyserman D, Bybee D, Mowbray C & Hart-Johnson T: When mothers have serious mental health problems: Parenting as a proximal mediator. Journal of Adolescence 2005; 28:443-463.
- 59. Phelan K, Khoury J, Atherton H & Kahn RS: Maternal depression, child behavior, and injury. Injury Prevention: Journal of the International Society for Child and Adolescent Injury Prevention 2007; 13:403-408. doi:13/6/403 [pii]
- 60. Poehlmann J & Fiese BH: The interaction of maternal and infant vulnerabilities on developing attachment

- relationships. Development and Psychopathology 2001; 13:1-11.
- 61. Poinso F, Gay M, Glangeaud-Freudenthal N & Rufo M: Care in a mother-baby psychiatric unit: Analysis of separation at discharge. Archives of Women's Mental Health 2002; 5:49-58.
- 62. Reder P & Lucey C: Significant issues in the assessment of parenting. In P. Reder & C. Lucey (Eds.), Assessment of parenting: Psychiatric and psychological contributions (pp. 3-17). USA and Canada: Routledge, 1995.
- 63. Rholes WS, Simpson JA, Blakely BS, Lanigan L & Allen EA: Adult attachment styles, the desire to have children, and working models of parenthood. Journal of Personality 1997; 65:357-385.
- 64. Salmon M, Abel K, Cordingley L, Friedman T & Appleby L: Clinical and parenting skills outcomes following joint mother baby psychiatric admission. Australian and New Zealand Journal of Psychiatry 2003; 37:556-562.
- 65. Salmon M, Abel K, Webb R, Warburton A & Appleby L: A national audit of joint mother and baby admissions to UK psychiatric hospitals: An overview of findings. Archives of Women's Mental Health 2004; 7:65-70.
- 66. Seneviratne G, Conroy S & Marks M: Parenting assessment in a psychiatric mother and baby unit. British Journal of Social Work 2003; 33:535-555.
- 67. Spencer N: Poverty and child health. Oxford: Radcliffe Medical Press, 1996.
- 68. Sutter-Dallay A, Murray L, Dequae-Mechadou L, Glatigny-Dallay E, Bourgeois M & Verdoux H: Impact of 6 weeks maternal postnatal depressive symptoms on the developmental outcome of the child: A two-year follow-up study of the matquid cohort. European Psychiatry 2011; 26:484-489.
- 69. Swain JE, Lorberbaum JP, Kose S & Strathearn L: Brain basis of early parent-infant interactions: Psychology, physiology, and in vivo functional neuroimaging studies. Journal of Child Psychology and Psychiatry 2007; 48:262-287.
- 70. Turney D, Platt D, Selwyn J & Farmer E: Social work assessment of children in need: What do we know? Messages from research. London: Jessica Kingsley Publishers, 2011.
- Wan MW, Abel KM & Green J: The transmission of risk to children from mothers with schizophrenia: A developmental psychopathology model. Clinical Psychology Review 2008; 28:613-637.
- 72. Ward MJ & Carlson EA: Associations among adult attachment representations, maternal sensitivity, and Infant? Mother attachment in a sample of adolescent mothers. Child Development 1995; 66:69-79.
- 73. Weinraub M & Wolf BM: Effects of stress and social supports on mother-child interactions in single-and two-parent families. Child Development 1983; 1297-1311.
- 74. Whitmore J, Heron J & Wainscott G: Predictors of parenting concern in a mother and baby unit over a 10-year period. The International Journal of Social Psychiatry 2011; 57:455-461. doi:10.1177/0020764010365412 [doi]

Correspondence:

Maurice Lipsedge, MD South London and Maudsley NHS Foundation Trust London, UK E-mail: m.lipsedge@btconnect.com