Healthcare professionals' attitudes, knowledge and self-efficacy levels regarding the use of self-hypnosis in childbirth: A prospective questionnaire survey

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ABSTRACT

Objective: to examine healthcare professionals' attitudes, knowledge and levels of self-efficacy regarding the use of self-hypnosis in childbirth.
Design: a prospective survey.
Setting: two large maternity units in London, England.
Participants: healthcare professionals (*n*=129) involved in the care of childbearing women (anaesthetists, midwives and obstetricians).
Methods: online questionnaire assessing healthcare professionals' experience, knowledge, attitudes and self-efficacy relating to self-hypnosis in childbirth.
Main outcome measures: attitude, self-efficacy and knowledge.
Findings: over half of the participants surveyed (56%) reported they had minimal or no knowledge of hypnosis. Higher levels of knowledge were associated with higher levels of self-efficacy ($p < 0.001$) and also with more positive attitudes ($p < .001$). Midwives reported significantly higher levels of knowledge, more positive attitudes (7.25, 95% CI: 4.60–9.89) and higher levels of self-efficacy (3.48, 95% CI: 1.46–5.51) than doctors. Midwives also reported more exposure to/experience of hypnosis than doctors, and more exposure was significantly associated with higher levels of self-efficacy (midwives $p < .001$; doctors $p=.001$). Professionals who would plan to use self-hypnosis in their own or partners' births had significantly higher self-efficacy scores ($p < .001$).
Key conclusions: if healthcare professionals are to effectively support women using self-hypnosis in childbirth, they need to be confident in their ability to facilitate this method. Previous research has established that self-efficacy is a strong indicator of performance.
Implications for practice: Professionals with more knowledge of self-hypnosis are also more confident in supporting women using this technique in childbirth. Multi-disciplinary staff training which aims to increase knowledge, and which includes exposure to hypnosis in labour, may be beneficial in assisting staff to support women choosing to use self-hypnosis in labour.

Introduction

Evidence suggests that fear and anxiety during pregnancy is associated with outcomes such as emergency and elective caesarean section, increased need for pain relief in labour, low birth weight infants and poorer perinatal mental health (Zar et al., 2001; Wijma et al., 2002; Dunkel Schetter and Tanner, 2012; Hall et al., 2012). There has been an increase in research into antenatal psychological techniques which aim to reduce anxiety and improve maternal satisfaction and perinatal mental health, and reduce pain, medical interventions and requests for caesarean sections (Fontein-Kuipers et al., 2014). These techniques include yoga, meditation, mindfulness,

hypnosis, and psychoeducational therapies. A recent meta-analysis of such antenatal interventions showed a small but significant reduction in maternal distress in at-risk women (Fontein-Kuipers et al., 2014).

Hypnosis is one of these techniques which involves an altered state of consciousness that reduces awareness of the external environment, whilst increasing receptivity to suggestions, in order to facilitate changes in behaviour and perception (Gamsa, 2003). During childbirth, suggestions focus on increasing feelings of relaxation, comfort, safety and reducing anxiety and fear (Madden et al., 2016). The Mongan Method and Natal Hypnotherapy are two antenatal education programs which teach self-hypnosis to childbearing women and are widely available in high-income countries (Howell, 2009; Mongan, 2005).

Self-hypnosis can be used independently by women and may enhance feelings of self-confidence, empowerment and well-being (Simkin and Bolding, 2004). Interest in and use of self-hypnosis in labour is increasing (Wainer, 2001; Walker et al., 2009; Werner et al., 2013; Whitburn et al., 2014). In a national survey of 23,000 women using maternity services in England in 2013 by the Care Quality Commission, 34% of women planned to use hypnosis, breathing and massage when giving birth (Care Quality Commission, 2013). The US report 'Listening to Mothers III' surveyed 2400 women who gave birth in hospital. This report revealed that 25% of women used mental techniques such as relaxation, visualisation and hypnosis in labour (Declercq et al., 2013).

There is some evidence of effectiveness in non-maternity clinical areas, showing hypnotherapist-led hypnosis and self-hypnosis are effective in reducing fear and anxiety (Moore et al., 2002; Saadat et al., 2006; Lang et al., 2008; Marc et al., 2009). In maternity, a Cochrane review concluded that hypnosis may reduce the overall use of pharmacological analgesia during labour although not epidural use, but further high-quality research is needed (Madden et al., 2016). Since this review, there have been three large randomised-controlled trials undertaken in Denmark, Australia and the UK (Werner et al., 2013; Cyna et al., 2013; Downe et al., 2015) which studied the efficacy of hypnosis and found no significant reduction in the primary outcome (use of epidural anaesthesia). However, the recent UK-based SHIP Trial (Self-Hypnosis for Intrapartum Pain) did find a significant reduction in postnatal fear and anxiety (Downe et al., 2015).

The trials studying self-hypnosis in childbirth (Werner et al., 2012; Cyna et al., 2013; Downe et al., 2015) had a number of limitations. In all three studies hypnosis training was delivered via two or three 45–60 minute sessions in the third trimester of pregnancy. These studies do not tell us whether longer courses started in early pregnancy would improve efficacy; this is relevant because self-hypnosis in childbirth courses typically involve 12 hours of face-to-face teaching.

In relation to their trial, Werner et al. (2013) commented that midwives had little or no knowledge of hypnosis, and this lack of awareness may have hindered the hypnotic process. If clinicians are not aware that women are using self-hypnosis, or if they have little knowledge of the technique, a woman's ability to use hypnosis in labour may be inhibited. Previous studies in other acute clinical settings, found improved effectiveness when both hypnosis and training of staff in supporting patients using hypnosis was implemented when compared with hypnosis alone (Lang et al., 2000, 2006, 2008). Self-efficacy refers to a person's estimate of his or her ability to perform a specific task successfully (Sandall et al., 2010). Perceived self-efficacy is an important element of behaviour, enabling people to act on intentions and try previously feared actions (Ajzen and Madden, 1986; Gollwitzer, 1993). Bandura's Theory of Self-Efficacy (Bandura, 1977; 2012) and the Theory of Planned Behaviour (Ajzen, 1991) propose a model about how human behaviour is guided. This model is increasingly used to predict attitudes and intentional behaviour in relation to clinical actions (Eccles et al., 2006). Organisational research has shown that self-efficacy can predict the performance of an individual, and therefore is a valuable way of evaluating healthcare

professionals' behaviour and support of women using self-hypnosis in childbirth.

Given the lack of published data about healthcare professionals' knowledge of hypnosis, this study aimed to examine staff knowledge, attitudes, experience of and self-efficacy levels relating to the use of hypnosis in childbirth in two UK maternity units, and examine associations between these factors. This study therefore aimed to address the following research questions:

In relation to self-hypnosis in childbirth:

- What is the level of knowledge, self-efficacy and attitudes reported by healthcare professionals and does this differ between midwives and doctors?
- What is the association between healthcare professionals' attitudes and self-efficacy and does this differ between midwives and doctors?
- Is there an association between:

Level of knowledge and: (a) self-efficacy and (b) attitude?
Self-efficacy levels and: (a) exposure (witnessing self-hypnosis in childbirth) and (b) personal preference regarding use of self-hypnosis?

Methods

Ethics and governance

This study was approved by a University Research Ethics Committee (Reference: PNM/14/15-75). Research governance and managerial approval was provided by participating sites.

Participants, setting, and recruitment

Participants were included if they were a qualified midwife, anaesthetist or obstetrician currently working in maternity services. Participants were excluded if they were students or retired. Participants (*n*=129) were all healthcare professionals (midwives, obstetricians and anaesthetists) involved in providing maternity care at two large inner London maternity units. An invitation email was sent to these staff groups via the staff email distribution lists. The email included a direct link to the online survey which included the participant information and confirmed consent.

Validation, piloting and questionnaire and scale development

In the absence of an existing validated tool on this subject, a validated questionnaire of complementary medicine (Complementary and alternative medicine Health Belief Questionnaire: CHBQ) was adapted. The CHBQ demonstrates internal consistency (Cronbach's coefficient alpha was 0.75), reliability and validity (Lie and Boker, 2004). Items were also adapted from pre-existing surveys used in studies which examined knowledge, attitudes and self-efficacy (Coldrey and Cyna, 2004; Eng and Cyna, 2006; Sandall et al., 2010; Stewart et al., 2014).

A pilot questionnaire was developed to examine healthcare professionals' knowledge, confidence and attitudes to self-hypnosis in childbirth. The questionnaire was reviewed and developed using cognitive interviewing, a technique in which the interviewer asks the interviewee to give a concurrent verbal account of their thinking as they read and complete the survey (Drennan, 2013). Four healthcare professionals (three midwives and an obstetrician) with experience of caring for pregnant women and research reviewed the questionnaire for clarity, understanding and completion time, ensuring face and content validity. Minor adjustments were made following piloting.

The final questionnaire contained five sections: demographic data, level of knowledge, exposure to and training in hypnosis, and a series of Likert-type statements relating to attitudes to self-hypnosis in child-