

Prevention of postnatal mental health problems: a survey of Victorian Maternal and Child Health Nurses

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KEY WORDS

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ABSTRACT

Objectives

To investigate Maternal and Child Health (MCH) nurses' views on what contributes to mental health problems among new mothers, and their current practices regarding risk factors for maternal mental health problems that are potentially modifiable in primary care.

Design

Cross-sectional, online survey.

Setting

Universal MCH service offered free to all new parents in Victoria, Australia.

Subjects

All MCH nurses employed in full or part-time clinical practice were invited to participate.

Main outcome measures

MCH nurses' views on risk factors for maternal mental health problems and for unsettled infant behaviour; and their current practice regarding addressing unsettled infant behaviour and inclusion of fathers in services.

Results

Surveys were completed by 343/1051 eligible MCH nurses (32.6%). Respondents identified social factors as major determinants of postnatal mental health problems among women, including: parents having limited knowledge about infant sleep needs and skills to manage unsettled infant behaviour; and lack of support, including from intimate partners. Respondents offered widely divergent advice to mothers about management of unsettled infant behaviour. They regarded the inclusion of fathers in routine services as valuable, but acknowledged practical barriers, including difficulties in offering services and programs outside conventional office hours.

Conclusions

MCH nurses identified risks to maternal mental health that are potentially modifiable in primary care, but face barriers in addressing these. To facilitate more consistent advice to new parents about management of unsettled infant behaviours, evidence-based guidelines and training programs should be developed. Inclusion of men in routine services would require practical barriers to be overcome.

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INTRODUCTION

In Australia perinatal depression is associated with significant health and social care costs as well as productivity loss among women and men (Deloitte Access Economics 2012). Less is known about the burden of other mental health problems such as anxiety or adjustment disorders which may be even more common than depression in the perinatal period (Wynter et al 2013).

The National Perinatal Depression Initiative (NPDI) (Australian Government Department of Health and Ageing 2008) was launched in 2009, to “improve prevention and early detection of antenatal and postnatal depression and provide better support and treatment for expectant and new mothers experiencing depression” (Austin et al 2011). In the Australian state of Victoria, there is a universal Maternal and Child Health (MCH) service, whose mandate is to monitor child health and development, but since the launch of the NPDI, has been expected also to screen women who have recently given birth for symptoms of depression and refer those who meet screening criteria, for care. While training in detection has been implemented, there have not yet been systematic approaches to primary prevention. Prevention requires identifying potentially modifiable risk factors, plausible causal pathways and strategies to address these directly (Mrazek and Haggerty 1994).

There is consistent international evidence for four risk factors for postnatal mental health problems: having a history of mental health problems, lack of social support, poor partner relationship and recent adverse life events (Scottish Intercollegiate Guidelines Network (SIGN) 2012). Of these, lack of social support and poor partner relationship are potentially modifiable. Data gathered from women admitted with their infants to residential early parenting services (REPS) in Australia, which offer brief psychoeducational programs to mothers with their infants for assistance with difficulties in caretaking or unsettled infant behaviour (Fisher et al 2011), are consistent with the international evidence that poor quality intimate partner relationships play a central role in maternal mental health problems (Fisher et al 2002a; Barnett et al 1993). Many of the women admitted to these services, amongst whom depression and anxiety are common (Fisher et al 2011; Rowe and Fisher 2010; Rowe et al 2008; Phillips et al 2007; McMahon et al 2001), report that they feel unable to confide in their partners (Rowe and Fisher 2010), that they experience their partners as critical and lacking in empathy (Fisher et al 2002b) or that paternal participation in infant care and household work is low. Including partners in ante- or postnatal education classes has been found to contribute to prevention of postnatal mental health problems (Midmer et al 1995; Gordon and Gordon 1960).

Another potentially modifiable risk factor for maternal postnatal mental health problems which has emerged from the data gathered from women admitted with their infants to REPS in Australia is unsettled infant behaviour (Fisher et al 2002b; McMahon et al 2001; Armstrong et al 1998). Unsettled infant behaviour includes prolonged and inconsolable infant crying, resistance to soothing, frequent overnight waking and waking after short sleeps (Fisher et al 2011), and is a common reason for mothers of infants to seek help (McCallum et al 2011). Prospective cohort studies assessing the effects of Australian REPS, in which sustainable settling strategies and solution-focused responses to infant crying are taught (Fisher et al 2011), have shown not only significant improvements in infant sleep but also reductions in depression and anxiety symptoms, sustained up to six months post discharge (Rowe and Fisher 2010; Matthey and Speyer 2008; Fisher et al 2004a; Fisher

et al 2004b; Don et al 2002; Leeson et al 1994).

Primary care practitioners are well positioned to promote maternal mental health, including by addressing potentially modifiable risks. However, little is known about their views about factors associated with mental health problems among women who have recently given birth, and this extension to their role and responsibilities.

The aims of this study were to investigate MCH nurses’:

- views about risk factors for postnatal mental health problems;
- views about risk factors for unsettled infant behaviour;
- current practice in responding to mothers with unsettled infants; and
- current practice regarding inclusion of fathers in their services.

METHODS

Setting

In Victoria, a universal primary care health service is available to families with children from birth to preschool age (Department of Education and Early Childhood Development Maternal and Child Health Office for Children and Portfolio Coordination 2011). The MCH service is funded by local and state governments, and is offered free to all new parents to support and monitor child health and development from birth until school age. The service includes a home visit, at least 10 consultations at the local MCH centre, and access to the MCH Line, a state-wide 24-hour telephone information service. MCH nurses are registered nurses with midwifery qualifications and postgraduate training in maternal and child health nursing (Kruske and Grant 2012).

The focus of MCH care is predominantly the health and development of the child. However, the schedule of visits as documented in the state of Victoria’s Key Ages and Stages (KAS) Framework (Department of Education and Early Childhood Development Maternal and Child Health Office for Children and Portfolio Coordination 2011) includes a longer consultation at four weeks postpartum, for the ‘Maternal Health Check’. Australian guidelines recommend that the Edinburgh Postnatal Depression Scale (EPDS) (Cox et al 1987) be used 6-12 weeks after birth, to assess symptoms of depression and anxiety (Austin et al 2011). Translated versions of the EPDS in some languages other than English are available to MCH nurses. Many MCH centres also offer First-Time Parent (FTP) groups, which emphasise parenting skills and social support in order to increase confidence and skills in parenting (Hanna et al 2002).

Participants

Inclusion criteria were: MCH nurses practicing in MCH centres or staffing the MCH Line anywhere in Victoria during June 2012.

Data source

A survey instrument including both open-ended and fixed choice questions was developed in collaboration with key stakeholders from local and state government.

The survey content was informed first by existing international evidence about potentially modifiable risk factors for postnatal mental health problems, and second by themes emerging from semi-structured interviews and small group discussions with 21 MCH nurses, about current practice and training needs in this field (Wynter et al 2013). The survey was piloted by research staff to ensure face validity.

The survey had five sections. First, characteristics of the respondents and their services, including FTP groups, were assessed in fixed choice questions. Second, views about risk factors for mental health problems in new mothers were assessed using an open-ended question: “In your experience, what are the three main contributing factors that contribute to mental health problems in parents of infants in your area?”. Third, as

unsettled infant behaviour is a potentially modifiable risk factor for postnatal mental health problems, two open-ended questions assessed nurses' views about risk factors for, and current practices and responses relevant to, unsettled infant behaviour: "We know that parents often seek help with a baby who is unsettled (for example, sleeps poorly, cries inconsolably, is difficult to feed, is difficult to manage). In your experience, what contributes to unsettled infant behaviour?" and "Please imagine that a mother/ caregiver presents with a concern regarding her six month old infant, of age-appropriate weight, who wakes every few hours overnight and/or is difficult to settle. She is distressed about this. What advice would you give her?". Fourth, as poor quality intimate partner relationship is also a risk factor for postnatal mental health problems and could potentially be addressed in MCH services if opportunities existed to engage with both parents, nurses' practices and experiences regarding inclusion of fathers in usual care were assessed using fixed choice questions: "What do you offer in your service that is relevant to fathers?" and "In your opinion, what are the main barriers that prevent fathers from becoming more involved in activities at your MCH service?". Finally, nurses were asked to indicate how willing they would be to make changes to FTP groups in the future to address evidence about potentially modifiable risk factors.

Procedure

The survey was hosted online by an independent online survey company, from 4 - 22 June 2012. Local government representatives e-mailed MCH co-ordinators an invitation to participate with the online survey link and co-ordinators forwarded this email to MCH nurses.

Ethics approvals

Approval to conduct the study was obtained from the Human Research Ethics Committee of Monash University (CF12/O989 - 2012000455, 18 April 2012) and the Research and Evaluation Branch, Department of Education and Early Childhood Development (2012_001508, 24 April 2012).

Data analysis

Data from fixed-choice questions were analysed using descriptive statistics. Responses to open-ended questions were read by two researchers and sorted into themes, which were summarised. Concept maps were generated using Mindjet Mind Manager software (Mindjet 2011) to illustrate the relative frequencies of responses within themes: the size of the 'bubble' and font reflects the number of responses which represent each theme relative to the number of responses in other themes.

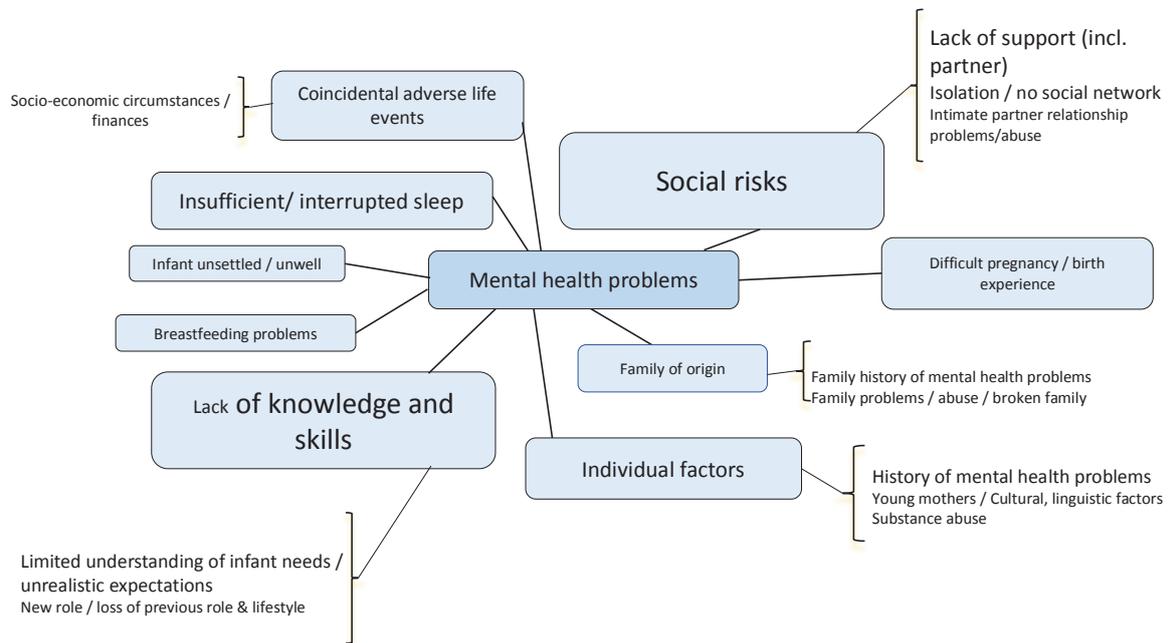
Findings

At the time of the survey, 1,051 nurses were employed (203 full time), 992 only in the universal service, 39 on the MCH Line, and 20 in both services. Online surveys were completed by 343 MCH nurses, 11 of whom worked only at the MCH Line and not in universal service. The overall response was 343/1,051 (32.6%). Survey responses were received from Greater Melbourne as well as all five additional regions of Victoria. More than half (51.0%) of the respondents had been practising as a MCH nurse for at least 11 years.

Factors identified as contributing to mental health problems

Respondents described mental health problems among new parents as having multifactorial causes. The most commonly identified risk factors related to social circumstances and experiences rather than biological vulnerability. The two most commonly cited factors were parents having insufficient understanding, knowledge and skills about infant caregiving and lack of support from intimate partners and others (see figure 1).

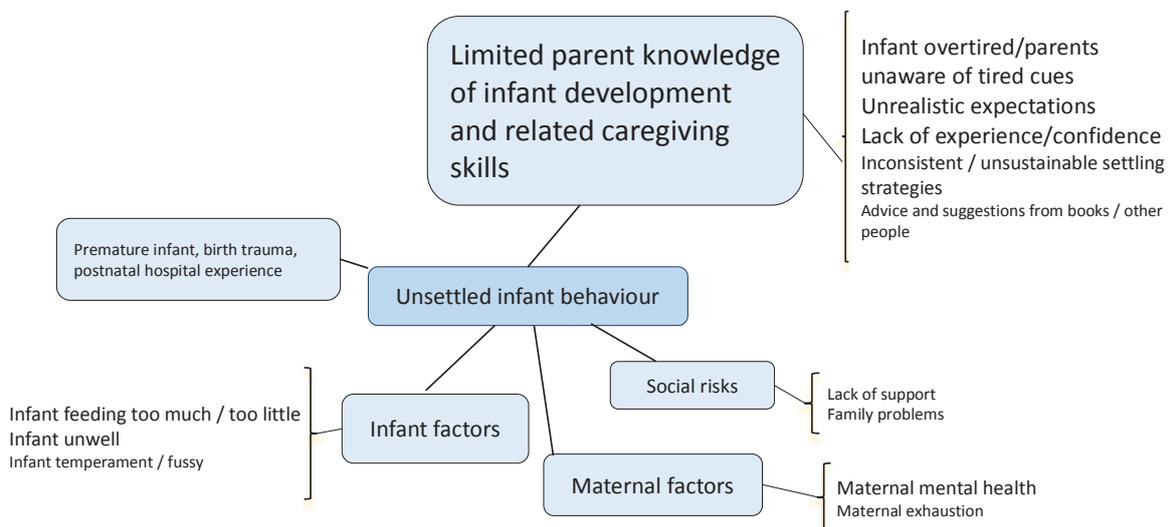
Figure 1: Themes emerging from responses to ‘What contributes to mental health problems in parents of infants in your area?’



Factors contributing to unsettled infant behaviour and advice regarding overnight waking

The main factors which respondents believed contributed to unsettled infant behaviour were grouped into themes. The most commonly mentioned risk factor was parents’ lack of knowledge about infant development and related caregiving skills (see figure 2).

Figure 2: Themes emerging from responses to ‘What contributes to unsettled infant behaviour?’



There were four broad categories of responses to the question about advice to a mother of a six month old infant who wakes frequently and is difficult to settle (see figure 3). Many responses were included in more than one category of response.

General assessment (n=280)

Many respondents saw it as central to their role to assess the mother’s wellbeing and gain insight into her current circumstances, assess the infant’s physical wellbeing, and gather information on current sleeping and feeding habits.

Education (n=220)

Some respondents indicated they would discuss or explain to parents about infant sleep needs, infant development, sleep environment and routines.

Specific advice (n=247)

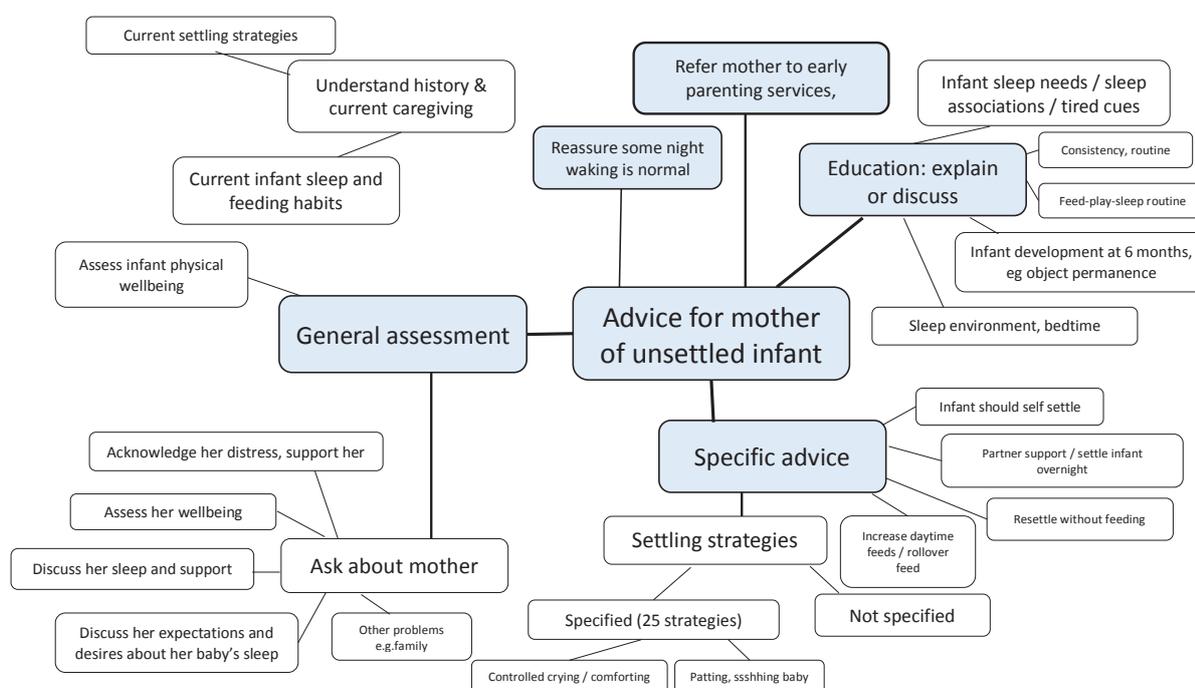
Some respondents indicated specific advice, including feeding advice (n=60) and settling strategies (n=221). In many cases (n=125), settling strategies were not specified. Amongst the responses which mentioned a specific settling strategy (n=96), at least 25 different settling strategies were mentioned.

Some respondents indicated that they would 'normalise' the infant's overnight waking, or emphasise that it is common at this age (n=55).

Referral (n=147)

Some respondents said they would refer parents to various resources or services, such as early parenting centres.

Figure 3: Themes emerging from "Advice for a mother of a six month old infant who wakes frequently overnight or is difficult to settle"



Inclusion of fathers in routine practice and First Time Parent groups

More than three quarters of respondents (76.7%) indicated that FTP groups are offered at their centres.

Most respondents indicated that fathers are welcome to attend MCH routine visits (93.7%) and FTP programs (80.3%). However, few indicated that they extend a specific invitation to fathers to attend MCH routine visits (18.7%) or FTP programs (12.3%). Almost half (45.0%) of respondents indicated that they 'cover' partner relationships in the FTP program.

Table 1 shows the frequency of responses for each of the specified barriers that may prevent fathers from becoming more involved in activities at MCH services.

The most common response was that programs and services are not offered after hours. Of the 263 respondents who reported that FTP groups are offered at their MCH centres, only 2 (0.8%) indicated that they are offered on Saturday mornings and 11 (4.2%) on weekday evenings.

Table 1: Barriers preventing fathers from becoming more involved in activities at MCH centres

Programs and services are not offered after hours	220	73.3%
They're too busy	193	64.3%
There are few other fathers who attend	151	50.3%
They consider these activities to be "the mother's job"	137	45.7%
Cultural factors e.g. they don't want to gather in mixed sex groups	109	36.3%
They don't feel confident	72	24.0%
They don't feel included or involved	62	20.7%
They're not interested	61	20.3%
They are embarrassed by women breastfeeding in front of them	56	18.7%
We (the MCH nurses) don't invite them	43	14.3%
We (the MCH nurses) don't feel as comfortable with them as with mothers	15	5.0%

*As respondents could select more than one option, these do not sum to 100%

Willingness to incorporate changes to FTP programs

More than two thirds of respondents indicated that they would be willing to include sessions about adjustments to relationships, roles and responsibilities after the birth of an infant (67%) and about infant soothing and settling techniques (72%) in their FTP programs. An additional 22% and 18% indicated that they felt neutral (neither unwilling nor willing) about including these sessions, respectively. However, only 38% of respondents indicated that they would be willing to include at least one Saturday session. An additional 31% indicated that they felt neutral about doing this.

DISCUSSION

This study provides unique evidence about MCH nurses' views about risk factors for maternal mental health problems and unsettled infant behaviour, and current practices in addressing these in primary care in Victoria. The respondents' emphasis on the social determinants of postnatal mental health, and their commitment to their own role in facilitating mothers' wellbeing and helping them find ways to overcome risks to their mental health, provides support for the implementation of a prevention focus in universal MCH service. The main risk factors named by the respondents in this study were potentially modifiable, although addressing these would involve some changes in *what* MCH nurses are offering, *to whom* they are offering it and *when* it is offered.

To address parents' lack of knowledge and skills in caring for (unsettled) infants, consistent, evidence-based advice about managing unsettled infant behaviour should be given to parents by primary care providers. Our data suggest that advice from nurses on this matter is currently diverse. In a recent national study of Australian paediatricians, a similar lack of uniform responses to persistent infant crying was reported and further training supported by evidence-based guidelines was recommended (Rimer and Hiscock 2014).

To optimise the intimate partner relationship, an opportunity for nurses to engage with both partners is necessary. Having the father present at individual consultations or FTP group sessions, and explicitly addressing adjustment in the intimate partner relationship following the birth of a baby in the FTP group, would be an ideal opportunity to address this. However, respondents indicated that currently fathers are rarely specifically invited to FTP groups, and MCH services and FTP groups are almost always available only

during conventional office hours. Respondents acknowledge this as the major barrier which prevents fathers from attending, but only 38% of respondents indicated willingness to offer a Saturday session which would facilitate fathers' attendance.

We acknowledge some limitations in this study. For privacy reasons researchers did not have access to e-mail addresses for individual MCH nurses, centres or co-ordinators. All respondents used the same survey link, targeted reminders could not be sent and it was not possible for respondents to save a draft of their surveys and return to their draft at a later stage, which is likely to have reduced participation rates.

CONCLUSIONS

This study represents an important step in building evidence for broadening the focus of primary care of new mothers to include prevention of, as well as screening for and treatment of mental health problems. Primary care nurses are ideally positioned not only for case detection and referral for treatment but also for addressing risk factors in order to reduce the risk of mental health problems in the postnatal period.

RECOMMENDATIONS

The results from this study indicate there are opportunities in primary care to address two potentially modifiable risk factors for postnatal mental health problems: poor adjustment in the intimate partner relationship and unsettled infant behaviour. It is recommended that evidence-based guidelines for infant sleep needs, and relevant training, be made available to nurses to facilitate consistent advice to new parents about managing unsettled infant behaviour. In addition, increasing involvement of fathers in services may help new mothers feel supported and help couples to negotiate changes in roles and responsibilities after the birth of the infant.

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