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‘Tough love’: The experiences of midwives giving women sterile water injections for the relief of back pain in labour

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ABSTRACT

Objective: To explore midwives’ experiences of administering sterile water injections (SWI) to labouring women as analgesia for back pain in labour.
Design: A qualitative study, which generated data through semi-structured focus group interviews with midwives. Data were analysed thematically.
Setting: Two metropolitan maternity units in Queensland, Australia.
Participants: Eleven midwives who had administered SWI for back pain in labour in a randomised controlled trial.
Findings: Three major themes were identified including: i. SWI, is it an intervention?; ii. Tough love, causing pain to relieve pain; iii. The analgesic effect of SWI and impact on midwifery practice.
Key conclusions: Whilst acknowledging the potential benefits of SWI as an analgesic the midwives in this study described a dilemma between inflicting pain to relieve pain and the challenges encountered in their discussions with women when offering SWI. Midwives also faced conflict when women requested SWI in the face of institutional resistance to its use.
Implications for practice: The procedural pain associated with SWI may discourage some midwives from offering women the procedure, providing women with accurate information regarding the intensity and the brevity of the injection pain and the expected degree of analgesic would assist in discussion about SWI with women.

Introduction

Sterile water injections (SWI) are often perceived by midwives as a reliable and effective means of pain relief for women with back pain in labour (Lee et al., 2012) However, the significant pain associated with the injection may be sufficient to deter labouring women from considering using SWI for pain relief (Martensson and Wallin, 2008b; Hutton, 2009). Procedural, also referred to as clinically inflicted, pain is not often considered when reviewing medical procedures performed on adults, in particular those related to pain relief (Madjar, 1998), for example the insertion of spinal or epidural catheters. The NICE guideline on Intrapartum Care (National Institute for Health and Care Excellence, 2014)' which has had a significant influence on maternity care practice in the UK and internationally, makes reference to SWI as ‘injected water papules’ and recommends against their use (section 8.3.6.4, p333); this recommendation appears to reflect concern regarding the degree of procedural pain associated with SWI. No studies have yet explored midwives' attitudes towards causing procedural pain and whether this presents a barrier to SWI use. In fact there is little literature exploring the clinicians’ attitudes with respect to causing procedural pain in adults, however short-lived, seemingly the only study conducted on this topic was reported two decades ago (Madjar, 1998).

In a phenomenological study of nurses attitudes to inflicting procedural pain in a burns or oncology unit, Madjar (1998) describes clinically inflicted pain as often being invisible to clinicians, who tend to view it as an inevitable and non-harmful aspect of treatment. However, where shared control and a relationship of trust existed between the patient and clinician, this worked to preserve the integrity of the therapeutic relationship when procedural pain occurred (Madjar, 1998).

SWI has been examined for its analgesic potential in labour in both

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non-pharmacological (Labrecque et al., 1999) and pharmacological (Ranta et al., 1994) studies., with results suggesting that clinicians' perceptions are somewhat polarised. For example, where SWI is positioned as an alternative, or 'natural', therapy, i.e.it is 'only water', it is not viewed as having the potential to cause harm. This contrasts with the view that injecting water is a clinical procedure that may cause harm by delaying women's access to 'real' analgesia, e.g. epidural anaesthesia. In a study which explored Australian midwives knowledge and use of SWI, findings suggested that some viewed the procedure as invasive, whilst others were sceptical about the analgesic effects (Lee et al., 2012). This raises the question of whether SWI sits within the midwifery scope of supporting normal birth or, as it is an injection, is more likely to be seen as a medical intervention.

Although the use of SWI as an analgesic option in labour is common in Sweden (Martensson and Wallin, 2006), it is less so in other countries including the United Kingdom, Australia and the United States of America (Martensson et al., 2008a; Lee et al., 2012). A contributing factor to differences in uptake may be opposition to the use of SWI, with an Australian survey reporting that over 30% of midwives had experienced resistance to the use of SWI from other midwifery and/or medical colleagues (Lee et al., 2012).

To date no studies have reported specifically on midwives experiences of inflicting clinical pain through the administration of SWI. Nor has research explored more generally midwives attitudes to SWI use in clinical practice. This paper addresses both gaps in the extant literature.

Methods

Study aim

The aim of this study was to describe midwives' experiences of administering SWI and views about use in clinical practice.

Study design

A qualitative sub-study of a randomised controlled trial examining the use of SWI for back pain in labour (Sterile Water Injections Techniques Comparison: SWITCh trial: Trial registry number ACTRN12609000964213) conducted at two metropolitan hospitals in Queensland, Australia (Lee et al., 2013).

Participants, data collection and analysis

Methods for recruitment, data collection and analysis have been previously described (Lee, Kildea, and Stapleton, 2015). In summary, midwives (n = 11) participating in the SWITCh trial consented to, and participated in, focus groups (n = 3). There were two groups of four participants and one group of three. The focus group interviews were conducted at the midwives workplaces, lasted approximately one hour and were audio recorded. Topics for discussion were based upon areas of interest to the study and domains identified in the literature (Table 1). The focus groups were facilitated by the first author (PhD candidate) whilst field notes, including the order in which participants responded, were taken by the third author. The focus groups were transcribed by a third party, who also assigned participants' pseudonyms. All transcriptions were read and verified as accurate by the first author. The first and third authors independently coded all transcripts and resolved discrepancies before agreeing a final coding scheme. Data were then analysed thematically (Mason, 2002) utilizing NVivo qualitative data analysis software (QSR International Pty Ltd. Version 8, 2009). To assess whether the themes accurately reflected the original data they were evaluated against the original transcriptions and coding structure to ensure a consistent progression. Subthemes underwent an iterative process that involved reviewing, collapsing and merging into a final thematic structure (Tong et al., 2007). Examples of how data were employed in the coding process are provided in Table 3.

Table 1
Guides for focus group interviews.

Domain	Guiding prompts
Supporting women in labour	Thoughts and ideas about what it is to be the midwife supporting women in labour What (non-pharmacological) strategies etc. would you use to help women cope with pain in labour? For women specifically wanting to have a normal birth (drug free)?
Applying Sterile water Injections in practice	First time you used it (expectations, feelings etc.) An example of when it worked well An example of when it did not work well, (coping with analgesic failure) How do women respond to the injections?
Injection pain	Inflicting pain on women (pain versus effect) Influences and considerations in offering women SWI
Changing practice	Has using SWI changed the way you practice (management of back pain)? Have you experienced resistance to the use of SWI? Likelihood to recommend the practice to other midwives and women, why or why not?

Results and discussion

Participant descriptions and demographics are provided in Table 2. Data analysis identified the following three themes:

i. SWI: Midwifery strategy or medical intervention? (sub theme; Resistance to SWI)
ii. Tough love – causing pain to relieve pain (sub theme; 'pain talk' – presenting information about SWI to women);
iii. The analgesic effect of SWI and impact on midwifery practice.

Representative quotes are provided to support the text commentary. Where necessary, clarification and non-verbal content has been provided, for example: (laughs). Some quotes were edited to maintain focus on the issue under discussion; the format [...] indicates where this has occurred.

Theme i: SWI - Midwifery strategy or medical intervention?

Some midwives viewed SWI as invasive, were generally unsupportive of the practice, and/or were suspicious regarding effectiveness. In this context SWI was referred to as an 'intervention' (Lee et al., 2012). Although there is no precise definition in the midwifery/obstetric literature regarding what constitutes an intervention during labour, in this study the term is used to refer to a treatment that is either clinically justified or one instigated for convenience, clinician's choice or to achieve efficiency. The term has also be used to describe aspects of care that are not seen to sit comfortably within the concept of woman centred care (Maputle and Donavon, 2013). An interactive discussion during one focus group challenged participants' ideas about what constituted an intervention, how this defined their views of midwifery practice and philosophy, and where they positioned SWI within these debates

> *Are you hinting that it's (SWI) an intervention? That its non-midwife? [...]Is that what we are getting at? I think it's very midwife. It's as midwife as a bath because it's not a drug. It's invasive, but it's as invasive as we can get. It's immediate. It's effective.* (Alexandra, midwife eight years)

> *I don't feel like it's an intervention at all because it has no lasting effects on mother or baby. [...] An epidural clearly goes against how the body works but the sterile water is dot, dot, done and she*