



Women's experiences of outpatient induction of labour with remote continuous monitoring

Ediri O'Brien, BSc Hons (Research Assistant)^{a,*}, Zubair Rauf, MB, BS (Clinical Research Fellow)^b, Zarko Alfirevic, PhD, FRCOG (Professor of Fetal and Maternal Medicine)^b, Tina Lavender, PhD, MSc, RM, RGN (Professor of Midwifery)^a

^a School of Nursing, Midwifery & Social Work, University of Manchester, Manchester M13 9PL, UK

^b Department of Women & Children's Health, University of Liverpool, Liverpool Women's Hospital, Liverpool L8 7SS, UK

ARTICLE INFO

Article history:

Received 6 October 2011

Received in revised form

24 January 2012

Accepted 28 January 2012

Keywords:

Outpatient induction

Cervical ripening

Remote monitoring

Women's experiences

ABSTRACT

Objective: to gain insight into women's experiences and preferences for induction in the home as part of a trial investigating the feasibility and acceptability of outpatient induction of labour with remote monitoring.

Design: a qualitative study using semi-structured individual interviews. Interview transcripts were subjected to thematic analysis to identify the dominant themes regarding women's experiences of outpatient induction.

Setting: a large maternity hospital in the North West of England.

Participants: fifteen women who participated in the main trial of outpatient induction of labour with remote continuous monitoring.

Findings: three main themes were identified; the need for women to 'labour within their comfort zone'; their desire to achieve 'the next best thing to a normal labour' and the importance of a 'virtual presence' to offer remote reassurance.

Conclusions: women's preference for the outpatient setting of induction of labour is dominated by their need to labour within their comfort zone. Outpatient induction offered women the familiarity and freedom of the home environment, and the resulting physical and emotional comforts helped women cope better with their labour and improved their birth experiences. While remote monitoring offered some reassurance, women still depended on effective communication from hospital staff to provide the virtual presence of a health professional in the home.

Implications: the combination of slow-release prostaglandin and a remote monitoring device may provide low risk women with an improved induction and labour experience. While ongoing studies continue to explore further the safety of interventions at home, this study has importantly considered women's views and confirmed that induction at home is not only acceptable to women but also that the outpatient experience is preferable to long inpatient inductions.

© 2012 Elsevier Ltd. All rights reserved.

Introduction

It has frequently been reported that over 20% of all labours in the United Kingdom (UK), United States of America and many other western countries are induced (ACOG, 2009; NHS Maternity Statistics, 2009–2010; Caughey et al., 2009; WHO, 2011), placing an additional burden on already stretched health services (NICE, 2008; Moleti, 2009). Indications for induction may be medical, obstetric or even social (NICE, 2008; ACOG, 2009; Moleti, 2009;

Mozurkewich et al., 2009), but despite the benefits to mother and baby, induction of labour can still have a negative impact on women's birth experiences. Induction of labour is more painful, more likely to result in an epidural or assisted birth and has been associated with decreased maternal satisfaction (Shetty et al., 2005; Declercq et al., 2006; NICE, 2008). Shetty et al. (2005) evaluated women's perceptions, expectations and satisfaction with labour induction in a questionnaire based study. Post-induction questionnaire results ($n=314$) showed that women felt induction had taken longer than expected (40%, $n=126$); was more uncomfortable than anticipated (38%, $n=119$) and required more vaginal examinations than they expected (27%, $n=84$) and women were unable to move around as much as they would have liked (18%, $n=55$). Despite the limited responses available, findings illustrated the concerns and

* Correspondence to: Jean MacFarlane Building, School of Nursing, Midwifery & Social Work, University of Manchester, Manchester M13 9PL, UK.

E-mail address: ediri.obrien@manchester.ac.uk (E. O'Brien).

issues that contribute to reduced maternal satisfaction with artificially induced labours.

Many studies have researched the advantages and disadvantages of different modes of induction (Boulvain et al., 2001; Barrilleaux et al., 2002; Alfirevic et al., 2009; Kelly et al., 2009a; Abdel-Aleem, 2011) but recently there have been calls to also consider the setting of labour inductions. Outpatient induction (or cervical ripening) may offer a cost-effective alternative to standard inpatient procedures for low risk women and study evidence is beginning to demonstrate the feasibility and efficacy of the outpatient approach (Biem et al., 2003; Bollapragada et al., 2009; Kelly et al., 2009b). A recent Cochrane review (Dowswell et al., 2010) of outpatient induction methods found several pharmacological agents and mechanical methods may be suitable in the outpatient setting but there was little evidence regarding women's preferences. Few trials of outpatient induction have addressed maternal satisfaction directly, but secondary outcome evidence suggests that women are accepting of the outpatient experience (Biem et al., 2003; Bollapragada et al., 2009; Kelly et al., 2009b). Previous assessments however, have offered little insight into women's experiences of outpatient induction. More in-depth exploration is required to understand women's preferences for induction of labour settings and the issues that impact on their decisions and subsequent level of satisfaction.

A recently completed study (Rauf and Alfirevic, 2011) investigated the feasibility and acceptability of outpatient induction of labour using a slow release prostaglandin (Proppess) and a telemetric device (Monica AN24) for the remote continuous monitoring of fetal heart activity, uterine electrical activity and maternal heart rate. In addition to clinical primary outcome data, a mixed method approach was employed to assess the acceptability of the intervention. Maternal satisfaction with the outpatient experience was evaluated using self-completed, semi-structured diaries. Diaries are a flexible data collection tool for obtaining longitudinal data on an individual's perspective and experiences and recording actions or events (Verbrugge, 1980). They offer a valuable strategy to detect individual changes over time within a lived-in context (Richardson, 1994). However, a disadvantage of diaries is the reliance on the user to record data, which can result in variation in the amount and content of information provided (O'Brien et al., 1997). Follow-up interviews were therefore conducted to allow in-depth exploration of the important issues raised from the woman's perspective. Results of the clinical and diary data that address feasibility and acceptability are reported elsewhere (Rauf et al., 2011). This paper reports on the insight into women's experiences and preferences for induction in the home, gained through the individual interviews.

Methods

The prospective cohort study was conducted at a large maternity hospital in the North West of England and ethical approval from a local Research Ethics Committee was obtained (REC-08/H1017/194). The study aimed to evaluate the feasibility and acceptability of remote continuous trans-abdominal fetal ECG monitoring in women undergoing induction of labour with slow release prostaglandin. Eligible women i.e. those with a healthy singleton pregnancy, cephalic presentation, gestational age $\geq 37^{+0}$ and parity < 4 were provided with study information. Written consent was obtained and a date set for induction of labour. On the day of induction fulfilment of additional criteria i.e. intact membranes, Bishop score < 6 and 60 mins normal trans-abdominal fetal ECG monitoring following insertion of the slow release dinoprostone pessary was also required before women could go home. Women with medical problems, contra-indication

to slow release 10 mGM dinoprostone pessary, previous caesarean section or maternal age < 18 years were excluded from participating, as were those who did not have a birthing partner at home, did not have access to telephone and transport or lived more than 60 mins drive away from the hospital. While at home, the wireless monitoring device relayed fetal ECG, uterine activity and maternal heart rate in real time to the hospital, which was reviewed by midwifery staff at least once every hour. A mixed methods design was used to assess maternal views of the outpatient induction of labour experience utilising self-complete diaries and semi-structured individual interviews. A qualitative interpretive approach allowed for in-depth exploration of views and experiences from a personal perspective. The rich data generated with this approach facilitates a deeper understanding of the important issues within the lived-in context (Crotty, 2003).

Diaries completed during the outpatient setting were placed in sealed envelopes and collected by the clinical team (ZR) on readmission to hospital. Following birth women were asked if they wished to participate in a face-to-face interview to enable further exploration of their experiences. Diaries were forwarded by the clinical team (ZR) to the qualitative team (EOB) along with the contact details of women interested in having follow-up interviews. Interviews were arranged by the qualitative team (EOB) and took place at the woman's home using a semi-structured interview schedule and typically lasted 30–45 mins. Interviews were audio recorded and later transcribed verbatim using study numbers and pseudonyms to maintain anonymity of participants. Interviews transcripts were imported into MAXQDA2 to assist with the management and organisation of data and then subjected to inductive thematic analysis. Thematic analysis is the foundational method of qualitative analysis as the process of identifying, analysing and reporting patterns or 'themes' in the data is common to various forms of qualitative analysis (Braun and Clarke, 2006). Analysis of study data involved familiarisation with the data through reading and re-reading transcripts; commonalities and differences were identified and systematically coded before collating codes into potential themes. Two researchers (EOB and TL) independently analysed data to minimise interpreter bias and a consensus was reached on the overarching themes. An audit trail was maintained throughout.

Findings

One hundred and four women were recruited; however 24 women laboured before their induction date and 10 others were withdrawn from the study for a variety of reasons i.e. changed their mind ($n=2$); Bishop score > 6 ($n=3$); cord presentation ($n=1$); unable to establish link between monitoring device and online server ($n=4$). Therefore a total of 70 women went home for up 24 hrs while fetal ECG and uterine activity was monitored in the hospital via the wireless technology. Reasons for induction were prolonged pregnancy ($n=69$) and symphysis pubis dysfunction ($n=1$). The time women spent at home ranged from 1 hrs 55 mins to 22 hrs 4 mins with a median of 10 hrs 35 mins. Fifteen one-to-one in-depth interviews were conducted and analysed. All women interviewed had been induced for prolonged pregnancy reasons. Table 1 shows additional participant characteristics, induction and delivery data. Three main themes were revealed with regards to women's preferences for outpatient induction of labour. The dominant theme was the need for women to 'labour within their comfort zone'; followed by their desire to achieve 'the next best thing to a normal labour' and the importance of a 'virtual presence' to offer remote reassurance. Direct quotations are used to contextualise women's views and illustrate the themes identified.

Download English Version:

<https://daneshyari.com/en/article/10515884>

Download Persian Version:

<https://daneshyari.com/article/10515884>

[Daneshyari.com](https://daneshyari.com)