



Caregiving attachment in mothers with schizophrenia: Theoretical issues and pilot of an empirical investigation of maternal interaction with children at bedtime

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Abstract

The assessment of parenting capacity and appropriate provision of services to assist parents with mental illness requires improved understanding of how a mental illness may affect the parent-child relationship. Mothers with mental illness may be defensive when providing self-report accounts of their parenting. Within the framework of attachment theory, this study developed a methodology for investigating the quality and characteristics of caregiving through exploration of the mothers' perceptions and strategies in managing her child at bedtime. Utilising questions derived from caregiving attachment research, five mothers with schizophrenia participated in a semi-structured interview concerning bedtime separation. In addition the mothers completed a modified standardised measure of attachment style, the Parent Bonding Instrument, to provide information regarding how they perceived their parenting style. The mothers demonstrated very poor understanding of their child's bedtime anxiety. They described difficulty being effective with bedtime strategies and attributed it to medication-induced fatigue. The interview data contrasted significantly with the Parent Bonding Instrument data in which the mothers did not identify concerns in themselves as caregivers. This study demonstrated the feasibility of a novel approach to gathering information regarding parenting from mothers with a diagnosis of schizophrenia.

Keywords

attachment, schizophrenia, caregiver, mother, parent-child relationship

Introduction

Increasing interest in the parenting capacity of individuals with mental illness is reflected by national policy development and implementation including 'Principles and Actions For Services and People Working with Children of Parents with a Mental Illness' (Australian Infant, Child, Adolescent and Family Mental Health Association, 2004). The authors of this document recognise that positive attachment

experiences are integral to healthy parent-child relationships and also the need to identify how parental mental illness may negatively impact on a child's health and wellbeing. Furthermore they addresses the grief and loss issues that occur with child-parent separation.

It is now well established that seriously mentally ill women are sexually active, with fertility rates and average number of children close to the general population (Mowbray, Oyserman,

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Zemencuk, & Ross, 1995). Exposure to multiple psychosocial risk factors, such as unplanned pregnancy, poor antenatal care, low socioeconomic status, less education and fewer social supports, increases the likelihood that mothers with mental illness will experience parenting difficulties (Miller, 1997; Miller & Finnerty, 1996; Mowbray, Oyserman & Ross, 1995; Sands, 1995; Zemencuk, Rogosch & Mowbray, 1995). Mothers with serious mental illness described parenthood as rewarding but they and their case-managers identified four sources of stress: stigma, the management of their mental illness, custodial issues and day-to-day parenting demands (Nicholson, Sweeney & Geller, 1998).

Acute illness factors specific to schizophrenia, such as disorganised speech or behaviour, delusions and hallucinations, may also mediate parenting difficulties (Goldberg, Aloia, Gourovitch et al., 1998). Even in the absence of acute symptoms of psychosis, clinicians and researchers have observed severe impairments in interpersonal and social functioning. Neurocognitive deficits, affecting attention, working memory and executive functioning, impact more than symptomatology on the person's ability to live independently (Goldberg & Gold, 1995). The chronic negative symptoms of schizophrenia, such as affective blunting, may have an even greater effect on the quality of mother-child interaction than positive symptoms (Cutting, 1995).

Mothers with severe mental illness were found to believe less in the reciprocal nature of their interaction with their child and were less able to differentiate between their own needs and those of the child (Cohler, Grunebaum, Gallant & Wise, 1980; Cohler, Grunebaum, Weiss et al., 1976). Early observational studies of mothers with a psychotic illness showed that they were less able to foster mutual social interactions with their infants, played less with them and were more likely to misinterpret infant cues (Gamer, Gallant & Grunebaum, 1976). Mothers with schizophrenia also demonstrated less positive affect toward their children, were less responsive, with fewer verbal and non-verbal interactions (Grunebaum, Weiss, Cohler et al., 1975; Kumar & Brockington, 1988).

Attachment Theory

Attachment theory proposes that the capacity for successful social relationships is established in the early attachment between the mother and infant (Ainsworth, Blehar, Waters & Wall, 1978; Bowlby, 1973). Healthy attachment is thought to be critically dependent on the responsiveness of the mother to the infant. Mothers of securely attached infants tend to be sensitive to infant needs, encourage reciprocity and express more positive feelings about themselves (Bell & Ainsworth, 1972; Bretherton, Biringen, Ridgeway et al., 1989; Crowell, O'Connor, Wollmers et al., 1991; Egeland & Farber, 1984; Tracy & Ainsworth, 1981). They attend to the full range of affective display and respond more frequently than mothers of insecurely attached infants (Goldberg, Mackay-Soroka & Rochester, 1994).

However maternal sensitivity is not an exclusive condition of attachment security (De Wolff & van Ijzendoorn, 1997). Understanding the maternal variables related to child attachment requires an appreciation of the caregiving attachment system in its own right, organised at the level of representation. Evidence of a correlation between caregiving and adult attachment classifications supports the proposal that a parent's caregiving representation is derived from the content and process components of her own internal working model of attachment relationships (George & Solomon, 1996). Content components relate to evaluations of the self as caregiver along the following dimensions: (1) the ability to accurately perceive the child's cues (2) willingness to respond and (3) effectiveness of caregiving strategies. The process components involve the mother's ability to process information and emotion relevant to the relationship without relying on defensive exclusion.

Exploring caregiving attachment in mothers with schizophrenia: Interactions at bedtime

Everyday observations that young children are upset by brief separations and older children by longer ones resulted in Bowlby's reformulation of separation anxiety (Bowlby, 1969, 1973). The distress and typical behavioural sequelae associated with young children separated from their mothers include: crying and searching for

mother (especially at bedtime); inability to be comforted; hostile behaviour; breakdown in sphincter control; and ambivalent reunions.

In contemporary Western cultures children are usually expected to sleep separately from their parents. Subsequently bedtime separations cannot be avoided and the mother's capacity to manage her child's distress is important. In addition children of all ages may be frightened by darkness which may exacerbate anxiety in the child. The mother needs to be able to understand and manage her anxious child. The use of transitional objects and bedtime rituals such as story-telling and lullabies are examples of providing support and comfort whilst setting appropriate limits through the finite quality of the story or lullaby.

The question that informed this study was whether mothers with schizophrenia have particular difficulties managing the potentially stressful, everyday attachment experience of their child's bedtime. It was also of interest whether this issue facilitated exploration of the

mother's perceptions of her own childhood bedtime experience, as there is evidence that insecure adult attachment in mothers predicts sleep disorders in toddlers (Anders, 1994).

Method

Overview of design

This cross-sectional, descriptive, pilot study aimed to investigate the feasibility of studying bedtime separation as a focus for the study of caregiving of mothers with a diagnosis of schizophrenia. The aim was to discover whether the use of semistructured clinical interviews supplemented with a standardised measure of parental bonding could generate meaningful information concerning the caregiving attachment of mothers with schizophrenia. It was not expected, given sample size, that the study would yield substantive information but rather that it would pilot an innovative approach to data gathering with this population so as to evaluate its feasibility in a larger study.

Table 1. Maternal and illness related data

	M1	M2	M3	M4	M5
Age of participant (years)	39	37	33	28	30
Age of child (years)	3	8	5	8/12	16/12
Sex of child	Female	Male	Female	Female	Female
Marital status	Single	Defacto	Single	Single	Married
Employment status	Part-time and pension	Pension	Pension	Pension	Pension
Highest level of education	Grade 11	Grade 10	Grade 10	Grade 12	Grade 9
Age at diagnosis / onset schizophrenia (years)	17	26	23	21	29
Number hospitalisations past 5 yrs	2	2	1	Multiple	1
Medications	Clozapine Clonazepam	Olanzapine	Olanzapine	Zuclopenthixol	Haloperidol Paroxetine Cogentin
Comorbid diagnoses	Personality Disorder	Depression	Nil	Substance use	Nil
Ongoing Case Management support	Yes	Yes	Yes	Yes	No
Frequency of family support	Frequent	Daily	Regular	Regular	Daily
Quality of support	Fair	Inconsistent	Very good	Very good	Very good
Case-manager concern re caregiving	Occasionally	Occasionally	Never	Frequently	Never
Global Assessment of Functioning previous month	N/A	80	75	70	N/A

The participants comprised five women recruited from the existing mental health clients of two regional community psychiatric clinics. Inclusion criteria consisted of women of childbearing age with a confirmed diagnosis of schizophrenia, who have a child currently living with them. To improve availability of suitable participants the age criteria for the child was increased to up to 10 years old. Of ten potential participants approached by their case-managers, five women were recruited. The investigator was blind to their psychiatric and life history, other than information provided by the participant and case-manager (Table 1).

Each mother then participated in an audiotaped semi-structured interview that lasted 45-60 minutes. The interview questions were mostly open-ended to allow the mother the opportunity to reflect on her perceptions and experiences relating to bedtime of her young child (Table 2).

Table 2. Exploring the experience of bedtime

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- 1a. Tell me about *what usually happens* at night when putting your child to bed.
 - b. What are your thoughts and how do you feel about your child's bedtime?
 - c. What do you think is happening for your child at bedtime?
 - 2 a. Is there a *bedtime routine* for you child?
 - b. Do you think having a bedtime routine is important?
 - 3 a. What do you do when there are *difficulties putting your child to bed*?
 - b. What are your thoughts and how do you feel when this happens?
 - 4 a. Describe what happens if your *child wakes up during the night*?
 - b. What are your thoughts and how do you feel when this happens?
 - c. What do you think is happening for your child when he/she wakes up during the night?
 - 5 a. Describe what happens if your *child wants to sleep with you*.
 - b. What are your thoughts and feelings about this?
 6. What do you remember of your own bedtime experience as a child?
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The Parental Bonding Instrument (PBI) was developed to measure fundamental parental dimensions of care and protection (or control), with the aim of studying optimal and distorted parental bonding (Parker, Tupling & Brown, 1979). There has been extensive review of the psychometric properties of the PBI (Parker, 1989; Wilhelm & Parker, 1990) and it is regarded as a valid measure of both 'perceived' and 'actual' parenting. The parental bonding style of 'affectionless control' (low care with high over-protection), has received the most attention for its purported pathogenic role in many psychiatric conditions.

The participants agreed during the interview to complete a modified PBI as a self-report questionnaire examining themselves as mothers, which they received by mail within the following few weeks. The content of the 25 items in the modified PBI used here was the same as that of the 25 items in the original PBI. The modification was that, whereas the original PBI required participants to respond to items as they remember their mother during their first sixteen years, the modified form required them to respond to items to describe the mothering they provide their own children.

Data analysis

A manual thematic analysis (Aronson, 1994) of the audiotaped data was performed by the investigator and interpreted with the aid of a research supervisor. The collateral illness-related information provided some indication of the severity of the mother's illness, including concern by the case-manager regarding maternal functioning. The modified PBI enabled each mother to be assigned to one of four perceived parental styles, produced by the scores on each axis of care / warmth and protection / control.

Results

Interview findings

Common issues and themes that emerged from the interview data were organised around the following headings consistent with a caregiving attachment representation.

(1) Bedtime strategies and effectiveness

All of the women expressed some difficulty managing their child's bedtime. Although they each described a reasonable routine, frequently

they expressed frustration at implementing it and ineffectiveness of their strategies. Furthermore all mothers excluding M2, reported feeling somewhat helpless with the child exerting control, where it became a 'win or lose' bedtime situation. Four of the mothers (M1, M2, M3, M5) expressed feeling anger towards their child regarding difficulties at bedtime.

M3: 'As soon as you put her down in the cot she'd start crying. I used to get really angry. I'd think, God why doesn't this kid go to sleep and let me do what I was doing...'

These mothers also appeared to demonstrate some difficulty differentiating between their needs and the child's needs, or perhaps interpreted the child's needs concretely, with inadequate recognition of the child's need for interpersonal closeness.

M2: 'He used to come and wake me up all the time 'Mummy, Mummy, Mummy I'm hungry'. This was when he was a few years younger but he could make his breakfast... You know...wise little old man in a child's body.'

(2) Maternal responsiveness

All mothers complained of significant fatigue in the evening at their child's bedtime and attributed it to their prescribed antipsychotic medication. They reported that their fatigue adversely affected their ability to respond to their child and cope with the parenting demands of bedtime.

All of these women volunteered that they were hospitalised within the first 6 months of their child's birth. M1, M3 and M5 elaborated that they became unwell following reduction or cessation of their medication due to its sedative side-effect. Following her husband's death and subsequent psychotic relapse, M2 was unable to care for her child for approximately 6 months while her sister informally assumed custody. M3 described that the loss of a friend and neighbour coincided with cessation of her medication due to 'tiredness', eventuating in relapse and attempted infanticide. Consequently M3 did not see her child for 3 months and lost custody for one and a half years.

Three of the mothers spontaneously reported suffering depressive episodes that impacted on their perceived ability to cope as a parent.

M3: 'I had depression for a long time ...I only had Family Services really coming once a week and I'd tell them how she wakes up at night crying and I had to get up with her...and they didn't really tell me what to do.'

(3) Understanding of the child's experience of bedtime

Three of the mothers revealed a poor understanding and appreciation of the bedtime experience from the child's perspective. They reported superficial explanations for the child's reluctance to go to bed or awakening distressed in the middle of the night. Only one of the mothers, M3, mentioned fear of the dark or distress due to separation from the parent and also considered that her child's distress when alone in the dark had been exacerbated by moving four times that year. She admitted not understanding or knowing what to do prior to the education and support she received from a weekly Living Skills group.

When asked about their own childhood memories of bedtime, only M3 recalled her experience of feeling frightened of the dark. Two of the mothers, M1 and M2, described rejecting experiences with their mothers. Four of the mothers expressed some desire to be a better mother than their own mother had been.

M2: 'I remember staying up, like it seemed for hours 'Mummy, Mummy, I want a drink'...and of course Mum would never come...I felt like my Mummy didn't care'

Perceived maternal style utilising a self-report PBI

All PBI scores reflected the care dimension as high, ranging from 23–36 (maximum 36). With the exception of M4 the PBI scores reflected the protection dimension as low, ranging from 8–17 (maximum 39). This suggests that four of the five mothers appeared to demonstrate a perceived maternal style consistent with 'optimal parenting' (high care and low overprotection). M4's high protection score perhaps reflected her recent 2 month hospitalisation and subsequent separation from her child.

Discussion

The interview data in this study suggested a negative caregiving experience at bedtime in four of the five mothers. Four of the mothers with schizophrenia described feeling frustrated,

sometimes angry, as well as helpless, when confronted with a child who was unresponsive to their strategies. One mother clearly demonstrated a reluctance to respond to her child and conveyed that her child was not deserving of her care and attention.

Three of the five mothers did not convey an understanding of the child's bedtime anxiety signals and were perplexed by their child's responses. Only M3 was able to reflect on her own childhood bedtime experience, perhaps utilising information she had received from a weekly Living Skills group, to facilitate understanding of her child's bedtime cues. None of these mothers mentioned the use of a transitional object or bedtime stories to help soothe a distressed child.

However, excluding M4 who had recently been hospitalised, it is interesting that collateral information provided by the mothers' case-managers indicated 'no' or only 'occasional' concern regarding their caregiving. This possibly reflects the case-managers' thresholds for intervention, usually involving safety issues, rather than consideration of the day-to-day parenting difficulties experienced by mentally ill mothers.

The mothers' perceptions of medication-induced sedation, psychotic relapse and depression emerged as their issues of concern associated with caregiving.

Psychotropic medication can affect an individual's spontaneity and physical expressiveness (Nicholls & Kirkland, 1996). The mothers in this study reported reduced responsiveness and effectiveness, as well as difficulty awakening in the middle of the night to attend to their child, as a consequence of their medication causing fatigue and sedation.

Previous studies of women with schizophrenia have reported that one in four or more will become acutely psychotic within six months postpartum (Grunebaum et al., 1975; Miller, 1997). All of the mothers volunteered that they had suffered a psychotic relapse within the first six months of their child's birth and three further disclosed that this was associated with poor medication compliance. The psychotic relapse in two of the mothers, M2 and M3, resulted in

serious safety concerns for the child and both temporarily lost or relinquished custody of their child.

A study examining the relational deficits in parenting of mothers with schizophrenia and depression suggested that maternal responsiveness and affective involvement is the major way in which maternal diagnosis has its effect on child development (Goodman & Brumley, 1990). Three of the mothers volunteered that a depressive episode had negatively impacted on their ability to respond effectively to their child.

While PBI scores reflected 'optimal parenting', interview data indicated significant parenting problems around the child's bedtime. Excluding M2, the care domain of the PBI was broadly consistent with the semi-structured interview data for four of the five mothers. However four of the mothers perceived themselves as low in the control domain, in contrast with the interview data which reflected anger or frustration at implementing effective bedtime strategies. Frequently they described a power struggle with the child. There are three possible reasons for the discrepancy. The first is that the bedtime focus used in interviews may not reflect their general caregiving style. The second is that the mothers may have sought to present a 'socially desirable' image of their caregiving when completing the PBI, which was less possible in the semi-structured interviews. The third is that the modifications to the PBI may have distorted scale scores.

Study implications and future directions

The study was designed to pilot an approach to information gathering rather than generate substantive information about the caregiving of mothers with schizophrenia. It established that mothers with schizophrenia are willing and able to talk about their experience of bedtime with their children, regarding both the characteristics of their interactions with their children at this time and their feelings about these interactions. The material generated suggested that mothers do experience significant difficulty during the bedtime separation experience, which is consistent with earlier reports of parenting problems experienced by mothers with a diagnosis of schizophrenia. These difficulties are

likely to be mediated by a combination of illness factors, including medication side-effects, as well as social disadvantage factors. Only one of the five participants was in a stable marital relationship with the father of the child. The unavailability of a supportive partner during potentially difficult everyday situations such as bedtime, may have particular relevance for mothers with schizophrenia.

Of particular interest was the marked contrast between the accounts provided by the mothers of bedtime experiences and their global self-reports of caregiving on the PBI. This is consistent with previous research that has identified that mothers with mental illness frequently provide more idealised accounts of their parenting, which may reflect concern that children will be removed if they report difficulties. A semi-structured interview, conducted by a skilled clinician, may be less threatening than a printed questionnaire and therefore less likely to elicit a defensive response. In addition the focus on very specific aspects of parenting suggests that participants are not able to respond with general or global self-evaluations but rather are encouraged to discuss actual experiences.

This exploratory study was limited by a number of methodological and data analysis factors. The small sample size and nature of a single, cross-sectional interview limits the rigour and transferability of the findings of this pilot study. A sampling bias exists because the method of recruitment probably over-represented women with more severe mental illness, indicated by their affiliation with case-managers in an integrated mental health service. The large age range of the mothers' children in this study also presents difficulties interpreting this data. Issues of separation and attachment, especially around bed-time are strongly affected by developmental stage. Although it remains noteworthy that these mothers with schizophrenia described common themes pertaining to their experience of caregiving, the lack of a control or comparison group means that the data generated cannot be assumed to be characteristic only of mothers with a diagnosis of schizophrenia. It is possible that a sample of mothers without mental illness would yield similar themes. It should also be pointed out that we do not know how effective PBI items or scale scores are when used in this

modified form. Some items may not be applicable when reflecting on parenting of young children and this in turn may compromise the validity of scale scores. We think that the PBI scores reported here should be interpreted with considerable caution.

The main finding of this pilot study is that the research method developed is both feasible and appropriate with this population. In addition, the information obtained from the semi-structured interviews is different from and possibly has greater validity than self-report on the standardised questionnaires. Further utility of this method with larger samples and comparison groups will assist in greater understanding of attachment issues by enabling a better reference to normative experience and behaviour at bedtime of mothers with a mental illness.

Conclusion

This pilot study demonstrated that semi-structured interviews focussed on the bedtime experience facilitated understanding of caregiving attachment in mothers with schizophrenia, whilst the modified self-report PBI addressing self-perceptions demonstrated limited usefulness. The methodology for examining caregiving attachment appeared to demonstrate some utility and face validity to inform a larger study. To facilitate understanding of the special needs of mothers with schizophrenia there needs to be exploration of the mother-child relationship and how this maternal mental illness perhaps more directly affects it. This is a potentially important and useful area of research with implications in primary prevention of child and adult psychopathology.

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