Sexual & Reproductive Healthcare 6 (2015) 132–137

Contents lists available at ScienceDirect

Sexual & Reproductive Healthcare

journal homepage: www.srhcjournal.org

The characteristics of women who birth at home, in a birth centre or in a hospital labour ward: A study of a nationally-representative sample of 1835 pregnant women

Amie Steel [a,b,*], Jon Adams [a], Jane Frawley [a], Alex Broom [c], David Sibbritt [a]

[a] Office of Research, Endeavour College of Natural Health, Level 2, 269 Wickham St, Fortitude Valley, QLD 4006, Australia
[b] Australian Research Centre in Complementary and Integrative Medicine, Faculty of Health, University of Technology Sydney, 235-253 Jones St, Ultimo, NSW 2006, Australia
[c] School of Social Sciences, The University of New South Wales, Sydney, NSW 2052, Australia

ARTICLE INFO

Article history:
Received 14 December 2014
Revised 27 March 2015
Accepted 12 April 2015

Keywords:
Birthing centre
Home childbirth
Obstetrics
Midwifery
Reproductive health

ABSTRACT

Objectives: A woman's choice of birth setting can depend on a variety of factors including her preference, availability of services and legislative environment. However, examination of the characteristics of women in relation to their birth environment has been limited in scope and design. This study presents the comparative characteristics of women who birth at home, in a birth centre or in a standard hospital setting.

Methods: Cross-sectional survey of women (n = 2445) identified as pregnant or recently given birth in the 2009 survey of the "young" cohort (n = 8012) from the Australian Longitudinal Study on Women's Health.

Results: Women's birth setting was associated with a variety of factors including employment status, private health insurance, attitudes towards obstetric care, health status, use of intrapartum pain management, and adverse birth events.

Conclusion: Women's choice of birth setting may be affected by factors such as government and institutional policy, personal values, and economic situation. The confluence of these factors for individual women can impact on the birth settings available to women and the corresponding choices they make. A clear understanding of these factors is important to ensure women access the most appropriate birth environment to achieve the best maternal and foetal health outcomes.

Introduction

Contemporary maternity care often affords women the choice of various locations for the birth of their children. The birth setting used by women is determined by a confluence of factors including women's preference [1], availability of services [2], and the immediate legislative environment [3]. In Australia, the vast majority (96.9%) of women give birth in a standard hospital labour ward whilst 2.2% give birth in a hospital-based birth centre and very few labour and birth at home (0.4%) [4]. The dominance of hospitals as a preferred birth location has arguably been interpreted as driven by women's perception of risk [5,6] as well as their choice of maternity care provider [7]. For example, women who choose an obstetrician as their main care provider will inevitably birth in a hospital (either public or private) as it is the formal position of obstetricians that close access to obstetric, anaesthetic, operating theatre and resuscitation services in labour and during the immediate postnatal period is needed to ensure the safety of mother and baby [7].

Previous research suggests women receiving midwifery-led care, rather than obstetrician-led care, may have improved maternity and neonatal outcomes [3,8,9]. These outcomes are further supported by additional research which emphasises the value of care being provided by a known midwife throughout pregnancy and birth [10]. Such findings have driven support for alternative birth environments, including hospital-based birth centres and home births, in which midwives provide the primary care to women [1,2,11–13]. The birth centre model is proposed to be supportive of woman-centred care and midwifery-led service delivery whilst still providing women the assurance of easy access to obstetric services and equipment if needed – features which have been highlighted by some as placing the birth centre model at an advantage over home birth [14,15]. This latter benefit to birth centre care may also explain national figures which highlight a difference in numbers of *intended* birth centre births compared with *actual* birth centre births and

* Corresponding author. Office of Research, Endeavour College of Natural Health, Level 2, 269 Wickham St, Fortitude Valley, QLD 4006, Australia. Tel.: +61 07 3253 9523.
E-mail address: amie.steel@uts.edu.au (A. Steel).

http://dx.doi.org/10.1016/j.srhc.2015.04.002
1877-5756/

suggests a number of women who begin labour in a birth centre are transferred intrapartum to a standard hospital labour ward [4].

Preference for birth centre care is proposed to be due to women placing value on the experience of being in control at birth [16]. Women may also choose a birth centre due to a preference for not wanting pharmacological pain relief, and because they value continuity of care and want to have a known midwife present at the birth [16], approaches which are supported through birth centre services [17]. Meanwhile, admittance to birth centre care is often restricted to women who are classified as "low risk" in their pregnancy [18]. This selective access and screening is justified by arguments that midwives are not appropriately trained to provide care to women with complex obstetric needs and birth centre care denies women the necessary access to the services of a specialist obstetrician and high level technical equipment such as ventilators [19]. Meanwhile clinical research indicates birth centre care, even when following the same guidelines as standard obstetric care, results in: fewer emergency caesarean sections and vacuum extraction (for multiparous); less frequent epidural use; decreased incidence of foetal distress; and lower rates of anal sphincter tears [11,20].

Despite attempts to facilitate a woman-centred birth environment in hospital settings through birth centres, a small number of women still choose to birth at home [1,12,16,21]. The decision to birth at home remains highly controversial and is viewed by some as highly risky to mother and baby [15], and by others as vulnerable to current policy review and possible legislative change [22]. Women, in turn, report experiencing negativity from hospital staff in response to a decision to birth at home [23]. These issues contrast with the available evidence indicating that when comparing the benefits and harms of planned hospital births and planned home births for low-risk pregnant women, home birth can be appropriate and safe if attended by a qualified midwife and the transfer between home and hospital is uncomplicated [24,25]. In contrast, compared with birth centre births, hospital births have been found to result in a higher incidence of interventions and complications [24].

Proponents of hospital-based birth centres argue that managers of these facilities attempt to minimise the risk of home birth whilst still offering many of the advantages of an intimate birth setting supported by midwifery-led care thereby encouraging natural and low intervention birth [26]. In line with this, research suggests there are some shared characteristics between women who choose to give birth at home and those who opt for a birth centre for their labour and birth. For example, both groups of women are more likely to experience birth place as affecting mother–infant bonding and less likely to view birth as a medical process compared with those women birthing in hospital [27]. Likewise, those using birth centre care/home birth articulate an intention to use medical care if and when necessary [5]. Women choosing home birth are reported to be well-informed about the options available to them whilst many women planning a hospital birth appear to perceive hospital-based care as the only option [2]. Women birthing at home have been described as older, more educated, more feminist, more willing to accept responsibility for maintaining their health, better read on childbirth, and more likely to be multiparous [28]. These women also tend to rate their midwives much higher than labour-ward mothers [27,28]. However, other research has suggested that women who choose hospital births tend to be older, have a higher family income, a higher rate of miscarriage, and are more frequently pregnant after assisted reproduction than those who choose a home birth [6]. Ultimately, women strongly value their autonomy of choice regarding the location at which they will give birth [29].

The growing body of research which informs our understanding of women's choice of birth environment has been primarily based on qualitative research which focuses on women who have accessed a defined birth setting (e.g. home birth) [1,5,21,27]. Additionally, preliminary analysis has examined the characteristics of groups of women using different birth environments, but these data have been drawn from small data sets with limited generalisability [6,13,16,28].

Aim

This paper provides the first comparison of the demographic, health and attitudinal characteristics of a large, nationally-representative sample of women who have given birth in a hospital labour ward, hospital-based birth centre, or at home.

Methods

The Australian Longitudinal Study on Women's Health (ALSWH) was established in 1996 from a sample of women randomly selected from the Medicare database. The sample was subsequently divided into three cohorts, older (born 1921–1926), mid-age (born 1946–1951) and younger (born 1973–1978). The ALSWH was designed to examine demographic, social, physical, psychological and behavioural variables and their effect on women's health and well-being. In 2009, women from the younger ALSWH cohort (n = 8012) participated in their fifth survey and those who identified as being pregnant of having recently given birth at this time were invited to complete a sub-study in 2010 (n = 2445). The sub-study survey examined demographics, a range of maternity health service utilisation and attitudes and perceptions towards different maternity care. Ethics approval for the sub-study was gained from the relevant ethics committees at the University of Newcastle (#H-2010_0031), University of Queensland (#2010000411) and the University of Technology Sydney (#2011-174N).

Demographics

Women were asked to identify their employment and marital status, level of education, residential location (categorised as *urban* or *rural*), perceived income manageability, and health care insurance coverage.

Attitudes towards maternity care

Participants were invited to rate their agreement with a range of attitudinal statements related to their maternity care provision through a Likert scale. These statements included whether the women perceived any differences between conventional care providers, and features of their maternity care considered important by the women.

Use of maternity care health services and treatments

The women were asked to identify any health services or treatments used for pregnancy-related health conditions. In addition, women's use of intrapartum pain management techniques was examined including: breathing techniques; massage; hypnotherapy; transcutaneous electro nerve stimulation (TENS), water therapy, acupuncture/acupressure, nitrous oxide; pethidine; epidural; local anaesthetic and general anaesthetic.

Pregnancy health, outcomes and history

The women were asked to identify the birth outcomes for their most recent birth including occurrence of premature birth, caesarean section after onset of labour, and induction of labour. Women were also asked to report any history of adverse birth events such