Midwifery 30 (2014) 220–226

Contents lists available at ScienceDirect

Midwifery

journal homepage: www.elsevier.com/midw

Why are young Canadians afraid of birth? A survey study of childbirth fear and birth preferences among Canadian University students

Kathrin Stoll, PhD (Postdoctoral Fellow)[a,*], Wendy Hall, RN, PhD (Professor)[b], Patricia Janssen, PhD (Professor)[c], Elaine Carty, CNM, SciD (h.c) (Professor)[a]

[a] Division of Midwifery, University of British Columbia, B54-2194 Health Sciences Mall, Vancouver, British Columbia, Canada V6T 1Z3
[b] School of Nursing, University of British Columbia, T201 2211 Wesbrook Mall, Vancouver, BC, Canada V6T 2B5
[c] School of Population & Public Health, University of British Columbia, Rm 103, 2206 East Mall, Vancouver, British Columbia, Canada V6T 1Z3

ARTICLE INFO

Article history:
Received 17 May 2013
Received in revised form
9 July 2013
Accepted 15 July 2013

Keywords:
Caesarean section
Fear of birth
Media
University students

ABSTRACT

Objective: to examine attitudes towards birth that may be common among young adults who have been socialised into a medicalised birth culture. Specifically, we were interested in examining factors that might be associated with fear of birth and preferences for elective obstetric interventions among the next generation of maternity care consumers.
Design: secondary analysis of an online survey of university students.
Setting: British Columbia, Canada.
Participants: students from the University of British Columbia ($n=3680$). A quarter of the sample comprised Asian students, which allowed for analysis of cultural differences in attitudes towards birth. Both male and female students participated in the study; results are reported for the full sample, and by gender.
Measurements: a six item fear of childbirth scale was developed, as well as a 4 item index that measures students' concerns over physical changes following pregnancy and birth and a 2 item scale that assesses students' attitudes towards obstetric technology.
Findings: as we hypothesised, students who were more fearful of birth preferred epidural anaesthesia and birth by CS. Worries over physical changes following pregnancy and birth, favourable attitudes towards obstetric technology, and exposure to pregnancy and birth information via the media were also significantly associated with a preference for CS. Fear of birth scores were highest among students who reported that the media had shaped their attitudes towards pregnancy and birth. Asian students had significantly higher fear of birth scores and were more likely to prefer CS, compared to Caucasian students.
Implications for practice: young adults are contemplating pregnancy and birth in an increasingly technology-dependent society. Educational programmes aimed at reducing fear of childbirth and concerns over physical changes following pregnancy and childbirth might contribute to vaginal birth intentions among young adults. Midwives may use the findings to identify and counsel nulliparas who exhibit fear of birth and other childbirth attitudes that may predispose them to choose elective obstetric interventions.

Introduction

Fear of birth is a socio-cultural phenomenon that is often discussed in the context of the medicalisation of childbirth (Ponte, 2007). Medical anthropologist Davis-Floyd (2006) observed that childbearing women in North America super-value and uncritically accept obstetric technology, because 'not using it looks like you are giving your baby substandard care' (as cited in Ponte, 2007: 62). The trend toward medicalised birth is exacerbated by media depictions of birth as inherently risky, unpredictable, and fraught with complications (Declercq et al., 2006; Sakala, 2006; Zeldes and Norsigian, 2008; Morris and McInerney, 2010); such depictions may predispose young adults to view birth as frightening, epidural pain relief as necessary to cope with labour, and a medicalised, high-technology approach to birth as the optimal and safest way to deliver babies (Zeldes and Norsigian, 2008).

Fear of childbirth has implications for women's health because it is a primary psychological factor that contributes to women's requests for interventions and disruption of physiological labour.

* Corresponding author.
E-mail addresses: kathrin.stoll@midwifery.ubc.ca (K. Stoll), Wendy.Hall@nursing.ubc.ca (W. Hall), patti.janssen@ubc.ca (P. Janssen).

0266-6138/$ - see front matter © 2013 Elsevier Ltd. All rights reserved.
http://dx.doi.org/10.1016/j.midw.2013.07.017

The prevalence of childbirth fear has been estimated at 25% among pregnant nulliparous and multiparous women (Zar et al., 2001; Hall et al., 2009). In Finland, severe fear of childbirth affects 6–10% of pregnant women and is characterised by nightmares, physical complaints, and difficulties concentrating on work or family activities (Saisto and Halmesmaki, 2003). Eriksson et al. (2005) detected intense fear of birth in 23% of women and 13% of men. A review of the literature by Hanson et al. (2009) identified paternal fears including: harm to the mother or newborn, partners' pain, feelings of helplessness, lack of knowledge, and concern about high-risk interventions.

Fear of childbirth among pregnant women is associated with a preference for CS (Ryding, 1993; Nieminen et al., 2009; Karlström et al., 2010; Haines et al., 2012), longer labours (Adams et al., 2012), increased use of epidural anaesthesia (Hall et al., 2012a, 2012b), and increases in emergency CS (Ryding et al., 1998). Women most commonly fear labour pain and harm to the baby (Geissbuehler and Eberhard, 2002, Melender, 2002; Saisto and Halmesmaki, 2003; Maier, 2010; McAra Couper et al., 2010); they view their fears as mitigated by obstetric interventions, such as epidural anaesthesia for relief of labour pain and planned CS to avoid labour pain (Stoll & Hall, in press-a). Most studies of childbirth fear have focused on pregnant women and their partners, with little attention paid to fear of birth and preferences for obstetric interventions among the next generation of maternity care consumers (Saroli-Palumbo et al., 2012; Stoll and Hall, in press-a, in press-b).

Purpose of the study

Our secondary analysis of an online survey aimed to identify university students' (n=3680) attitudes towards pregnancy and birth, with a focus on fear of childbirth and preferences for obstetric interventions. Specifically, we assessed attitudes towards birth that may be associated with students' level of childbirth fear and preference for CS.

Hypotheses

1. Students who prefer CS, compared to students who prefer vaginal delivery, will: hold more favourable views towards obstetric technology, be more likely to perceive birth as inherently risky, be less concerned about CS surgery, and be more likely to express worries about bodily changes during pregnancy and after birth.
2. Fear of birth scores will be higher among students who: prefer CS, prefer epidural anaesthesia, indicate that the media shaped their attitudes towards pregnancy and birth and believe that childbirth is inherently risky.

Methods

Procedures

The Behavioural Research Ethics Board at the University of British Columbia approved our study following a review of the research questions, protocol for analysis and choice of the questionnaire items (certificate #: H11-00221). In September 2006, enrolment services sent a cover letter, on behalf of the researchers, to all undergraduate and graduate students at the University of British Columbia (N=42,583). We specified two inclusion criteria: participating students had to be childless at the time of data collection and express a desire to have one or more children. Male students were invited to participate in the study because they were regarded as contributing significantly to maternity care decisions, once their partners experience pregnancy.

The survey instrument consisted of four sections for a total of 70 questions. Section 1 of the survey included nine questions about participants' demographic information and reproductive goals. In Section 2 (seven questions), participants were asked to indicate what mode of delivery they would prefer, how they planned to cope with labour pain, whom they would choose as their maternity care provider, and where they would prefer to give birth. Section 3 (43 items) comprised items that assessed students' attitudes towards pregnancy, labour, birth, and the postpartum period. In Section 4 (11 items), questions elicited participants' preferences for pregnancy and childbirth education, as well as the sources of information that shaped their attitudes towards pregnancy and birth.

Measurement and psychometric properties of key variables

The Likert scales for the attitude items (Section 3 of survey) were anchored from (1) strongly disagree to (6) strongly agree. Students were given the option of choosing 'I don't know' for each attitude item; this option was recoded as a missing value prior to data analysis.

Fear of childbirth

A 6-item fear of birth scale was created from existing attitude items for the purpose of the study. Three items measured fear of birth (I am worried that labour pain will be very intense; I am afraid that I might panic and not know what to do during labour; I am fearful of the labour process). Three items measured fear of birth and three reverse-scored items assessed low fear of birth (I believe I -my partner- will have enough confidence to give birth vaginally; I feel that my -my partner's- body is able to successfully birth a child; I think I -my partner- will be able to handle the pain of childbirth). The Cronbach's alpha for the scale was adequate (0.75). Of 3860 students, 2283 completed all 6 items of the scale (see Fig. 1). The development and psychometric testing of the scale is described in detail elsewhere (Stoll and Hall, in press-b).

Attitudes towards obstetric technology

To create a scale that measured attitudes toward obstetrical technology, we summed two attitude items: (1) technology is necessary to deliver a child; and (2) childbirth requires a reliance on technology and medical interventions. Of 3680 students, 2732 (74.2%) answered both items. Items were summed (range of scores=2–12) and recoded into favourable attitudes towards obstetric technology (scores of 8 or higher) and unfavourable attitudes

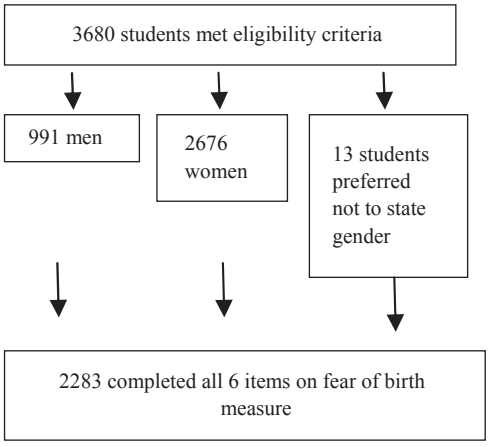

Fig. 1. Sampling strategy.