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Authors	O'Connell, Rhona;Cronin, Mary
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HOME BIRTH IN IRELAND

1993 - 1997.

A REVIEW OF COMMUNITY

MIDWIFERY PRACTICE

Rhona O'Connell, RGN, RM, BA, M.Ed College Lecturer
Department of Nursing Studies
University College Cork
Western Road Telephone 353 21 490 3538
Cork Fax 353 21 490 3105
Ireland e.mail rhona.oconnell@ucc.ie

Mary Cronin RGN, RM Independent Midwife
The Coven
Mellifontstown
Kinsale
Co. Cork
Ireland

HOME BIRTH IN IRELAND 1993 - 1997. A REVIEW OF COMMUNITY MIDWIFERY PRACTICE

Abstract

Objective: To date little is known about the practices of domiciliary midwives and the outcomes of home birth in Ireland. The purpose of this review is to provide some background information on the situation for women seeking a home birth and to document the outcomes of home births in Ireland between 1993 - 1997.

Design: Descriptive analysis of prospective data collected from domiciliary midwives regarding women who requested a home birth between 1993 and 1997.

Participants: The questionnaire was distributed to 15 domiciliary midwives; this included all the domiciliary midwives known to the authors to be practising in Ireland at that time.

Findings: During this period, 585 women planned to give birth in their home with the assistance of midwives, 500 women achieved this. The spontaneous vaginal delivery rate for women who commenced their labour at home was 96.9% (n = 554). These women gave birth without medications or other interventions. 544 (93%) of the women breastfed their babies and 538 (92%) were still breastfeeding at 6 weeks. This is the first review of domiciliary midwifery practice in Ireland in recent years.

Introduction

In 1998, from a total of 53,551 births, the domiciliary birth rate for Ireland was 0.4% (Dept. of Health and Children 1999) yet reports indicate that 14% of women would chose to give birth in their home if the facility was available to them (O'Connor 1995). In the four years between 1993 – 1996 there were 789 domiciliary births, with a range of 181 – 212 births per year (Central Statistics Office 2001). Other than this raw data, which includes both planned and unplanned out of hospital births, little is known about the service provided by domiciliary midwives in Ireland. To redress this deficit a survey of midwives was initiated in 1998 by one of the authors (MC). The purpose of the survey was to provide information on the outcome of planned home births in Ireland and the practices of domiciliary midwives. This was primarily

undertaken so that accurate information could be provided both to service planners and to women seeking a home birth.

Maternity Services in Ireland

In Ireland, under the provisions of the Health Act (1970), women are entitled to a home birth yet for women who wish to avail of this option there are several limitations. Under the Mother and Infant Care Scheme women are offered a hospital based maternity service (Dept. of Health 1994a). This is obstetrician led and supported by the woman's general practitioner. Services are centred in maternity hospitals and in maternity units attached to general hospitals. In recent decades many of the smaller maternity units have closed (Dept of Health and Children 1999) and women are often required to travel considerable distances to give birth. A recent publication *Preparing Together for Birth and Beyond* (Cuidiú 2000) provides a review of maternity services. This gives information on the outcomes for hospital births in Ireland and demonstrates an increase in caesarean section rates over the last few years with 11 out of 24 maternity units reporting rates of 20% or greater (Cuidiú 2000). An exploration of the statistics provided in the Cuidiú report demonstrates that when all instrumental births are considered the chances for a woman achieving a spontaneous vaginal birth in some hospitals may be in the region of 60-70%. This equates with trends in the United Kingdom and elsewhere (Keen et al 1999, O'Connell & Lindow 2000, Pai 2000, Quadros 2000, Roberts, Tracy & Peat 2000).

Another issue of national concern is the low breastfeeding rates among Irish women (Food Safety Authority of Ireland 1999, Dept. of Health 1994b, Dept of Health and Children 2000). The most recent national figures indicate that 33.9% of women

initiate breastfeeding (Dept of Health 1993). Figures from individual maternity units suggest rates between 20 – 60% (Cuidiú 2000). Unfortunately, there are no national figures for the duration of breastfeeding following hospital discharge. One report found that although 44% of mothers commenced breastfeeding only 26% continued to do so at one month of age (Freeman 1996).

Domiciliary midwifery and home birth

Probably one of the reasons for the low numbers of home births in Ireland are that few midwives are employed by the health service to provide a domiciliary service and midwives who wish to work in this area are generally required to work independently. A woman seeking to have her baby at home is dependent as to where she lives and whether a domiciliary midwife is in a position to accept her. Each midwife working in the community is required to notify her intention to practice with the relevant health board and maintain personal records (An Bord Altranais 1994). These records are subject to scrutiny by the local health board. Although the number of midwives working independently varies, in 1998 it was noted that there were 14 independent midwives (Commission on Nursing 1998).

Recent initiatives have made the situation rather easier for some women to obtain a home birth. In 1994, a report on the Mother and Infant Care Scheme suggested that a pilot scheme be set up to provide a domiciliary service (Dept. of Health 1994). Following this the health boards set up an Expert Group on Domiciliary Births to review and recommend possible projects that could meet the requirements of women. Their report has led to funding by the Department of Health and Children for three pilot schemes to provide a limited service (Expert Group 1998). Two of the schemes

are hospital based, from the National Maternity Hospital, Dublin and University College Hospital in Galway while the third scheme is community based, utilising the services of the independent midwives in the Southern Health Board region. The future for any of the pilot schemes is unknown.

The setting up of these schemes has led to speculation in the media about the safety of home birth in Ireland (Tannam 1999, Murphy 1998). Unfortunately, the research demonstrating the safety of home birth (Ackerman et al 1996, Davies et al 1996, Weigers et al 1996, Northern Region 1995, Chamberlain et al 1997) has not been considered. In particular, a meta-analysis investigating the mortality related to planned home and planned hospital births demonstrated no statistical difference in mortality (Olsen 1997). The analysis furthermore showed that there were fewer medical interventions in the home birth group: induction of labour, augmentation, episiotomy, operative vaginal birth and fewer babies with low Apgar scores. The Cochrane Review concludes that there is no strong evidence to suggest that home birth is unsafe for low risk pregnant women (Olsen & Jewell 2000).

Methods

For the purpose of this survey a questionnaire was designed and sent to 15 midwives practising in the community in Ireland; these included all the known independent midwives at that time and one hospital based community midwife. The midwives were asked to review their personal records and provide information regarding the women whom they had provided maternity care for between 1993 and 1997. Eleven midwives returned the questionnaire indicating a 73% response rate. Currently there is no independent way of verifying the data obtained in this survey though this may

change in the future as the Commission in Nursing (1998) recommended clinical audit for independent domiciliary practice.

Findings

During the period under review, the eleven midwives received 752 requests for home births and from these, 612 women booked with them for delivery. Prior to the birth 27 women moved or delivered elsewhere which left 585 women who planned to give birth in their home with the assistance of a midwife. In this survey, 269 (46%) women lived in rural areas and 316 (54%) were from urban areas (within a 10 mile radius of a city). Some of the midwives work predominantly in rural areas and provide maternity care for women 60 to 100 miles from the nearest maternity unit. 427 (73%) women who booked a home birth were multigravidae and 158 (27%) were primigravid women. It was apparent from individual responses to the questionnaire that some of the domiciliary midwives did not provide care for primigravid women.

Of the 585 women who planned to deliver their babies at home 31 (5.3%) women transferred to hospital care during their pregnancy. As these women did not continue under the care of a domiciliary midwife their birth outcomes were not followed up in this survey. The reasons for the antenatal transfers were not requested but they were likely to be due to pregnancy related complications which required obstetric management. Following these transfers there were 554 women who commenced labour with the intention of giving birth in their home. While 500 (85.5%) women achieved this, 54 (9.2%) women transferred to hospital following the commencement of labour. Further details on transfers will be given later.

Table 1	**Women's experience of birth in domiciliary settings (n = 500)**
Labour	
Artificial rupture of membranes	4 (0.8%)
Meconium stained liquor	61 (12.2%)
Pain relief:	
Water	217 (43.4%)
TENS	20 (4%)
Birth positions	
Upright (incl. standing, squatting, kneeling, all-fours, birthing stool)	463 (93%)
Recumbent (incl. dorsal or side lying)	37 (7%)
Water births	54 (10.8%)
Presentations	
Cephalic	390 (98%)
Breech	7 (1.4%)
Face	1 (0.2%)
Birth numbers	
Singletons	499 (98.8%)
Twins	1 (0.2%)
Third stage of labour	
Physiological 3rd stage	473 (94.6%)
Active management of 3rd stage	27 (5.4%)
Received Syntometrine	39
Received ergometrine	8
Postpartum blood loss > 500mls	12 (2.4%)
Perineal trauma	
Intact perineum	333 (66.6%)
1st degree tear	80 (16%)
2nd degree tear	77 (15.4%)
3rd degree tear	0
Episiotomy	10 (2%)
Suturing required	72 (14.3%)
Condition of Infant at birth	
1 minute Apgar Score ≥ 8	468 (93%)(93.6%)
5 minute Apgar Score ≥ 8	491 (98.2%)
1 minute Apgar Score ≤ 7	32 (6.4%)
5 minute Apgar Score ≤ 7	9 (8.1%) (1.8%)
Infant feeding (n = 585)	
Initiated breast feeding	544 (93%)
Breast feeding at 6 weeks post partum	538 (92%)

Midwifery care during the birth

Artificial rupture of the membranes is rarely performed by domiciliary midwives and in this cohort (n = 500) just four women (0.8%) had their membranes ruptured by the midwife (Table 1). 61 (12.2%) women were reported to have meconium stained liquor following membrane rupture. The stage when this appeared was not requested; where meconium staining occurs early in labour or where changes in the fetal heart indicate fetal distress then appropriate action is taken. There were no recorded cases of meconium aspiration or neonatal asphyxia in any of the babies who had meconium stained liquor amni.

Pain relief

The authors were aware that domiciliary midwives do not tend to use pharmacological methods of pain relief for labour. As a result, the survey requested information regarding certain non-pharmacological methods of pain relief, in particular the use of water and trans electrical nerve stimulation (TENS). 217 (43.4%) women used water to relieve their pain while 20 (4%) women used TENS. The questionnaire did not enquire about the use of aromatherapy, herbs or homeopathy which are known to be used by some midwives (Cuidiú 2000).

Birth

Of the women who gave birth at home 463 (93%) women delivered in upright positions; this included standing, squatting, kneeling, all-fours and using a birthing stool. 37 (7%) women chose to deliver in dorsal or side lying positions and although many women used water as a method of pain relief just 54 (10.8%) women had water births.

490 (98%) of the babies had a cephalic presentation for delivery; there were seven breech deliveries, one face presentation and one set of twins. The midwives were not asked as to whether these complicated deliveries were anticipated; as a standard domiciliary midwives do not plan to deliver breech or twin pregnancies at home.

Third stage of labour

27 women experienced active management of the 3rd stage of labour with 473 women having a physiological 3rd stage. All the midwives carry Syntometrine and ergometrine but in this survey just 47 (5%) of the women who delivered at home received an oxytocic, 39 received Syntometrine and 8 received ergometrine. 12 (2.4%) women were reported to have a postpartum blood loss of greater than 500 mls. The midwives were not asked as to whether these women were transferred to hospital as a result of their blood loss.

Perineal care

The survey enquired about the rate of perineal trauma in the women who delivered at home. 333 (66.6%) women delivered with an intact perineum. 80 (16%) women had a first degree perineal tear and 77 (15.4%) women had a second degree tear. In all, there were 10 (2%) episiotomies performed. Of the 167 women who had perineal trauma just 72 (14.3%) required suturing. First degree tears and some second degree tears were left unsutured. There were no third degree tears.

Condition of infant at birth

Of the babies who delivered at home, 468 (93.6%) had Apgar scores of 8 or greater at 1 minute and 491 (98.2%) had scores of 8 or greater at 5 minutes. 32 (6.4%) babies had scores of 7 or less at 1 minute and 9 (1.8%) had scores of 7 or less at 5 minutes.

All the midwives are equipped to deal with emergency situations and carry suction and resuscitation equipment. The outcomes for three of the babies with low Apgar scores are detailed later.

Infant feeding

Though the women who transferred to hospital care in pregnancy are not included in the figures above in most cases the domiciliary midwife provided some postnatal care. The infant feeding figures therefore relate to the 585 women who had initially booked for a home birth. 544 (93%) of these women breastfed their babies and 538 (92%) were still breastfeeding at six weeks postpartum. Follow up later than this was not conducted.

Transfers to hospital

Of the total number of women (n = 585) who planned to have their baby at home, 85 (14.5%) women delivered in a maternity hospital (Table 2). As stated above, 31 (5.3%) women transferred to hospital care during their pregnancy and delivery details were not obtained. However, two of these women had babies with significant congenital abnormalities which were diagnosed in pregnancy. Both infants died in the early neonatal period. In addition to the antenatal transfers, 54 (9.2%) women transferred to hospital in labour and a further 11 (1.8%) women transferred post delivery. The overall rate of transfer was greater for primigravid women (35%) than for multigravidae (10.2%), particularly in labour. The indications for maternal transfer to hospital were not requested but it is likely that some primigravid women transferred for pain relief in labour. In this review, 33 (22.7%) of primigravidae transferred to hospital during labour. Most domiciliary midwives acknowledge that

transfers of primigravid women are more likely and because of this some do not accept them for booking. Indeed, Chamberlain et al (1997) found that 40% of all primigravid women who booked a home birth transferred to hospital, most of these during labour. In addition, eleven women transferred to hospital in the postnatal period (1.9%). Again reasons for transfer was not requested but it is probable that some of these women were transferred to hospital because their baby required admission.

Although 54 women transferred to hospital in labour, 37 of these women had normal vaginal births (Table 3). Of the instrumental births in hospital there were 5 forceps deliveries, 4 vacuum deliveries and 8 caesarean sections. Therefore, of the 554 women who commenced labour at home the spontaneous vaginal delivery rate was 96.9%. This gives an overall spontaneous vaginal delivery rate of at least 91.8% for the 585 women who had received midwifery led care and had booked a home birth. Delivery outcome for the 31 women who transferred to hospital care in pregnancy was not obtained.

Table 2 Transfers of women to hospital (n = 585)

	Primigravidae (n= 145)	**Multigravidae (n = 440)**	**Total Transfers (n = 585)**
Antenatal	15 (10.3%)	16 (3.6%)	31 (5.3%)
Labour	33 (22.7%)	21 (4.8%)	54 (9.2%)
Postnatal	3 (2.1%)	8 (1.8%)	11 (1.9 %)
Total	51 (35%)	45 (10.2%)	96 (16.4%)

Table 3 Type of delivery (n = 585)

Normal delivery in home	500 (85.5%)
Normal delivery in hospital	37 (6.3%)
Forceps delivery	5 (0.8%)
Vacuum delivery	4 (0.7%)
Caesarean section	8 (1.4%)
Transferred antenatally delivery outcome unknown	31 (5.3%)

Neonatal morbidity and mortality

Of the 500 babies born at home, 20 (4%) had problems requiring medical attention. 19 of these were admitted to hospital post delivery (Table 4). There were three perinatal deaths; one was an undiagnosed breech delivery, one infant had abnormal lungs on post mortem and one infant with Potter's Syndrome was stillborn. Three infants were born with Down's Syndrome and one baby had a cleft palate. It is not known if any of these congenital conditions were diagnosed in pregnancy or if these mothers had received ultrasound scans in their pregnancy. Fetal anomaly screening is not usually offered to pregnant women in Ireland.

One infant with an Apgar Score < 7 at five minutes was admitted to hospital but was discharged after 24 hours was therefore unlikely to have experienced hypoxic ischaemic encephalopathy or other sequelae as a result of a low Apgar Score. The remaining babies were admitted to hospital for reasons such as tachypnoea, feeding difficulties and jaundice requiring phototherapy. All of these babies were well on discharge from hospital.

Table 4 Morbidity and mortality of babies who were born at home (n = 500)

Morbidity / mortality	Number	Outcome
Tachypnoea	5	Admitted to hospital All resolved and discharged
Poor feeding	3	Admitted to hospital All feeding well on discharge
Jaundice	3	Admitted to hospital Phototherapy given. All well on discharge
Low Apgar score	3	Admitted to hospital - 7 at 5 mins. Discharged after 24 hours - Undiagnosed breech delivery. Early neonatal death - Early neonatal death. Abnormal lungs on postmortem
Down's Syndrome	3	Admitted to hospital
Cleft palate	1	Admitted to hospital
Potter's Syndrome	1	Still born. Not transferred to hospital
Brain tumour	1	Admitted to hospital at one week of age

Discussion

It has always been difficult to compare home birth statistics with hospital deliveries and even home births under different health care systems (Young & Hey 2000, MacFarlane 1997). Inevitably domiciliary midwives will only accept women who can be considered to have little risk of complications whereas maternity hospitals must provide care for all. Probably the most striking features of the above figures are the high percentage of women who commenced labour at home and had spontaneous vaginal births (96.9%). These women gave birth with little intervention and without pharmacological methods of pain relief. Though women who opt for a home birth can not be considered comparable to women who give birth in hospital, these figures

should be viewed in the context of the increasing caesarean section rates in many hospitals (Cuidiú 2000, Keen 1999). In addition to methods of delivery, episiotomy rates and perinatal mortality and morbidity rates are often used to audit maternity services (Olsen & Jewell 2000). In comparing episiotomy rates, the 2% achieved here compares well with the 4% to 80% reported nationally (Cuidiú 2000).

However, any review of home birth must primarily consider the issue of safety for women and their babies. As has been seen from the above figures, where problems emerge women and babies are transferred to hospital appropriately. Of obvious concern is the one infant who died who was an undiagnosed breech delivery; further details of this birth are unknown but nevertheless, the overall perinatal mortality rate is low. The stillbirth rate for this data at 0.5/1,000 and perinatal mortality rate at 6/1,000 appear favourable to national rates (Department of Health and Children 1999) however the small numbers involved make comparisons unwise.

A further important feature of this review is the number of women who successfully breastfed their baby (93%). This compares with reported figures from maternity units of between 20 – 60% (Cuidiú 2000). A woman who chooses a home birth may well be more inclined to breastfeed her baby but her success at continuing to feed may be related to her antenatal and postnatal midwifery care. Where postnatal midwifery care for women who give birth in hospital ceases at discharge, domiciliary midwives provide daily care for ten days or more, and frequently continue contact until six weeks post delivery. This continued support is likely to facilitate success at breastfeeding.

Conclusion

Though there are many limitations to this survey; including the lack of information on the transfer of women in pregnancy, labour or postpartum and the birth outcomes for women who transferred to obstetric care in pregnancy. The findings presented here are in keeping with current research which has indicated that home birth is no less safe than hospital birth for low risk women (Olsen & Jewell 2000). In relation to delivery outcomes, perineal trauma, incidence of breast feeding and neonatal mortality and morbidity it is apparent from the data presented here that the services of domiciliary midwives can rate highly in any of these criteria.

As domiciliary births are such a rarity in Ireland and midwifery education programmes do not provide community experiences, hospital based midwives and doctors do not meet the many women who deliver successfully at home. As a result, it is likely that only when women transfer to hospital care that hospital based midwives and the obstetric team meet with domiciliary midwives. These hospital transfers should not be viewed as evidence that home birth is hazardous rather they demonstrate that midwives can judge clinical situations and take appropriate action. As is apparent from this data, domiciliary midwives are open and willing to share their knowledge and experience of birth with other health care professionals and service planners. Midwives and service planners need to look closely at the evidence demonstrating the safety of home birth and fears about this practice must be allayed from those involved in the maternity services.

The authors are grateful to all the domiciliary midwives who took the time to compile their records to complete this survey.

References

Ackerman-Liebrich U, Voegeli T, Gunter–Witt K, et al (1996) Home versus hospital deliveries: follow up of matched pairs for procedures and outcome. British Medical Journal 313: 1313-1318.

An Bord Altranais (1994) Guidelines for Midwives Dublin: An Bord Altranais

Central Statistics Office (2001) Personal communication from official from Central Statistics Office. Cork

Chamberlain G, Wraight A, Crowley P. (1997) Home Births: The Report of the 1994 Confidential Enquiry by the National Birthday Thrust Fund. Carnforth: Parthenon

Commission on Nursing (1998) Report of The Commission on Nursing Dublin: Stationery Office

Cronk M, (2000) Home Birth. Continuity of care MIDIRS Midwifery Digest 10 (3) 381 – 382.

Cuidiú and Health Promotion Unit (2000) Preparing Together for Birth and Beyond: A consumer guide to the maternity services in Ireland Dublin: Cuidiú

Davies J, Hey E, Reid W, Young J (1996) Prospective regional study of planned home births. British Medical Journal 313 1302 – 1306.

Department of Health (1993) Perinatal Statistics 1993. Dublin: Stationary Office

Department of Health (1994a) Report of the Mother and Infant Care Scheme Review Group. Dublin: Department of Health

Department of Health (1994b) A National Breastfeeding Policy for Ireland. Dublin: Department of Health

Department of Health and Children (1999) Health Statistics 1999 Dublin: Stationary Office

Departmet o f Health and Children (2000) The National Health Promotion Strategy 2000 – 2005 Dublin: Stationary Office.

Expert Group on Domiciliary Births (1998) Second Report to the Chief Executive Officers. Unpublished Report by Expert Group on Domiciliay Births.

Food Safety Authority of Ireland (1999) Recommendations for a National Infant Feeding Policy. Dublin: Food Safety Authority of Ireland

Freeman V (1996) A Longitudinal study of growth, feeding practices and iron status in healthy children from birth to age two years. PhD Thesis Trinity College Dublin

Government of Ireland (1970) Health Act 1970 Dublin: Stationery Office

Keen A, Newburn M, Kaufmann T, Drife J (1999) The Rising Caesarean Rate: a public health issue. Conference Proceedings London: Profile Productions

MacFarlane A. (1997) Commentary the safest place of birth, is there a better analysis than meta-analysis? Birth 24 (1) 14-16.

Murphy J (1998) Home births an unresolved debate Irish Medical Journal 91 (5) 156.

Northern Region Perinatal Mortality Survey Coordinating Group (1996) Collaborative study of perinatal loss in planned and unplanned home births. British Medical Journal 313: 1306 - 1309.

O'Connor M. (1995) Birth Tides London: Harper Collins

O'Connell MP. & Lindow W. (2000) Caesarean section controversy. Further research is needed on why rates of caesarean section are increasing. BMJ. 320 (7241): 1074.

O'Driscoll K., Meagher D and Boylan P (1993) Active Management of Labour 3rd ed. Aylsebury England: Mosby Year Book

Olsen O, and Jewell MD. (2000) Home versus Hospital Birth [Cochrane Review] In: The Cochane Library, Issue 1, 2000. Oxford: Update Software

Olsen O. (1997) Meta-analysis of the safety of home birth. Birth 24 (1) 4-13

Pai M. (2000) Caesarean section controversy. A debate is needed on caesarean section rates in India [letter; comment]. BMJ. 320(7241):1073.

Quadros LG. (2000) Caesarean section controversy. Brazilian obstetricians are pressured to perform caesarean sections. BMJ. 320(7241):1073.

Roberts CL. Tracy S. Peat B. (2000) Rates for obstetric intervention among private and public patients in Australia: population based descriptive study. BMJ. 321(7254):137-41.

Tannam A (1998) Irish domiciliary midwife fights for her professional life British Journal of Midwifery 7 (1) 17

Wiegers T, Keirse M, van der Zee J, Berghs G (1996) Outcome of planned home birth in low risk pregnancies: prospective study in midwifery practices in the Netherlands. British Medical Journal 313: 1309 – 1312

Young G. Hey E. (2000) Choosing between home and hospital delivery. British Medical Journal 320: 798