Interest in the relationship between mother–child interactions and mental health has two sources: awareness of the importance of correct parenting in personal development; and the exploration of postnatal mental illness.

**Impact of parenting on children**

The notion that parenting is a skill has led to detailed analyses of parenting strategies that differentiate between competent and ineffective parents. They have confirmed that the outcomes of parenting interchanges are understandable in terms of operant conditioning on both parent and child. Inadvertent conditioning accounts for around half the variance for significant child misbehaviour (Patterson *et al.*, 1989). Parental mistakes that lead to children misbehaving may increase the likelihood of them receiving further inappropriate parenting, resulting in a ‘vicious circle’. This may produce clinically significant behavioural problems in the child, and deteriorating parenting strategies in the mother. ‘Parent training’ interventions based on this are effective in 60–80% of clinically significant cases (Webster-Stratton, 1991).

The other major advance in our understanding of parenting has been the development of attachment theory. It proposes that a young child requires a secure base from which to develop and explore the world. This requirement is hierarchically invested in the child’s major caretakers, so that the mother typically becomes the child’s main attachment figure.

Attachment behaves like a piece of elastic between mother and child. It allows the child to explore freely when there is no threat, but ‘snaps’ the child back to the mother when danger threatens. This snap follows the activation of a hypothetical ‘attachment system’, which triggers proximity-seeking behaviours. These behaviours have been classified into between three and four types, based on the child’s behaviour at separation and on reunion with the mother in a controlled situation unfamiliar with the child (the ‘strange situation test’; Ainsworth *et al.*, 1978). Securely attached young children show slight distress on separation or reunion, that responds readily to comfort or novelty. Between 65 and 70% of all children may be classified as securely attached. Avoidant insecure attachment presents with the child being apparently indifferent to the mother’s appearance or disappearance. They may even move away from their mother on reunion, apparently preferring to be left alone. In contrast, children with resistant insecure attachment will cling excessively to their mothers on separation, to the point of being unable to tolerate it, and will require considerable comforting after reunion. A fourth group, disorganised insecure attachment, is a chaotic combination of characteristics of both the avoidant and the resistant type (Main & Cassidy, 1988).

The secure–insecure attachment dichotomy can predict social competence and behavioural disturbances in children, provided there is stability in caretaking arrangements, family circumstances, and patterns of interaction. There is an analogous classification of adult’s recalled attachment experiences. This classification is tripartite only. Secure attachment is referred to as autonomous, and there are two insecure sub-classes. The dismissive type minimises memories of family adversity, may present a disjointed account, or may have difficulties recalling large portions of his own childhood. The preoccupied type has difficulty separating himself from his attachment figure, and may have difficulties in establishing independence. Insecurity is linked to a number of adverse outcomes in adulthood, including relationship difficulties, low self-esteem, and depression.

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or her childhood. The preoccupied type dwells excessively on the childhood problems he or she experienced, and appears not to have resolved many of the difficult emotions they engendered.

There appears to be an empirical, as well as a conceptual relationship between these classifications. Adults with dismissive attachment styles are more likely to have children with avoidant insecure attachment, while the preoccupied type seems to assort with resistant insecurity (Fonagy et al, 1991). Inadequate parenting, especially inadequate availability of the attachment figure, predisposes to insecure attachment, and in more extreme cases, to impairment or breakdown of the child’s whole attachment system.

Postnatal mental illness

Three disorders are specifically associated with the puerperium (Steiner, 1996): postpartum blues, postnatal depression and puerperal psychosis. All are affective disorders.

Childbearing may exacerbate schizophrenia. The need to change medication (especially the cessation of lithium) may provoke a relapse in bipolar affective disorder. Recreational drugs and alcohol pose indirect risks for the infant through impaired economic and psychological functioning of the mother, as well as direct toxicity. We shall see below that other disorders, particularly personality disorders, eating disorders and somatisation disorders, may present specific risks to the sufferer’s offspring. The reciprocal nature of mother–child interactions, and the specific nature of some postnatal mental illnesses, also raises the question of the child promoting mental ill-health in the parent.

Illnesses important in mother–child interactions

Maternal illnesses

Though almost any psychiatric disorder affecting the mother could provoke child disturbance, some disorders present especial risk to her children.

Affective disorders

Postpartum blues are the most common maternal mental disturbance associated with the puerperium, occurring in 26–85% of women. Its brief duration (usually around 24–72 hours) suggests a benign prognosis, though its symptomatology includes mother–infant interactions. However, it now appears that it is a marker for postnatal depression (Kelly & Deakin, 1992).

Depression is probably the affective disorder that has been most widely studied in relation to the puerperium and mother–child interactions. In general, children of concurrently depressed mothers will show more behavioural disturbance, poorer cognitive functioning, more insecure attachment, more difficult temperament, and greater risk for developing depression when older. Non-psychotic postnatal depression, defined as depression with onset within the first three months postpartum, is the most common disorder affecting new mothers. While its rate, at around 15%, is approximately the same as depression in non-postnatal samples of equivalent age, the relative risk of developing this kind of depression is increased approximately threefold (Cox et al, 1993). In determining the likely impact of depression on the child’s development, timing of the depression, its duration and course all appear significant. Onset in the postnatal period is more likely to result in cognitive disturbance (Hay & Kumar, 1996). The children of specifically postnatally depressed mothers may show less behavioural disturbance than mothers whose depression has evolved by a different pathway. However, behavioural disturbance may appear as a late effect of postnatal depression, and recurrent brief episodes of depression may be an especially important risk factor for this. Temperamental abnormalities may antedate the onset of maternal postnatal depression. Additionally, male gender and the predicament of the family also worsen the likely impact. Maternal depression may also be associated with infanticide.

Bipolar affective disorder appears to have less overall impact on child development than unipolar depression, having no significant effect on attachment, behavioural or emotional disturbance (Cytryn & McKnew, 1997).

Puerperal psychosis, although the most severe form of specifically postnatal psychiatric disorder affecting women, appears relatively benign in its impact on the mother, provided it is identified promptly, and correctly treated. Its impact on children is more ambiguous. Mothers with manic symptomatology appear to develop better relationships with their infants than those with depressive symptomatology (Hipwell, 1992). However, similarly to bipolar affective disorder, the impact on the infant appears benign.

Schizophrenia

There is considerably less information about the impact of schizophrenia on parenting. An acute
onset of schizophrenia in the postnatal period is more likely to result in a complete breakdown of parenting, leading to the child and mother being separated (Hipwell & Kumar, 1996). After this period, the severity and chronicity of the disorder, not syndromal type, predicts outcome. Of course, there may still be some disturbance in mother–child interaction.

**Substance misuse**

At least 25% of women make some use of drugs (including tobacco or alcohol) during pregnancy, with a trend for multiple use to be associated with other risk factors. Besides biological effects, which may be severe, the children of mothers with alcohol misuse are likely to experience markedly disrupted lifestyles. As many as two-thirds may have lost their mothers from alcohol-related causes by the time they reach adulthood (Streissguth et al, 1991). These mothers appear to be more rejecting, ignoring, neglecting, interfering and less sensitive to their infants, who respond with insecure attachment. Maternal illicit drug use is associated with sudden infant death syndrome.

**Personality disorder**

Studies that specifically address the relationship between personality disorder and parenting are lacking. However, low frustration tolerance, inappropriate expression of anger, impaired parenting skills and social isolation all have important associations with child maltreatment. The children of parents with personality disorders may have the worst outcome of all (Laucht et al, 1994) when compared with those of other mentally ill parents. There is a specific association between borderline personality disorder and Munchausen syndrome by proxy.

**Anxiety disorder**

There have been relatively few studies of impact of anxiety disorder on parenting. Those there are suggest adverse consequences at least as bad as those relating to non-postnatal maternal depression. For example, rates of insecure attachment in the children of concurrently anxious mothers may be as high as 80% (Manassis et al, 1994). They bring their children to hospital with factitious, or even induced, illnesses. Psychiatric disorder is the rule rather than the exception in this group’s children, who are also at significant risk of attempting suicide.

**Eating disorders**

Recent observational studies of the children of parents with an eating disorder indicate that there are significant abnormalities in their interactions around mealtimes, these mothers being more intrusive and less facilitating. Their babies are also lighter, though there is no simple relationship between this and the disorder (Stein et al, 1996).

**Child illnesses**

Child psychiatric symptomatology is not simply a reflection of indifferent parenting. Nevertheless, maternal mental illness promotes some disorders. This is particularly true of common child psychiatric disorders. It is important to understand that although these disorders are qualitatively similar to the distress or misbehaviour found in well children, they are distinguishable by their severity, duration, and the amount of disability they cause.

**Common child psychiatric disorders**

These comprise behavioural disorders, emotional disorders and mixed disorders of conduct and emotion. Aggressive and defiant behaviour, and insecure attachment, are associated with inappropriate parenting. It is therefore not surprising to find that maternal mental illness is over-represented in the parents of children with these disorders. There is around a one-in-three chance that the mother of a clinically referred child will have identifiable mental illness, most typically depression (Dover et al, 1994). Conversely, depressed mothers are three to five times as likely to have children with psychiatric disorder as normal control mothers.

**Attachment disorders**

Though insecure attachment is not qualitatively a disorder, its extreme expressions are. The most common is separation anxiety disorder, which is essentially a chronic inappropriate activation of the attachment system in the child. The child presents with inappropriate clinging, sleep disturbance (including insiting on sleeping in the parent’s bed) and in older children, anxiety about parental health or accidents. It may be associated with either over-close or excessively distant parental relationships,
parental separations (from each other and the child) or maltreatment. Maternal mental illness, in giving real cause for concern to the child, is an important maintaining factor.

Rarer, but more ominous when they are present, are reactive and disinhibited attachment disorders (Zeanah & Emde, 1994). Both suggest more extreme breakdowns of the attachment system, with degenerating expression or regulation of proximity-seeking behaviours. The prototype of reactive attachment disorder is frozen watchfulness. The child remains anxious, immobile, following adults with its eyes alone. More frequently, the child appears miserable and unhappy, and turns away or avoids adults who approach them. Interest is shown in peer interactions, but is inhibited by negative emotional reactions. This condition is typically associated with abusive or cruelly neglectful parenting. In contrast, disinhibited attachment disorder presents as grossly disorganised social behaviour with indiscriminate friendliness without depth. It typically occurs in situations where an infant or young child has experienced repeated changes of caretaker, for example, where a young child has had multiple foster-homes or many brief accommodations in care. Failure to thrive may be associated with either type, as may reversible cognitive deficit. However, there is considerable overlap between the phenomenology and the aetiology of these disorders, particularly when the deprivation has been extreme.

School non-attendance

Though not strictly speaking a disorder, this deserves a separate mention because of its ominous prognosis, and its close relationship to parenting problems. Children who do not attend school regularly are at increased risk of every indicator of adversity, including non-accidental deliberate self-harm, marital breakdown, depression and substance misuse (Berg, 1992). Children who stay at home (school refusers) are more likely to suffer from anxiety disorders, while truancy is related to delinquency, though there is considerable overlap. School refusers seem more likely to suffer from overprotection, while truancy is associated with family discordancy and dysfunction.

Child abuse

Most child abuse is intrafamilial, and we have already seen that maternal mental disorder may predispose children to victimisation. In addition to the disorders already discussed, child abuse may be indicated by post-traumatic stress disorder. However, this definition may require extension to be used in the infant population (Ruttenberg, 1997). While the disorder itself is not specific to abuse, the content of much of its symptomatology (flashbacks, preoccupation with the trauma, nightmares, avoidance of traumatic associations) can clearly indicate a source in abusive parenting. Children may also re-enact abusive behaviour, which means they may present as perpetrators.

Munchausen syndrome by proxy

This fortunately rare form of abuse probably represents an extreme of a continuum, where a parent confuses the interests of the child with their own (Eminson & Postlethwaite, 1992). Involving as it does the ‘manufacture’ of an illness in a child by its parents, it typically presents to paediatricians, but maternal mental illness is extensively implicated in its aetiology.

Explanatory models for psychopathology

It is convenient to think about explanatory models in two groups: those that consider the mother’s influence on the child and those that consider the child’s impact on the mother.

The mother as an agent in child psychopathology

Maternal mental illness directly provokes child psychopathology

This simple model explains many of the most serious consequences of maternal mental illness. The association between postnatal depression and infanticide, or somatisation disorder and Munchausen syndrome by proxy, demonstrate the power of mental illness to overpower appropriate maternal behaviour.

Maternal mental illness indirectly impairs children via disturbed attachments

Several studies have shown insecure attachment in the children of postnatally depressed mothers. We have already seen that this opens a separate pathway to child disturbance.

Maternal mental illness impairs attachment via more general parenting impediments

Observational studies of depressed mothers have identified clear impairments in their interactions with their infants. These involve fewer verbal
interchanges, fewer child-centred exchanges, and less mobility of maternal expression. These parenting disturbances have been shown to be associated with expressions of anxiety and distress in infants, consistent with attachment disturbance.

**Maternal mental illness distorts child development**

Several follow-up studies have demonstrated continuing disadvantage to the children of postnatally depressed mothers, including cognitive delays and behavioural disturbance. In the latter case, the disturbance may even be a late effect, not being apparent until years after the depression.

**Mentally ill mothers are less effective at protecting their children from adversity**

Several studies have shown that the adverse effects of postnatal depression are most apparent in children coming from deprived backgrounds, and are more apparent in boys. These two interactions (between the impact of postnatal depression and gender or deprivation) may both reflect a common mechanism. It may be that postnatally depressed mothers also become less effective in screening their children from adversity in their lives.

**A common genetic loading is expressed differently at different ages**

Depression is the most frequent consequence of parental depressive disorder, and the genetic component in this is well established. Gender-differences in the relative contribution of environmental and genetic effects have also been shown. There is evidence to support the extension of the behavioural phenotype to include non-depressive disorders in both adults and children (Rende et al, 1997). However, genetic research has not, to date, concentrated on postnatal maternal psychiatric disorders.

**The child as agent in maternal psychopathology**

Though there is more research on mentally ill mothers acting as an agent of harm to their children, it is important to remember that childbirth and children can adversely affect mothers’ lives.

**Childbirth as an insult**

The existence of specific postnatal mental illnesses shows that giving birth can significantly damage maternal mental health. However, psychobiological data to support an organic aetiology of any of the postnatal psychiatric disorders has been equivocal. It seems a truism to say that childbirth is a life event, but it is easy to imagine circumstances where the birth of a child may bring significant negative social consequences. Associations between adverse life events and difficulties in child-rearing may be mediated via maternal depression.

**Difficult child temperament in abuse and maternal mental illness**

Temperament is a narrower term than personality, and refers to the style in which a young child expresses behaviours such as sleeping, feeding or socialising (Prior, 1992). A baby who cries constantly, will not sleep and takes hours to feed presents a greater risk to the mother, and to itself, than the mere inconvenience. Difficult temperamental traits in neonates increase the risk of the mother subsequently developing postnatal depression. There is an excess of such children in at least some studies of currently depressed women. There is also evidence for a link between difficult child temperament, especially irritability, and physical abuse.

**Problems in parenting as negative life events**

There is now good reason to believe that the coercive family interchanges associated with child misbehaviour are also inimical to parental mental health. While there are no direct studies of child-to-parent expressed emotion, the operational definitions of expressed emotion include such items as hostility and critical comments. These are well documented in the behaviour of difficult children. Expressed emotion is now robustly identified as a non-specific precipitant of psychiatric disorder in adults. Maternal depression is associated with difficult interchanges with problem children. Studies of social precipitants of depression have also shown how difficult child behaviour can provoke humiliating life experiences for the mother. These have been shown to be especially damaging to maternal mental health.

**Impact of children on marital intimacy**

Children have a complex impact on maternal life, with parent-child relationships being intimately related to mutual parental involvement in both positive and negative ways. Close confiding relationships are known to have a protective effect on women’s mental health (Brown & Harris, 1978), so children may also impair maternal mental health indirectly, by reducing the mother’s access to such relationships.

**Ill or disabled children**

A less than ‘perfect’ child presents a disappointment to the family’s expectations, and a
demand on its resources. Families adapt in a wide range of different ways, though the child’s own disabilities may make a systematic contribution to the resultant coping style. In families, risk factors for poor outcome are very similar to those discussed above. Therefore, the mothers of these two groups of children are at high risk for mental illness.

**Principles of treatment**

A fundamental principle is to the need to extend the focus of professional concern to include the whole family.

**Family assessment**

With no more than standard interview skills, doctors can show acceptable accuracy in making judgements about families. A structured framework for assessment is important, as it ensures systematic cover of significant areas.

Consider all immediate family members

Either the mother or the child may present as the ‘identified patient’. Because the training of the assessing psychiatrist differs between these two presentations, each will be addressed separately.

**When the mother presents**

The construction of a family tree should be an essential part of the assessment process. This will allow identification of spouses and children, distinguish between those who are living with the mother from those living away from her, and give preliminary warning of other family members especially at risk. For example, the spouses of mothers with postnatal depression have an increased risk for neurotic psychiatric disorder, including depression, and children with multiple problems are especially vulnerable. It also offers a useful framework for exploring family dynamics. A problem for the general psychiatrist (who will usually assess such cases) may be lack of confidence in making an assessment of disturbance in the children. Fortunately, there are structured screening questionnaires, such as the Child Behaviour Checklist (Achenbach, 1978; Achenbach & Edelbrock, 1983). Children so identified may be referred on if it is considered appropriate. Given the association between maternal mental disorder and child maltreatment, it is important that the general psychiatrist ‘thinks child protection’ when confronted with a parent from a high-risk group, and seeks a social worker’s advice if suspicious of either abuse or neglect.

**When the child presents**

As child psychiatrists in the UK have to pass a professional qualifying examination in general psychiatry, they are unlikely to lack confidence in making psychiatric assessments of their patients’ parents. Family trees are also a routine part of the child psychiatry assessment. However, a different problem presents here, in that we have seen that many maternal psychiatric disorders that cause serious disturbance in children have been traditionally been regarded as ‘minor’ by general psychiatrists. This may present a conflict of priorities between the two services. Therefore, for a child psychiatrist, the theoretically preferable option of referring on to a general psychiatrist may not be practicable. Also, general practitioners are likely to be less knowledgeable than the child psychiatrist about maternal mental illness. Therefore, the child psychiatrist needs to consider very carefully whether they should undertake treatment of the mother’s mental illness as well as

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**Box 1. Key learning points**

Most parenting can be understood in terms of two-way interchanges governed by operant conditioning, or attachment theory. The relationship between maternal and child psychiatric disorder is two-way, and mediated by multiple mechanisms. Disorders such as substance misuse, personality disorder, somatisation disorder and neurotic depression affect children more than bipolar affective disorder or acute, self-limiting psychoses. Child maltreatment and neglect is an important corollary of maternal psychiatric disorder. Assessment needs to focus on the whole family relationships as well as individuals. Hierarchical treatment approaches need to be adopted, to avoid unnecessary treatments to multiple family members.
the child’s, as it may be in the child’s best interests to do so.

Distinguish between referred and non-referred problems

The approach advocated will lead to an increase in the detection of psychiatric disorder in both adults and children. However, these ‘non-referred’ problems will include many that normally resolve without referral. It may therefore not be necessary to organise individual treatments for every psychiatric disorder identified by this assessment process.

Assess relationships as well as individuals

The importance of intrafamilial relationships as aetiological factors in this field makes their evaluation an important part of a proper psychiatric appraisal. The assessment developed by Epstein & Bishop (1981) has several advantages for psychiatrists. It is easily learned, relies on naturalistic questioning and ordinary observation, and may be related to a standardised questionnaire (Epstein et al, 1983). It generates data relevant to the current evidence-based theories of family dysfunction and its treatment. Briefly, it classifies family relationships into six areas (Box 2).

Treat hierarchically

Clearly, an assessment such as that just described will increase the assessed need for treatment, possibly to a point beyond the resources available to either the practitioner or the family. Therefore, the practitioner must first treat those conditions whose relief has the best chance of reducing or removing the other problems identified in the assessment. Such a hierarchical approach has most chance of minimising the number of therapeutic interventions a family may require, and may be guided by some general principles.

Relieving maternal mental illness may by itself relieve children’s disorders

Though there is surprisingly little research in this area, it seems likely that children’s difficulties will at least improve if maternal psychiatric disorder is treated effectively. Conversely, a more chronic or relapsing course in the mother predicts a worse outcome in the children. Therefore, aggressive treatment of even mild maternal psychiatric disorder is an appropriate first stage in the treatment hierarchy, and may be all that is needed.

Maternal disorder may be improved if children’s disorders are managed aggressively

Separate treatment of concurrent child psychiatric disorder may improve both mother and child if the mother fails to improve as expected, despite aggressive treatment, and the child disorder is
significantly elevating family discordancy. Of course, the child should also be treated if its problems continue despite a successful resolution in the mother.

Consider the possibility of relationships maintaining both maternal and child disorders

Besides being a specific treatment for child behaviour disorders, family therapy has an important role in the management of psychiatric disability in adults, especially in reducing expressed emotion. This makes it a valuable therapeutic addition in difficult cases, where hostile relationships in the family are observable.

Paternal mental health does not compensate for maternal mental illness

A full discussion of the role of fathers is beyond the scope of this article. However, they may offer considerable protection, and they may have significant concurrent comorbidity. Therefore, despite the frequent reluctance of spouses to accept treatment, it may be important to achieve this if other interventions are failing.

References


Motier-child relations APT (1998), vol. 4, p. 143


Multiple choice questions

1. The parent–child relationship:
   a is regulated by principles of classical conditioning
   b is the attachment relationship
   c is regulated by the child
   d may be unaffected by psychiatric disorder
   e may be permanently improved by teaching skills to parents.

2. In maternal psychiatric disorder:
   a puerperal psychosis is the most damaging to children
   b abuse or neglect of children is an important complication
   c the effects on children may only be apparent some years later
   d cognitive impairment of the infant is a frequent consequence of postnatal depression
   e the adverse effects found in the infants of depressed mothers reflect direct maternal damage to them.

3. Common psychiatric disorders in children:
   a are frequently associated with maternal psychiatric disorder
   b are the clinical expression of insecure attachment types
   c probably promote maternal psychiatric disorder
   d are usually trivial if the parental disorder is non-psychotic
   e frequently recover only after aggressive treatment of a psychiatrically disordered mother.

4. The assessment of patients in a family context:
   a reduces the importance of individual diagnosis
   b requires all family members to be seen together
   c reduces the likelihood of detecting psychiatric disorder
   d is primarily based on theoretical considerations
   e reduces the need for mental state examinations.

5. The hierarchical treatment of mothers and children:
   a increases the necessary treatment load on a family
   b is based on placing the needs of the presenting patient ahead of incidental findings of psychopathology
   c targets the most influential disturbance in a family
   d requires repetitive re-evaluation of all affected family members
   e does not include fathers.

MCQ answers

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