

The importance of pain histories for latent phase labour

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Overview

Latent phase labour has been identified as a challenging time for women (Cheyne et al 2007, Barnett et al 2008, Hundley et al 2020) and midwives (Cheyne & Hundley 2009, Hanley et al 2016). A key question is how best to support women during this period without increasing their risk of unnecessary interventions; managing labour pain is an important aspect.

In this paper we suggest that midwives can draw on lessons from the field of musculoskeletal conditions, where it is well-acknowledged that there are multiple factors that contribute to constructing perceptions of chronic or long-term pain across the lifespan.

We draw on knowledge around a woman's previous pain experiences and how this may contribute to perceptions of labour pain. We propose that midwives have an early discussion with women about their previous pain experiences.

This paper is presented as one of two papers aimed at 'unpicking' elements of pain perception in labour.

Influencing pain

Recording pain management is a feature of the World Health Organization (WHO) *Labour care guide* (WHO 2021) aimed at improving childbirth experiences. Understanding a person's pain history can enhance the pain management approach and support provided prior to, and during, the latent phase of labour.

Pain histories

Pain histories are common in other professions, for example physiotherapy, and in this context relate to exploring previous pain experiences (Papageorgiou et al 1996) (across the lifespan), their management and how these encounters have influenced the individuals' current perceptions of pain.

Each pain history is unique, and the aim is to ensure that an individual's perspective is heard, and individual needs are met to optimise person-centred health care (Killingback et al 2021). A pain history

taken in pregnancy can provide information that is specific to childbirth; for example, if a woman has previously managed her labour without requiring any medical intervention, she may feel confident that she can self-manage her pain using the same techniques for her subsequent labour. However, it is also important to include other experiences of pain, some of which may have occurred many years earlier, for example an episode of back pain, as this may have implications for her experience of pain in labour.

Pain can be influenced by physical and emotional aspects with or without tissue damage (Raja et al 2020). When we think about supporting women to manage their pain it is important to consider multiple factors that may affect the way in which they manage their pain. For example, a lack of knowledge and understanding about why pain is being felt can trigger fear and anxiety and intensify pain perception (Main et al 2010).

It has been suggested that changing conceptualisation of labour pain to something that is productive and purposeful may alter a woman's pain beliefs and reduce the need for pain interventions (Whitburn et al 2019). Pain perceived by individuals is influenced by those around them, including family, friends, and health professionals (Main et al 2010, Whitburn et al 2019, Whitburn & Jones 2019). Williams et al (2013) demonstrated that the personal characteristics and previous pain experiences of midwives biased their perceptions of a woman's pain and impacted on their care.

'Working with pain'

Considering women's pain histories may be adjunctive to the concept described by Leap et al (2010) – 'working with pain'. They describe 'working with pain' as an approach to supporting women with their beliefs and providing encouragement for women to work with their bodies and with the pain they experience. This contrasts with the concept of 'pain relief' and a pain-free labour which, in practice, leads to women being offered a choice of pharmacological interventions.

Introducing women to a 'pain-free' labour experience is likely to lead to unrealistic expectations and preferences as many women want minimal drug interventions (Leap et al 2010). It is suggested that women need to be given tools that enable them to rethink their pain beliefs as part of a non-threatening life event, which enables a reduction in pain interventions (Whitburn et al 2019).

There is evidence from those with chronic pain conditions that such beliefs are influenced by thoughts that the amount of pain perceived directly correlates to the extent of tissue damage (Petrini & Arendt-Nielsen 2020). The greater the misconceptions are that pain equates to tissue damage, the greater the fear, which then leads to avoidance of activities perceived to be responsible for the pain that can further perpetuate the pain. A similar picture was reported in women who anticipated the pain would be 'unbearable' and those looking for ways to 'avoid' the pain (Lally et al 2014).

Whitburn et al (2019) found similar beliefs about tissue damage in their review of labour pain. It follows that those women who believe pain is harmful may become more anxious/fearful as their labour pain intensifies, because they anticipate the rising pain intensity might be associated with growing physical damage to themselves or their unborn child. These negative thoughts, anxiety, and lack of self-confidence around managing pain may be related to previous pain experiences that were unrelated to labour.

Fear of pain and pain catastrophising

There is evidence from long-term conditions that people can report feeling overwhelmed by pain and exhibit behaviours aimed at 'avoiding' the pain. These maladaptive behaviours include fear of movement and emotional distress, leading for example to 'fear avoidance'. This is where feelings of fear and anxiety, based on previous experiences, memories or beliefs, lead to behaviours aimed at avoiding activities that might exacerbate pain (Vlaeyen & Linton 2000).

Fear of pain and pain catastrophising are characteristics that have been found to be embedded in nulliparous women's pre-labour pain experiences and are linked to pain-related anxiety (Clark et al 2022). There is recognition that, for some women, there may be considerable feelings of fear and anxiety about the impending birth experience and in particular the pain experience (Lowe 2002, Jones et al 2012, Klomp et al 2017). Women who present in pregnancy with higher pain catastrophising scores report increased anticipated childbirth pain and, as part of their fear-avoidance behaviour, a preference for elective caesarean section (Flink et al 2009, Dehghani et al 2014).

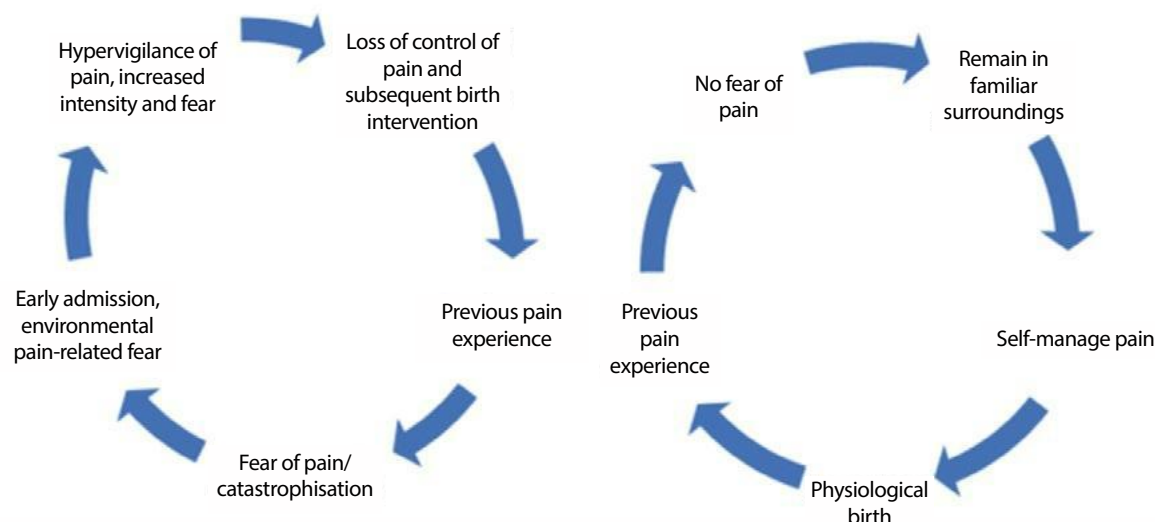
Feelings of pain are individual, influenced by worry, anxiety and pain experiences, and augmented by pain beliefs. By using this knowledge, we might be able to predict which women would benefit from strategies prior to early labour that support their ability and confidence to self-manage their pain in early labour.

Fear avoidance as a model for understanding pain in labour

Current fear-avoidance models are aimed at conceptualising chronic pain and demonstrate the role of fear and anxiety in contributing to pain perception. These models were initially developed in the 1990s and continue to be reflected on and further developed. They pictorially demonstrate how pain sufferers develop strategies that they feel will avoid perpetuating pain perception as a fear-avoidance behaviour.

Building on the model described by Vlaeyen & Linton (2000), which relates to fear avoidance of chronic pain, we propose a model of fear avoidance in relation to labour pain (Figure 1). Anxiety-driven avoidance leads to reductions in activity, as a protective function. In early labour, activity avoidance may lead to some women opting to lie down to avoid activity and movement. Women who adopt recumbent positions tend to have longer labours and are more likely to have a caesarean section (Lawrence et al 2013).

Figure 1. Suggested fear avoidance model of labour pain



Source: adapted from the Fear Avoidance Model (Vlaeyen & Linton 2000)

In the centre of the model a woman's previous pain experience is appraised resulting in either a fear of pain and pain catastrophising or no fear of pain. If there is 'no fear of pain', a woman in labour may choose to remain in the familiar surroundings of home, staying active, successfully self-managing her pain, and continuing with a physiological birth following the 'clockwise pathway'.

Alternatively, if a woman believes that the pain associated with labour is that of a physical nature influenced by a history of pain and fear avoidance, she may follow the 'anti-clockwise pathway'. Her beliefs and fears may lead to catastrophising about her pain and as a result a request for admission to hospital in early labour.

Admission of women into the unfamiliar hospital environment may further contribute to feelings of anxiety and increased pain perception. As hypervigilance and concerns about pain build with the intensity of contractions so does a continuing spiral of fear and anxiety. Eventually a woman feels unable to control her pain and requests pain relief or other interventions. The experience of this birth may feed into future pain experiences and a self-perpetuating cycle characterised by fear throughout her lifespan. We suggest strategies are required to support women who are at risk of adopting fear-avoidance behaviours to maintain mobility during pregnancy and in labour.

Antenatal assessment for pain constructs

From the model above it might be suggested that as part of an early antenatal assessment women's previous pain experiences (or pain history) are explored. This would provide an opportunity for midwives to predict which women are most likely to fear or catastrophise about their pain and

require additional support. Although the Visual Analogue Scale (VAS), which rates pain intensity, is a quick way to measure pain, it does not provide information about the underlying factors that contribute to perceived pain and its repeated use is not recommended during labour.

In the field of chronic musculoskeletal pain, several self-report tools have been developed to help measure different constructs of pain, which may all influence the reported pain experience to varying degrees. This includes measuring thoughts about pain, pain-related anxiety, avoidance of pain and fear of pain. Of particular interest are:

- Pain Catastrophising Scale (PCS) (Sullivan et al 1995)
- Pain Anxiety Symptoms Scale (PASS-20) (McCracken & Dhingra 2002)
- Fear of Pain Questionnaire (FPQ) (McNeil & Rainwater 1998).

Pain catastrophising is of particular interest as the literature suggests that, as a construct, pain catastrophising is a feature that negatively impacts on women's coping behaviours before, during and after childbirth (Van den Bussche et al 2007, Flink et al 2009, Dehghani et al 2014).

Pain catastrophising is recognised as focusing negative thoughts (ruminating) around the pain focusing on the physical nature of the pain (that is, tissue damage). Magnification of those thoughts are then coupled with a sense of helplessness, feeding into a cycle of negative thoughts.

Pain catastrophising as an entity is more common than we might expect. In our study more than half of the healthy non-pregnant nulliparous women reported PCS scores of ≥ 20 (Clark et al 2022), and this mirrored findings in a study of nulliparous

pregnant women (Flink et al 2009). There is clearly overlap between different pain constructs and factors that predict high PCS scores and, in our study, there was a positive correlation with 'fear of pain' and 'pain-related anxiety' measured using the FPQ and PASS-20 respectively (Clark et al 2022). There is evidence that women who catastrophise about their pain demonstrate fear-avoidance behaviours, for example by requesting an operative birth (Dehghani et al 2014) rather than a physiological birth.

Managing pain catastrophising

If we can identify those women with pain catastrophising then we can develop support for them prior to labour. This involves exploring a woman's pain history, including pain catastrophising scores early in pregnancy, identifying those at greater risk of pain catastrophising and then providing them with individualised interventions.

Early interventions will include changing pain beliefs and strategies to support pain management during labour. In relation to pain beliefs, it has been suggested that women need to be encouraged to reframe their thinking around the purpose of their labour pain (Whitburn et al 2019) and to have tools that enable them to self-manage their labour pain.

Practitioners working with musculoskeletal pain acknowledge that the presence of pain catastrophising is linked to adverse pain outcomes caused by the magnification of the emotional-pain response. Pain beliefs that lead to catastrophising are learned and are modifiable (Petrini & Arendt-Nielsen 2020).

Interventions that might help pain sufferers are those that support an individual to focus on reducing their catastrophic thinking (Wideman & Sullivan 2011). Education is recognised as an important feature in helping people to understand the nature of their pain condition and to help them to accept that they may need to develop strategies to reframe and manage their pain. However, education alone offers only part of the solution and there are other forms of psychological interventions that reduce pain by reducing stress and anxiety and providing distraction and/or inducing relaxation. These include cognitive-behavioural therapy, distraction, acceptance commitment therapy and hypnosis (McGrath et al 2014). These therapies provide strategies that are aimed at reducing pain, by reframing catastrophising thoughts and addressing fear-avoidance behaviours.

A recent systematic review of randomised controlled trials (RCTs) highlights significant reductions in stress, anxiety and pain following self-hypnosis, but these results have not been replicated for pain in childbirth (Eason & Parris 2019). This may reflect the self-hypnosis strategies in two childbirth studies which did not include individual hypnosis sessions or a chance to practise (Werner et al 2013, Downe et al 2015). In addition, the hypnosis interventions were not specifically targeted to those who pain catastrophise and/or show fear-avoidance behaviours.

There is good evidence from a systematic review involving 5218 women that upright positions in early labour can reduce length of labour and the risk of caesarean section (Lawrence et al 2013). Women may need to be encouraged to be upright and to adopt positions of comfort (Lawrence et al 2013) and to be introduced to these strategies during pregnancy, so they are prepared for labour. Birth balls have been shown to facilitate mobility, reduce pain and delay hospital admission, leading to better birth outcomes (Mylod 2020).

Breathing exercises are a well-acknowledged intervention for women who are encouraged to practise these during pregnancy in preparation for active labour, where it has been shown to reduce pain (Yuksel et al 2017). Focusing on breathing, especially if this is paced, provides a form of distraction activity. Although there are limited studies exploring the use of breathing exercises to reduce pain in early labour, an experimental study has showed that paced, slow, deep breathing is effective in reducing pain when the breaths were slow-paced with a longer expiratory phase (Jafari et al 2020).

Further work is required to explore key elements that contribute to pain catastrophising in individuals (Petrini & Arendt-Nielsen 2020) and to explore strategies that might help women who are more at risk of adverse pain behaviours to manage their pain, particularly in the latent phase of labour.

Conclusion

Women in early labour may be better supported if they and those around them have a better understanding of factors that predict adverse pain beliefs and perceptions. Assessing pain histories and beliefs early in pregnancy will enable midwives to predict which women would benefit from additional interventions. These women could be targeted for receiving additional support to help them to self-manage their pain in early labour and safely remain at home until they are in active labour. It is suggested that effective interventions will be those that aim to support women to reframe their pain beliefs and have the confidence to self-manage their pain.

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For more information on this topic see MIC database search pack: L9 Women's perceptions of pain and pain relief.

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