research

Health and social circumstances of women admitted to a private mother baby unit

A descriptive cohort study

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BACKGROUND The health and social circumstances of economically advantaged mothers who are caring for infants with unsettled behaviour or feeding difficulties has been under investigated.
METHODOLOGY An observational survey of consecutive admissions to one private hospital's mother baby unit in Melbourne admitted with infant feeding or sleeping problems.
RESULTS Of 146 eligible participants, 109 (75%) completed the questionnaire. All had partners and previous employment in the professional/managerial sector. There were low rates of previous psychiatric illness, family history of psychiatric illness, childhood sexual abuse or current domestic violence, despite which most felt currently unwell. They had experienced high rates of reproductive difficulties, (6.5% IVF conception, 25% invasive prenatal testing, 26% antenatal admission, and 53% operative delivery). Many (52%) perceived their postnatal obstetric care as unsatisfactory. Breastfeeding problems were common (29% had experienced mastitis). Severe sleep deprivation associated with frequent infant night time waking was universal. Partner's working hours greatly exceeded the community average and many women felt under supported and unable to confide in their partners. More than half reported serious, coincidental life events.
CONCLUSION Some economically advantaged mothers experience such significant postpartum ill health they seek hospital admission.

A range of psychosocial and obstetric factors has been associated with maternal postpartum psychological distress and psychiatric illness. These include:

- poor support from partner, family and friends
- unplanned conception
- previous termination of pregnancy[1]
- operative obstetric intervention[2,3]
- dissatisfaction with intrapartum and postpartum hospital care[2]
- coincidental stressful life events
- previous or current sexual or physical abuse
- personal history of psychiatric disorder, and
- socioeconomic status.[4-10]

Unsettled infant behaviour may affect maternal mood adversely,[11] and presents clinicians with difficult diagnostic and treatment decisions.[12]

A five bed residential mother baby unit was opened at Masada Private Hospital, Melbourne (MPHMBU) in April 1996 offering brief joint admission to mothers and their infants aged less than 12 months of age with feeding or sleep disorders.

We aimed to assess the health and social circumstances of such mothers and compare them to the general parturient and hospitalised psychiatric postpartum populations and to those admitted to a mothercraft unit offering a comparable service in the public sector.

Method

We surveyed all women admitted with their infants to the MPHMBU between 1st June 1997 and 30th November 1997. They were asked to complete anonymously a comprehensive seven section self report questionnaire that included existing psychometric instruments which we describe here. Current maternal psychological functioning is reported elsewhere.[13]

Results

In all, 109 of the 146 (75%) eligible participants completed or near completed the questionnaire.

Sociodemographic factors

In comparison to relevant analogous groups, the MPHMBU population was socioeconomically advantaged (Table 1). Their partners were highly educated and, of the two who were not currently employed full time, one was the primary care provider for their baby. One infant, born prematurely was admitted at more than 12 months chronological age.

Most women (71%, 77/108) were working full time as mothers. Others (24%, 26/108) combined this with part time paid work. Few (5%, 5/108) were employed full time. Most of the women (85%, 92/108) spent fewer than 12 hours per week away from their babies in either employment or leisure activities. However, 96% (100/108) of fathers were away from their families for 40 or more hours, a quarter of them (26%, 28/108) for more than 70 hours per week. Most (83%, 90/108) felt their accommodation was suitable for their family's needs.

Past reproductive events

Participants had experienced a total of 241 pregnancies, of which, 139 (74%) had ended in a live birth. They had a lower incidence of both spontaneous and reported induced abortions, but greater than the general population for pregnancy terminations for fetal abnormalities, perinatal deaths and ectopic pregnancies (Table 1).

Conception and pregnancy

Few pregnancies were unintended. As in the other parentcraft unit, fertility difficulties and assisted conception and multiple births were frequent compared to the national average.

Delivery and peripartum care

Less than half the participants delivered by unassisted vaginal birth. Intrapartum care was perceived as good in terms of consideration of preferences, unexpectedly severe pain or separation from their infants at birth. Nevertheless 34% (36/105) expressed disappointment with their childbirth. Disappointment was greater after caesarean (66%, 16/24) than instrumentally assisted (45%, 14/31) or spontaneous (20%, 10/50) births ($P<0.001$). Dissatisfaction with quality of postpartum care, in particular perceived control of postdelivery pain, insufficient rest (72%, 76/106) and poor quality of breastfeeding advice (64%, 67/104) was common.

Events since taking the baby home from hospital

Anxiety about infant care

Many of the women (61%, 65/107) felt highly anxious about infant care when they took their baby home after giving birth.

Maternal health

Physical health was self assessed as seriously compromised by many, especially by breast problems. Most women (90%, 95/106) described having six or fewer hours sleep per night.

Workload

Women performed all or most of the domestic and infant care work in 62% (66/106) of households. It was shared evenly in only 10% (11/10) of households.

Partner and social support

Almost all (83%, 88/105) reported a changed relationship with their partner since giving birth. Twenty-eight percent (29/105) reported a marked deterioration, many stating they could not confide in their partner. Most had adequate wider social support.

Coincidental life events

Many (59%, 62/106) reported coincidental distressing experiences including: serious financial problems; insecurity of partner's employment; recent bereavement or illness in a close relation; and caring for stepchildren or dependent aged parents. High rates of recent immigration and/or intercity relocation and concurrent home renovation (58%, 63/108) may have contributed to social dislocation.

Personal and family history and relationships

The family histories of this group suggested that because of premature death, illness or breakdown, many were mothering with limited assistance from their families of origin (Table 1).

Family histories of serious psychiatric illness and alcohol dependence exceeded lifetime prevalence estimates for the general population, but were substantially lower than hospitalised postpartum psychiatric populations. In contrast, and accepting that this was a relatively young population, apart from a past self reported history of an eating disorder, personal histories of psychiatric illness appeared lower than population estimates (Table 2).

Discussion

This study reveals that economically advantaged women admitted with their unsettled infants to a private hospital

Table 1. Social circumstances and health

	MPHMBU population	Australian parturient/ general population[14,15,30]	Australian mothercraft hospital[4,5,8,10]	Hospitalised postpartum psychiatric population
Maternal age (years)	33 (SD 4; range 25 to 43)	28	32 (5; 19-41)	29[5]
Paternal age (years)	35 (4.8; 25-49)		34 (6; 20–50)	
Infant age (weeks)	22 (14.6; 1.5-64)		10 (1–40)	
Paternal full time employment	98% (106/108)	73.9%		
Paternal hours of work and independent leisure	56.9 hours per week (17-105)	40.5 hours of work		
Marital status	94% (101/108) married, 6% (7/108) defacto relationships	87.3% married or defacto	6% no partner	58%[7] 64%[8]
Second marriage for one partner	22% (24/108)	19%		
Health insurance status	100% (109) privately insured or able to self fund admission	35.5% privately insured		
Postsecondary qualifications	69% (74/108)	45% women aged 15–64	30% tertiary education	
ASCO 1 and 2 occupations pre-motherhood	100% (109)	45%		14% employed[7,10] 43-61%[8] unemployment benefit[7]
Accommodation	87% owned (94/108); 10% (11/108) rented	70% owned; 25% rented		29-50% owned[8, 10]
Overseas country of birth	17% (18/108)	23%		29%[7]
Non-English speaking overseas country of birth	33% (6/18)	61%		88%[7]
Mobility	49% (53/108) lived in current town or city <10 years	7.2% of 25–45 year olds move state in 5 years		
Previous perinatal death	1.3% (3/241)	0.71%[16,17]	2%	
Ectopic pregnancy	1.3% (3/241)	0.5%[18]	3%	
Termination for fetal abnormality	0.8% (2/241)	0.000014%[19]		
Termination for other reasons	9% (22/241)	19%[19]	15%	Termination 17-21%[5,10]
Spontaneous abortion	14% (33/241)	20%[19]	26%	29%[8]
>12 months to conceive	17% (18/107)	3.6-14.3%[20]	9% infertility	
IVF assisted conception	6.5% (7/107)	1.1%[21]		
Unplanned conception	15% (16/107)	50%[22]	50-53% [5,8,10]	
Amniocentesis/CVS	25% (27/107)	9%[16]		
Antenatal admission	26% (28/107)	20%		
Primiparity	36% (39/107)	30%[14]	71%	
<37 weeks gestation	5.6% (6/107)	6.4%[14]	16%	14%[5,8,10]
>41 weeks gestation	5.6% (6/107)	2.2%[14]		
Instrumental delivery	30% (32/107)	11%[16]		14-29%[5,8,10]
Caesarean delivery	23% (24/107)	19.4%[16]	10%	14-21%[5,8,10]
Multiple birth	3.7% (4/108)	1.4%[16]	5% twins	
Active say in childbirth	93% (99/106)	80%[23-25]		
Worse than expected intrapartum pain	39% (42/107)	46.5%[23-25]		
Did not hold baby at birth	11% (12/107)	15.5%[23-25]		

Table 1. Social circumstances and health

	MPHMBU population	Australian parturient/ general population[14,15,30]	Australian mothercraft hospital[4,5,8,10]	Hospitalised postpartum psychiatric population
Kind intrapartum care	80% (86/107)	80% private patients[23-25]		
Hospital stay ☐5 days	89% (95/107)	64%[23-25]		
Hospital stay too short	22% (24/107)	13%[23-25]		
Postpartum pain inadequately controlled	41% (43/106)			
Poor postpartum care	52% (56/107)	20%[23-25]		
Physical health very good/excellent	37% (39/105)	73.7%[26]		
Breastfeeding	76% (81/107)	45.1% at 25 weeks[27]		
Nipple pain persisting >1 week	41% (44/108)	25.5%[28]		
Mastitis	29% (31/108)	20% in first 6 months[29]		
Insufficient practical help	53% (56/105)			
Unable to confide in partner	42% (44/106)		38% conflict with partner	
Socially isolated	10% (10/105)			
Coincidental distressing circumstances	59% (62/106)			
Relocation or home renovation	58% (63/108)			
Own mother dead	4% (4/107)			
Own mother ill or frail aged	19% (20/107)			
Own father dead	14% (15/107)			
Own father ill or frail aged	12% (13/107)			
Own parents alive, but divorced	22% (20/90)			
Step children from partner's previous relationship	88% (14/16)			

Table 2. Personal and family history of psychiatric illness and experiences of abuse[10]

	MPHMBU population		Lifetime prevalence	Hospitalised postpartum psychiatric population[5,8,10]	
	Personal history N (%)	Family history N (%)		Personal history	Family history
Major depression	9% (10/108)	17% (18/108)	10-25%[30]	12-21%	7-43%
Other major psychiatric illness	2% (2/108)	9% (10/108)	0.5-2.0%[30]	21-42%	7-50%;
Eating disorder	10% (11/108)	Not asked	0.5-1.0%[30]		
Alcohol dependence	2% (2/108)	17% (18/108)	8%[30]		
Other substance dependence	1% (1/108)	7% (8/108)			
Counselling for nonpsychiatric emotional problems	13% (14/108)	12% (13/108)			
Childhood physical abuse	7% (7/103)				
Childhood sexual abuse	7% (7/103)		6-32%[33,34]	21-40%	
Domestic violence in previous 12 months	4% (4/103)		2.6-28.0%[31,32]		

mother baby unit have specific and significant health needs which are similar to those reported in a comparable population admitted to a public parentcraft facility, but appear to differ both from general parturient populations and those with severe postpartum psychiatric illness and warrant specific enquiry in general practice settings. It is a limitation of this approach that these differences could not be tested and therefore have to be interpreted with caution.

Self rated maternal health in this population was poor. While aetiological relationships cannot be attributed in cross sectional studies, this population appeared to differ from the general parturient population in a range of ways, which may have compromised it. These include complex past and recent reproductive health problems and a perception that postpartum hospital care after giving birth had been inadequate to meet their needs. In addition, their social circumstances appeared problematic, with insufficient emotional or practical support from their partners and high rates of coincidental difficult life events. They may have been rendered vulnerable by being of older average maternal age and lower parity.

This cohort also differed significantly from postpartum psychiatric populations. They reported lower rates of previous major psychiatric disorder and childhood sexual abuse when compared with psychiatric populations. They had lower rates of reported previous termination for social reasons and of insufficient social support. The significance of a past history of an eating disorder or of family history of alcohol dependence is not clear.

Women with unsettled babies usually seek help first from their general practitioners. These findings suggest it is appropriate for GPs to enquire about the mother's reproductive experiences, relationship with her partner, current health and coincidental life events in addition to assessing infant health. Socioeconomic advantage does not protect women from compromised postpartum health and wellbeing, and GPs are uniquely well placed to provide emotional support as well as managing the postpartum physical problems and offering strategies to manage their unsettled infants.

Implications of this study for general practice

Economically advantaged mothers of unsettled new babies can have associated health and social problems including:

- fatigue
- persistent breast and childbirth related problems
- past reproductive difficulties (including assisted conception, rare perinatal losses, antepartum hospital admission and operative births)
- isolation (including inadequate practical and emotional support associated with partner's excessive working hours; or limited support from family of origin)
- quality of relationship with partner including fear of intimidation or violence.

In addition to assessing the health of the unsettled baby it may be relevant to enquire about these factors.

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References

1. Kumar R, Marks M, Platz C, Yoshida K. Clinical survey of a psychiatric mother and baby unit: characteristics of 100 consecutive admissions. J Affect Dis 1995; 33:11-22.
2. Astbury J, Brown S, Lumley J, Small R. Birth events, birth experiences and social differences in postnatal depression. Aust J Public Health 1994; 18(2):176-184.
3. Fisher J, Astbury J, Smith A. Adverse psychological impact of operative obstetric interventions: a prospective longitudinal study. Aust N Z J Psychiatry 1997; 31:728-738.
4. Barnett B, Lochart K, Bernard D, Manicavasagar V, Dudley M. Mood disorders among mothers of infants admitted to a mothercraft hospital. J Paediatrics and Child Health 1993; 29:270-75.
5. Buist A, Dennerstein L, Burrows G. Review of a mother baby unit in a psychiatric hospital. Aust N Z J Psychiatry 1990; 24:103-108.
6. Buist A, Barnett B. Childhood sexual abuse: A risk factor for postpartum depression? Aust N Z J Psychiatry 1995; 29:604-608.
7. Milgrom J, Burrows G, Snelen M, Stamboulakis, Burrows K. Psychiatric illness in women: A review of the function of a specialist mother baby unit. Aust N Z J Psychiatry 1998; 32:680-686.
8. Kissane D, Ball J. Postnatal depression and psychosis: A mother and baby unit in a general hospital. Aust N Z J Obstet Gynaecol 1988; 28:208-212.
9. O'Hara M W, Swain A M. Rates and risks of postpartum depression: a meta-analysis. Int Rev Psychiatry 1996; 8:37-54.
10. Sharp P, Dennerstein L, Hrasky M, Lynch C, Burrows G. A mother and baby unit in a psychiatric hospital. Aust N Z J Obstet Gynaecol 1986; 26:44-48.
11. Murray L, Cooper P. The role of infant and maternal factors in postpartum depression, mother-infant interactions and infant outcomes. In: Murray L, Cooper P, eds. Postpartum depression and child development. London: The Guilford Press, 1997.
12. Oberklaid F. Editorial comment. Persistent crying in infancy: A persistent clinical conundrum. J Paediatric and Child Health 2000; 36:297-298.
13. Fisher J, Feekery C J, Rowe-Murray H. Nature, severity and correlates of psychological distress in women admitted to a private mother baby unit. Journal of Paediatrics and Child Health 2002; 38:140-145.
14. Australian Bureau of Statistics. Births Australia 1997. Canberra: Australian Bureau of Statistics Catalogue No. 3301.0: 1998.
15. McLennan W. Australian Social Trends 1998. Canberra: Australian Bureau of Statistics Catalogue No. 4102.0: 1998.
16. Riley M, Halliday J. Births in Victoria 1996-1998. Melbourne: Perinatal Data Collection Unit. The Consultative Council on Obstetric and Paediatric Mortality and Morbidity. Victoria: Department of Human Services, 1999.
17. Australian Bureau of Statistics. 1993 Perinatal Deaths Australia. Canberra: Australian Bureau of Statistics Catalogue No. 3304.0: 1994.
18. Cunningham F, MacDonald P, Gant N. Williams Obstetrics. Norwalk, Conn: Appleton and Lange, 1989.
19. Chan A, Scott J, McCaul K, Keane R. Pregnancy Outcome in South Australia 1997. Adelaide: Pregnancy Outcome Unit. Epidemiology Branch. South Australian Health Commission, 1999.
20. Schmidt L, Munster K. Infertility, involuntary infecundity, and the seeking of medical advice in industrialized countries 1970-1992: a review of concepts, measurements and results. Hum

Reprod 1995; 10(6):1407-1418.
21. Lancaster P, Shafir E, Hurst T, Huang J. Assisted conception Australia and New Zealand 1994 and 1995. Sydney: AIHW National Perinatal Statistics Unit Catalogue No. PER 3: 1997.
22. Torvaldsen S, Kurinczuk J, Bower C, Parsons D, Roberts C. Listeria awareness among new mothers in Western Australia. Aust N Z J Public Health 1999; 23(4):362-367.
23. Brown S, Lumley J. Satisfaction with care in labor and birth: a survey of 790 Australian women. Birth 1994; 21(1):4-13.
24. Brown S, Lumley J. Reasons to stay, reasons to go: results of an Australian population based survey. Birth 1997; 24(3):148-158.
25. Brown S, Lumley J. Changing childbirth: lessons from an Australian survey of 1336 women. Br J Obstet Gynaecol 1998; 105(2):143-155.
26. Australian Bureau of Statistics. National Health Survey Australia 1995. Canberra: Australian Bureau of Statistics Catalogue No. 4364.0: 1997.
27. Donath S, Amir L H. Rates of breastfeeding in Australia by state and socioeconoomic status: evidence from the 1995 National Health Survey. Journal of Paediatrics and Child Health 2000; 36(2):164-168.
28. Gunn J, Lumley J, Chondros P, Young D. Does an early postnatal checkup improve maternal heatlh: results from a randomised trial in Australian general practice. Br J Obstet Gynaecol 1998; 105:991-997.
29. Kinlay J, O'Connell D, Kinlay S. Incidence of mastitis in breastfeeding women during the six months after delivery: A prospective cohort study. Med J Aust 1998; 169:310-312.
30. American Psychiatric Association. Diagnostic and statistical manual of mental disorders IV. Washington DC: 1994.
31. Australian Bureau of Statistics. Women's safety Australia. Canberra: Australian Bureau of Statistics Catalogue No. 4128.0: 1996.
32. Hegarty K, Hindmarsh ED, Gilles MT. Domestic violence in Australia: definition, prevalence and nature of presentation clinical practice. Med J Aust 2000; 173(7):363-367.
33. Leventhal J. Epidemiology of child sexual abuse. Sydney: Harcourt Brace Jovanovich, 1990.
34. Romans S, Martin J, Anderson J, O'Shea M, Mullen P. The anatomy of female child sexual abuse: who does what to young girls? Aust N Z J Psychiatry 1996; 30:319-325.

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