HEALTH SERVICES RESEARCH

CSIRO PUBLISHING

Australian Health Review, 2012, 36, 448–456
http://dx.doi.org/10.1071/AH11128

Research Note

Women's experience of domiciliary postnatal care in Victoria and South Australia: a population-based survey

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Abstract

Objective. Despite the expansion of postnatal domiciliary services, we know little about the women receiving visits and how they regard their care. The aim of this study is to examine the provision of postnatal domiciliary care from a consumer perspective.

Methods. All women who gave birth in September–October 2007 in South Australia and Victoria were mailed questionnaires 6 months after the birth. Women were asked if they had received a midwifery home visit, and to rate the care they received.

Results. More women in South Australia reported receiving a domiciliary visit than in Victoria (88.0% *v.* 76.0%) and they were more likely to rate their care as 'very good' (69.1% *v.* 63.4%). Younger women, women on a lower income, who were holding a healthcare concession card or who had not completed secondary education were less likely to receive a visit.

Conclusion. Although the majority of women in public maternity care in Victoria and South Australia receive domiciliary care and rate it positively, there are significant state-based differences. Those more likely to benefit from domiciliary care are less likely to receive a visit. There is a need to further explore the purpose, aims and content of domiciliary care at individual and state-wide levels.

What is known about the topic? Postnatal domiciliary services have expanded dramatically over the past decade as the postpartum hospital stay has shortened. Despite its widespread introduction, there are no mechanisms in place to monitor or evaluate whether these services are meeting women's expectations. We know little about the women who receive domiciliary postnatal visits in the first week after discharge from hospital, and how they regard their experience of care.

What does the paper add? This is the first Australian population-based survey that describes the experience of domiciliary care according to the state in which women reside and to examine the sociodemographic, obstetric and organisational factors associated with the provision of services.

What are the implications for practitioners? There were state-based differences in the provision of domiciliary care and whilst the majority of women received domiciliary care and rated it positively, an inverse care law seems to apply: women who were more likely to need and derive benefit from domiciliary care were less likely to receive it. There is a need to further explore the purpose, aims and content of domiciliary care at individual and state-wide levels.

Received 15 December 2011, accepted 13 May 2012, published online 2 November 2012

Background

Postnatal domiciliary care is designed to provide care for women in the early postpartum period who have been discharged home after their hospital stay. Women generally receive one or perhaps two midwifery visits to assess maternal health and issues related to infant care.

Postnatal domiciliary services have expanded dramatically over the past decade as the postpartum hospital stay has shortened.[1] Government policy and funding arrangements in relation to domiciliary service provision for women giving birth in the public sector vary by state. For example, the Victorian Maternity Services Program requires that public maternity hospitals offer at

least one postnatal domiciliary visit to women who give birth under their care, with further visits according to individual need.[2] Victorian hospitals are also required to report on the number of women referred for domiciliary care.[3] In South Australia, the government provides packages of care in relation to discharge planning for any patient in the public health system. Domiciliary midwife visits are offered as per individual hospital criteria.[4]

The most recent assessments of domiciliary postnatal care in Victoria took place more than a decade ago. Around 60% of women participating in the population-based Victorian Survey of Recent Mothers 2000, received at least one postnatal home visit.[5] Only half of these women regarded the advice and support the midwife offered on a range of postnatal issues as 'very helpful'. Around the same time, a survey of women's experiences of care following reform to maternity services at four Melbourne hospitals in 1999–2001 reported higher ratings of domiciliary care and almost three-quarters (72%) of women reported the advice and support they received from the domiciliary midwife about baby care as 'very helpful'.[6] No equivalent survey data are available for women giving birth in South Australia.

In the most recent Australian population-based study of early postnatal care in Western Australia, women consistently rated both the style and quality of home-based midwifery care more highly than they did hospital-based care.[7] A series of surveys in Victoria have shown that women rate their hospital-based postnatal care less favourably than they did other aspects of maternity care.[8–10] Given the extent of women's dissatisfaction with hospital-based postnatal care, it is important to examine women's experiences of home-based postnatal care as provided by hospitals.

Despite the widespread introduction of domiciliary postnatal visiting, there are no mechanisms in place to monitor or evaluate whether this service is meeting women's expectations. We know little about the women who receive domiciliary postnatal visits in the first week after discharge from hospital, and how they regard their experience of care. Using data from a population-based survey of women who gave birth in South Australia and Victoria conducted in 2008 we examined: (1) the proportion of women admitted to hospital as public patients receiving postnatal domiciliary visits; (2) a range of sociodemographic, obstetric and organisational factors associated with women receiving postnatal domiciliary visits and (3) women's overall rating of postnatal domiciliary care; with comparisons made within and between the two states.

Methods

Sample

Questionnaires were mailed to all women who gave birth in Victoria and South Australia in September–October 2007, excluding those who had a stillbirth, or whose baby was known to have died.

All hospitals with births in the study period ($n = 110$) agreed to participate by mailing questionnaires to women; however one hospital later withdrew. Questionnaires, together with an invitation to participate, were posted to women at 6 months postpartum. An explanation of the study was included in six community languages (Arabic, Vietnamese, Cantonese, Mandarin, Somali and Turkish). Two reminders were sent at 2-week intervals; the second of these included a repeat copy of the questionnaire.

Research ethics approval was obtained from the ethics committees of the Victorian Department of Human Services, the South Australian Department of Health, the University of South Australia, the Royal Children's Hospital and 10 other hospitals.

Survey

The questionnaire was developed drawing on data-collection tools used in three previous surveys of recent mothers,[8,9,11] and was designed to explore women's views and experiences of care received during pregnancy, labour and birth, and the first 6 months following birth.

Information collected relevant to this study included maternal sociodemographic characteristics such as age, country of birth, secondary education attainment, annual household income and healthcare concession card status. Model of maternity care, parity, mode of birth and infant health outcomes including infant birthweight and admission to special care (SCN) or neonatal intensive care (NICU) data were also collected.

Women were classified as attending one of five main models of public maternity care (Appendix 1) based on the model the women were attending up to 20 weeks of pregnancy and this classification has been described elsewhere.[12] For women attending standard clinic care, midwife clinic care, shared care and primary medical care, early postnatal care in the hospital and at home is provided by rostered public hospital staff. Primary midwifery care including birth centre care, midwifery group practice, team midwifery and caseload involves midwives as lead care providers with postnatal care provided by the same or known caregiver.

Hospital size was categorised based on a question asking women to name the hospital where their baby was born and the annual published birth rates for these hospitals for 2007.[13,14] Women were asked how long they stayed in hospital after the birth and we then derived three lengths of stay (LOS) categories including 1–2 days, 3–4 days and 5 days or more.

Women were asked to respond to questions about care received in the first week after leaving hospital, including whether they had received a visit from a midwife from the hospital where they had given birth and the number of home visits.

Rating of this midwife home visit was derived from a question that asked: 'Overall, how would you describe the care you and your baby received from the midwife or nurse who visited you in the first week at home?' Five categories of response were given: 'very good', 'good', 'mixed', 'poor', 'very poor'.

Statistical analysis

Data were analysed using Stata version 11.[15] Data are summarised using numbers and percentages and presented stratified by the state in which women gave birth. Categorical data were analysed by chi-square tests. Comparisons are presented using unadjusted odds ratios, 95% confidence intervals (CIs) and *P* values.

For statistical purposes, the variable measuring womens' overall rating of care in the first week at home was grouped into two categories: responses describing care as 'very good', and all other categories. An *a priori* decision was taken to consider all responses other than 'very good' as indicating some aspects of

care could have been better. The analysis is confined to women who reported attending maternity care in the public sector and receiving a visit(s) in the first week at home from a midwife from the hospital where women gave birth. Hospitals did not receive individual results.

Results

Characteristics of the sample

Questionnaires were mailed to 8597 women. The adjusted response fraction excluding questionnaires 'returned to sender', duplicate responses and women who gave birth outside the study period was 52.0% (4366/8468). A total of 2466 (56.5%) women in both South Australia and Victoria reported attending public maternity care and Table 1 shows their sociodemographic and reproductive characteristics. Almost 33.0% of participants were aged between 30 and 34 years. More than a fifth (21.7%) of this sample were born outside Australia, with 14.5% born in countries where English is not the primary language spoken. Two-thirds of participants were married. Comparisons with routinely collected data from the South Australian Pregnancy Outcome Unit and the Victorian Perinatal Data Collection showed that women born overseas of non-English speaking background, Aboriginal and Torres Strait Islander women and single women were underrepresented.

There were differences between the states with South Australian women more likely than their Victorian counterparts to be younger, born in Australia and to have a healthcare concession card. South Australian women were also less likely to be married, to have completed secondary education and to have a household income >A$ 50 000.

Domiciliary postnatal visits

Across the two states, 80% of women enrolled in public-sector care reported receiving a midwife home visit. There were significant differences between the states with 88.0% of women in South Australia reporting a midwife home visit compared with 76.0% in Victoria ($P < 0.001$). On average women in South Australia received 1.9 visits (s.d. 1.2; range 1–14) compared with 1.6 (s.d. 0.8; range 1–7) for women in Victoria.

Domiciliary postnatal visits according to maternal sociodemographic and obstetric factors

The proportions of women in South Australia who received domiciliary visits by sociodemographic, obstetric and organisational factors are presented in Table 2. Women in South Australia were less likely to receive a domiciliary visit if they were ≤ 24 years than were those aged 30–34 years; if they held a healthcare concession card or were on a lower household annual income. South Australian women in midwifery models of care were more likely to receive domiciliary visits compared with women in standard public clinic care.

The proportions of women in Victoria who received domiciliary visits by sociodemographic, obstetric and organisational factors are presented in Table 3. Women in Victoria were less likely to receive a domiciliary visit if they did not complete Year 12 or they held a healthcare concession card. They were also less likely to receive a visit if their LOS was 5 days or more than were those who stayed 3–4 days, if their baby's birthweight was <2500 g compared with 3500–3999 g, or their baby was admitted to SCN or NICU. Victorian women were more likely to receive a domiciliary visit if they gave birth in a non-tertiary hospital whose annual birth rate was $\geq$2000 births than were those who gave birth in a hospital with an annual birth rate 1000–1999 births, or if they were cared for in midwife clinic care; shared care or primary midwifery care rather than in public clinic care.

Rating of domiciliary postnatal visits

Overall 65.5% of women who reported receiving a home visit rated their domiciliary care as 'very good' (Table 4). Results show that South Australian women rated their domiciliary care more highly than did Victorian women. However, this lower rating of domiciliary care by Victorian women appears to be largely influenced by the poorer ratings from women giving birth to their first baby: 57.5% of Victorian primiparous women rated their domiciliary care as 'very good' compared with 68.5% of multiparous women. In South Australia, there was no difference between the proportions of primips and multips 68.9% *v.* 69.2% that rated their domiciliary care as 'very good'.

Discussion

This is the first Australian population-based survey to investigate sociodemographic, obstetric and organisational factors associated with receiving postnatal domiciliary visits, and to examine women's experiences of care across two state jurisdictions, allowing for comparisons between states. Overall more women in South Australia reported receiving a domiciliary visit, and they rated the care they received more highly, than did Victorian women.

Of particular concern is the finding that in both states younger women, women on a lower income, those holding a healthcare concession card or women who had not completed secondary education were less likely to receive a domiciliary visit in their first weeks at home. Other researchers have noted that these indicators of social disadvantage or social class may also influence LOS in hospital with younger women and women on lower incomes experiencing shorter lengths of stay.[16,17] Matijasevich *et al.*[18] found that several sociodemographic characteristics, such as younger age and lower income, were associated with the absence of postnatal visits in a cohort of Brazilian women. Sutherland *et al.*[12] suggest that despite a universally funded public health system in Australia, there are inadequacies in supporting some of the most vulnerable women. Whilst the majority of women received domiciliary care and rated it positively, an inverse care law[19] seems to apply: women who were more likely to need and derive benefit from domiciliary care were less likely to receive it. However, these women may also have chosen not to receive domiciliary postnatal visits, perhaps seeing them as inappropriate in their circumstances. Regardless of the explanation, maternity services and state governments need to re-examine the structure and content of traditional domiciliary postnatal care in order to develop innovative early postnatal programs that may be more likely to meet the needs of our most vulnerable groups of childbearing women. Recently the Victorian Auditor-General in a review of maternity services capacity suggested there should be a focus on vulnerable women in the early postnatal period and beyond.[20]

Table 1. Social and reproductive characteristics of women who reported receiving public maternity care ($n = 2466$)
Denominators vary due to missing values. ES, English speaker; NESB, non-English speaking background

	SA		VIC			Total	
	n	(%)	*n*	(%)		*n*	(%)
Maternal age (years)							
16–24	151	(18.8)	224	(14.3)	$\chi^2 = 18.3$ $P < 0.001$	375	(15.8)
25–29	268	(33.3)	457	(29.1)		725	(30.6)
30–34	243	(30.2)	535	(34.0)		778	(32.8)
≥35	142	(17.7)	353	(22.5)		495	(20.9)
Relationship status							
Married	526	(62.7)	1,105	(68.3)	$\chi^2 = 7.88$ $P < 0.05$	1,631	(66.4)
Living with partner	250	(29.8)	409	(25.3)		659	(26.8)
Unsupported[A]	63	(7.5)	103	(6.4)		166	(6.8)
Indigenous status							
Non-Aboriginal	771	(98.5)	1,511	(99.0)	$\chi^2 = 2.93$ $P = 0.40$	2,282	(98.8)
Aboriginal or Torres Strait Islander	12	(1.5)	16	(1.0)		28	(1.2)
Country of birth							
Australia	680	(82.5)	1,223	(76.1)	$\chi^2 = 18.9$ $P < 0.001$	1,903	(78.3)
Overseas (ES)	60	(7.3)	115	(7.2)		175	(7.2)
Overseas (NESB)	84	(10.2)	269	(16.7)		353	(14.5)
Education							
Completed Year 12	550	(66.4)	1,216	(75.8)	$\chi^2 = 23.9$ $P < 0.001$	1,766	(72.6)
Did not complete Year 12	278	(33.6)	389	(24.2)		667	(27.4)
Household income ($A)							
<$50,000	308	(41.4)	508	(35.3)	$\chi^2 = 7.78$ $P < 0.01$	816	(37.4)
>$50,000	436	(58.6)	931	(64.7)		1,367	(62.6)
Health care concession							
No	541	(64.6)	1,121	(69.4)	$\chi^2 = 6.05$ $P < 0.05$	1,662	(67.8)
Yes	297	(35.4)	493	(30.6)		790	(32.2)
Parity							
Primiparous	371	(44.0)	741	(45.7)	$\chi^2 = 0.61$ $P = 0.436$	1,112	(45.1)
Multiparous	472	(56.0)	882	(54.3)		1,354	(54.9)
Method of birth							
Spontaneous vaginal birth	502	(59.7)	955	(59.1)	$\chi^2 = 1.61$ $P = 0.656$	1,457	(59.3)
Instrumental vaginal birth	102	(12.1)	195	(12.1)		297	(12.1)
Caesarean section, no labour	113	(13.4)	245	(15.2)		358	(14.6)
Caesarean section, in labour	124	(14.7)	221	(13.7)		345	(14.0)
Infant birthweight							
<2500 g	29	(3.6)	84	(5.5)	$\chi^2 = 5.89$ $P = 0.118$	113	(4.8)
2500–3499 g	401	(49.7)	710	(46.2)		1,111	(47.4)
3500–3999 g	263	(32.6)	504	(32.8)		767	(32.7)
≥4000 g	114	(14.1)	238	(15.5)		352	(15.0)
Plurality							
Singleton	825	(99.4)	1,588	(98.1)	$\chi^2 = 6.71$ $P < 0.05$	2,413	(98.5)
Twins	5	(0.6)	29	(1.8)		34	(1.4)
Triplets	0		2	(0.1)		2	(0.1)

[A]Single/divorced/widowed/separated.

Table 2. Midwife domiciliary visits by sociodemographic, obstetric and organisational characteristics for women who received public maternity care in South Australia ($n = 843$)

Denominators vary due to missing values. ref, reference group; ES, English speaker; NESB, non-English speaking background; SCN, special care

	Public maternity care	Received domiciliary midwifery visit		Unadjusted OR 95% CI	*P*-value
	n	*n*	(%)		
Maternal age (years)					
16–24	151	121	(80.1)	0.35 (0.14–0.88)	<0.05
25–29	268	244	(91.0)	1.45 (0.51–4.15)	0.49
30–34 (ref)	243	212	(87.2)	1.00	
≥35	142	128	(90.1)	0.70 (0.19–2.54)	0.58
Country of birth					
Australia (ref)	680	592	(87.1)	1.00	
Overseas (ES)	60	54	(90.0)	1.34 (0.56–3.20)	0.51
Overseas (NESB)	84	78	(92.9)	1.93 (0.82–4.57)	0.12
Education					
Did not complete Year 12	278	242	(87.1)	0.89 (0.57–1.37)	0.58
Completed Year 12 (ref)	550	486	(88.4)	1.00	
Health care concession					
No (ref)	541	488	(90.2)	1.00	
Yes	297	250	(84.2)	0.58 (0.38–0.88)	<0.05
Household income ($A)					
<$50,000	308	260	(84.4)	0.55 (0.35–0.86)	<0.01
>$50,000 (ref)	436	396	(90.8)	1.00	
Relationship status					
Married (ref)	526	469	(89.2)	1.00	
Living with partner	250	216	(86.4)	0.77 (0.49–1.22)	0.26
Unsupported[A]	63	53	(84.1)	0.64 (0.31–1.34)	0.24
Parity					
Primiparous	371	332	(89.5)	1.31 (0.84–2.06)	0.21
Multiparous (ref)	472	409	(86.7)	1.00	
Method of birth					
Spontaneous vaginal birth (ref)	502	448	(89.2)	1.00	
Instrumental vaginal birth	102	89	(87.3)	0.83 (0.43–1.58)	0.56
Caesarean section, no labour	113	94	(83.2)	0.60 (0.34–1.05)	0.08
Caesarean section, in labour	124	108	(87.1)	0.81 (0.44–1.48)	0.50
Infant birthweight					
<2500 g	29	23	(79.3)	0.61 (0.23–1.60)	0.31
2500–3499 g	401	358	(89.3)	1.32 (0.82–2.12)	0.25
3500–3999 g (ref)	263	227	(86.3)	1.00	
≥4000 g	114	101	(88.6)	1.23 (0.63–2.42)	0.56
Admission to SCN (n =838)					
No (ref)	682	599	(87.8)	1.00	
Yes	156	138	(88.5)	1.06 (0.62–1.83)	0.83
Hospital size					
<100 births	31	25	(80.7)	0.43 (0.14–1.28)	0.13
100–399 births	184	147	(79.9)	0.41 (0.19–0.85)	<0.05
400–999 births	52	44	(84.6)	0.56 (0.21–1.52)	0.26
1000–1999 births (ref)	108	98	(90.7)	1.00	
≥2000 births (non-tertiary)	186	173	(93.0)	1.36 (0.57–3.21)	0.49
≥2000 births (tertiary)	269	248	(92.2)	1.21 (0.55–2.65)	0.64
Model of care					
Public doctor clinic (ref)	178	158	(88.8)	1.00	
Public midwife clinic	119	114	(95.8)	2.89 (1.05–7.92)	<0.05
Shared care	188	160	(85.1)	0.72 (0.39–1.34)	0.30
Primary medical	196	156	(79.6)	0.49 (0.28–0.88)	<0.05
Primary midwifery	145	143	(98.6)	9.05 (2.08–39.4)	<0.01

Table 2. (*continued*)

	Public maternity care	Received domiciliary midwifery visit		Unadjusted OR 95% CI	*P*-value
	n	*n*	(%)		
Length of stay					
1–2 days	264	237	(89.8)	1.25 (0.75–2.09)	0.39
3–4 days (ref)	336	294	(87.5)	1.00	
5 days or more	229	197	(86.00	0.88 (0.54–1.44)	0.61

[A]Single/divorced/widowed/separated.

A significantly lower proportion of women in Victoria reported not receiving a domiciliary postnatal visit if their babies were admitted to a SCN or NIC unit. One major health service in Melbourne asks women whose babies remain in hospital to attend for a 'domiciliary visit' when they return to see their babies. These visits represent a significant proportion of domiciliary visits for this particular health service (Anne Edwards, Monash Medical Centre, pers. comm.). Women in South Australia whose babies were admitted to a SCN were as likely as their Victorian counterparts whose babies were not admitted to a SCN to report receiving a home visit.. This appears to reflect a different approach to the provision of services between the states. According to a major health service in South Australia, women who are discharged and have a baby remaining in SCN or NICU are contacted by phone to arrange a home visit. Otherwise a phone consultation can be organised in lieu of a visit (Belinda Biddle, Women's & Children's Hospital, pers. comm.).

In Victoria, health services are required to report on the proportion of women referred for domiciliary postnatal care, and this forms one of the Victorian Maternity Services Performance Indicators.[3] In 2007–08, the reported Victorian state-wide average for the offer of a domiciliary postnatal visit was 90.0% with variations across health services and smaller rural hospitals reporting lower rates than their metropolitan counterparts.[3] However, the percentage of Victorian women in this survey who reported receiving a domiciliary visit falls far short of this average. Some women may have been referred for care but received a telephone call rather than a home visit, and some women may have declined the offer of a visit. This may account for some of the discrepancy between the reported referral rate and the reports of women in the survey. It is unlikely that women would not have remembered receiving a visit from a midwife as long-term maternal recall of events has been shown to be accurate for many pregnancy and birth-related events.[21,22] However, women in Victoria could also have received a visit from a maternal and child health nurse (MCHN). Therefore, in response to the question about who visited them in the first week at home, some women may have had to distinguish between a midwife from the hospital and a MCHN, and this may have been difficult.

Our study highlighted differences in women's reporting of domiciliary visits as a function of hospital size based on annual birth rates, with a trend for women in smaller hospitals to be less likely to report receiving a home visit. Women in smaller rural hospitals may stay in hospital longer and home-based services may be difficult to provide because of a lack of staff availability as well as the time and cost related to travelling greater distances. This represents a significant gap in rural and regional health service provision with policy implications. In Victoria, several rural and regional hospitals report referral rates to domiciliary care to be significantly less than what is expected by the government.[3]

Victorian women who stayed in hospital for 5 days or more were less likely to report receiving a domiciliary visit than were women who stayed for shorter periods. This finding is similar to that of the last survey of recent mothers in Victoria.[5] The original rationale for the introduction of domiciliary postnatal care was a shortened LOS[23] and it may be perceived that women staying for longer periods do not require home visits to the same degree as those discharged 'early'.

Women in midwifery models of care were more likely to report receiving domiciliary visits compared with women in medical models of care. The philosophy of continuity of care and carer often underpinning midwifery models of care is a likely explanation with the provision of domiciliary care an opportunity for midwives to extend individualised care to women in their home. We are mindful of other factors that may impact on women's reports of postnatal home visits by model of maternity care including the sociodemographic profile of women attending the five public models, the well established midwifery group practice model operating in South Australia at the time of the survey and the prominence of primary medical care in the rural sector in both states.

In previous surveys of women's experiences of maternity care, women have consistently rated hospital-based postnatal care less highly than other aspects of care. In the current survey, 65.5% of women overall rated their domiciliary postnatal care as 'very good' and this is higher than the ratings of hospital-based postnatal care. However, Victorian women were less likely to rate their care as 'very good' than were South Australian women and this difference was influenced by the ratings of primiparous women. This finding is similar to Fenwick's *et al.*'s[7] Western Australian study that found primiparous women were less satisfied with home-based care than were multiparous women. In a study examining postnatal support needs in a group of women who gave birth at one Sydney hospital, Cooke and Stacey[24] found that primiparous women were less likely than were multiparous women to have their emotional needs met. However, these findings do not explain the difference in ratings of care between Victorian and South Australian primiparous women. A variation between the states in the timing, style and content of visits may provide an explanation. According to one major health service in South Australia, women receive on average two to three home visits and are visited for up to 2 weeks postpartum (Belinda Biddle, Women's & Children's Hospital, pers. comm.). However, Victorian maternity services have traditionally only provided postnatal care in the first week at home.

Table 3. Midwife domiciliary visits by sociodemographic, obstetric and organisational characteristics for women who received public maternity care in Victoria ($n = 1603$)

Denominators vary due to missing values. ES, English speaker; NESB, non-English speaking background

	Public maternity care	Received domiciliary midwifery visit		Unadjusted OR 95% CI	*P*-value
	n	*n*	(%)		
Maternal age (years)					
16–24	221	163	(73.8)	0.81 (0.56–1.16)	0.25
25–29	455	347	(76.3)	0.92 (0.69–1.25)	0.61
30–34 (ref)	528	410	(77.7)	1.00	
≥35	346	258	(74.6)	0.84 (0.61–1.16)	0.29
Country of birth					
Australia (ref)	1,209	903	(74.7)	1.00	
Overseas– ES	114	87	(76.3)	1.09 (0.70–1.71)	0.70
Overseas–NESB	265	215	(81.1)	1.46 (1.04–2.03)	<0.05
Education					
Did not complete Year 12	382	265	(69.4)	0.64 (0.50–0.83)	<0.01
Completed Year 12 (ref)	1,203	937	(77.9)	1.00	
Health care concession					
No (ref)	1,111	860	(77.4)	1.00	
Yes	484	349	(72.1)	0.75 (0.59–0.96)	<0.05
Household income ($A)					
<$50,000	502	378	(75.3)	0.90 (0.70–1.61)	0.42
>$50,000 (ref)	921	711	(77.2)	1.00	
Relationship status					
Married (ref)	1,096	835	(76.2)	1.00	
Living with partner	400	308	(77.0)	1.05 (0.80–1.37)	0.74
Unsupported†	101	68	(67.3)	0.64 (0.42–1.00)	0.05
Parity					
Primiparous	734	563	(76.7)	1.09 (0.86–1.38)	0.47
Multiparous (ref)	869	653	(75.1)	1.00	
Method of birth					
Spontaneous vaginal birth (ref)	945	728	(77.0)	1.00	
Instrumental vaginal birth	193	141	(73.1)	0.81 (0.57–1.15)	0.24
Caesarean section, no labour	240	174	(72.5)	0.79 (0.57–1.08)	0.14
Caesarean section, in labour	219	170	(77.6)	1.03 (0.73–1.47)	0.85
Infant birthweight					
<2500 g	79	38	(48.1)	0.26 (0.16–0.42)	<0.001
2500–3499 g	704	548	(77.7)	0.98 (0.74–1.29)	0.86
3500–3999 g (ref)	497	389	(78.3)	1.00	
≥4000 g	236	173	(73.3)	0.76 (0.53–1.09)	0.14
Admission to SCN					
No (ref)	1,338	1,041	(77.8)	1.00	
Yes	258	169	(65.5)	0.54 (0.41–0.72)	<0.001
Hospital size					
<100 births	41	25	(61.0)	0.62 (0.32–1.21)	0.16
100–399 births	116	86	(74.1)	1.14 (0.71–1.82)	0.59
400–999 births	166	120	(72.3)	1.04 (0.69–1.55)	0.86
1000–1999 births (ref)	387	277	(71.6)	1.00	
≥2000 births (non-tertiary)	410	340	(82.9)	1.93 (1.37–2.70)	<0.001
≥2000 births (tertiary)	472	360	(76.3)	1.28 (0.94–1.73)	0.12
Model of care					
Public doctor clinic (ref)	267	186	(69.7)	1.00	
Public midwife clinic	327	261	(79.8)	1.72 (1.18–2.51)	<0.01
Shared care	395	304	(77.0)	1.45 (1.02–2.07)	<0.05
Primary medical	435	328	(75.4)	1.33 (0.95–1.88)	0.10
Primary midwifery	141	117	(83.0)	2.12 (1.27–3.54)	<0.01

Table 3. (*continued*)

	Public maternity care *n*	Received domiciliary midwifery visit *n*	(%)	Unadjusted OR 95% CI	*P*-value
Length of stay					
1–2 days	599	478	(79.8)	1.28 (0.98–1.68)	0.07
3–4 days (ref)	624	471	(75.5)	1.00	
5 days or more	352	244	(69.3)	0.73 (0.55–0.98)	<0.05

[A]Single/divorced/widowed/separated.

Table 4. Overall, how would you describe the care you and your baby received from the midwife/nurse who visited you in your first week at home?

	SA (*n* = 740) *n*	(%)	Vic. (*n* = 1210) *n*	(%)		Total (*n* = 1950) *n*	(%)
'Very good'	511	(69.1)	767	(63.4)	$\chi^2 = 6.5$	1278	(65.5)
Other than 'very good'	229	(31.9)	443	(36.6)	$P = 0.011$	672	(34.5)

Strengths and limitations

This study is the first to report on and examine factors that may be associated with women in public maternity care receiving domiciliary postnatal visits. Data are drawn from a large population-based survey of women giving birth in all hospitals in Victoria and South Australia.

The response fraction of around 52% was less than in previous population-based surveys of recent mothers in Victoria.[8,9,11] However, participants were representative in terms of important obstetric characteristics such as parity and infant birthweight, when compared with data from the Perinatal Data Collection Unit in Victoria and the Pregnancy Outcome Unit in South Australia. As was the case with the previous postal surveys of recent mothers[8–10] women of Aboriginal and Torres Strait Islander background, single women and women from a non-English-speaking background were under-represented, which means the results may not be applicable to these populations.

A limitation of the current study is the presentation of global ratings of domiciliary care without considering the specific aspects of care that may be contributing to women's ratings. The aspects of care that contribute to more positive ratings of domiciliary postnatal care remain to be elucidated in a further study.

Conclusion

The majority of women in public maternity care in Victoria and South Australia received at least one domiciliary midwifery visit in the first week after they left hospital and the majority of these rated their care positively. However, there were significant state differences both in the groups of women who received care, and in their experiences. Victorian women were less likely to receive a visit and to rate their care positively. Of particular concern is that women in both states, who may be more likely to benefit from domiciliary care, were less likely to report receiving visits. There is a need to further explore the purpose, aims and content of domiciliary care at individual and state-wide levels. The Victorian Auditor-General has recently suggested that postnatal care should be underpinned by a robust policy and service guidelines with a focus on vulnerable women in the early postnatal period and beyond.[20]

Acknowledgements

We are extremely grateful to all the women who completed the survey; staff at South Australian and Victorian hospitals for assisting in the mail-out of the surveys; and staff in the Healthy Mothers Healthy Families Research Group for their contribution to the study. The project was funded by the Australian National Health & Medical Research Council, the South Australian Department of Health, the Victorian Department of Human Services and supported by the Victorian Government's Operational-Infrastructure Support Program.

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Appendix 1. Five main models of public sector maternity care

Public clinic care	Antenatal care provided to women as public patients at clinics operated by a public hospital with consultation with hospital-based doctors and midwives. Intrapartum and postnatal care is provided by rostered staff at the public hospital
Midwives clinic care	Shares a similar structure with public clinic care, but women see hospital-based midwives for most antenatal care unless specialist obstetric care is clinically indicated. Intrapartum and postnatal care is provided by rostered staff at the public hospital
General Practitioner (GP) shared care	Antenatal care provided to women in the local community by GP with scheduled visits to hospital-based doctors at the public hospital where women are booked for birth. Intrapartum and postnatal care is provided by rostered staff at the public hospital
Primary medical care	Antenatal care provided to women by community-based medical practitioners. Women usually see the same caregiver for each visit. Intrapartum and postnatal care is provided by rostered staff at the public hospital
Primary midwifery care	Antenatal care provided to women by a midwife or a team of midwives as lead care-providers with medical input for review and consultation. Intrapartum and postnatal care is provided by the same or known caregiver (this term incorporates birth centre care, team midwifery, caseload and midwifery group practice)