'Women's experiences of undiagnosed breech birth and the effects on future childbirth decisions and expectations'

Katie Rose Lightfoot 13042159

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Introduction to the Thesis and Systematic Review

I have carried out research and written this accompanying thesis for the qualification of Professional Doctorate in Health Psychology (DHealth). The aim of the thesis is to explore women's experiences of undiagnosed breech birth and the potential effects on future thinking around childbirth; the future childbirth decisions women may make because of their experience and the associated expectations they may have. Consequently, in response to the themes found in the data, considerations are made regarding potential support mechanisms that could be put in place in clinical practice and beyond for women who experience undiagnosed breech birth.

I decided to embark upon this area of research as I had my first baby in 2015 and had an undiagnosed breech birth. For me, the experience was very traumatic, but obviously very unique to me. Consequently, a new passion developed inside me; I needed to explore other women's experiences of undiagnosed breech births, the implications, if any, and ideas for support that could be provided to women like me after an undiagnosed breech birth (if required).

An extensive literature review was carried out within the Introductory Chapter of this thesis to inform the research background, context and aims. Conducting such an in-depth review demonstrates similar skills to those required when conducting a systematic review such as critical appraisal and synthesis of evidence and was necessary due to a previously completed systematic review being unrelated to the thesis content.

The literature review importantly begins by considering what is meant by pregnancy and 'normal childbirth' as a starting point then moves onto discussion of relevant psychological theory that may explain certain psychological impacts of both 'normal' and 'complicated' childbirth. These are discussed in general terms and explicit links are made to the research

questions. It was thought to be important to include an account of 'normal' childbirth after defining breech birth and breech incidence prior to the literature review for comparisons to be able to be made between breech birth and 'normal' birth. Following on from this, the specific psychological implications of breech birth are considered in relation to the theories presented. Next, general birth trauma is discussed alongside the resulting psychological impacts of birth trauma itself and then birth trauma specifically related to breech birth is also discoursed. At this point in the review, clinical aspects of undiagnosed breech birth are highlighted that could also have direct or indirect psychological impacts on women who experience undiagnosed breech birth. These clinical aspects include management options and the use and consequences of caesarean section for breech birth. Lack of choice and recurrence rates of breech presentations are also discussed. The reported infant morbidity and mortality rates relating to undiagnosed breech birth are also included alongside the increased risk of maternal morbidity and mortality and clinician fear. The literature review ends with a presentation of information regarding the most relevant current research alongside some clear research aims and research questions.

Finally, as mentioned previously, although not relevant to this content of this thesis, it is a Doctoral requirement I mention that in year 1 of the course a systematic review was completed in line with the British Psychological Society Standards for Doctoral Programmes in Health Psychology (2014). The title of this systematic review is 'Effectiveness of Psychological Interventions for Smoking Cessation in Adults with Mental Health Issues: A Systematic Review and Meta-Analysis' (see Appendix A). The findings relating to the effectiveness of different psychological interventions for smoking cessation were inconsistent. Nevertheless, psychological interventions alone or combined with pharmacotherapy appeared to have some positive effects on reducing smoking in mental health populations over the short and medium term. It was concluded that incorporating

psychological interventions into smoking cessation programs for mental health populations could be worthwhile.

Originally, I had planned to conduct research into this area as I always have had a keen interest in advocating those with mental health issues and equality for them in accessing schemes that may improve physical as well as mental health. However, accessing such a group to conduct research proved near impossible due to the nature of the participants required and as previously mentioned, my life experiences provided me with a new research area I wanted to explore.

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Katie Lightfoot 13042159

Abstract

An unexpected breech birth in labour affects 1 woman in every 100 in the UK (Walker, 2013). An undiagnosed breech presentation poses a clinical problem in obstetrics and midwifery. Once recognised it requires quick reasoning and decision-making as with any 'clinical problem' that allows provision of support, prevention of trauma, assessment or appraisal for example (Fleming, 1984). In the case of an undiagnosed breech birth, mode of delivery may need to be quickly decided with consideration to the best way forward for both the mother and baby in terms of risks to their morbidity and mortality as well as other clinical considerations such as stage of labour or presence of a skilled clinician for example. Therefore, an undiagnosed breech can create an emergency where there is little time to plan, prepare or potentially make a reasoned choice as to what the next steps should be for women in labour and their baby. This state of emergency could have implications for a woman's psychological wellbeing.

This qualitative study aims to give voice to women who have experienced an undiagnosed breech birth and will consider the influence this experience may have had on decisions about future pregnancy and childbirth and the associated expectations women may have.

Above all, women's feelings are the main point of consideration rather than mode of delivery or clinical outcomes of breech birth; both of which have dominated the research in this area.

Pre-existing textual data from discussion boards on Mumsnet, a UK parenting website, were examined. Inductive thematic analysis of 1364 messages using the 6-step process advocated by Braun and Clarke (2006) was carried out and five key themes were identified: 'I was unlucky though, dc3 [darling child number 3] was undiagnosed breech', 'Obstetricians are not the enemy! ', 'They told me it is not my decision but the decision of the consultants', 'His head was pretty misshapen and his legs were up by his head' and

'Feeling like a crap mum'. Two sub-themes were also identified, 'Just got to work through it and keep on swimming' and 'You just don't know what will happen!'

The findings suggest that women generally regard undiagnosed breech birth as a negative experience that gives rise to feelings of fear, anxiety and anger. They feel they have not been listened to by healthcare professionals and lost all choices regarding their own care during their breech experience. Future decisions and expectations around childbirth are also impacted, with some women deciding to have no more children due to the seemingly negative psychological impact of their undiagnosed breech birth. The role of Health Psychologists may be key in providing support for women who are experiencing negative emotional impacts because of an undiagnosed breech birth.

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'Women's experiences of undiagnosed breech birth and the effects on future childbirth decisions and expectations'

CHAPTER 1: Introduction

Definition of Breech Pregnancy

Breech pregnancy is where the baby is laying bottom first or feet first in the uterus rather than being in the usual 'head-down' cephalic position (RCOG, 2008). Breech babies may be lying in one of three positions, these are Frank or Extended breech where the bottom is first and the feet are up by the ears (most common) Flexed, where the bottom is first, thighs are against the chest and knees bent, and Footling, where the feet are below the foetus' bottom (RCOG, 2008). At term (40 weeks) breech presentation is apparent in approximately 3-5% of all births (RCOG, 2017; Guittier et al, 2011; Ford et al, 2010). Current standard NHS care for detecting breech presentations occurs antenatally. Antenatal screening after 36 weeks is carried out to identify babies who are suspected as presenting breech, an ultrasound referral occurs for confirmation of breech and a discussion with the mother (patient) regarding which delivery options (vaginal or caesarean birth) should occur (Walker, 2013; RCOG, 2008, 2017). In some hospitals/units obstetricians will attempt to turn the baby to a cephalic position in a process called External Cephalic Version (ECV). ECV is thought to be successful in 50% of diagnosed breech babies (NHS, 2014). The breech diagnosis process is, however, not infallible resulting in 14% to 33% of breech babies recognised only for the first time in labour (Nwosu et al, 1993; Jackson & Tufnall, 1994; Flamm & Ruffini, 1998; Imoh-Ita et al, 2003). Where it only becomes evident the baby is not in a cephalic position during established labour the birth is classified as an undiagnosed breech (RCM, 2016). Women who have a low obstetric risk and consequently have not been subject to increased antenatal monitoring as well as those who have had scant or no antenatal care at all are most at risk of undiagnosed breech presentation pre-labour (Walker, 2013).

Incidence of Undiagnosed Breech Birth

An unexpected breech birth diagnosed in labour (undiagnosed breech) affects 1 woman in every 100 (Walker et al, 2013) but estimates vary on the incidence of undiagnosed breech presentation. Nswosu et al (1993) found 26% of cases of breech presentation were undiagnosed over a 3-year period at a Maternity Teaching Hospital in Liverpool despite

assumed thorough antenatal surveillance. Similarly, Leung et al (1999) found that 21% of breech births occurring over a 1-year period in a teaching hospital in Hong Kong were undiagnosed, although cultural differences in provision of healthcare and birth practices limits the comparability of these findings. These research studies can also be regarded as lacking temporal validity as when we consider the changes in birth trends over time such as larger babies, older mothers and changing birth rates these findings do not necessarily reflect incidence today due to a lapse of 20 years since the research was conducted. However, diagnosis of breech position does seem to be improving as demonstrated in more recent research. For example, Ressl et al (2015) performed a retrospective analysis of breech births in a Medical Centre in Canada and identified an 8% undiagnosed breech rate over 14 months providing support for Siassakos et al (2005) audit of a London hospital where 11% of breech births were undetected until labour had begun. The audit was being conducted in order to assess and improve management of breech presentation due to its contribution to rising caesarean section rates and underuse of ECV in the hospital. Interestingly though, Babay et al (2003) did a case control study comparing undiagnosed and diagnosed breech in Saudi Arabia at a University hospital and found a 12.9 % incidence of undiagnosed breech over 6 years between 1993 and 1997. Although this was a much earlier study, the rate of undiagnosed breech birth is more comparable to figures seen in more recent research (Siassakos et al, 2005; Ressl et al, 2015). This suggests that detection practices and availability of resources have improved more quickly in some countries than others meaning that the undiagnosed breech birth rate appears to have achieved lower rates longer ago. However, in a more recent audit of a single hospital in Oxfordshire, also embarked upon to assess whether additional interventions for breech detection were needed, Madu (2015) found that over a 1-year period, an increased rate of 17% of breech births were undiagnosed until, in the majority of cases, the first stage of labour and after 2 or more clinical examinations had already taken place. Comparing all UK findings suggests potential regional variations in detection of breech presentation. Interestingly, Madu (2015) also identified that all cases of undiagnosed breech occurred in women with a normal Body Mass Index (BMI) rather than a BMI above 40kg/m²; this is contrary to the expected outcomes of the study and findings from previous research (McGuire et al, 2010) where it is suggested if a woman is overweight it is harder to assess foetal position in labour. Ressl et al (2015) acknowledged that the number of missed breech presentations would have been greater if some women had not had ultrasound screening for issues other

than foetal presentation during the last few weeks (36 weeks plus) of their pregnancy. In these cases, breech presentation would have been inadvertently identified when being scanned for a different concern. Excluding the women receiving ultrasound screening for other concerns, breech screening at 36 weeks to prevent undiagnosed breech presentation only in Ressl et al (2005) study was found to be 75% effective in identifying breech presentation. In support, Babay et al (2003) identified in a study comparing undiagnosed breech outcomes with diagnosed breech outcomes that when an ultrasound shows a breech presentation at ≤20 weeks it has a 62% Positive Predictive Value (PPV); at 30 weeks the PPV increases to 70%. Baby et al (2003) claim when reviewing a patient with such ultrasound results, these figures are really important, especially if scans at 20 and 30 weeks demonstrate a breech position.

Clinical Guidelines for Breech Management

An undiagnosed breech presenting foetus is regarded as malpresenting and poses a clinical problem in obstetrics regardless of culture, country or setting (Bako et al, 2000[Nigeria]; Usta et al, 2003[Lebanon]; Imoh-Ita et al, 2003[UK]; Founds, 2006[Jamaica]). Late detection of breech presentation reduces the time available for clinical investigation thus complicating clinical management. Reasons for breech are varied, too much or too little fluid in the amniotic sack, the position of the placenta or having more than one baby in the uterus. For a few babies, presenting breech indicates a problem with the baby (RCOG, 2008). Due to this uncertainty of medical factors when posed with an undiagnosed breech presentation, guidelines are in place to aid with the management of undiagnosed breech births during labour; usually a vaginal breech birth (VBB) or an emergency caesarean section (CS) (RCOG, 2006, 2017).

The Royal College of Obstetrics and Gynaecologists (RCOG) (2017) recommend in a change to their previous guidelines on managing breech birth that management of a birth for a woman presenting in labour with an undiagnosed breech birth should depend on stage of labour, whether factors linked to increased complications are found and whether skilled personnel are available for potential vaginal birth. These most recent RCOG (2017) guidelines also stipulate that informed consent should still be present regardless of management method, women should be counselled during labour if time and circumstance

permits as well as a requirement for all hospitals to ensure that skilled clinicians or midwives are available always for such an eventuality. This aspect of the guideline is difficult to monitor and measure though as there are questions that could be posed on what is meant by 'skilled'; this has not been operationalised in the guideline. Additionally, as Walker, Breslin, Scarnell and Parker (2017) mention in their systematic review, a requirement for skilled personnel to be readily available to assist vaginal breech births is difficult as lack of skill and training already exists in many units. Their review identified a lack of evidence to support that standard training programmes on breech births improve clinical outcomes or attendance at vaginal breech birth by those trained in it.

In contrast to RCOG's (2017) most recent guidelines, the National Institute for Health and Care Excellence (NICE) (2012) recommend that caesarean delivery is preferable for an undiagnosed breech presentation than a vaginal delivery. However, It has been suggested that undiagnosed breech babies are much more likely to be delivered vaginally (Nwosu et al, 1993; Jackson & Tufnell, 1994) perhaps due to progressing so far with the labour before breech is detected that an emergency CS would be unsafe.

The Royal College of Midwifes (RCM) (2005) states elective caesarean should not be the only acceptable option for babies who present breech, which is in line with RCOG's (2017) recommendations. In fact, in its normal birth campaign the RCM (2005) voices support for spontaneous breech birth (SBB). The National Childbirth Trust (2010) defines SBB as being a 'natural' vaginal delivery where the mother is free to move around, the labour is not induced, no epidural or pain relief is used and the Midwife or Doctor takes a 'hands-off' approach where they do not touch the baby until it is born, if safe to do so. In support, Stables and Rankin (2010) also suggest the best practice for normal SBB should be to keep hands off and allow the breech to deliver spontaneously. RCOG (2017) provides some support for this; in a change to their previous guidelines on breech birth, they now advocate an 'all-fours' birthing position if the woman prefers it to a lithotomy position. An upright position such as 'all fours' allows a woman to work with gravity rather than against it (RCM, 2009). This is helpful for all births where it has been reported in a RCM (2010) survey that 63% of positions used during labour are upright positions, which is reported as a positive step forward for all births.

CHAPTER 2: Review of the Literature

Psychological Implications of Pregnancy and 'Normal' Childbirth

The Maternity Care Working Party (2007) advocate the notion of 'normal' birth and state, 'It is important to have a precise working definition for 'normal birth' to enable accurate comparisons to be made for similar women using different services and models of care' (pg. 1)

Thus, 'normal' labour and birth or 'normal delivery' can be defined as birth without the use of induction, instruments, anaesthetics, episiotomy or caesarean section (NHS Information Centre, 2007). Anderson (2003) similarly defines 'normal' birth as being in an environment that allows choice and empowerment for women with no interventions. Ultimately, a 'normal delivery' that is inevitably straightforward protects long term physical and mental health and allows easier establishment of family bonds and breastfeeding (Maternity Care Working Party, 2007). Problematically though, many definitions of 'normal birth' have been established but there is no ultimate consensus so operationalisation is difficult. Regardless, in their Maternity Statistics Report, NHS Digital (2017) has identified that in 2016-2017 both spontaneous onset of labour and spontaneous delivery without intervention ('normal delivery') occurred in 55.1% of UK births; this is a decrease from a rate of 68.7% ten years earlier. According to the Maternity Working Care Party (2007) 'normal delivery' is much more likely when women feel supported, communicated to and offered more choices in pregnancy as well as a shared positive attitude towards birth as a 'normal' physiological process. Without feeling supported through pregnancy and childbirth, women may not feel so good about themselves, their labour or their babies (NHS Quality Improvement Scotland, 2005). This may have implications for the psychological impacts that birth may have.

Birth is a physiological process yet due to the associated psychological anxieties surrounding it, it is a crisis for many women (Donmez, Yenial & Kavlak, 2014; Erkaya, Karabulutlu & Calik, 2017). Even after experiencing a 'low-risk' pregnancy and a 'normal delivery' it has been identified that women can still experience negative thoughts relating to guilt, loss and unacceptability after childbirth; and this is still the case in non-depressed mothers (Hall & Wittkowski, 2006). In their exploration of negative thoughts in non-depressed mothers, Hall & Wittkowski (2006) found that negative thinking after childbirth

was a relatively normal phenomenon and this was the case regardless of age, marital status or number of children. Negative thoughts that were thought occasionally by most women were 'my baby could die', 'someone in my family might die' and 'I must show everyone I am coping'. After qualitative analysis, overarching themes were identified including 'expectations of motherhood,' 'the need to be perfect' and 'a sense of responsibility'. These findings challenge the misperception that women may not experience psychological impacts after birth if they are not depressed or have had a 'normal delivery'; anxieties and expectations may be different in women who have not had 'normal deliveries' but nevertheless will still be present.

Before childbirth even occurs, pregnancy itself represents a 'powerful psychological event' as is characterised by many psychological changes including ambivalence, anxiety, fatigue, mood changes and depressive reactions (Bjelica & Kapor-Stnulovic, 2004). Ultimately, pregnancy can be a potent stressor, which may not only exacerbate psychological impacts and changes further but could also lead to undesirable clinical changes in pregnancy such as hypertension (Bjelica, 2004) raised hormone levels in the uterus and as a result, likelihood of obstetric complications (Kaplan, Bahar & Sertbaş, 2007). It has been acknowledged by the Centre of Perinatal Excellence (COPE) (2017) that one in five of all pregnant women experience some degree of anxiety both perinatally and post-natally and one in ten women experience depression during pregnancy and one in seven, post birth. This can have further psychological implications for the mother but can also impact upon the wellbeing of the baby as previously mentioned, even if the subsequent birth is positive and/or free of complications,

'As well as affecting a woman's emotional welfare and happiness, mental health conditions affect her experience of pregnancy and parenting, are associated with a degree of increased risk of obstetric and neonatal complications and can profoundly affect a woman's ability to bond with her baby and the infant's psychological adaptation over the longer term' (COPE, 2017, pg. 6)

Milgrom et al (2008) also found in a large prospective study that depressive symptoms can commonly occur during pregnancy and post-natally and previous depression and poor partner support were identified as increased risk factors. Unfortunately, screening for anxiety and depression is limited in clinical practice due to time constraints and a likelihood that such symptoms may not be uncovered if a woman has not been treated for mental

health issues previously (Kingston et al, 2015). Kingston et al (2015) also identified that there were common barriers to screening for mental health symptoms in pregnancy, which included others normalising new mother's emotional difficulties, wanting to deal with things alone and not really knowing whether emotions were 'normal'; all of which may potentially be overcome by suggested facilitators such as awareness of other women with similar emotional difficulties and seeing mental health screening as the 'norm' in antenatal care.

Understandably, anxiety and fear could be present in any pregnancy and childbirth fear has been found to be linked with significant anxiety (Hall et al., 2009) so both could realistically occur together. It is no surprise that women may feel fear in pregnancy of childbirth as,

'Birth has been removed from its place in the realm of natural female experiences, effectively denying generations of women the right to observe... and fully understand the birthing process before they themselves experience it. It is a natural characteristic of the human psyche to fear the unknown...' (Bak, 2004, pg.45)

Ultimately, childbirth fear can be defined as,

'negative perceptions starting in the antenatal period and experienced in the birth and postpartum period' (Wijma, Wijma &Zar, 1998).

Importantly, regardless of parity such fear could exist in any woman, although the focus of that anxiety may differ due to experience. For example, Geissbuehler & Eberhard (2009) studied over 8000 pregnant women and found their most common fears to be fear of pain and fear for child's health. Fear of medical intervention was much less predominating, although these figures are not separated into parity sub-groups so they have limited value in comparing fears in groups with previous negative/positive birth experiences or no previous experience. Other studies have also identified fear of pain and lack of trust in staff (Sjogren, 1997) and fear of own incompetence (Sjogren, 1997; Lowe, 2000) as the focus of many women's childbirth fears. Depression, decisional-conflict, less perceived knowledge on childbirth and low social support has also been found to predict childbirth fear in both nulliparous women, where 32.4% of variance could be explained by these factors, and multiparous women, where 29.4% of variance could be accounted for (Toohill, Fenwick, Gamble et al., 2014a). These findings are useful, as focusing on changing such predictive factors of fear when providing support to women could potentially aid in reducing anxiety

and fear in pregnancy. However, caution would need to be applied as these results yield from Australian women only so generalisability of these factors and the resultant interventions to British women is limited without further research.

Self-Efficacy of Childbirth

It has been suggested by Lowe (2000) that fears around childbirth can be applied to Bandura's Self Efficacy Theory (1994); they found that self-efficacy expectancies in women around childbirth (their belief in themselves they can labour successfully) were significantly correlated with childbirth fears, hence the lower a woman's self-efficacy, the greater her childbirth fears. Notably, the women placed in a 'high-fear' group also had lower selfesteem, lower general self-efficacy and more prevalent learned helplessness than those with fewer and less intense fears. Schwarz, Toohill, Creedy et al., (2015) also found that childbirth fear was strongly correlated with low childbirth self-efficacy for both nulliparous and multiparous women. Regardless, there was no difference in parity groups in the correlation between experience of pain and low self-efficacy and low outcome expectancy, where there is little trust that a behaviour will lead to a certain outcome. Bandura's model of self-efficacy (1994) can readily explain these results as having a sense of high selfefficacy allows an individual to approach difficult events as challenges and when perceived setbacks arise, to be able to recover from them. This in turn means that these individuals would be able to face new challenging and fearful situations in a way where they feel they can exert some control over them (Bandura, 1994). In turn, outcome expectancy would be high and there would be trust that carrying out a given behaviour would yield a particular outcome. Applied to fear and anxiety of childbirth, believing one can go through labour, everything will go generally well and not having too many unrealistic expectations would facilitate this cognitive mindset. Clearly, these findings have implications for the consideration of self-efficacy when supporting women during pregnancy and perhaps the provision of education to help improve confidence in the childbirth process and the women themselves by providing detailed information when women request it to assist in allaying their fears, especially in a first pregnancy where there are many 'unknowns' as with all the women in Lowe's (2000) study. Making 'unknowns' more known about will increase selfefficacy and a sense of control. If a woman perhaps continually doubts her capabilities of giving birth in a first pregnancy or a pregnancy after a 'complicated' pregnancy such as an undiagnosed breech birth for example, if self-efficacy is not addressed and is low, the woman may avoid difficult tasks that appear threatening due to past setbacks of perceived

failure, such as labour. Consequently, the woman may lose faith in hers and other people's capabilities and will ultimately become more prone to anxiety and depression as a result (Bandura, 1994). Therefore, consideration of self-efficacy could be key in helping to prevent the onset or reduce the severity of pre-natal anxiety and depression, which has been found to be strongly related to both low childbirth self-efficacy and high levels of childbirth fear (Toohill et al., 2014a; Schwarz et al., 2015). In this research, it will be useful when considering realistic support that could be implemented to help women with psychological impacts after childbirth to consider if low self-efficacy may have a part to play in women's anxieties around pregnancy and childbirth (if they are found to be evidenced in the data).

Vicarious Reinforcement in Childbirth

We can learn directly from the experience of others and the change of an individual's behaviour through observing the rewards or consequences of someone else's behaviour in a similar situation is called vicarious reinforcement (Bandura, 1971). Ultimately, individuals learn by observing and modelling the behaviours of others and expecting the same outcomes by behaving the same way (Bandura, 1977a). Due to increasing accessibility of internet information sites, videos and social media it could be argued that such social learning may be more likely to occur in response to any given event as more opportunity for exposure is likely and exposure to any event can be sought from simply typing the event one would like to witness into a search engine. In support, Thomas & Seeley-Brown (2011) noted that learning boundaries have significantly expanded over the last few years due to new technologies and internet advancements, this has created a new culture of learning. In turn, this has meant learners have been able to expand their learning opportunities greatly.

In relation to childbirth, it could be argued that witnessing labour and childbirth involving different birth modes and different eventualities via media sources may affect anxiety levels in pregnant women as they may believe through vicarious reinforcement that such outcomes may happen to them. Such resources may act as a helpful educational tool or may serve to reinforce childbirth fear and anxiety further. Stoll & Hall (2013) found media exposure to birth in the form of online videos and TV programmes was significantly associated to fear of childbirth in young women. They argued that this is probably because media depictions of birth may induce learned helplessness and anxiety as they do not empower women but reinforce to them that negative or rare events may happen during

childbirth. Importantly, women who had observed a live birth, had an increased knowledge about childbirth as well as the ability to learn about birth from family/friend stories were significantly less likely to experience childbirth fear (Stoll & Hall, 2013). Although, Fisher, Hauck, & Fenwick (2006) found that sharing 'horror stories' with other women about birth results in them feeling significant fear of childbirth themselves. Therefore, the nature of the shared story seems crucial (positive or negative) as to how attitudes will be affected by vicarious learning. Ultimately though, the research demonstrates that vicarious learning from media or other sources can impact on a woman's attitudes towards childbirth and her associated fear level depending on what is witnessed and where it is witnessed; real life observation appears more helpful than use of media video resources. Morris & McInerney (2010) found that of 70% of American women who regularly watched reality shows involving childbirth, one third of them reported increased fear of childbirth as a result. Such media resources can have an impact on women's social constructions of birth as they inflate perceptions that birth is unpredictable, risky, requiring medical intervention and should be feared (Sakala, 2007; Stoll & Hall, 2013). Naturally, childbirth fear for those in a first pregnancy as well those as who have had previous birth experiences could increase because of such exposure to negative depictions of birth via vicarious reinforcement. This is a concern for the wellbeing of pregnant women and may mean that exposure to some resources should be encouraged more than others to aid with effective management of the potential psychological impacts of pregnancy and birth. Once again though, evidence is very limited in this area so further research is needed to establish the relative contribution of vicarious learning in childbirth fear and anxiety.

Vicious Cycles, Safety Behaviour and childbirth

A cognitive manifestation of childbirth fear and anxiety could arise from a vicious cycle of fear or anxiety (Beck et al., 1979, 1985). A vicious cycle typically involves worrying about a potential threat leading to physiological symptoms of anxiety, narrowed attention and preoccupation with threat and scanning for danger. In turn, this could lead to escape or avoidance for temporary relief but over time will lead to loss of confidence or self-efficacy in being able to cope, worsened physical symptoms, more worry and an increase in safety behaviours to assist coping (Beck, 1985). Vicious cycles could plausibly operate during pregnancy or during childbirth as women may experience physical symptoms of anxiety

during labour, scan for any incident that they do not feel is the 'norm' and feel further fear and anxiety as a result as labour commences. During pregnancy, childbirth anxiety could build up and in turn, women turn to the safety behaviour of requesting an elective caesarean section rather than having to face a vaginal delivery as this can be seen as an easy way out (Paarlberg & Van de Weil, 2017). In support, D'Cruz & Lee (2014) identified that childbirth fear levels were much higher in women requesting an elective caesarean compared to a vaginal birth. Interestingly, healthcare providers may influence women's requests by reassuring a woman she will be given lots of pain relief when she delivers her baby but this conceals the fear issue rather than solves it and many women will therefore still go on to request a caesarean (Paarlberg & Van de Weil, 2017). Ultimately, Fenwick et al (2010) highlighted that women with childbirth fear see a caesarean as a method to exert control over their birth and to alleviate fear whilst offering safety. Following of from this, Zar, Wijma & Wijma (2001) have suggested that during a birth, a woman must face what they have been afraid of and they can no longer use avoidance behaviours as labour cannot be stopped, this in turn can affect their cognitive appraisal of the birth afterwards. The appraisal of a previous delivery will affect the level of fear felt in future pregnancies and deliveries (Hofberg & Ward, 2003). In fact, several studies have shown significant associations of fear over time for several reasons such as pain and negative staff experience (Nilsson & Lundgren, 2009) birth complications (Sjorgren, 1997) previous subjective negative experience (Melender, 2002; Storksen et al., 2013) and previous traumatic birth (Soderquist, Wijma & Wijma, 2004) which could correspond with the maintenance of a vicious cycle and produce concerns the same may happen again in a subsequent birth. This of course could be the case if a woman has experienced an undiagnosed breech birth that at the time or since has been perceived as negative, complicated or traumatic. In fact, Storksen et al. (2013) noted that subjective negative experience is more greatly associated with childbirth fear than birth complications.

Psychological Implications of Breech Birth

Due to the uncertainty during labour that occurs with an undiagnosed breech presentation, different or more intensely focused fears could potentially occur in women compared to those experiencing an uncomplicated pregnancy or a 'normal delivery'. As previously mentioned, research has alluded that 'unknowns' can result in lower self-efficacy around

the childbirth process for women and increased fears about the process (Lowe, 2000); regardless of previous pregnancies, a breech birth could have the same effect in raising fears and making a woman feel helpless. In fact, women who have reported previous negative events during previous pregnancies have been shown to be more likely to have a low childbirth self-efficacy in subsequent pregnancies (Dilks & Beal, 1997).

Although most women may have fears and anxieties regarding birth, it has been identified that in women who have had a previous complicated childbirth, which may have involved an undiagnosed breech birth may have a different focus for the fears; for example, Sjogren (1997) found that a previous complicated delivery significantly predisposed to fear of death in pregnant women and fear of death arising in a previous labour was significantly associated with fear of the pending delivery and fear of a loss of control, perhaps due to this also occurring previously. In addition, Berg & Dahlberg (1995) found that women expressed feelings matched to five key themes in relation to complicated (not normal) deliveries they had had, these were 'a need to be seen and respected', 'trust', 'continuous dialogue', 'need for control' and 'mothering'. Some themes may be consistent with those identified after 'normal delivery' but involve different and more intense feelings of fear and anxiety. For example, 'mothering' involved the notion that women who were separated from their babies after birth had difficultly comprehending they had become mothers and felt disorientated by the separation from their baby and having not yet seen them; this was reported to raise their anxieties even further and prevented post-birth feelings of relief. Furthermore, the 'need for control' or 'fear of loss of control' identified in both Sjorgren's (1997) and Berg & Dahlberg's (1995) research resonates with Bandura's self-efficacy theory (1994) as previously explained, as this perceived loss of control in a previous experience may have lowered self-efficacy and hampered belief that control can be exerted in a future situation and may fuel belief that the same incidences are likely to occur again. Not only may loss of control lower self-efficacy but it has also been found to be negatively correlated with maternal anxiety (Cheung, Ip & Chan, 2007). Furthermore, Rondung et al. (2016) found that a negative birth experience appears to be related to childbirth fear in future pregnancy.

Berg & Dahlberg (1995) concluded that especially after a traumatic or complicated birth women may need to tell their stories to feel supported, which potentially could serve to be therapeutic by increasing self-efficacy levels by vicarious reinforcement or social support. This gives rise to two of the important aims of this research, which are to uncover the

stories of women who have had undiagnosed breech births to identify what those experiences involved and whether they were positive or negative and what the main psychological or emotional impacts may have been for them specifically. Do they differ from those identified for 'normal deliveries' or not, especially considering there is limited research on women's experiences of undiagnosed breech birth and the psychological implications?

Regardless of often unavoidable uncertainties around undiagnosed breech birth, women should be entitled to the correct advice and care especially as a psychological implication of a breech-presenting baby is that a woman will naturally be more anxious than a woman with a cephalic presenting baby about the impending birth and the subsequent health of her baby due to uncertainty (Tiran, 2004). In their paper on breech birth, Powell et al (2015) agree that care needs to be taken in labour to ensure a woman's consent to intervention medically is given based on appropriate advice; this could help to reduce anxieties and fears around the birth and aid with shared decision making. This suggestion has also been supported by recent RCOG breech management guideline changes (2017). Nassar et al (2007) found that knowledge significantly improved with the use of a patient decision aids to help women make informed decisions about their breech presentation. However, anxiety did not decrease with increased knowledge, hence consent cannot be the only factor contributing to the anxiety resulting from a breech presentation. Even so, patient decision aids may be useful in reducing anxiety in a pregnancy occurring after experiencing a previous undiagnosed breech birth that may have been regarded as a 'difficult birth'. This is because it has been found that a perceived previous negative birth where damage may have occurred to the mother or baby, where there was a loss of control or panic during the birth and a resultant mistrust in health care professionals will affect a woman's decisions in future pregnancies, such as the delivery mode she requests (Şahin, Dinç & Dişsiz, 2009 & Subaşı, Özcan, Pekçetin, et al., 2013). Following on from this, when hypothetically asking expectant parents their preferences for birth and the relative importance of factors that would influence a decision they would make regarding birth preferences, Kok et al (2008) found that the two most important considerations were 'ensuring the safest route for the baby' and 'fear for a handicapped child', which is in line with the 'fear for health of child' that many pregnant women feel (Geissbuehler & Eberhard, 2009) although it could be argued that hypothetical reasoning may result in very different decisions to those made in reality. However, both factors are potentially anxiety

provoking and might make a woman fearful, especially if she thinks she has a cephalic presenting baby and it is identified during labour that this is not the case. Additionally, decisions made based on these two concerns also will depend on the information provided to the woman being correct and truthful as previously discussed. 'Fear for the gynaecologist' was the least important concern for both parents. As previously mentioned, it will be important to identify in this research whether decisions around future pregnancies are impacted because of past undiagnosed breech birth experiences and if so, what those decisions may be.

Kok et al (2008) also considered expectant parents' trade-offs for a breech presentation, expectant mothers reported that if they were to have a breech baby it would be okay if the 2-year neonatal outcomes were good; expectant fathers were more concerned about the maternal outcome. There is an interesting distinction here in what the main sources of anxiety may be for each expectant parent. Following on from this, in a study on foetal anal trauma due to undiagnosed breech birth (Warwick et al, 2013) it was found that for babies who suffered trauma because of the birth mode, hospital admission time went up and so did parental anxiety. Again, such evidence appears to point towards a different focus of some fears and anxieties due to the nature of undiagnosed breech birth compared to uncomplicated birth and it will be interesting to identify if such fears and anxieties are apparent in the women's accounts of breech birth in this research.

Guittier et al (2011) conducted a qualitative study using semi-structured interviews to uncover women's experience of being diagnosed with breech presentation. A thematic analysis was carried out to identify common themes arising across the sample of 12 women. Coding was completed independently by three researchers and they conferred to produce the final themes. One woman refused to participate in the interviews because of self-declared psychological distress directly related to breech presentation and she was fearful of further increasing her anxiety. In the same study, of the 12 women interviewed about their breech birth, all had an emotional reaction to the diagnosis of a breech presentation; 11 not only were mourning their ideal birth but were feeling fear and apprehension regarding the birth and 7 experienced stress because of the diagnosis. Furthermore, half of the women felt alone in the decision-making process regarding their decision and 10 women felt they needed more time to decide whether to have a CS or a VBB, thus demonstrating varied psychological impacts of a breech diagnosis. This research appeared to take a critical realist ontological perspective as although Guittier et al (2011)

concluded that all women go through several phases of emotional processes to reach acceptance of a non-idealised birth, they also acknowledge that this is different for everyone based on factors including personality, life history and representations of motherhood. In a similar qualitative study on breech presentation where interviews, observations and hand-searches of delivery logs were carried out, women expressed a range of emotions from 'normal for them' to 'extreme pain' and 'extreme fear' (Founds, 2007). The study used content analysis as its method to identify codes and themes and appears to conclude from a critical realist viewpoint by suggesting ways in which women can be helped but by also acknowledging the role of education, networks and providers. In fact, Founds suggests a symbolic interactionist approach is the way forward to help guide women to better experiences of breech birth. It is understandable that Founds acknowledges the role of gestures and language within social communication but advocating this will not allow us to uncover how we can use language to help women have better birthing experiences and reduce psychological consequences of breech diagnosis.

Importantly, most of the women in these studies experienced diagnosed breech pregnancies so had some insight before labour began; again, it might be expected that these stressors may be exacerbated when experiencing an undiagnosed breech presentation. As Guittier et al (2011) state, not only do pregnant women (with a breech-presenting baby) feel physically and psychologically vulnerable but they find themselves in a situation where decisions that were unimaginable at the start of their pregnancy must be made. Unfortunately, the nature of undiagnosed breech birth presents an inability to plan, loss of control and no shared decision making, many of those areas women already feel fearful about prior to 'normal' childbirth. Not only does experiencing an undiagnosed breech birth appear lead to psychological implications of raised anxiety and fear levels in some women due to some existing fears playing out during labour, but it could correspond with definitions of experiencing birth trauma,

'It is clear that some women experience events during childbirth (as well as in pregnancy or immediately after birth) that would traumatise any normal person. For other women, it is not always the sensational or dramatic events that trigger childbirth trauma but other factors such as loss of control, loss of dignity, the hostile or difficult attitudes of the people around them, feelings of not being heard or the absence of informed consent to medical procedures' (Birth Trauma Association [BTA] 2015).

A traumatic event cannot only result in emotional upset, anxiety or fear, but in some cases, it can lead to Post-Traumatic Stress Disorder (PTSD) which is an anxiety disorder caused by very frightening or stressful events (NHS Choices, 2015).

General Birth Trauma and Resulting Psychological Impacts

There are numerous perinatal and postnatal mental health conditions that women can be diagnosed with during the childbearing process, these include perinatal anxiety, perinatal obsessive-compulsive disorder (OCD) post-natal anxiety, postpartum psychosis, post-natal depression (PND) birth trauma and post-natal PTSD (Mind, 2016). All can be equally debilitating and require support. However, although all could occur because of 'normal birth' or 'complicated birth; the main focus in this thesis, although not related to a specific research question, will be on trauma and PTSD simply since PTSD symptoms can arise from an unexpected event in labour, which is a likely occurrence and 'normal' with an undiagnosed breech birth. That is not to say that the other conditions listed would not occur after an undiagnosed breech experience and these are still considered where relevant in this thesis.

Other than potentially resulting in PTSD, it is also important to acknowledge that experiencing birth trauma from any birthing experience, not just a breech birth, could potentially lead to many severe and profound psychological impacts on a woman, her baby and her family (Ayers, 2004, 2007; Taghizadeh, Irajpur & Arbabi, 2013). Beck and Watson (2008) conducted a phenomenological analysis of thirty-five women's experiences of subsequent childbirth after a traumatic birth. The women were from the USA, UK, New Zealand, Australia and Canada. One participant reported the following feelings regarding her birth trauma,

'My dad received two Purple Hearts and a Bronze Star during Vietnam. He, by most standards, would be considered a hero. Where are my Purple Hearts? My Bronze Star? I've fought a war, no less terrifying, no less destroying, but there are no accolades. At least that's what it feels like.' (pg.244).

In the UK it has been suggested that up to 34% of women would report their birth as traumatic (Soet et al, 2003) so considering the psychological impacts of giving birth is clearly important. Going through a traumatic birth can mean feelings of terror and helplessness during the birth and then vivid memories of the event, irritability and nightmares later because of the trauma (Ayers, 2004). Of psychological birth trauma, Taghizadeh et al (2013) said,

'The mothers suffer from its consequences, but they do not know what is going on? Mothers are getting worse every day by "the silent effects of the psychological phenomena."'(pg. 1)

Elmir et al (2010) completed a meta-ethnographic study on women's experiences of traumatic birth and found five common themes across 10 studies that reflected impacts felt by women because of their birth experience. In all included studies, women were interviewed either face to face or online, given a questionnaire to complete or wrote their story on the internet to present their unique experience. A traumatic birth in these cases was very closely linked to 'feeling invisible and out of control' and a need 'to be treated humanely' due to the perceived mistreatment by healthcare professionals they experienced and the distaste at people coming to 'watch' their birth without consent. In addition, these women were 'feeling trapped', had 'a rollercoaster of emotions' and like they had developed 'disrupted relationships' which also included being avoidant of sexual contact from a partner due to fear of future pregnancy. They had 'strength or purpose' in that some reported over-protectiveness or use of breastfeeding to attempt to overcome the trauma and to prove they were successful mothers (Elmir et al, 2010). Similar themes were identified by Bailham & Joseph (2003) in an earlier review on post-traumatic stress following childbirth where sexual avoidance, fear for self and baby and relationship problems were key consequences of trauma resulting from birth experience. As Elmir et al (2010) suggest in the conclusion to their research, traumatic birth can have profound impacts on a woman, so healthcare professionals should consider this when communicating with, and supporting women through the process. Care should be womencentred and continuous. In addition, routine screening for PTSD and associated symptoms could be beneficial and should be investigated (Bailham & Joseph, 2003).

Beck and Watson (2008) also explored the impact of traumatic birth experiences on breastfeeding and identified that women appear to use breastfeeding to attempt to overcome their trauma and to "prove" themselves as a mother. Other themes were identified relating birthing trauma to breastfeeding including 'making up for an awful arrival', 'helping to heal mentally', 'just one more thing to be violated: mothers' breasts' and 'enduring the physical pain: seeming at times an insurmountable ordeal'. Ultimately, it appears for these women that birth trauma led them to persevere with breastfeeding or created difficult obstacles that hindered their breastfeeding attempts (Beck & Watson, 2008). This is problematic because if the impacts of trauma are not addressed and problems with breastfeeding occur as a result, the UNICEF Baby Friendly Initiative (2013) requires all women to be given the best possible care to build loving relationships with their baby, and potentially the experiences of breech birth are preventing mothers from feeding their babies in a way that would support optimal health. The Care Quality Commission (2010), reported on women's experiences of maternity care in England and found that one in five women felt they needed more support and encouragement regarding infant feeding, particularly in the first six weeks after birth. Although, these were not exclusively women who had had a traumatic birth experience, they still felt unsupported so one would expect these feelings might be exacerbated for those who have experienced trauma.

As well as affecting the breastfeeding process for some mothers, traumatic birth experience can also affect mother-infant attachments and bonds. Ayers, Wright and Wells (2007) did a UK study where mothers reported feeling detached from their child and feeling rejection towards them because of a traumatic childbirth experience. Taghizadeh et al (2013) supported this finding in a content analysis they carried out on Iranian women's experiences of birth trauma where they found that problems bonding with the child and difficulties with family relationships were quite common, further supporting the findings of Elmir et al (2010) previously reported. Nicholas and Ayers (2007) found that two different types of bonding between mother and child were affected following a traumatic birth experience, the couples were more likely to be 'overprotective' (anxious) and 'rejecting' (avoidant). PTSD due to childbirth trauma also affected the relationships the women had with their partners in areas such as communication, coping and physical relations. This is

problematic as after an unpleasant birth experience, support from friends and family could help women overcome and recover from birth trauma (Ford, Ayers & Bradley, 2010); if relationships are strained this is less likely to happen.

A woman's wider social rapport can also be impaired or damaged because of birth trauma and in turn, she may become even more isolated (Taghizadeh et al, 2013). This is a concern, as women who have experienced birth trauma already feel isolated from the 'norm',

'The medical establishment thinks I am 'mental' and I have no common ground on which to discuss my childbirth experiences with 'normal' women' (Beck & Watson, 2008, pg.244).

In the UK, no specific national framework exists on supporting women psychologically who have had an undiagnosed breech birth or generalised birth trauma. The BTA (2015) calls for more to be done to prevent mental health problems such as PTSD that have occurred due to birth trauma as well as to reduce other psychological and physical impacts,

'New mothers suffering from PTSD have given us harrowing accounts of physically traumatising births, including severe haemorrhages or third-degree tears. Our members frequently tell us that the trauma of a difficult birth was compounded by poor communication or insensitive and even dismissive staff... We believe that this insensitivity would be unacceptable anywhere else in the NHS, and that all maternity units should provide care that is focused on the needs of women.'

In fact, in 2004, the BTA wrote a letter the UK Health Minister at the time, Dr Stephen Ladyman, to highlight the need for more research into the psychological effects of birth trauma and potential implementation of psychological support for women but the situation remains unchanged and no long-term psychological support is routinely provided at present for potential PTSD. After discharge from hospital after giving birth, women are routinely passed on to the care of their GP, community midwife or Health Visitor.

Unfortunately, there are no screening tests that exist or routinely carried out for postnatal PTSD. In addition to this, many GPs are highly informed about post-natal depression (PND), which is a mood disorder that is characterised by low mood and a lack of engagement in

activities several weeks after childbirth (NHS Choices, 2016) but they may not be as informed regarding post-natal PTSD, which is an anxiety disorder occurring due to a very frightening, distressing or life-threatening event, usually a traumatic birth (NHS Choices, 2015). Treatment for both disorders differ due to the nature of the disorders and for this reason, misdiagnosis and management with inappropriate treatment can realistically occur. This is also because women with post-natal PTSD may also realistically present with PND (Reynolds, 1997, Ballard et al., 1995) as there is symptom overlap between the two such as withdrawing, having frightening thoughts, a sense of a shortened future and difficulty sleeping (Bailham & Joseph, 2003) so it is not surprising that more focus is more likely to be on PND when a woman presents with such symptoms as screening already routinely takes place in the form of three questions after birth in the UK (NHS Choices, 2016). However, these disorders should be regarded as distinct and should be screened for separately to provide women with the best possible outcomes; Czarnocka & Slade (2000) suggested from their findings on PTSD that it is possible that 25% of women with post-natal PTSD could remain undetected because they are not also symptomatic for PND; existing PND screening will not pick up fully symptomatic PTSD.

It is essential to find ways to support women who have experienced PND or birth trauma for any reason to ensure they no longer feel as isolated, useless or ignored. It would also make sense financially as Turkstra et al (2015) considered women's use of health services after a traumatic birth and found that at 1-year post-birth those who had experienced birth trauma were significantly more likely to have a lower health related quality of life than women who had not had a traumatic birth. Importantly, the women who experienced birth trauma had more visits to their GP and made use of more additional health services than women who had not experienced birth trauma. Therefore, not only would resolving the trauma be of utmost importance to a woman's health and wellbeing it would also potentially yield savings on frequency of access to healthcare later. In a review on efficacy of debriefing strategies after childbirth, Sheen and Slade (2015) conclude that it may be advantageous to provide a targeted debriefing intervention (perhaps called a 'childbirth review') soon after birth for women who have experienced birth trauma to potentially help prevent development of distress symptoms. Such a review could also incorporate existing support measures for PND. Nevertheless, they do acknowledge that further research is necessary on the efficacy of such measures. Perhaps attempting to reduce and prevent

incidences of birth trauma may be preferable to considering interventions for PTSD and related psychological impacts, although these conditions will inevitably always exist due to the unpredictable nature of childbirth. Nevertheless, hopeful of some change, the BTA (2015) recommend their 'Preventing Traumatic Birth Guidelines' to healthcare professionals, which include statements such as 'care should be individualized; this includes pain relief provision and complete information about the well-being of their baby because fear and lack of trust are commonly associated with later traumatic experiences'. The most recent RCOG (2017) guidelines that are specifically related to managing breech birth also support these recommendations.

Birth Trauma relating to Breech Birth

The possibility of developing symptoms relating to PTSD is potentially being overlooked when considering undiagnosed breech birth. Although trauma is not a specific outcome considered in this research, it is still important to highlight that it could arise from a combination of different psychological impacts relating to perceived birth experience. In relation to childbirth self-efficacy and childbirth fear, it has been reported that high levels of fear are a risk factor for post-natal PTSD (Soet, Brack & Dilorio, 2003; Ford, Ayers & Bradley, 2010) and as previously discussed, high levels of fear could be apparent in women who experience 'normal birth' as well as those who suffer from events such as undiagnosed breech birth. Following on from this, one of the research aims here is to attempt to listen to women's experiences of breech birth and as an endpoint, consider what preventative or management support might be effective to aid women, if necessary, in coming to terms with their experience. It may be that some women present psychological feelings associated with trauma in relation to their undiagnosed breech birth stories but this is unknown as yet and reading such potential accounts will of course not assume a diagnosis of trauma unless a woman's account makes that explicit. Additionally, it may be useful to identify whether any women declare that their birth confidence (childbirth self-efficacy) was or has been affected by an undiagnosed breech diagnosis or a fear of childbirth in a subsequent pregnancy.

In relation to PTSD and arising from breech birth, the NICE Caesarean Section guideline (2011) details that women experiencing breech presentation who had an emergency caesarean section or assisted vaginal delivery were more likely to have PTSD 1-2 years after

the birth than women who had a planned vaginal birth. Molasaljevic et al. (2016) also found that PTSD was much more likely in women in the months after childbirth is a woman had an obstetrician assisted delivery. Importantly, inexperienced clinicians may be more likely to engage in assisted delivery with a breech presenting baby and deliver the baby quickly due to fear of complications, resulting in potential birth trauma (Girerd, 2015). The BTA (2015) estimates that 10,000 women each year develop PTSD from birth trauma and 200,000 women each year develop symptoms of PTSD due to being traumatised by childbirth (figure includes other birth traumas in addition to undiagnosed breech). Postnatal PTSD or the psychological symptoms of it can occur due to reasons such as emergency procedure, loss of control and not being listened to; all of which could occur because of an undiagnosed breech or complicated birth. As the BTA (2015) highlights, many women who experience such symptoms can suffer long term distress and although others tell them to 'put it behind them' it is difficult to do so due to the ruminating nature of PTSD. In addition, as childbirth is a natural experience other mothers can find it difficult to appreciate that sometimes it is not quick or easy to get over a birth. For example, one woman who had experienced PTSD from birth trauma shared,

'And I failed. In the past, with the previous two births (particularly with the one that resulted in PTSD) -that's what it felt like. I failed at being a woman' (Beck & Watson, 2008; pg. 244).

These women have no voice, may feel ignored, unsupported and experience cognitive dissonance between the want for another child but fear getting pregnant and experiencing birth again; arguably they may have developed low childbirth self-efficacy due to a previous negative experience (Bandura, 1994). In a BTA story (2015) 'Cassie' reflects on an undiagnosed breech birth by writing, ...this birth experience left my husband and I unsure whether we could ever go through another birth again which was upsetting as we had both hoped for a large family. However, two years later I became pregnant with my second daughter. I found myself preoccupied with worry regarding the birth'....

In support, Taghizadeh et al (2013) found that decision-making abilities regarding future pregnancy and psychological ability to have another child were affected by birth trauma and this linked to disruption of relationships. Regarding the prospect of future pregnancy one of the mothers said,

'That kind of fear is lingering in my head. This is a reason that made me refuse a later pregnancy, as the same procedure would happen to me, things that I'm really afraid of, why do I have to go through it again?' (pg.5).

In a recent systematic review investigating risk factors for post-natal PTSD, it was found that the most important predictive factor was a perceived negative experience of a previous birth (Dekel, Stuebe & Dishy, 2017). Both the literature on general psychological impacts and birth trauma as well as that relating to undiagnosed breech birth that has been considered here has alluded to potential fears of future childbirth after a previous negative experience and expectations about what may or may not happen during childbirth relating to experience or usual education on childbirth. For this reason, it is important in this research to explore previous experience further and to identify whether an undiagnosed breech birth experience affects decisions about having future children or expectations about future pregnancies and childbirth, and if so, how? As research in this area is particularly limited, it is difficult currently to draw any conclusions.

Although the focus here, as already discussed, is the potential psychological and affective impacts that breech birth experiences and birth generally may have on a woman, it must be acknowledged that most existing research on undiagnosed breech birth focuses on clinical aspects of care and management. Clinical recommendations from different medical bodies regarding management of breech birth are somewhat contradictory, thus these discrepancies within clinical practice may have implications on clinical issues such as increased CS rate and clinicians becoming 'de-skilled' that are important to acknowledge as they may arguably impact how a woman perceives her birth experience and the psychological implications that may subsequently arise. The following part of the literature review considers such clinical issues relating specifically to undiagnosed breech birth that could have direct or indirect psychological impacts on women:

Lost opportunity for External Cephalic Version (ECV)

Due to differences in clinical recommendations, management in labour varies and remains controversial (Nwosu et al, 1993). Even so, Bako et al (2000) uncovered that the overall outcome of a breech birth is dependent on ECV, skill of the clinician, availability of an ultrasound machine and availability and quality of neonatal intensive care. These aspects may not be difficult to achieve in countries such as the UK but in developing countries there is limited technological back up so outcomes may be worse (Bako et al, 2000). An undiagnosed breech presentation in any setting though will enforce the loss of opportunity for ECV (Nwosu et al, 1993; Leung et al, 1999). Women will not only miss the chance for ECV but also for the counselling that goes along with it in UK clinical practice, which may improve the potential for a natural VBB (Imoh-Ita et al, 2003). If ECV were routinely used at term once a breech is diagnosed, it could greatly reduce the rates of CS for breech births as well as the associated costs (Gifford et al, 1995). ECV procedures have been recommended by RCOG (2006) in past guidelines, but unfortunately as already mentioned, it is often too late to provide ECV for an undiagnosed breech-presenting baby. In addition, the practice is not widely used in the past and it has been found that this may be due to consultant preferences for CS (Land et al, 2001). In fact, only 33% of women with diagnosed breech presentations are offered ECV in the UK (POST, 2002). Nevertheless, due to a recent update to RCOG guidelines (2017) a stronger worded recommendation stating that ECV should be offered to all women presenting breech at term unless there are any contraindications should lead to increased offerings and uptake and may serve to reduce potential anxiety relating to impending breech birth if successful.

Increased caesarean (CS) rate and 'de-skilled' clinicians

A profound clinical implication for undiagnosed breech births is the increased CS rate perhaps due to adherence to the previous RCOG (2006) and current NICE (2012) clinical guidelines mentioned previously that were largely based upon a large-scale landmark RCT across 26 countries on breech birth titled the 'Term Breech Trial' (TBT) (Hannah et al, 2000). The TBT concluded that a VBB is more hazardous for the baby than a CS in term breech babies so CS is preferable. Nevertheless, the study only considered planned mode of delivery and did not explicitly include or report on undiagnosed breech births even though it was used to inform policy on undiagnosed breech birth in addition to diagnosed

breech birth. In fact, Glazerman (2006) who was a collaborator on the original TBT trial has argued that the research is methodologically flawed so the guidelines written based on such evidence should be potentially disregarded. An in-depth discussion of these limitations can be found in the 'Morbidity and Mortality' section of this Introductory Chapter. Regardless of this, Steen and Kingdon (2008) write that the TBT has strongly and substantially impacted current practice and policy formation on breech birth. In a recent research paper on undiagnosed breech birth Walker (2013) states that there continues to be a lack of evidence on whether a CS in labour offers the same benefits to the foetus as it would have done prior to the onset of labour.

Numerous research studies, as well as the RCOG (2017) guideline for breech management, report that the CS rate for breech presentations, including undiagnosed breech in many cases, has dramatically risen since the dissemination of the Term Breech Trial. Kok et al (2008) identified that the CS rate for breech presentations in Holland rose from 45% to 80% over an eight-year period (2000-2008). Thomas and Paranjothy (2001) found in a UK audit that almost 90% of women who have a breech presenting baby (diagnosed and undiagnosed combined) will have a CS, which is a major contributor (fourth) to the average UK caesarean rate of 21% (Parliamentary Office of Science and Technology (POST) 2002). Guittier et al (2011) reported that in one Swiss maternity unit 80% of women with a breech presenting baby had an elective CS, despite the option of a VB. In a French study (Carayol et al, 2007) it was reported that vaginal delivery rate had decreased from 39.2% over a 3year period before the publication of TBT (1995-1998) to 16.7% in 2003. In addition, the CS rate rose from 42.6% to 74.5%. Ultimately, since the TBT CS has become the preferred management strategy across many countries for breech delivery (American College of Obstetricians and Gynaecologists, 2001). Deneux-Tharaux et al (2006) state that as the practice of VBB for breech presentations decreases, clinicians and midwives are de-skilled in the process and experiences are lost. In turn, this contributes to further rises in CS rates. Lindqvist et al (1997) also warned of de-skilling when discussing her research on breech presentations in Sweden. She suggested that having a low vaginal delivery rate for breech babies will not only result in fewer opportunities for training but will make it virtually impossible to retain the skills necessary in the workforce for safe delivery of a breech presenting baby. Evans, a Midwife, describes the optimum process for a vaginal SBB in her 2012 paper and stated, 'It is unacceptable to make CS operation the only option for those women whose baby is presenting breech, just because we professionals have lost the

knowledge and skills to assist them in a safe, spontaneous vaginal breech birth' (pg. 21). This de-skilling is a real concern, particularly as the RCOG (2017) guideline on breech management requires a skilled supervisor to be present for a vaginal breech delivery as a necessity. RCOG (2017) has acknowledged this and is also recommending further training in breech delivery for all relevant healthcare professionals.

This increase in CS rates arguably matters, for as well as the potentially increased safety risks to the mother and consequences for future pregnancies from having a CS that will be discussed later, caesarean deliveries result in longer hospital admission and cost implications to the NHS. The high cost of CS compared to a vaginal birth makes this rise in CS where breech presentation is the fourth main contributor a public health issue (POST, 2002). In 2002 the cost to the NHS of a CS was £1701, this compared to £749 for a vaginal delivery (POST, 2002).

Recurrence of breech presentation

A further implication of increased CS for breech births (undiagnosed and diagnosed) is that findings demonstrate that women who have a CS delivery for a first baby (not necessarily breech) are at a greater risk of having a baby with malpresentation in their next pregnancy compared to women who have a vaginal delivery first (Kenare et al, 2007). Ford et al (2010) considered recurrence of breech in consecutive pregnancies regardless of mode of delivery to assess predictive factors of breech and found that the rate of recurrence of breech presentation in a second pregnancy was 9.9% and in a third consecutive pregnancy it was 27.5%. This compared to a breech presentation occurring in 4.2% of first pregnancies. These findings demonstrate that implications of an undiagnosed breech can stretch way beyond delivery in the short term and may contribute to further breech experiences later due to several predictive factors. Pregnancy factors that significantly predicted a recurrence of breech in the Ford et al (2010) research included placenta praevia and maternal diabetes in a first pregnancy and birth defects, placenta praevia and a female baby in a second pregnancy. Monitoring women more closely with a history of breech may help to reduce recurrence of breech, CS rate and the potential physical impacts and psychological fears and anxieties that may occur due to fear of recurrence.

Lack of choice and consent

As already discussed, experiencing an undiagnosed breech birth allows little or no time to plan or prepare for a breech birth due to being diagnosed in labour. Nevertheless, the RCOG (2006, 2017) still recommends that certain auditable standards be followed regarding breech birth such as discussing and reviewing the preferred mode of delivery with the woman and recording this in the notes. This is advocating shared decision making, which is where a health professional and their patient will reach a healthcare choice together after possible options are presented and reviewed (NHS Shared Decision Making, 2012). Although as Roberts et al (2004) stated in their study aiming to improve antenatal detection of breech presentation, 'antenatal detection of breech presentations at 35-37 weeks is necessary to allow adequate time for decision making about external cephalic version (ECV) and/or caesarean section' it could be suggested that not diagnosing a breech birth until established labour removes all possibility for shared decision making. Say et al (2011) suggested in a systematic review of 11 existing Randomised Control Trials (RCTs) investigating the benefits of patient decision aids relating to clinical and psychosocial outcomes for pregnant women that shared decision making is increasingly important in pregnancy and maternity services but health professionals find it difficult. They concluded that using patient decision aids and using shared decision making is associated with better health outcomes in women such as reduced anxiety, improved knowledge, less decisional conflict and feeling an informed choice has been made. However, because the patient decision aids in each study were so heterogeneous, the reliability of such a conclusion is threatened. Say et al (2011) have conceded that none of the positive effects of decision aids were identified in all studies and outcomes were so heterogenous that the same outcomes were not even tested in the same ways, if at all, across studies limiting the usefulness of the findings. Even so, Guittier (2011) also concluded from a qualitative study on breech presentation that emphasis should be placed on creating spaces for dialogue with pregnant women regarding mode of childbirth and useful material containing relevant information should be provided to make a woman feel she is sharing the decision-making process.

Consent is also a key factor within the process of shared decision making and in their paper on consent to breech birth in New Zealand, Powell et al (2015) state that legally and morally women should be provided with full, unbiased information about different birthing options to make an informed choice. They should be able to give or refuse consent and for

providers to cooperate or give them a second opinion. Lawson (2012) considered the TBT 10 years on and suggested that delivery option advice for women with breech presenting babies during labour should be very different compared to what might be received antenatally due to women no longer having certain safe pre-labour options during labour. Importantly, in a change to their 2006 guidelines, RCOG (2017) now stipulate that informed consent must be gained from a woman even if presenting with an undiagnosed breech baby detected in labour and counsel should be offered as time and circumstance permits.

If an undiagnosed breech is progressing well, an experienced clinician is present and there appears to be no compromise to the foetus or mother then a VBB should be assumed and delivered (Nwosu et al, 1993) especially if it is the woman's choice (RCOG, 2017). In practice, VBB is rarely a choice that has been available to women (Powell et al, 2015). Even so, although clinicians cannot be forced to provide care they believe is harmful or inappropriate clinically, this right does not stretch to requiring a competent woman to undergo surgery (CS) to avoid a 'natural' process because of the clinician's personal beliefs. Nor does it mean a CS should be withheld when a woman requests it because a physician believes a vaginal delivery is morally preferable (Montgomery vs. Lanarkshire Health Board, 2015). It appears that the right for a woman to choose VBB when experiencing a diagnosed or undiagnosed breech presentation is undermined by several factors including providing misleading or biased information about the risks of VBB, clinical policies that disallow VBB due to research such as TBT and threatening to not look after a woman if she disagrees to consent to the advice provided (Powell et al, 2015). Reassuringly, the new RCOG (2017) guidelines may serve to address these issues, although it is certainly possible that women who experience breech births could still experience less choice in delivery than those with cephalic presentation. Tiran (2004) suggests that women with breech presentations are rarely facilitated to make an informed decision about the way their baby might be delivered, in turn this may lead to a perceived negative birth experience. Ultimately, it appears that having a breech-presenting baby could lead to choice and consent implications since choices are often understandably not offered for safety, resource or time reasons when a breech baby is diagnosed during the labour process. However, once again, RCOG's (2017) most recent guidelines may counteract this consequence, as they also recommend that clinicians should counsel women in an unbiased way that considers relative and absolute risks of different birth choices.

Morbidity and Mortality for Baby and Mother

Undiagnosed breech birth not only could result in greater rates of perinatal mortality and morbidity but also maternal mortality and morbidity (Bako et al, 2000). Not only this, undiagnosed breech birth poses an ethical dilemma for clinicians and midwives (Walker, 2013) as in during labour they may be unsure as to whether to go with their extensive training and experience or whether to follow the relevant professional guideline for their profession, even when they believe the alternative may prove more beneficial for mother and baby.

As discussed, the TBT (Hannah et al, 2000) set out to discover whether a policy for planned caesarean or planned vaginal delivery is better for breech presenting babies. Importantly, the results demonstrated that incidences of perinatal mortality, neonatal mortality and morbidity combined were significantly higher for the VBB group (5%) compared to the CS group (1.6%). The reduction in risk of these perinatal and neonatal outcomes from a CS rather than a VBB was much greater in countries with a low perinatal mortality rate. In addition, it was found that the absence of a skilled clinician for a VBB greatly increased the risk of perinatal and neonatal mortality and morbidity for the VBB group compared to the CS group (40.9% vs. 1.7%). No differences were found between groups relating to maternal morbidity and mortality (3.9% (CS) vs. 3.2% (VBB)). Because of these findings, Hannah and colleagues concluded that 'planned caesarean section is better than planned vaginal birth for the term foetus in the breech presentation'. This was a potentially bold conclusion to draw but consequently guidelines have been developed favouring a preference for CS over VBB based mostly on these initial findings of the TBT (Walker, 2013). In a letter to the Editor of 'Birth,' Berard (2003) a Registered Midwife states in relation to this matter, 'Never did I imagine that a day would come where a defence would be required for a biological childbirth'.

Since the TBT (Hannah et al, 2000) was published it has received much criticism related to its methodology as well as the clinical practice used by those involved. Berard (2003) appeals that we take the results and conclusions of TBT with caution and states that more harm than good could be done as a result of blanket guidelines suggesting that CS is the birthing method that should be used for a breech-presenting baby. In addition, she claims that the study would inevitably have suffered from bias due to the nature of it; it is difficult to randomise and impossible to blind obstetric practice. Bandolier (2002) states that

application of randomised control trials to clinical practice should be done with caution as bias in the research creates an overestimation of the benefits of treatment; in this case, this could have occurred relating to the use of CS over VBB.

In the journal 'Birth,' Keirse (2003) suggests that the TBT should not have included low birth weight babies in their data as they could have skewed the data to disproportionately show worse outcomes for VBB. Wilkinson (2003) a collaborator in the TBT disagreed with the suggestions made by Keirse and in a letter to the Editor claims the criticisms being made were 'nonsensical'. Nevertheless, Biswas (2001) also demonstrated concern about the results of the TBT in a letter to the Lancet where he claimed the TBT would 'push assisted vaginal delivery of singleton term breech foetuses into the history books'. According to Biswas, this is a concern as the TBT reported that only 9.8% of the women who delivered a VBB had had a scan for pelvic adequacy prior to being assigned to birthing groups. This is problematic as availability of information on a woman's pelvis size may lead to better clinical outcomes and increased numbers of successful VBBs but with no increased risk of perinatal outcomes compared to CS (Van Loon et al, 1997). In addition, Leung & Pun (2001) question the conclusions of the study relating to undiagnosed breech births. In their research prior to TBT, Leung et al (1999) found that undiagnosed breech babies are much more likely to result in a VBB and there is no more neonatal morbidity in those babies compared to those whose breech presentation was diagnosed antenatally. Therefore, they believe clinical considerations such as pelvis size and dilation of the cervix are better indicators of which birthing method should be used for breech presentation than just selecting women for type of method before they go into labour or during labour. In support, Michel et al (2011) trialled a decision protocol for type of delivery in breech babies, which included a consideration of pelvic measurements and found this lead to an increase in VBB but without any associated impairment of neonatal condition. Even so, the RCOG (2008) stipulate that pelvimetry is not necessary for a VBB and RCOG (2017) state that evidence is unclear on pelvimetry, so there is not necessarily consensus on this matter.

Somewhat unpredictably, a 2-year follow up of the TBT (Whyte et al, 2004) found no differences between groups (CS vs. VBB) in child mortality and morbidity at 2 years old but strangely still concluded that CS was the safest method to use for breech presenting babies. Lawson (2012) considered the TBT ten years on and provided evidence that since the publication of TBT, maternal deaths had been recorded among women who had had a CS for their breech-presenting baby. Lawson (2012) also considered other flaws with TBT

including reporting of incorrect facts, attributing death of foetuses to mode of delivery even when they may have been deceased before they were even recruited to the study, violation of study definitions creating ambiguity, and the tools available at different centres being very different creating problems with generalisability. He considered the clinical implications of these flaws and showed concern that there will eventually be no clinicians left who will be able and willing to handle VBBs. This is worrying as VBBs will never disappear completely as undiagnosed breech births usually result in VBB, some women choose to have a VBB and some have chosen a CS but go into labour so revert to a VBB.

As may be expected, due to the wide plethora of research criticising the TBT, much research has been carried out since to attempt to uncover some consensus on whether perinatal and neonatal outcomes really are worse because of a VBB and whether maternal health is affected by mode of delivery for breech births or not. Bako & Audu (2000) compared diagnosed and undiagnosed breech births for mode of delivery and fetal outcomes and found that there was no significant difference in practice regarding the mode of delivery occurred between groups but importantly that there were no differences between groups in perinatal death, fetal trauma, cerebral irritation or admission to neonatal intensive care. As each group contained women who had CS and VBB these results do not support Hannah et al (2000) TBT that concluded CS was safer for breech birth. In fact, Bako and Audu (2000) conclude by advocating VBB for undiagnosed breech presentation if careful case selection has occurred. Usta et al (2003) also compared undiagnosed and diagnosed breech births for neonatal outcome and mode of delivery and found similar results in that neonatal outcomes including Apgar scores, intensive care admission, neonatal death, sepsis and assisted ventilation were not significantly different between groups. In contrast, they identified that more women with a diagnosed breech presentation had a CS than those in the undiagnosed group. This may also explain why blood loss was significantly higher and hospital stay was significantly longer in the diagnosed group compared to the undiagnosed group. However, there was no difference between groups in maternal health outcomes such as need for antibiotic treatment.

In 2006, Goffinet et al published an observational prospective study titled PREMODA (PREsentation et MODe d'Acouchement) in order to consider neonatal morbidity and morbidity in term breech babies' dependent on mode of delivery in countries where VBB was still widely practised even after TBT, such as France. The outcomes and critieria for PREMODA were identical to that of the TBT for comparisons to be made in results. In

contrast to Hannah et al (2000) findings, Goffinet et al (2006) found no significant differences between groups in fetal or neonatal morbidity and mortality combined, suggesting CS is no safer than VBB for neonatal outcomes. After controlling for identified risk factors such as maternal age, educational level, pelvis size, previous CS delivery and parity the difference between groups in neonatal outcomes remained significant. Although, lower Apgar scores at 5 minutes and total neonate injuries were significantly more common in the VBB group than the CS group. Even so, overall Goffinet et al (2006) concluded that planned vaginal delivery of breech presenting foetuses remains a safe option that can be offered to women alongside the correct clinical information. In addition, they concluded there is no excess risk from having a vaginal delivery of a term breech baby than from having a CS. Other studies have also supported there is no significant excess risk when a breech baby is birthed vaginally compared to a CS in places where VBB is still widely practiced (Golfier et al, 2001; Kayem et al, 2002; Alarab et al, 2004). Pradhan et al (2005) published a cohort study that reported on breech birth outcomes based on mode of delivery over a 10-year period (1991 – 2000 inclusive) at a UK district hospital and found that both VBB and CS in labour were associated with an increase in short term neonatal morbidity and mortality than a planned CS prior to labour. This finding may have implications for undiagnosed breech births, where all options have to be taken during labour and furthers the need for breech presenting babies to be diagnosed pre-labour. In support of Whyte et al (2004) 2 year follow up of the TBT, Pradhan et al (2005) also found that regardless of differences in short term outcomes related to mode of delivery, long term outcomes of mortality and morbidity, including cerebral palsy, were no different between groups.

Clinician Fear

A further consequence of presenting with a breech baby is clinicians' fear of outcomes such as those discussed in the previous section, which can affect labour and mode of delivery (McKay, 2010) and in turn could have further implications on delivery choices for women. Rubio-Batanas (2013) in a published Midwife Blog on best practice for SBB suggests this physician fear could be overcome by ensuring that Doctors and Midwives have the skills and confidence they need to deliver a VBB or SBB; or in her words, 'to facilitate this variation of normality'. POST (2002) states that clinicians are fearful of litigation and this

could explain rising CS rates for all types of birth. This is important as breech presenting babies in the UK contribute 16% to the UK CS rate so a continued or increased fear of litigation will only ensure that CS rates for birth complications such as undiagnosed breech presentation will continue to rise, alongside the associated additional costs of CS.

Nevertheless, the fear is well founded as over a 6-year period leading up to 2001, nearly 3000 litigation cases were filed relating to obstetrics and gynaecology in the UK and 80-90% of these claims regarded damage caused to a baby at birth (POST, 2002). By ensuring clinicians are trained to a minimum level of competency in all modes of delivery for an undiagnosed breech baby it may help to have a positive influence on some of these statistics as women will feel they have made a choice, clinician's will feel confident in delivering the woman's choice and litigation may be less likely if a woman perceives she has been listened to. Again, RCOG (2017) supports this suggestion by recommending further training provision to all who could be involved with VBB and the presence of 'skilled supervisors' in all maternity units at all times, which may also allay women's anxieties relating to the safety of a VBB.

Increased maternal risk

Naturally, the safety of both the mother and baby are paramount in any pregnancy and consequent labour but due to the wide plethora of conclusions that are made regarding breech, it is somewhat difficult to ascertain the safest practice for the infant and the woman in terms of delivery method. In the recent past, research has mostly lead to guidelines advocating CS over VBB for the best neonatal outcomes, the outcomes for the mother in all respects arguably seem to have been regarded with less importance. For example, the NICE Guideline for Breech Birth (2011) wholeheartedly supports CS for breech birth due to reduced perinatal mortality and neonatal morbidity risk but it avoids discussing the known increased risks to the mother of emergency CS during labour with a breech presenting baby (Walker, 2013). However, the recently published RCOG (2017) guideline is clear that there is much greater risk of adverse outcomes for the mother when having a CS during labour (emergency) than prior to labour. In support, a secondary analysis of the TBT results completed by Su et al (2007) identified that a CS during active labour carried a risk three times greater than that posed by vaginal birth to maternal morbidity. Even in early labour there was an increased risk of maternal morbidity, but this was not as significant as

the active labour risk. Nevertheless, this increased risk to the mother resulting from having an emergency CS during any stage of labour has implications for those who have undiagnosed breech births as they have no choice of a pre-labour caesarean for a breech presentation as the breech diagnosis will only be made during labour. Consequently, a VBB or an emergency CS during labour with increased associated maternal risks are the only options. Interestingly, Kok et al (2008) considered expectant mothers and fathers preferences for mode of delivery with a breech-presenting baby and the trade-offs of outcomes based on the delivery method. They found that most women would prefer a planned CS to a VBB and a favourable 2-year neonatal outcome is most important when they considered which birthing method to choose. For fathers, the most important outcome when deciding whether their partner should have a CS or VBB was maternal outcome. This is an interesting finding yet cannot be generalised to undiagnosed breech births due to the increased risks of emergency CS during active labour compared to planned CS and the lack of time to choose and weigh up the pros and cons of each mode of delivery.

Literature Review Key Messages

In summary, it appears from the literature reviewed that childbirth of any kind can produce feelings of depression, anxiety and fear in women during the pregnancy or childbirth phases. Importantly, the extent of fear or anxiety felt may differ between 'normal' and 'complicated' deliveries but this needs further exploration. Women who have had previous negative birth experiences that would not be regarded as 'normal' childbirth appear to report more fear and anxieties in future pregnancies so this may be the case for those who have had previous undiagnosed breech experiences that they have perceived as negative for various reasons. Anxieties and fears may be maintained via vicious cycles and vicarious learning as well as being greatly impacted upon by low childbirth self-efficacy. In turn, anxieties and fears left unaddressed could potentially result in disorders such as post-natal PTSD, post-natal depression or anxiety. Currently, screening for all such disorders is not always commonplace and women are not always willing to share the emotional impacts of a pregnancy or birth due to fear of having their babies taken away and being seen as inadequate. As a result, help cannot always be forthcoming as it is not always known it is required. Unfortunately, this means that psychological symptoms and fears may often go

unaddressed and could worsen or lie dormant, impacting a woman's psychological wellbeing further.

In terms of the clinical aspects of breech birth that may impact on psychological factors, it seems that the potentially appropriate advice and care for women presenting with an undiagnosed breech baby during labour would be to provide her with a choice of options for mode of birth (if the labour has not progressed too far and it is safe to do so) for a perception of choice to have occurred and a feeling of having some control. In addition, she should be given the opportunity to make an informed choice regarding her birthing decision and time should be provided to make that decision if it is available, all of which is advocated by RCOG (2017). Women should also be assured there is a suitably trained clinician on hand to assist with the delivery or a midwife trained in SBB as this may allay some fears and anxieties surrounding the birth process. This may also assist with feelings of trauma and anxiety a woman may have afterwards when she reflects on her overall perception of the birth. Each step and the processes involved with both CS and VBB should be explained to the woman and her partner (if present) and she should be informed of the relative risks of morbidity and mortality for both herself and her unborn child relating to each mode of delivery. Biased information should not be provided that favours CS because the clinician treating the woman favours CS for personal reasons. Naturally such recommendations as supported by RCOG (2017) are an 'ideal' but it must also be acknowledged that in a busy and stretched NHS, implementation of all recommendations could be challenging for both midwives and clinicians and may be difficult to measure due to subjective judgements. Attempting to adhere to guidelines where possible though and having the psychological impacts of birth in mind during clinical management should hopefully assist in reducing possible psychological impacts of breech (and normal) birth on women.

Current Research and Aims

As is clear, most existing research into breech birth has considered perinatal and maternal outcomes dependent on mode of delivery as well as the related medical management. Little research has explored the experiences of women and the way they feel regarding having delivered a breech-presenting baby. Two qualitative studies have considered women's perceptions of their breech birth experience and diagnosis to try to understand their experiences (Founds, 2007 & Guittier et al, 2011) yet neither exclusively considered undiagnosed breech presentation nor how the experience may have affected the women's thoughts on having more children in the future. Guittier et al (2007) considered decisionmaking processes regarding mode of childbirth and the thought processes that accompanied them but did not contemplate how the diagnosis of breech may have affected future pregnancy related decisions. In addition, although Founds (2007) considered the effects of context on women's and providers' experiences of breech birth, the conclusions drawn regarding the women's experiences are naturally very culturally bound as the study was conducted in Jamaica. To this end, the current study aims to not only uncover women's experiences of undiagnosed breech birth exclusively, which is an arm of breech presentation that appears neglected in research, but will also endeavour to understand whether birthing experience (positive or negative) has any effect on decisions whether to have further children and what the expectations of birth may be if future pregnancy did occur. For example, after completing her study on women's experiences of breech, Founds (2007) stated that, 'future reproductive choices may have been affected by the experience of breech presentation'. In fact, she also felt it was important to note that a few women said they would have no more pregnancies after their experience of breech presentation even though this was not an outcome being considered as part of the study. This notion that an undiagnosed breech birth could effectively inform thinking regarding future childbirth is also supported by the previously mentioned literature on general birth trauma (Taghizadeh et al, 2013; Elmir et al, 2010). Furthermore, anecdotal support comes from a few women I have spoken to during PPI who indicated that they are wary about future childbirth and may not have another child because of their recent breech birth experience.

Although focusing on medical management may be justified from clinical conclusions that have been drawn regarding the outcomes of undiagnosed breech being no different to diagnosed presenting breech (Bako & Audu, 2000; Usta et al, 2003) we cannot assume that the way women experience undiagnosed breech is the same as how they experience a diagnosis of breech prior to labour. Ultimately, learning more about women's subjective birth experiences that have potentially been made more complex by a breech presentation may aid our understanding further and in turn, inform clinical practice and women's pregnancy experiences for the better.

Furthermore, investigating women's undiagnosed breech experiences exclusively has never been done using online discussion forums, yet other varied experiences have been successfully investigated in such a way including subsequent birth after a birth trauma (Beck and Watson, 2008) the male experience of infertility (Malik and Coulson, 2008) and use of forums for social support for eating disorders (McCormack and Coulson, 2009) and Huntingdon's disease (Coulson et al, 2007). There are many strengths to using such online discussion boards as a source of secondary data as outlined in the 'Method' section of this thesis and using such a unique method of investigation will allow women's real stories to be uncovered as they have been allowed to write them without trying to fulfil researcher expectations (Giles, 2016).

Research Questions

In relation to the aims discussed, the research questions are as follows:

RQ1: What are women's experiences of undiagnosed breech birth?

RQ2: Are there any common psychological/affective themes that can be drawn from these experiences and what are they?

RQ3: Have women's future decisions relating to having further children and the expectations of future childbirth experiences been impacted upon because of an undiagnosed breech birth?

RQ4: Are there any potential support mechanisms that could be put in place in clinical practice and beyond for women who experience undiagnosed breech birth?

CHAPTER 3: Reflections

My Undiagnosed Breech Story

In December 2015, I gave birth to my own undiagnosed breech baby. Throughout the final 4 months of my pregnancy, I experienced terrible rib pain and never felt my baby kick; I was a first-time mum so did not know what a baby kicking inside you should feel like. I informed a series of different midwives about my pain and enquired as to what kicking should feel like and I was consistently told not to worry and that the rib pain would get worse yet they did not investigate it or consider why I was getting it. I felt helpless and nobody was listening to my concerns.

At 38+1 weeks, my waters broke at 7am in the morning. I contacted the hospital numerous times that morning and was told to wait at home until the head was showing, as there was no room. I ignored this advice as the pains were getting worse by 1.30pm and made my way to the hospital with my husband, which was a 30-minute drive away. We arrived and were left in a room on our own for over two hours. Nobody came to palpate me or examine me except a Health Care Assistant who weighed me. The Senior Midwife then came to scan me with a hand-held scanner and confirmed my baby was cephalic. She pointed out his head to my husband on the screen; this in fact was his bottom. No internal examinations were ever carried out. By 5.30pm, I was finally told to walk to the Midwife Lead Birthing Unit (along the corridor) where a birthing pool was available. After being in the birthing pool for 30 minutes and feeling I was ready to push, nothing seemed to happen. I was in pain and was not offered any pain relief. A newly qualified midwife in her first week of work suddenly (and thankfully) raised the alarm as she saw meconium in the water. This was an emergency and my baby was breech. I was told to get out of the pool and to get on the trolley. I was pushed down the corridor to the delivery suite whilst the mass of people around me were arguing about whose fault it was the breech was

undiagnosed and whether it was too late for an emergency caesarean section. My husband nor I were told what was going on and all choices had gone. I was taken into the delivery suite where I was forced down on my back and had to deliver my breech baby vaginally. I had no pain relief. I was lucky as a clinician was present who had experience in delivering breech babies. Even so, my baby was stunned and he did not cry when he was born, he had to be given help to breathe and had a very low Apgar score. Luckily, this resolved and his Apgar score improved at 5 then 10 minutes. He was a frank breech and born at 7pm with his legs up by his ears; his head had probably been sticking in my ribs for months, which explained the pain. I could not really see my little boy with all the people around me and he was taken to Neonatal Intensive Care for several hours. I did not get to give my baby his first bottle-feed. It was very traumatic and I felt as if my birthing experience was stolen from me. I felt I had no control over the experience. My husband and I were left in the room without our little boy, eagerly and anxiously awaiting his return. I had a seconddegree tear and was consequently stitched up and then told to get in the shower. Our baby was finally brought back to us at 10.30pm and we were thrilled to see him. At midnight, we were moved to a maternity ward. There was a failure to clerk us into the ward for our entire stay and as a result, I was not monitored. Luckily, I did not haemorrhage.

Numerous midwifes came to 'take a look' at my baby, not to care for him, as they had never seen a breech baby before. This felt hurtful and I just wanted to protect him. We finally left the ward at midnight the following day. From then on, my baby has had multiple health problems and the first seven months I spent with him involved often bi-weekly hospital visits and administering many medicines to him. He is being managed well now and is a beautiful toddler but he and I have had to go through so much because of this traumatic undiagnosed breech birth. We felt very badly let down and the future is still uncertain in relation to his health.

It is important to mention here that although this was 'my story' others will have experienced the same events as I have but will have differing perspectives and reflections. It is important for me to acknowledge this as an 'insider researcher' as I will need to ensure that throughout I am keeping a check on myself that my assumptions are not fuelling my interpretation of the data I collect. I hope to use my 'insider' experience in a positive and helpful way to benefit my research rather than in a limiting way; following a realist epistemological stance will also help with this as it involves seeing things as they are. This is considered in the following section on 'Philosophy of Research'.

Philosophy of Research

I have spent a considerable amount of time considering my epistemological standpoint within qualitative research. In achieving my BSc, MSc and PGCE I completed quantitative pieces of research that were clearly positivist and objective and these aspects of empiricism have become engrained within me. I have also always enjoyed 'number crunching'.

Therefore, I surprised myself as well as others when I decided to do a qualitative piece of work. I could have re-considered my research question or looked at a different aspect of undiagnosed breech birth in order to be able to complete a quantitative analysis, but I decided against it. I felt and still feel so passionate about the experiences women have regarding undiagnosed breech birth that I had to follow this passion and challenge myself by learning new qualitative techniques in the process as they are more suitable for my research question. I have very much enjoyed this new take on things and the new way of 'doing'.

Even so, identifying an epistemological stance has been a lengthy process but I now feel I have some grasp of the variances between different viewpoints. After reading about the

different theoretical approaches, I feel the view that best identifies with my own is the essentialist or realist perspective. I have considered perspectives using my own analogy of political parties; I vote for one party who I best identify with but it does not mean that I disagree with all views and ideas of other political parties.

The realist framework acknowledges a reality in the data. Realism is based on the premise that there is a real World that we interact with and with which our theories and ideas refer (Maxwell, 2012; Schwandt, 1997). In other words, there is a real World that exists independently of the observations we make and related theory we have about it. Such realist views have been ignored until relatively recently in qualitative research as it has been suggested that qualitative research and realism cannot mix (Smith, 1983; Guba, 1987). This purist stance has been criticised by pragmatists who have suggested such a separation between qualitative and quantitative stances is false and we should use the strengths of both in research to better aid our understanding of the World (Sieber, 1973; Newman and Benz, 1998).

Realism is not the same as objectivity; Lakoff (1987) made the distinction between the two by suggesting objectivism allows for only one correct reality but realism assumes 'the World is the way it is' but there may be different ways of understanding it. In other words, what we can observe is not necessarily true or false and cannot be tested against theory as there are some aspects of reality that cannot be observed (Hibberd, 2010).

Following a realist approach in qualitative research has been labelled as a common-sense basis of social research (Maxwell, 2012). To illustrate this, Schwandt (2007) articulates, 'On a daily basis, most of us probably behave as garden-variety empirical realists - that is, we act as if the objects in the World (things, events, structures, people, meanings etc.) exist as independent in some way from our experiences with them. We regard society,

institutions, feelings, intelligence, poverty, disability and so on as being just as real as the toes on our feet and the sun in the sky' (pg.256)

As I have subscribed to a realist perspective for this research, the method I have used is Thematic Analysis, which lends itself to many epistemological approaches (Braun and Clarke, 2006). I have also only considered the semantic content of the stories women have shared; the experiences as they appear are "what they are". For this reason, member checking was not a necessary requirement for scrutinising the validity of the methods or data as the data is real for those women regardless of the thoughts others may attribute to it or how it is measured. Maxwell (2012) suggests that using procedural criteria for checking validity is fundamentally flawed so does not recommend it; he helpfully outlines a realist approach to validity,

'Validity thus pertains to the accounts or conclusions reached by using a particular method in a particular context for a particular purpose, not to the method itself' (pg. 130)

Therefore, the validity of the accounts the women in this study have given and the relationship the accounts have to the research questions are essential, not the methods used to create or check the provided accounts. The conclusions I draw will be checked for validity by asking myself whether my conclusions follow the data and whether I have adequately discussed arguments for and against my own arguments and my own personal story. This will also be done as part of my reflexive process with the acknowledgement, as mentioned previously that I am an 'insider researcher'. This consideration is essential as there are both advantages and disadvantages of being an 'insider' and the disadvantages need to be overcome to ensure credible insider research (Unluer, 2012).

Advantages of being an insider include having an established understanding that allows the truth to be told and judged more effectively, having an enhanced knowledge of the culture being studied and not allowing the flow of communication to be interrupted in an unnatural manner (Bonner and Tolhurst, 2002). Ultimately, researcher's insights are unique and should be valued (Johnson, 2009). Problems also exist though and I have tried to manage these throughout the entire research process. Bias is the main concern with insider research and making assumptions about the research or data that are wrong because I have lost objectivity and based them on my own experience could be an issue (Hewitt-Taylor, 2002). To overcome this, I ensured that I kept a reflective diary and questioned myself and my assumptions throughout the process. I believe that following a realist perspective has also assisted with this as it has enabled me to see the data for 'what it is' rather than trying to attribute too much hidden or latent meaning to it that could be based on my own expectations.

I have reflected on the entire research process and realise that my own experience has undoubtedly influenced the research process in some ways. When I was deciding on the research I would do I had just had just experienced my own undiagnosed breech experience and I realised there were many aspects of the experience, in my view, that could have been improved to have given me a better experience and an improved memory of it. I had suddenly become passionate about the whole topic area and wondered whether my experience had common elements compared with other women going through the same thing or whether my experience was not really the 'norm' at all. It was important for me to research a topic that I had a keen interest in and one that would hold my passion and interest; this was it. I knew this research at times would be challenging both emotionally and psychologically, but I needed to find out more about others experiences and try to do the little I could to perhaps provide research support to encourage changes to be made

clinically for women to have improved undiagnosed breech experiences. For this reason, it was important to choose the design I did, and to conduct my research using secondary data to get a 'real' account of the birth experiences of women like me in that they had had an undiagnosed breech baby. When I was trying to establish my research questions, being an insider was sometimes problematic but I had to make sure I asked questions that I knew the answer to in my own head regarding my experience but could not assume that other women's answers would be the same. I feel I have done this successfully overall.

Furthermore, when analysing the results I have discussed findings with my supervisory team and have consciously checked with myself that I have not made any outward assumptions or interpretations.

Role duality can also be an issue with insider research (Sikes and Potts, 2008) but it was not really an issue for this research as I did not have direct contact with the contributors to the discussion forums used to collect data and the contributors did not know me as 'researcher' or 'woman who had an undiagnosed breech birth' so keeping these in check was not a problem in relation to participants. To keep myself in check though, I have tried to clarify the researcher role and my own personal role in my reflections here and in my diary and I feel it has allowed me to consciously separate the two. My supervisors have also been able to assist me in ensuring I am covering the role of the researcher rather than role of the woman who had an undiagnosed breech birth. Overall, I feel my own experience has played a positive role in this research and has provided me with a valuable insight that other researchers do not have, as well as enhancing my own understanding. However, this situation has only happened by considering the potential pit-falls of being an 'insider researcher'.

CHAPTER 4: Methods

Design

It was intended that an experiential qualitative study would be carried out using a form of asynchronous semi structured email interview. The email interviews would be used to gather data from individual participants to explore their individual participant experiences. Unfortunately, the research method had to be changed due to difficulties recruiting participants.

An attempt was made to recruit participants via an online forum via a post explicitly asking for volunteers but disappointingly, after several months, no potential participants made contact via email. On reflection, this may have been for several reasons. Firstly, the call for participants had to be posted on the 'Not for Profit' section of Mumsnet, a UK developed and based parenting website, in which many members will not and do not engage with. This would have reduced the numbers of site members who may have seen the post. Secondly, undiagnosed breech pregnancy is not a common experience (1:100) so this would reduce the applicability of the study and the ability to participate even further. Thirdly, some women may not wish to discuss their experiences in an electronic or face to face format or may have felt they did not have the time. Furthermore, some women may have felt they were not yet ready to share such an experience, although some could have regarded it therapeutic as I have done myself. Fourthly, internet accessibility may also be an issue for some women as we should not assume that everyone has access to the internet. The Office for National Statistics (2016) found that 89% of households in the UK had access to the internet and 70% of adults use the internet 'on the go' via a mobile phone or similar device. Finally, those women who would have satisfied the inclusion criteria would have children to look after (assumed because of the topic of the research)

and may also be working so they may have felt they would not have the time to participate in research in addition to childcare.

The new study design was experiential and qualitative as planned but instead of using primary data that I had created myself, it was decided to use an online discussion forum to gather the secondary data from on undiagnosed breech birth experiences due to the suitability of this method for gathering information on experience. Online discussion boards have some similar features to online interviews in that they are both asynchronous, users take turns and there are interactional sequences; the interaction can also stretch over days or months, which is not the case with a corporeal interview. Interesting information can be identified if this temporal aspect is considered by considering how views, opinions and memories of experience may change over time for individuals.

Participation in discussion boards can also provide the users with support and information that is available all the time and is not limited by where they live or resources, which means a wide variety of experiences can be drawn from them (Malik & Coulson, 2008).

Consequently, using pre-existing data from such sources could allow a more varied data set than using more traditional research methods.

The specific source of the secondary data used was Mumsnet discussion boards relating to undiagnosed breech pregnancy where the thread was started any time after and including 1st September 2012. The timeline was chosen to keep the experiences shared by these women historically relevant, September 2012 is when the NICE Guideline for Antenatal Care (2012) which includes procedures on diagnosing and managing breech babies was changed. The experiences need to embed what is or is close to current healthcare practice in the UK to be able to use those stories to suggest recommendations for support for

women in the UK who currently are experiencing undiagnosed breech births. Experiences reported prior to September 2012 would of course be no less valid as an experience but would lack external validity in that they would no longer reflect positive elements and shortcomings in current birthing practice and support in the UK.

There are of course pros and cons to using online forums or discussion boards to provide secondary research data. Ghauri and Gronhaug (2010) suggest using secondary data from the internet saves both time and money but advantageously, the contributor's post information is more 'natural' and fits with their own agenda rather than the agenda of the researcher. This in turn yields a potentially more open and freer response compared to online interviewing. Jowett (2015) provides agreement in his paper on using online discussion forums for research by stating,

'The searchable nature of online discussion archives allows the researcher to capture conversations by ordinary people pertaining to specific issues without the researcher directing the discussion' (pg. 288).

In addition, Braun and Clarke (2013) suggest that gathering pre-existing data from settings such as discussion boards can be useful in answering questions about people's experiences without shaping their responses through the methods we use and the questions we want to ask. In support, Malik and Coulson (2008) investigated the male experience of infertility using pre-existing discussion board data and concluded that,

'Online support groups may provide a useful venue and context for men to open up about their fertility problems, without the inhibitions associated with face-to-face discussions' (pg.18)

A further potential advantage is that when posting on discussion boards, contributors are not necessarily consciously thinking they are contributing to research even though they know their comments remain in a public domain (Giles, 2016). Consequently, they may perhaps not display social desirability biases or demand characteristics to such a degree so the validity of the data could be less threatened than when using online interviews.

There are, however, disadvantages to using this method. Giles (2014) in his work on the online Asperger's community did acknowledge that using discussion boards to gather secondary data can be problematic when posts are isolated from discussion threads, thus losing the context of the comment. In this research I have been careful to try to retain as much context as possible by retaining all posts in a thread from contributors who have had an undiagnosed breech birth, even though they may not explicitly mention it in every post. Furthermore, many of the threads included are specifically about undiagnosed breech birth experience so most of the posts within a thread have been retained and are relevant as people posting to these threads have usually experienced the topic matter being discussed in the thread. Using secondary data from discussion boards could also be problematic if the data is inappropriate for the research question due to being collected or produced for other reasons other than the concrete idea a researcher may have had when collecting primary data (Denscombe, 2014). For example, if the data was written too long ago or if the data comes from people who you will not be concerned with when discussing and

suggesting suitable application of the data it would be inappropriate to use. For this research, I have ensured the data is current by only considering posts from September 2012 onward as mentioned previously and ensuring the largest demographic of users from the forum I have used are UK-based due to wanting to consider failings and successes in birthing support for women in the UK as part of my discussion and suggesting potential improvements applicable to UK healthcare.

Patient Participant Involvement (PPI)

Some procedural design decisions were initially made using PPI. Those involved with the PPI were Mumsnet members (the website where I intended to recruit participants) and mothers from a nursery. There was a mixed response to whether they would prefer interview questions one at a time or at the start (see Appendix B). PPI also uncovered a preference for deadlines for interview questions otherwise participants anticipated they would not 'get on with it'. These issues were addressed in the initial planning of the research but unfortunately were no longer relevant once the study design had to change due to lack of recruitment of participants.

Data Collection

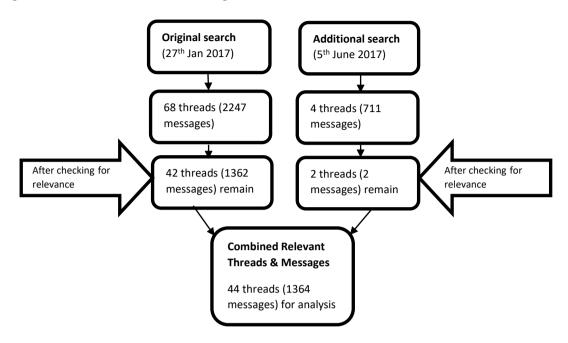
The Advanced Google Search Function was used to search within Mumsnet for any discussion board threads that contained the words 'undiagnosed breech' within their content. 'Mumsnet' was inputted into the Google Home Page search, then once the Mumsnet link to the webpage appeared at the top of the search results, the words 'undiagnosed breech' were typed into the search box underneath the Mumsnet website

link. Using the 'Tools' tab in the Google Toolbar the 'Custom Range' was used to define search 'from' and 'to' dates. The search was conducted on 27th January 2017 and included threads in the custom range written anytime from 1st September 2012 to the 27th January 2017. The search was re-run on 5th June 2017 using the same procedure to check for recent additional posts that would need to be included within the data set. Further relevant threads were found but relevant contributions were not made by posters who had not previously contributed to the data originally gathered on 27th January 2017, thus suggesting that the same women kept re-telling their stories in different ways across time and on different threads. There were also not many new threads that had been developed that were about undiagnosed breech birth so there was not much opportunity over the 4-month period between the two separate searches for women to tell their stories unless they had started a thread themselves.

Both searches combined yielded a data corpus of 72 separate discussion threads containing a combined total of 2958 individually posted messages. Each individual message contained the username of the poster, the date and time in the header of each message. Each of the 2958 messages were read and checked for relevance. If all the messages in an entire thread contained no explicit information on an experience of an undiagnosed breech birth the thread was discarded and labelled as 'not relevant'. For a thread and associated messages to be relevant they needed to explicitly mention undiagnosed breech birth experience that belonged to the individual posting rather than being a second-hand story. Once a poster had been identified as having an undiagnosed breech birth in one post, all their posted comments from relevant threads were included regardless of whether each individual post specifically mentioned the undiagnosed breech birth. This allowed for continuity and the ability to follow the telling of their story over time for some women. After working through this exclusion process, 44 relevant threads containing a combined total of 1364 messages

posted by 45 women with unique usernames who had experienced their own undiagnosed breech birth were included in the data set to be analysed. These usernames were anonymised to ensure confidentiality as outlined in the Ethical Considerations section of this thesis.

Figure 1: Discussion Forum Search Figures



Sample

In total, over 300 contributors were recorded across the data corpus, and of those, 45 women appeared to have had experienced their own undiagnosed breech birth after conducting a search for relevance outlined in the Data Collection section of this thesis.

These 45 users' contributions were reported in the analysis. Figure 2 outlines the demographic characteristics of some of these women; it demonstrates some heterogeneity in backgrounds of those who contributed to the data set.

Demographic Characteristic	Variations present in those who produced the secondary dataset (N=45)
UK location	East Anglia, Central London, Greater London, South West, North East, North West and Scotland
Parity (of undiagnosed breech baby) ◊	1 st through to 9 th
Type of birth Δ	Vaginal assisted and 'hands free' (includes VBAC*), EMCS**, CS***
Birth setting	Hospital ward, Midwife Lead Birthing Unit, Home
Sex of undiagnosed breech baby	Male and Female

Figure 2: Demographic Characteristics (◊Undiagnosed breech experienced in more than one baby for some; Δ Combination of type of birth for multiple births, i.e. twins; *Vaginal birth after caesarean, **Emergency caesarean section & ***Caesarean section)

It must be noted that Mumsnet has been criticised in the recent past because of the limited demographics of its users and questions have been posed on the representativeness of the views held. For example, Toby Young titled a blog

'Mumsnet isn't representative of the squeezed middle, it's just a bunch of Guardian reading laptop wielding harpies' (Daily Telegraph, 2011) in which he criticises the power in which a 'modest web forum' can command.

Mumsnet were contacted and their most recent demographic figures requested. Mumsnet were not able to provide information beyond the website usage figures. Alexa Internet (2017) a traffic statistics website suggests that currently 60% of Mumsnet users are from the UK and 16% from the USA. In addition, most of the users as expected are female. People who are graduates are over-represented. There appear to be women who both work and stay at home as the browsing location for Mumsnet is equally represented at both access sites. Netmums is an alternate site to Mumsnet, however it appeals to a very similar demographic. Netmums users are also female and those who are graduates are over-represented on the site. The only difference is that those users who attended college are equal in numbers to the general population but those who did not attend college or attended college for a while are under-represented as with Mumsnet (Alexa Internet, 2017). Regarding demographics, Alexa Internet (2017) shows that slightly fewer users of Netmums are living in the UK compared to Mumsnet (55% versus 60%).

After careful consideration, it was decided that Mumsnet would be used as the source for my secondary data for the following reasons. One, there are more UK users than there are for Netmums, which is an important consideration as this study investigates the experience of healthcare practice within the UK. Secondly, data heterogeneity is more likely to be achieved using Mumsnet due to a greater number of threads and posters relating to this topic area. Mumsnet is the UK's biggest network for parents, with 5000 registered users and 9.4 million visitors each month (Mumsnet, 2016). In May 2017 Mumsnet was the 432nd most visited website in the UK compared to the 826th most visited for Netmums (Alexa Internet, 2017). Lastly, the choice was made between these two websites rather than a Birth Trauma website to gather pre-existing textual data without a potentially unfair skew to undiagnosed breech being a completely negative and traumatic experience and for some

people of course that may not be the case. Using discussion boards from a birth trauma website to recruit participants was considered early in the research process however, I soon realised that although my birth experience was traumatic, I did not want my experience to allow me to make assumptions about other undiagnosed breech stories and thus allow assumptions to inform where I would recruit participants.

Data Analysis

Inductive thematic analysis (TA) was carried out whereby development of the patterns and themes regarding the women's experiences of undiagnosed breech birth was informed by the content within the data set. As Joffe and Yardley (2004) suggested, Thematic Analysis is more concerned with investigating themes in context rather than trying to develop a reliable coding strategy. I was also aware that although I followed a realist epistemological standpoint I still needed to be reflexive during analysis whereby a conscious critical awareness was made at regular intervals of how my own experience (an undiagnosed breech birth) would positively influence the research and the interpretation of the data (King, 1996). I had no direct access to contributors as I was using secondary data so I clearly did not influence the data content but I had to be mindful that I did not interpret the data in a way that fit with my assumptions about the experience of an undiagnosed breech birth. I kept track by keeping a personal journal throughout the research process. I also identified themes at the semantic level only so this allowed for less opportunity to create interpretations that did not really exist.

Specifically, the inductive TA procedure followed was that suggested by Braun and Clarke (2006) who advocate that TA is advantageous as it can be used within multiple theoretical frameworks including the essentialist/realist stance adopted. Braun and Clarke (2006) also

suggest that it is good practice when conducting research to ensure the theoretical framework in which the analysis will be conducted should be outlined before embarking on collecting or analysing data. An overview of the essentialist/realist framework I am following is provided in the 'Philosophy of Research' section in the Introductory Chapter of this thesis.

The procedure for TA outlined by Braun and Clarke (2013) informs six procedural steps that can be explicitly followed to ensure a thorough exploration of the data content. The first step involved reading and familiarisation whereby all of the data from the internet site was copied into a Word document and read through many times making notes as I went. Each post was highlighted if it was irrelevant and then removed revealing just the relevant posts. After familiarising myself with the data, initial coding ideas were developed by going back through the data and considering repeating patterns. At this stage it was ensured that all data items (each relevant message) could be linked to at least one of these initial codes. Some aspects of some of the data items were coded more than once or not at all. All information was kept from each relevant message to preserve the context of the message as much as possible. After coding with paper and pen, I put the codes in 'nodes' on NVivo 11 to have an electronic view of the initial codes. Cluster analysis on the initial codes on NVivo 11 assessed word frequency as part of the complete coding process and allowed the identification of relationships or associations between each node (code). Nodes (codes) that were regarded as being too similar were then merged or in some cases discarded. This was carried out both on paper copies of the initial codes and associated content and on NVivo 11. Once the semantic codes were further refined the data was scrutinised to identify larger patterns across the dataset at this stage and these patterns were considered in relation to the intent of the research question as suggested by Braun and Clarke (2013). The 'paper and pen' method was used to look for concepts that several codes related to

which might be used as a 'central organising concept' and candidate themes were developed. At this stage there were many candidate themes. A visual map was produced to help with the process of refinement. The themes were then reviewed several times on several occasions and further clusters of codes were combined and others were discarded if they did not fit with the aims of my research or did not answer the research question.

Through this lengthy process it was possible to allocate all data items to at least one of six themes developed on Nvivo 11. A theme map was produced based directly from the data. The final stage involved naming the themes with appropriate quotes from the data and ensuring that the themes were distinct from one another but also that they went together well to form a coherent analysis. The data was then re-read within each theme to ensure the theme name summed up the content of it appropriately.

It should be acknowledged here that following the six-step procedure is not as one directional as it may seem and it is not always clear at what stage you are at as well as often having to go back to the previous stage again after further thought and reflection. I found it to be a fluid process that moved freely in both directions across all 6 stages as discussed by Braun and Clarke (2013).

Each of these steps was followed using mostly a pen and paper method. NVivo 11 and the comment feature of Microsoft Word were also used during some of the stages and incorporating a number of methods allowed me to get the most out of the data. Although, Bourdon (2002) suggested that computer assisted coding methods can distance the researcher from the research data by acting as a buffer, Basit (2003) completed two analyses, one by the 'pen and paper' method and one using NVivo and claimed that using

NVivo made things less difficult for the researcher; although she also acknowledged that software cannot do the "sorting and thinking for you". On trying out both for the same analysis, I personally found that the 'paper and pen' method allowed me to get 'closer' to my data.

Quality of Data

The quality of the data was considered using the 'Eight "Big-Tent" Criteria' proposed by Tracy (2010) that allowed consideration of the quality of this piece of work and provided a common language of best practice. Each of the eight criteria are addressed below:

The topic of research here is interesting and evocative as well as growing from a personal experience of my own that validates the idea that the topic being researched is worthy (Tracy, 2010). In fact, Huberman and Miles (1994) suggest qualitative research that does not have personal meaning and is just convenient is likely to have less care and time dedicated to it so will not be so worthwhile. Following on from this, two further quality criterion that are arguably satisfied here are resonance and sincerity (Tracy, 2010). Due to having been self-reflexive throughout the entire research process, as evident in previous sections of this thesis, I feel I have added an honesty and transparency to the research and have acknowledged how my own experiences and assumptions may have shaped the research. In addition, I feel that telling my story as part of this research will demonstrate meaningful affect to the audience giving it resonance according to Tracy (2010). Furthermore, Ellis (1991) suggests that use of your own emotional experience when describing and theorising can have impact. Dadds (2008) suggests resonance can be achieved via 'empathic validity' where research is able to move people emotionally and promote reciprocated respect; I feel my story, quite unintentionally, may make people at

least think about the issue of undiagnosed breech birth and the implications. The hope is that my research will make a significant contribution to our knowledge on women's psychological feelings regarding their experiences of undiagnosed breech birth. This is something that has not been considered exclusively in past research. Importantly, this research may empower women who have had similar experiences to my own and liberate them from the torment they may feel about their experiences, as suggested by Tracy (2010) as a marker for making a significant contribution. Furthermore, as discussed in the discussion section of this thesis, this research could serve to improve practice in midwifery and gynaecology, but also importantly to potentially facilitate suitably qualified health psychologists to be employed in midwifery healthcare settings to help women with the psychological impacts of undiagnosed breech birth and other birth trauma.

As I am working from a realist epistemology, I have held back on interpretation of the data provided as I want to stay true to my epistemological stance. Essentially, I have aimed here to consider semantic rather than latent content as advocated by a realist perspective.

Through consideration of such theoretical frameworks and goals when not only designing the research but also when analysing the data, this research demonstrates meaningful coherence (Tracy, 2010) which is a further marker for quality in qualitative research.

Following this non-interpretive approach also arguably ensured that I had less opportunity to apply my own assumptions based on my own experiences whilst synthesising the data.

In addition, 'showing' rather than 'telling' the data as advocated by Tracy (2010) is an important marker for credibility in qualitative research and by interpreting the data I would essentially be telling the reader what to think rather than letting them draw their own conclusions (Tracy, 2010).

Ethical Considerations

Ethical approval was provided by UWE Ethics and Research Committee for this research (see Appendix C and D) and no significant amendments were required. Although, it has been suggested that it is good practice to consider the debate regarding whether data that appears in the public domain would be regarded as 'public' by those who created it; it is possible that the contributors may perceive that it is private (Elgesem, 2002; Association of Internet Research (AoIR) 2012). I wanted to consider fully whether this data should be classed as being public or private in the eyes of the contributors. As the discussion boards accessed in this study could be viewed without being a member of Mumsnet and without registering it was deemed the information could be regarded as being in the public domain. Moreover, when signing up to Mumsnet, all members are made aware that their posts will be made available in the public domain, which is why usernames instead of real names are a necessary requirement of registration.

Even so, the British Psychological Society Working Party on Conducting Internet Research (2013) suggest some form of consent should still be considered to use information that is already in the public domain and the potential harm that could be caused from using such material without consent should be considered. In this case, general consent was sought and permission was gained via email from Mumsnet Headquarters to use the secondary data without consent of the individual contributors (see Appendix E) and it was deemed appropriate that individual consent from each contributor would not be necessary due to the reasons previously outlined.

As part of the research it was attempted to uncover some demographic aspects about the women from the information they provided in their posts in order to gain a clearer picture of who the contributors were. The APA (2010) suggests demographic information needs to

be gathered to be able to describe a sample and although I acknowledge there was no traditional sample and I used a secondary data set, this information has still come from people and that must not be forgotten. In support, the Association for Internet Research (AoIR) (2012) states in their guidelines that one of the main considerations to be made when conducting internet research such as this is that information on the internet such as postings on discussion boards is an extension of individual and we should consider this to minimise harm to those individuals. For this reason, identifiable demographic details of contributors to the data will not be reported and will be altered where necessary due to confidentiality. Textual extracts will be presented anonymously as people do appear to invest a lot emotionally in these forums and it is inappropriate to uncover any identifying information, usernames or pseudonyms although they are in the public domain already. In support, the British Psychological Society Code of Ethical Conduct (2009) suggests that we should change pre-existing pseudonyms when reporting qualitative data as they should be treated with the same respect as real names.

CHAPTER 5: Research Findings

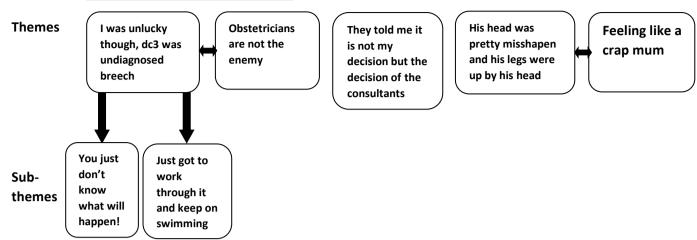
Key Themes

The data gathered was quite extensive in quantity and the overarching feelings arising from the data were anger, anxiety and fear resulting in negative experiences, but hope and stoicism were also present. The thematic analysis yielded five key themes in the data and two subthemes hierarchically related to one of the key themes; all were taken verbatim from the data set (see Figure 3).

Generally, these themes are followed as a journey from pre-birth to post-birth but it seems that the associated feelings that have arisen from having an undiagnosed breech birth do rear themselves again when a woman is experiencing a new pregnancy or considering one. Many of these women appear to have used the discussion boards to attempt to resolve their negative experiences, perhaps as a supportive intervention, as for many some issues still appear unresolved.

Each theme is described briefly, and an account given of how it is linked to other themes prior to the data presentation and discussion for each theme.

Figure 3: Key Themes and Subthemes



Key Theme A: 'I was unlucky though, dc3 [darling child number 3] was undiagnosed breech'

This theme is the starting point of most women's journey of having an undiagnosed breech baby. When women have posted on the discussion board and reflected on their feelings, the feelings that are apparent resonate mostly during the labour process. This is because when having an undiagnosed breech birth, the first time you become aware of it is during labour. This theme considers the perception that undiagnosed breech birth is more difficult than a cephalic birth and highlights the pain and panic felt by women due to such a birth; hence the notion that they were 'unlucky' to have had to go through an undiagnosed breech birth.

Two subthemes were derived from this theme as although the overriding feeling is that the experience was negative and painful, women are generally just trying to 'get through' their negative feelings and carry on regardless. This attitude is summed up in the **subtheme A1**, 'Just got to work through it and keep on swimming'. This thought process appears to be initiated during labour for some women but it importantly continues post labour too.

Similarly, the second **subtheme A2**, 'You just don't know what will happen!' is a feeling apparent in women both during labour and after labour due to the nature of undiagnosed breech birth and its psychological consequences later for the mother and physical consequences in some cases for the baby. Following on from this, feelings of anxiety continue for months and years later in some cases and this subtheme can also be applied to many women when considering future pregnancies where the anxieties regarding the unknown continue to cause angst.

Key Theme A: Data Presentation and Discussion

Frequent references were made throughout regarding an undiagnosed breech birth being very undesirable and painful and perceptions were that undiagnosed breech birth was more difficult than a cephalic presenting birth or even a diagnosed breech birth,

'Mine was my fastest, but most painful. I was unlucky though, dc3 [darling child number 3] was undiagnosed breech. I'd imagine if she'd been the right way round it would have been a breeze' (Help2)

'I was high on gas and air and not fully aware of what was going on (other than a general sense that there was a state of panic in the room and that two ambulances had been summoned to an 'obstetric emergency') but it was absolutely horrible for dh [darling husband]... Fortunately everything went well from there on and she was resuscitated on our kitchen table and recovered to have an apgar of 9 by 5 minutes.... Thank heavens. Obviously you wouldn't have the state of panic, since you know your dc [darling child] is breech, but as you can probably tell I would not recommend the experience!' (Robin14Red)

As seems evident here, in many cases women reported a perceived more extreme, panicked and traumatic birth experience than if they could have had a 'normal' birth with a cephalic presenting baby. This is apparent in many further posts as illustrated in the following quotes,

'Yep dc3 was born with my legs in stirrups. She was undiagnosed breech and even though all my instincts were screaming to stand up and hunched over I was forced into them. Having read around a bit since it seems my instincts were putting me in the optimum breech birth position. I also had a dr [doctor] try and fail to insert a catheter twice as her bum was coming out.' (Help2)

'Both my quirky girls were tricky deliveries, one feet first and one back to back. DD1 [darling daughter number 1] probably caused me PTSD. Horrible horrible delivery... DD3 [darling daughter number 3] not quite so bad... I have told a tonne of proffs [professionals] over the years, 2 quirky girls, 2 horrid deliveries both lefties. 1 NT [?] girl, easy waterbirth and a righty!' (Doubletake)

In this particular case, there is also a belief that the way these babies were presenting and the subsequent birth has impacted on their future characteristics and personalities; the more favourable characteristics are perceived to belong to the child who had the 'normal' birth.

The notion that having an undiagnosed breech baby is more extreme, painful and unlucky is also apparent in many women who ended up having to deliver their baby by emergency caesarean section (EMCS) rather than vaginally. This is the case even though caesarean section is often perceived as being the 'easier option',

'I had an EMCS following an undiagnosed breech... As for those people who think it is 'modern' or 'convenient' having a CS - ARGH! Remember – women don't have zips down there. Sections are major operations – and then you get a newborn to look after while you need to recover! I used to feel like punching people when they talked about sections being easy. F**cking cheek. See, it still winds me up. There is nothing easy about having a section!' (IgglePiggle)

This user clearly is angry that others would even suggest that her birthing experience was easy because she had an EMCS. Other women also harbour negative feelings, including anger, regarding the experiences leading up to an EMCS and the experience of pain is clearly evident even when an EMCS is requested,

'For me it (pessary) didn't work. I found the internals awful. Incredibly painful. Crying during them. They were in a rush to get him out so got me in for an induction but after 36 hours of nothing they wanted to start the process again. I refused (if they wanted him out bad enough to start induction then bloody get him out after all that time) and that's why I got a section. DS (darling son) was 11b7 and undiagnosed breech so I'm glad I refused and got a section. But hopefully some people will come along with success stories' (SantaBaby)

What is noticeable on the message board is that although it is a common occurrence for women to highlight the pain they have suffered as a result of a perceived difficult undiagnosed breech birth, there is still a strength in these women that comes through in the data. This strength of women displays a fighting spirit and an acknowledgment that they have to 'swim' otherwise they may 'sink' in the face of adversity; which in these cases is having experienced an incredibly difficult or painful, unexpected birth experience and aftermath. This can be summed up in the words of minionsteve: 'Just got to work through it and keep on swimming'.

Even after feeling an expected 'normal' birth experience has been stolen in some way, women are still able to share some positive aspects of events,

'Well, I suppose I have a positive story in that dd3 [darling daughter 3] was born in a vaginal breech delivery at home and we both survived to tell the tale... I was lucky to have midwives who had experience of hands-off breech deliveries' (Robin14Red)

To provide a positive spin, many women move the focus away from the detail of the birth stories but look instead at the bigger picture when reflecting on their past experiences. There is a noticeable change in their position in that something that was negative and traumatic for them is reframed as something positive as they and their baby are alive and live to tell the tale. In other words, because these women's babies are okay at the time of posting they are deciding to look to the future and not dwell on the past although it was difficult,

'It was a rough scary start, but they (twins) are fab now at 14 months x' (ShaunatheSheep)

'My waters started to go and I had a EMCS (twin 1 breech). 7 weeks in nicu [Neonatal intensive Care Unit] but they're okay now' (MrsGoggins)

In some respect, the strength of these women to overcome and work with their experiences means they may dismiss or choose to forget the difficulties they have been through to get to the positive place they find themselves now. As mentioned previously, this seems to be fuelled by their baby being okay now and in some respects, that is all that potentially matters to them.

'From my own point of view and given how things turned out in the end, I'm kind of glad she was born in the way that she was... But if I was in the same situation again, but knowing the baby was breech in advance, I would definitely choose a c-section. For dh's [darling husband's] sake as well as my own' (Robin14Red)

Although many women eventually appear at ease with the negative experiences of birthing an undiagnosed breech baby, they report, as evident in the previous quote, there is still a sense of a change in future thinking around childbirth that has arisen due to the undiagnosed breech birth that has taken place. In this case, Robin14Red would not have a vaginal breech birth again if she had another breech baby in the future. Frequently in the posts, many other women have made referrals to what they would and could cope with in future pregnancies and what they would not like to happen under any circumstances. These birthing preferences have been seemingly created due to a previous undiagnosed breech birth experience.

'My 10m dd [10-month darling daughter] was an undiagnosed breech, she came out bum, foot, cord, whole placenta, foot, body, head, arms. If I have another I'm having an elective c-section' (Egg1)

'EMCS for ds1 [darling son number one] (undiagnosed breech). Didn't want to risk another emergency one, and have never had a desire to labour naturally/give birth vaginally, so opted for elcs (elective caesarean section) with ds2 [darling son number two] last year' (Flowerpot89)

Many women have also stipulated they requested or would request scans in the third trimester of future pregnancies to check for a breech position,

'My first was an undiagnosed breech so I had an emcs... The second time around I requested a late scan to check position (wanted to avoid section if possible but didn't want a repeat of a breech being missed) ...' (Anna4)

'I'm 33 weeks and last time I was checked baby was transverse, got appointment on Monday and also at 36 weeks to check positioning. I've already had one undiagnosed breech and I can say with certainty I won't be taking any chances this time round, if she's still breech at 36 weeks it'll be elective section for me.' (Cakes2)

For some women, the experience of an undiagnosed breech birth was so painful or difficult, future pregnancies would theoretically be out of the question for them,

'My 3^{rd} DC [darling child] was a footling breech, delivered vaginally. If he had been my first he would have been my last' (Lilly)

Quotes such as those illustrated in this key theme demonstrate a sense of anxiety in these women; anxieties about having to go through the same traumatic or negative experience again, anxieties about what they have already been through and anxieties regarding the progression of a new pregnancy that has occurred. In some ways, it seems that ensuring a new pregnancy is delivered cephalically becomes an obsession for these women, highlighting the anxiety they appear to feel.

'I am so paranoid about this next babies position btw [by the way]! Every low down kick I feel makes me doubt my midwife even though she is certain this one is the right way round! I have felt more kicks the side this time round though... '
(Avocados)

'...now pregnant with baby 2. I have an appointment with the consultant when I'm 20 weeks so we'll see what they have to say. I'd like to VBAC [vaginal birth after caesarean] but anxious about what might go wrong. It's interesting to read about others' experiences though — you just don't know what will happen! That's where the anxiousness comes in.' (IgglePiggle)

'...This time, baby has mostly been head down at examinations, which midwife seems happy about (I'm 33 weeks), but baby still moves a lot because I can feel when she/he is breech because the head is like a hard rock under my ribs! But the books say they're a few weeks yet before it should be in place. I still have at least one scan to go, and it's in my notes (at my insistence!) to scan on arrival at hospital to be sure! There is a website called Spinning Babies that has some advice about trying to encourage baby into a good position...' (IgglePiggle)

The second and third quotes here illustrate anxiety continuing in the same woman regarding the same issues from before 20 weeks' gestation to 33 weeks of pregnancy. She is clearly anxious and distressed about the impending birth and is using the discussion forum as a way to consider what outcomes may happen to her. The mention of other resources she has used to try to ensure a cephalic presentation show a desperation to ensure her new baby remains the 'right way round'. Other posts explicitly label this anxiety around having a breech baby and the potential procedures associated with it as a genuine fear,

'...I was the most frightened I have ever been until DD [darling daughter] was safely in my arms. This is because DH [darling husband] is a paediatrician who has seen several vaginal breech deliveries go badly wrong and he's told me the stories...'
(Mimi)

'I'm seeing my consultant on Thursday, at 39+3, apparently to check my cervix. She didn't say why she was checking it, do you think they would do a sweep at this stage? I'm hoping for a VBAC [vaginal birth after caesarean], DS [darling son] was emergency CS [caesarean section] due to being undiagnosed footling breech. I have a fear of going overdue with another CS as they can't induce me safely' (Angel)

These anxiety issues still appear to be apparent months and may be years later as they have not been addressed or acknowledged for reasons unknown. Thus, many of the women appeared to have unresolved issues and anxieties regarding pregnancy and birth potentially because of their undiagnosed breech birth experience. They seem to brush this anxiety aside as not being serious,

'...Anyway, my midwife knows I suffer from Anxiety, god knows she had to fill out so much paper work because I have just been diagnosed with generalised Anxiety (nothing major, just worry and mild panic attacks). So postponing my appointment, and now having to drag my friend's little girl with my little boy next week is not my idea of fun! Especially as I would rather I went on my own (less stress!)... Oh I don't know, I just feel a bit let down again. My experience of the system is a bit negative anyway as my last pregnancy ended up with being left for 48hrs with no waters after they broke but labour didn't start – kept sending me home, undiagnosed breech, emergency c-section and a uterine infection. I just wanted this one to be a bit more positive.' (HQ1)

As previously mentioned, seeking information from the discussion boards and other resources on the internet or books appears helpful for some women in easing their anxieties. Some may even try to get or may have had a debrief from the hospital or unit where they delivered the breech baby. Egg1 requests of her fellow users after revealing that she had an undiagnosed breech birth 10 months earlier, 'How do you go about getting a debrief?' She wants to ease any unresolved issues but has not been given the opportunity to do so.

Key Theme B: 'Obstetricians are not the enemy! '

Some women reported a positive experience of undiagnosed breech birth and although this was much less apparent than the number of negative experiences described in the data, it is important to highlight and perhaps think of the reasons why. For those women who had a positive experience, this theme was the starting point of their journey, this theme does not co-exist with theme A but is independent to it as it demonstrates a conflicted message. Here, women believe they have been 'lucky' with the healthcare staff they had at their birth due to their expertise and experience so they commend them. These women were less likely to suffer complications or describe anxiety due to their undiagnosed breech birth.

Key Theme B: Data Presentation and Discussion

As explained above, some women did not appear to experience anxiety as a result of an undiagnosed breech birth and were happy to support obstetricians, midwives and other relevant healthcare professionals when sharing their accounts of labouring with an undiagnosed breech baby. They want to make it clear that healthcare professionals are on the side of the woman and will do what they can to help; they are not the enemy. These women have reflected on a positive birthing experience by considering that it is the expertise of healthcare professionals that aided their positive or uneventful experience,

'My experience (2013, so recent) is that obstetricians are very aware that correct management of breech delivery means as little intervention as possible. We were moved to theatre as a precaution due to worries over DD's [darling daughter's] heart rate, all intervention was at my request. You can't use forceps on a bum so if things head south you have very limited options, hence our desire for a CLU [?]' (Dianne)

'I was worried about having to have a second section with my second child, but my midwives were very supportive and I ended up having a very quick vaginal birth' (Jane6)

Aside from perceived expertise, it seems that a positive experience yields from a perception that the woman has had some element of choice in what is going to happen and is listened to, as demonstrated in the above quotes, which is at odds with many women who report negative births of an undiagnosed breech baby as discussed in the next theme. Experience of healthcare professionals is also a key characteristic that is perceived to increase the likelihood of a more positive experience and a more favourable outcome to an undiagnosed breech birth,

'If I had been at home with midwives inexperienced at breech births we could have been in a whole heap of trouble' (HelenT)

'I've had a vaginal breech delivery I hospital. Undiagnosed and she was on her way out so no other option but I was fortunate that the consultant on was very experienced in breech delivery and totally calm about the whole thing. She was wonderful. Midwifes were not calm although I do accept that they'd probably had less opportunity to experience a breech delivery' (Mimi)

It is interesting that although these women are advocating experienced healthcare professionals, they view their experience as being a result of luck; it seems they perceive they were lucky too that they happened to have had a midwife and obstetrician who could deal with an undiagnosed breech birth available to them when they went into labour. This reflects a notion perhaps that not all obstetricians and midwives would be perceived to be adequate or experienced enough to deal with an undiagnosed breech situation and thus a negative experience or expectations of one may potentially occur.

'I was lucky to have midwives who had experience of hands-off breech deliveries: as previous posters have said, many midwives nowadays have never even witnessed one, let alone delivered a baby themselves that way. If your IM [Independent Midwife] has enough experience to put your mind at rest then that's obviously a positive thing' (Robin14Red)

Regardless of the perceived breech delivery experience of their care providers, some women still reported a positive experience of having a breech baby,

'DS1 [darling son number one] was vaginal breech delivery with no problems whatsoever. Arrived at hospital fully dilated after 6 hours of contractions and waters breaking at home. Paracetamol and tens only, baby out after 30 mind [minutes] of pushing and no tearing etc. Was undiagnosed until I got to hospital thank goodness otherwise I probably wouldn't accepted a section. For me the vaginal delivery was far preferable!!' (SalamiSandwich)

'I've given birth to 7 babies... I've never been told that they will be giant babies, I just came to expect it and the last one was an undiagnosed breech — all 10lb 14oz of her. I've given birth naturally every time with no complications or baby getting stuck. How the fuck I do not know... But it can be done... '(Maisie)

Both examples come from women who had an uncomplicated vaginal breech birth. They report a positive experience but even so, there is still some disbelief demonstrated in how they managed to deliver vaginally without any complications. Although, delivering an undiagnosed breech baby via an emergency caesarean section with no complications to mother or baby seemed more prevalent in women reporting a positive experience of birth,

'In my notes it says I have had an emergency section due to failed induction but it wasn't emergency. I walked up to theatre, it was perfectly fine, no problems, it was so relaxed, chilled, I recovered well. It really was okay... '(SantaBaby)

'They brought in one of those portable scan machines to verify, and then within half an hour I was heading to theatre for a EMCS! Although it wasn't ideal, and not what I'd planned, it was all very calm and easy as they spotted it on first examination. I was only in the hospital for an hour before meeting my DD [darling daughter]' (Avocados)

'I had one [EMCS] (undiagnosed breech until full dilation and it was 20 minutes from being told I wasn't even in labour to being raced into theatre and giving birth) and it was a really calm and positive experience with a great recovery that as far quicker and better than many in my ante-natal group who gave birth vaginally and had tears' (Alex)

Noticeably, women who reported such positive incidences of EMCS in the discussion boards, which were more frequent than positive vaginal birth experiences, did not harbour the same thoughts on luck relating to the expert or experienced healthcare staff on duty when they delivered their undiagnosed breech baby as those women who reported a positive vaginal breech birth. This is interesting as it may potentially be linked to the notion that the perception generally is that if you have a breech presenting baby you will have an EMCS unless a baby is delivered at home. Women will also not perceive an EMCS to require any special expertise dependent on how the baby is lying in the uterus, unlikely a vaginal breech birth. These notions give rise to assumptions that a vaginal delivery will probably be unsafe and lead to complications unless an expert is available,

'What I'm saying is that (as long as you're not going for a home birth) it's highly unlikely you would have to give birth vaginally to a breech baby. Most hospitals don't recommend it and would whip you in for a EMCS. I think that is probably the usual procedure unless they have an expert on hand who is experienced in delivering breech babies' (Avocados)

Furthermore, it was evident that perceived continuity of care from midwives especially influenced the reporting of a positive or negative experience,

'The staff could not have been nicer and I had a regular midwife who I saw for 90% which was good - no need to keep explaining problems. I was booked into the midwife led centre but had to go into the labour ward because there was meconium in my waters so I was high risk. Good job because dd [darling daughter] was undiagnosed breech. Very very speedy route to theatre for emcs...' (HelenT)

'I was told by one crap MW [midwife] I'd have to sign a 'deviation from protocol form', she was very unconvinced with my HBAC [home birth after caesarean] plans. Came up with some random story about needing to take blood from me weekly so they could know my blood type etc. My good MW sorted me out as took over my care 100%' (Barbara)

Ultimately, it seems that continuity of care from experts or staff experienced in undiagnosed breech birth yield the reporting of more favourable or positive experiences for women who have had an undiagnosed breech pregnancy. This judgement of a positive experience appears to also be dependent on whether any complications have arisen to the mother or baby due to the breech positioning being undiagnosed; in many of the cases here, the healthcare professionals have been viewed as working with the woman rather than against their wishes. Even so, it is apparent that if staff experienced in undiagnosed breech birth are not available, continuity of care is not occurring and if women feel they are not being listened to, accounts may be more negative; this is evident in Theme C.

Key Theme C: 'They told me it is not my decision but the decision of the consultants'

This theme is constantly present for many women throughout their childbirth journey, for many they have reflected on feeling not listened to during pregnancy, labour and post labour. The feelings in this theme essentially seem to co-exist with all other themes except for the previously described theme (B). Once again, this theme appears to predominantly apply to those who perceived a negative rather than positive birth experience. For many women, the perception of lack of choice, consent and the disbelief surrounding it also resonates in future pregnancies where anxieties are potentially exacerbated due to a continued feeling of not being listened to.

Key Theme C: Presentation and Discussion

Some women used the discussion board to vent their frustrations and disbelief regarding choice and consent. It seems that even when a woman has previously been through a difficult undiagnosed breech birth and has preferred choices regarding their next pregnancy, the choice is removed from her without proper explanation,

'I'm now pregnant again and asked for a c section at my 8 week appointment. They told me that it is not my decision but the decision of the consultants and I would be pushed for a vbac (vaginal birth after caesarean). I have to meet with a consultant in 16 weeks, attend a vbac course and meet a midwife. So it seems the pressure will be on! So I've come through my second IVF, I've lost faith in the system (leaving me overdue with a breech baby) and now I've got to fight for this' (Flipflops123)

There is an element of despair and disbelief being demonstrated here in the response received from health care professionals to a perceived reasonable request made by this woman. Clearly, she feels that she has not been listened to regarding her concerns about the impending birth and she perceives choices are being taken away from her again as it

seems to have happened with the previous breech birth. Many similar accounts regarding a perception of a lack of reasonable choice offered to women during an unexpected labour of an undiagnosed breech baby have also been posted.

'I had a sweep. It hurt. It was uncomfortable. But I'm not going to lie. I was induced. It was 1000x worse. I was crying as they kept doing things to me but they wouldn't stop. 3 of them with head torches etc. it was horrendous. 3 days of being poked and prodded and literally nothing happening. I eventually told them I refused anymore and wanted a section. Everyone from every department came and tried to talk me out of it. They wanted to try more things. I got a section in the end. I'll never be induced again' (SantaBaby)

Just as the previous quote, many women demonstrate they have had to fight or beg for their choices; choices that are expected to be commonplace as part of a shared decision-making process during labour and pregnancy, choices that any woman may expect to have during pregnancy and labour,

'I had to beg for a position scan at 36 weeks in second pg [pregnancy] despite mw [midwife] thinking baby was breech and first baby being undiagnosed footling breech' (HIT1)

'Waters broke at 37+2, they wanted to induce me next morning, I refused. I held off for just over 48 hours. Said I would only be induced using the pessary not the drip. Less than 4 hours later I needed to push but was ignored... eventually needed an emergency c [caesarean] due to an undiagnosed breech' (Sue)

Interestingly, even the language used eludes to combat here with the use of terms such as 'held off' and 'I refused' suggesting further the situation is perceived to be a fight for choices. It is also evident that not being listened to and not being treated as a suitable enough authority on their own babies was an issue for many of these women. This is most

apparent when they reflect on the pregnancies they had that resulted in their undiagnosed breech births,

'DS [darling son] used to kick me in the cervix. Told me [midwife] repeatedly that I thought he was breech. She dismissed this. He was footling breech, diagnosed when I was 10cm dilated, and delivered by EMCS' (HIT1)

'My MW [midwife] always insisted dd [darling daughter] was head down – was my third breech baby so I knew that she wasn't' (Belle)

It seems that if these women suggested anything other than what the midwives believed based on their practice, they were ignored. In these cases, as a result, a breech baby has been missed. Understandably, the perception of not being listened to and then a traumatic or negative experience happening because of it appears to have riled some women as the quote below illustrates,

'And I'm another one that always had kicks very low down and had an undiagnosed breech. The midwife told me it was probably baby punching me, so imagined her with her hands above her head punching me. I think that was bollocks' (IgglePiggle)

Perhaps as a consequence of this and also because of assumptions regarding a right to choose, it also seems that some women have resigned themselves to the fact that when you have a baby and an unexpected event occurs, you forgo your choices. Whether this is right or wrong, many women have a caesarean section when in labour with an undiagnosed breech baby as they believe there is no other choice as choices are not discussed with them (if there are any depending on the stage of the labour). The reason why decisions have been made on their behalf are sometimes but not always discussed and it is assumed they will want the same course of action as the healthcare professional caring for them; their opinions are not asked for or considered in many instances,

'Obviously, I didn't have a chance to weigh up options with my first, but with a head down baby second time around there was no need for another section' (Anna4)

'I had a c-section with my first (breech but also tiny), which was only picked up after my waters broke, so they were more worried about weight and didn't really give me a choice' (Sue)

It ultimately seems here that women are being disempowered when they experience an undiagnosed breech birth. An undiagnosed breech birth is always unexpected and consequently may contain a greater emotional charge than an expected course of labour. These highly charged situations must be managed better by listening to women and giving them a forum (if only very brief) to voice their choices or concerns, otherwise women will continue to perceive and believe they have no choices at such a traumatic time. This disempowerment means these women are not being heard even though they have a right to be heard. In turn, not being heard in pregnancy and during labour may promote dissatisfaction and impact on emotional wellbeing later. The women on Mumsnet who provided this data are of a similar demographic, as discussed in the method section of this thesis; they are often more educated than the general population. So arguably, if these women who are more willing to perhaps question things are feeling unheard, it begs the question as to how other women may be feeling who are less educated and less willing perhaps to 'rock the boat' by asserting their opinions to healthcare professionals who they may feel intimidated by. This is a real concern as not listening to women may result in breech presentations being missed and unnecessary physical and psychological consequences for mother and/or baby as a result.

Key Theme D: His head was pretty misshapen and his legs were up by his head'

This theme is related to post-labour experience for all women, regardless of negative or positive experience. It essentially sums up the unique physical abnormalities that can occur to babies who have been laying in a breech position in the womb. Due to having undiagnosed breech babies, these women had no time to prepare for seeing their babies with these abnormalities and knowing the interventions that may be required to overcome them. The underlying feeling here is concern and a call for reassurance.

Key Theme D: Data Presentation and Discussion

There were numerous instances within the discussion boards where women appeared to focus on the features of their baby that were physically abnormal because of delivering an undiagnosed breech baby. The accounts provided demonstrate the concern the mothers had about these issues as they didn't expect their baby to be breech and they didn't know at the time how long these resultant abnormalities and deformities may prevail.

'Mine was born by CS after undiagnosed breech. His head was pretty misshapen and his legs were up by his head. Was totally unprepared for it and remember being quite worried at the time. His head sorted itself quite quickly I think maybe took a few months. He must have had a certain look as several hcps (health care professionals) asked if he was breech just by looking at him. Also be prepared for ultrasound scans to check for hip dysplasia.' (CharlieBee)

Even when health professionals appear to have reassured women that physical abnormalities would correct themselves, women appear to be cynical. This may perhaps link to the perception that healthcare professionals have previously not listened to them and their concerns as previously discussed so they are less inclined to believe what they are told at this post-labour stage. Even so, interestingly there is an awareness that the abnormalities are present in their babies but a gratefulness that they are not entirely

noticeable by those who don't know about them as they naturally don't want others to think their babies are 'different',

'Mine was undiagnosed breech until 10 days overdue. Csection the next day and he was quite large at 9lb9 and his head isn't quite right when you look from above. I'm certain it's because he was breech but we were told it would correct itself. He's 2.5yrs and I believe it will be misshapen for a long time. His ears are in different places. Luckily, it's only noticeable from above.' (Sooty123)

Having a baby who has noticeable abnormalities was difficult to take for some women, especially when their baby had to wear a correctable pelvic harness due to hip dysplasia suffered because of their breech positioning being undiagnosed. Many women also seemed to use the discussion forum to gain support, empathy and advice from other users who had or were experiencing the same issues with their baby's hips. The pleas for reassurance from fellow posters and the perceived lack of reassurance gained from medical professionals is quite profound,

'My baby needs to be fitted for the harness and I am so upset. The doctor seemed to keep saying 'she may develop arthritis in her adult life' 'it may cause problems' nothing definite which is frustrating. There's no dislocation, no clicking and they are completely stable on examination. It's only her left hip which is a few degrees under 60 which is the ideal. I know I need to listen to what the doctor says it's just tough. Has anyone had experience of them? Did the baby mind? What clothes did you have them in? How was travelling in the car seat?' (Leapfrog).

The abnormality in her baby was clearly unexpected for this mother and little support or reassurance has been provided. She is trying to convince herself that hopefully no long term physical impacts will occur in her baby because of hip dysplasia and appears to be experiencing cognitive dissonance. She knows her baby needs the harness but is concerned

about the discomfort it may produce in her baby, if her baby does not have a harness fitted, hip problems would still occur.

Certain members of the message board provided hope and encouragement to their fellow users and attempted to put a positive spin on the otherwise difficult situations that these women were coming to terms with because of their baby having hip abnormalities,

'My son had to wear one [pelvic harness] from birth until 4 months. When I had him he was undiagnosed breech and 2 weeks late and they guessed he had been in the breech position for at least 8ish weeks. As a result his hips sockets hadn't formed around the ball joints. It was worse for us parents but it caused him no distress as he had never known any different. Just get babygrows a couple of sizes too big as they then still do up around the harness. He fitted in his car seat and buggy with it on...' (OpalFruit)

'She did have clicks hips, but by 6 week check washable nappies had sorted her out. Btw [by the way] it did mean all the .Idwifes [midwives] thought I was amazing and I got great TLC from them all!' (Bean16)

When a breech baby is born, as evident in the quotes here, the head may appear misshapen and a baby's legs can also be 'stuck' up by their ears, which gives away to others that they were breech presenting. It is arguably perhaps more common in undiagnosed breech babies due to the fact there has been no awareness they may have been lying in a breech position for months in some cases and as a result, no attempt has been made to turn them via ECV. For women having an undiagnosed breech birth, this physical difference is unexpected and some healthcare professionals have never seen this physical difference in a real baby before. Consequently, some women mentioned that the health professionals enjoyed witnessing their undiagnosed breech birth as they had not seen one before, this could be regarded as hurtful and intrusive by the women who may perceive their baby to be acting as a 'freak show' for all to see how different they are,

'I also had an audience because a lot of staff had never seen a breech birth and wanted the experience.' (Lilly)

One woman (Robin14Red) who had delivered at home was horrified at the thought of birthing in hospital and putting on a display for midwives wanting to experience a breech vaginal delivery. Strong emotive language is used to highlight her strong feelings of discomfort with such a prospect,

'If I had been in hospital and the breech position had been diagnosed so late in the day, I would probably have ended up flat on my back with my legs in stirrups with every other midwife in the building standing round to watch and it would have been generally really gruesome and horrible. I can totally understand why you want to avoid that.' (Robin14Red)

And even though this woman (Robin14Red) did not have to have many experience-seeking witnesses to her birth, she still experienced a birth resulting in what seemed at first like a lifeless baby because of having an undiagnosed breech,

'In my case, DD3 [darling daughter number 3] was born not breathing and with an Apgar of 2; dh (darling husband) said she looked like a corpse.' (Robin14Red)

In a further post, she stresses the same horror relating to an apparently lifeless baby, something which no mother expects to witness when their baby is born,

'Dd's [darling daughter's] legs came out first and she was left hanging while they waited for the next contraction for her head to be released, and when she was born she was completely grey and floppy, and with an apgar of 2.' (Robin14Red)

It appears to be fairly commonplace for an undiagnosed breech baby who is born vaginally to have a low Appar score at birth and to need assistance with breathing based on the data here. This 'difference' compared to having a cephalic baby is due to the baby being undiagnosed breech and the journey from 'womb to World' being less easy so the baby can get stuck or distressed. Women here have therefore had to not only experience a traumatic or unexpected birth but they also may have had to experience seeing their babies in 'corpse like' states because of an undiagnosed breech birth. This is something that probably may not have happened if their breech baby had been diagnosed as management processes would have been planned and implemented.

Interestingly, lack of experiencing certain physical sensations seemed to be apparent during pregnancy for some women because of an undiagnosed breech baby. This was especially obvious when women were experiencing a second pregnancy, which was in the cephalic position, and the only baseline comparison they had was an undiagnosed breech first baby. For one woman, her second baby, who was in the cephalic position, yielded a new experience of pregnancy for her; foetal movements rarely occurred in the first breech pregnancy but they were in abundance for the second pregnancy,

'Hello 27 weeks here and also suffering the same problems [excessive movements of foetus]. 2^{nd} pregnancy and wasn't like this first time round, remember wondering why my baby didn't move much (he was undiagnosed breech in the end, explained a lot).' (Flowerpot89)

It appears that overall, women who experience undiagnosed breech birth have a different 'physical experience' to other women and their babies in some ways. In pregnancy, the

physical sensations felt can be different and non-existent in some cases, which is difficult to have an awareness of if it is a woman's first pregnancy. During birth, foetal distress may be likely due to the breech presentation being undiagnosed and as a result the baby may be compromised and it may be too late to have an EMCS. As a further consequence, the baby may need assistance with breathing and have a low Apgar score at birth. Most crucially, obvious physical abnormalities occur in babies who having been laying in a breech position such as hip dysplasia and these display to the World that the baby is 'different' and was breech. This could be difficult to take when it is treated as 'novel' by some healthcare professionals and the subsequent management required can be very distressing for mothers who feel a lack of support and need reassurance. This can make these women doubt themselves as a competent mother. Psychological support needs to be provided to women to help them with dealing with the impracticalities of management methods for physical abnormalities and the reaction their babies may get from others as a result.

Key Theme E: 'Feeling like a crap mum'

This theme for some women co-exists with the previously described theme (D) as it also sums up how women are feeling after their undiagnosed breech birth has occurred.

Although it should be acknowledged that many new mothers may feel like they are failing as a mother soon after childbirth, it seems here that having an undiagnosed breech baby and a traumatic birth as a result can provide another reason to feel like a failure but also to have failed as a woman for not being able to give birth easily or 'normally'.

Key Theme E: Data Presentation and Discussion

Several women appeared to doubt their abilities as a mother after having an undiagnosed breech birth: 'I kept going over and over in my mind what had happened and feeling like a crap mum' (IgglePiggle). The discussion forum acted as a sounding board for the women to not only voice their perceived inadequacies but to reveal their guilt regarding the birth and justifications for why they did what they did.

'There's no way in a million years I'd have had her at home if I'd known in advance she was breech; I chose a homebirth because my first two births were very straightforward' (Robin14Red)

'Will go there [hospital] for next baby but will insist on more checks and a scan if any doubt about position of the baby - I wish I had trusted my instincts more' (HelenT).

These feelings of guilt and self-blame were apparent in a fair number of posts and manifested in a monologue over a series of seven days for one woman (yellowbrickroad) where she was desperately seeking help and advice regarding breastfeeding her undiagnosed breech baby,

Day 1: 'My nearly 3 week old has not wanted to stop feeding today. We struggled getting him to stay on when bf [breastfeeding] in special care......Now it's so hot he doesn't seem to want to stop feeding, I pump every 2-3 hours but I'm just not making enough to satisfy him. Am I right to top him up with formula? Am I on the slippery slope to drying up? I really want to go as long as possible ebm [exclusive breast milk] even though it's hard. Just need some advice.' (yellowbrickroad)

Day 2: 'Sorry to sound thick but to keep pumping every time he cries isn't going to hurt other than be uncomfortable? Thank-you for answering was ready to quit today feel like a failure for not keeping up with him'. (yellowbrickroad)

Around 20 minutes later the despair and feeling of inadequacy as a new mother appears to continue,

'If he's near me it's awful but as soon as he's with dad he's calm and not looking for food. Also wonder if I'm doing it wrong, switched to hospital grade pump to tommee tippee and feel like it's all gone downhill since...' (yellowbrickroad)

A few minutes later after trying to feed the baby she once again reveals her thoughts regarding her insufficiencies,

'I've tried putting him to the breast but he just freaks out. I really wish he would just stick with it so we could crack on like a normal mum and baby.' (yellowbrickroad)

There is clearly a feeling that the situation is not normal and should not be happening this way. She continues to become more desperate in a bid to achieve 'normal breastfeeding' and begins to view her attempt at breastfeeding as a sham,

'I had support while I was attempting the charade of breastfeeding but now we've been signed off I don't know who to call... .I'm about ready to quit now it has to be said.' (yellowbrickroad)

At the end of around six hours of posting messages on the board and receiving some support from other users, yellowbrickroad still appears to feel a failure as a mum and is ambivalent about breastfeeding. The closeness in time of each of these posts demonstrates a need for information and advice now; she appears to keep posting until she gains permission from other users to feel how she feels through them sharing advice or experience. There is still an air of desperation in her posts and she attempts to brush this genuine feeling off alongside her negative feelings around breastfeeding by putting it down to tiredness,

'Just feel like I've broken in the last 24 hours... It just gets too much and not knowing whether to battle on or just quit completely, just feeling like a failure even though I know that's silly and there's no problem with just formula. Probably just tired and emotional...' (yellowbrickroad)

Yellowbrickroad ultimately tries to convince herself that she does not need to pressure herself and regard herself as a failing mother. The next post comes on day 6 after having seen a Health Visitor,

Day 6: 'Left in tears though because I asked for advice on breastfeeding again and felt like I was an idiot to have given up and that it was super easy. Now going to spend 48 hours trying to get it going if that doesn't happen I guess we have an answer. No idea what to do for the best anymore!' (yellowbrickroad)

This incident has clearly reinforced yellowbrickroad's feelings of inadequacy as a mother and her ambivalence regarding breastfeeding. Any hope of support or confirmation from a health professional that formula feeding is fine has not occurred so she does not yet feel she has permission to stop breastfeeding. The following day an update that feels cathartic in some ways is posted, where it first appears she has finally come to her own decision on this desperate situation,

Day 7: 'The boy is just not interested in breastfeeding. He never was and that's fine. I don't need the pressure and he doesn't need the stress. I'm going to lee [keep] pumping and get him to 6 weeks. I don't know why I have that goal. I guess where he was born by complete surprise c-section and then taken away poorly that night I feel guilty and just really wanted to do something my body was built for. I know that's stupid. There's nowt wrong with formula and we will move onto it. Just not ready to let go. Guess I'm just a bit of an idiot' (yellowbrickroad)

This post is extremely revealing as the guilt felt has been explicitly uncovered and yellowbrickroad clearly feels inadequate as a mother and perhaps a woman for not being able to have a 'natural' or 'normal' birth due to the circumstances surrounding an undiagnosed breech baby. She has tried to engage in a compensatory behaviour, breastfeeding, where she can demonstrate to herself and others that she is not inadequate as a mother or woman and her body can do something she perceives it should (i.e. breastfeeding). Unfortunately for her this has not transpired so has made her feelings about herself more negative. This post is a sign she is getting ready to let go of this notion that she needs to prove her body does as it should.

Yellowbrickroad made one final post on the same day in response to another forum user where these feelings of insufficiency were made even more explicit and directly linked to her undiagnosed breech birth,

'He was undiagnosed breech and had done a meconium poo in utero. Was happy with the decision to get him out while he was happy and knowing now how he ended up so poorly I'm glad we did. You just mentally prepare for giving birth and I don't feel like I did rather than just lie back and think of England. I think that's why I've become stuck on breastfeeding and now expressing' (yellowbrickroad)

Although it must be acknowledged that such doubting attitudes and feelings of inadequacy could occur in any new mother, in this case the situation appears to have escalated due to the feelings yellowbrickroad had regarding her body performing as it should because of an undiagnosed breech birth. She clearly felt she should have been able to cope with a vaginal birth, as other women do; she believes she just laid back and had her baby removed. As a

result, she wanted to prove she was a 'real' and adequate woman by breastfeeding her baby as a compensatory behaviour but unfortunately this has not happened how she would have liked. This has further exacerbated her feelings of inadequacy, guilt and despair. Many women become over-focused on breastfeeding after having a baby, but in this case, using the breastfeeding as a compensatory behaviour for the 'failed' birth is what is profound. In other cases, women may want to prove themselves as a mother but are not necessarily using breastfeeding in a compensatory manner.

This experience reported by yellowbrickroad does appear to be reflected in others accounts who also acknowledge that they did not feel 'normal' when they could not breastfeed or felt a similar way after having an EMCS. These women in the following posts did not necessarily have an undiagnosed breech birth but they provide a needed source of support for yellowbrickroad and congratulate her on the positives of her situation. In addition, they acknowledge the notion of feeling like a 'normal' mum and try to persuade her of her 'normalness' and her successes. All three posts were in response to those posted by yellowbrickroad,

'You are not an idiot! It's easy to feel as though your body's failing you etc etc but it's not. Breastfeeding is bloody bloody hard work for most people! Can I help you with expressing queries? I've been mixed expressing and breastfeeding for 5 weeks due to tongue tie x

Ps. if babs was born by surprise and you feel guilty about him being poorly (you shouldn't by the way!) it might help to talk through your birth with supervisor of midwives at your hospital. I wish I had done that with my first Dd who was born by EMCS as I had so many questions which were only answered when I was pregnant with Dd2.

Big hugs sounds like you are doing amazing x which pump have you got x' (Clouds&rain)

There is some crucial acknowledgement here that yellowbrickroad's breastfeeding beliefs are down to her guilt regarding her baby's birth. Clouds&rain empathises with yellowbrickroad and encourages her to seek help with her feelings of guilt and inadequacy, something which should perhaps happen routinely after a traumatic birth.

'I am exclusively pumping for dc4, 11wks who has never successfully latched. In the beginning I could get nowhere near enough to meet his demand and he was largely on formula while I worked in my supply. If that's the path you want to go down I'd suggest tiger milk, fenugreek and domperidone, as within a week I was able to catch him up and now even have a slight over supply. However, it is very hard and I totally relate to wishing we could just be like a normal mum and baby. I'm also south coast if you'd like any peer support just drop me a message' (Holly&Ivy)

'If you want to go down the breastfeeding support route then go for it - I know people who've done this and are glad they persevered. Honestly though - and ignore me if I'm wrong - you sound to me like you've already made the decision to bottle feed and are happier with that. If that is the case, I'd give formula top ups if I were you, and think no more of it.

There are things you can do to try and express more milk - pump at all hours, take supplements etc. For me the benefits of exclusive breast milk wouldn't really outweigh the negatives of that approach (extra pressure, less time with the baby) but some people do it very successfully. Oh and don't stress too much about "normal" mums and babies! I don't have the figures to hand but I'm fairly certain that a significant proportion of babies, if not the majority, are exclusively formula fed...' (Paula)

Both women here are attempting to get yellowbrickroad to overcome her concerns about being a 'normal' mum and having a 'normal' baby in a way that is suggestive of them having come to terms with this struggle themselves relating to feeling abnormal due to not being able to breastfeed 'properly'. Naturally yellowbrickroad's feelings probably appear more intense as she feels she couldn't give birth 'properly' either.

Overall, this theme highlights the need to provide psychological support to women, perhaps in the form of a birth review and subsequent referral to a health psychologist after experiencing a traumatic or unexpected birth. Becoming stuck on compensatory behaviours is harmful to psychological wellbeing and can exacerbate already existing feelings of failure. Clearly, all women who choose to breastfeed should be provided with the support needed to do this successfully if it is their choice but acknowledgement also needs to be made that being unable to breastfeed or give birth vaginally does not make you a failure as a woman.

It is clear from considering all themes taken from the data that experiencing an undiagnosed breech birth can give rise to many negative feelings including anger, fear, frustration and anxiety. In addition to this, women feel they have no choices and have not given consent for the procedures that have occurred as a result. Furthermore, due to the unexpected nature of an undiagnosed breech, the experience can give rise to panic and unless appropriate support and guidance are given to women, they will reflect on such events as a negative experience that will ultimately continue to impact on their psychological wellbeing until these negative emotions are resolved. Not only do some women have to deal with a traumatic birth, but in some cases, the aftermath in relation to physical abnormalities their babies have incurred is also extremely difficult to come to terms with. The lack of psychological support perceived is very apparent. Lastly, having an undiagnosed breech baby can be so traumatic for some women that they have decided to forgo future pregnancies and children due to their fear of reoccurrence. It is not acceptable to leave women in such emotional turmoil, which is why intervention from health psychologists is strongly recommended. Specific recommendations are presented in the discussion section of this thesis.

CHAPTER 6: Discussion

The principle aim of this study was to explore women's experiences of undiagnosed breech birth and to identify common psychological or affective themes drawn from these experiences. A further objective was to consider whether decisions and expectations regarding possible future pregnancy and childbirth have been impacted due to these experiences. Ultimately, it was hoped that findings relating to experience could be used to suggest potential support mechanisms that could be implemented in clinical practice by healthcare professionals and/or health psychologists for women experiencing undiagnosed breech birth.

Overall, 45 women contributed to the data set, 32 voices were included in the thematic analysis and 5 main themes were identified; a) 'I was unlucky though, dc3 [darling child number 3] was undiagnosed breech', b) 'Obstetricians are not the enemy!', c) 'They told me it is not my decision but the decision of the consultants', d) 'His head was pretty misshapen and his legs were up by his head' and e) 'Feeling like a crap mum'. Two subthemes that were hierarchically linked to the first theme were also identified; a1) 'Just got to work through it and keep on swimming' and a2) 'You just don't know what will happen!' All five themes incorporate content relating to psychological and affective matters as evident in the findings section of this report. All findings will now be reviewed and further discussed in relation to the research questions outlined at the end of chapter 2 of this thesis, the key themes contributing to each research question, and the related psychological theory:

Discussion of key findings relating to RQ1: What are women's experiences of undiagnosed breech birth?

The findings from **Theme A** of this research suggest that women feel mixed emotions regarding their undiagnosed breech birth experience, which is supported by research that found women feel a 'rollercoaster of emotions' after traumatic birth (Elmir et al, 2010) and specifically breech birth (Founds, 2007). Most of the emotions displayed in these posts can be regarded as negative and have yielded an overall negative experience of childbirth. There are strong feelings of anxiety that are displayed by many women in relation to the experience they have had and in looking forward to future pregnancies, which is discussed in the discussion of RQ3 section of this discussion chapter. The posts reflect a desperation in some cases in trying to come to terms with what has happened and trying to make sense

of it. For these women, an undiagnosed breech baby was unexpected due to the nature of the 'undiagnosed' element yet even with a diagnosed breech, previous research has reported that a breech baby will make a woman naturally anxious about birthing her baby and the future health of her baby; the woman becomes physically and psychologically vulnerable (Guittier et al, 2011; Tiran, 2014).

The perception that an undiagnosed breech birth is more difficult than a 'natural' (cephalic) birth comes through clearly in the data. Some women blame themselves for their baby being undiagnosed breech or for the traumatic or complicated situation that consequently unraveled. In many cases, they report suffering psychological symptoms and/or physical pain.

However, when considering the data from **Theme B**, some women who posted their experiences on the discussion board reported positive undiagnosed breech birth experiences. Many of these women seemed to attribute their positive memories to the experienced or expert staff who were available to them at the time of the birth of their baby and the fact they experienced no complications. Women are more likely to experience obstetric complications if they are anxious or stressed about a pending birth (Kaplan, Bahar & Sertbas, 2007) and childbirth fear can occur due to a lack of trust in staff (Sjogren, 1997). Therefore, women who have positive experiences are less likely to have felt anxiety or fear and less likely to have had complications and trust issues with staff as a result. This finding would be expected based on the recommendation in the RCOG (2017) Breech Management Guidelines that require a 'skilled supervisor' when embarking on a vaginal breech birth to increase the likelihood of positive outcomes. In some cases, the women said they were 'lucky' to have had these healthcare professionals available to them as the salient perception of these women is that most healthcare professionals would not have the appropriate skills or training to deal with an undiagnosed breech birth. This perception is perhaps not entirely inaccurate as it is supported by concerns voiced by those who have previously researched the issue of 'de-skilling' who have claimed it is mostly due to increasing CS rates for undiagnosed breech births (Deneux-Tharaux et al, 2006; Lindqvist et al, 2007; Evans, 2012). In addition, new concerns have been raised with the introduction of the new RCOG (2017) guidelines regarding how suitable training can be realistically delivered and taken up in an already stretched health service. Nevertheless, women who

reported positive experiences may have had a high outcome expectancy regarding skilled staff being present and a positive outcome occurring as a result, in turn they may have felt they could face a challenging undiagnosed breech experience in a way where they could exert some control and consequently trusted that a positive outcome could occur. These women also may have had high childbirth self-efficacy (Bandura, 1994) which would correlate with having fewer childbirth fears (Lowe, 2000). Consequently, a positive experience of an undiagnosed breech birth may be more likely to be reported with the presence of high outcome expectancy and high self-efficacy.

Importantly, women also expressed a positive experience when continuity of care and feeling supported had been apparent. In one case, after a change of personnel and resultant continuity of care, a potentially bad experience was turned into a positive one. This finding is supported by Elmir et al (2010) who suggested that care should be woman centered and continuous to assist with the profound impacts on a woman of a traumatic birth. In fact, the Maternity Working Care Party (2007) found that 'normal delivery' is much more likely when women feel supported and women will feel better about themselves and their babies' births if they are supported consistently throughout the process (NHS Quality Improvement Scotland, 2005). Therefore, if perceived continuity of support is apparent, undiagnosed breech births may potentially be more likely to be reported as a positive experience.

Birth mode appeared to make no difference to the women in this study in whether they reported a positive or negative experience of an undiagnosed breech birth, although there were more positive experiences reported from those who had had an EMCS. As may be expected, experience of healthcare professionals, no birth complications for baby (physical abnormalities) and feeling listened to (having choices) all appeared to be more symptomatic of yielding a positive experience in the cases reviewed here. If these factors were noticeable in the accounts provided, then women were more likely to report positively regardless of whether they had an EMCS or a VBB. Interestingly, the presence of these factors for a VBB are consistent with the definition of 'normal' childbirth highlighted in chapter 2 of this thesis so it may be that vaginal undiagnosed breech birth is experienced as positive if no complications occur.

The notion that outcomes, whether positive or negative, are not dependent on mode of delivery is supported by research that found both VBB and CS during labour for undiagnosed breech birth were associated with an increase in short-term neonatal morbidity and mortality compared to a planned CS before labour began (Pradhan et al, 2005) potentially giving rise to a more negative reported experience for the mother. Bako and Andu (2000) also found no difference in foetal trauma, cerebral irritation or admission to intensive care between babies who were diagnosed versus undiagnosed breech and born by CS or VBB. This research challenges other research findings (Hannah et al, 2000) that have previously informed clinical recommendations by concluding that CS will return more favourable neonatal and maternal outcomes than VBB.

When considering Theme C, many women who posted on the discussion boards felt noticeably frustrated about having no choice in the birth of the baby or in the pregnancies following it. Ultimately their experiences resonated as involving situations where they had little or no control. Shared decision making was not something that was mentioned regularly and women displayed disbelief in those areas where they were not being allowed to make a choice. For example, after a previous undiagnosed breech birth, one woman was informed she was not allowed to decide how she would birth her next baby. Such feelings have been evident in findings of other research into birth trauma where women have reported feeling 'invisible' and a loss of control (BTA, 2015; Elmir et al, 2010). Even when birth trauma has not been reported but a complicated, negative birth experience has occurred, the 'need for control' and 'loss of control' have been reported by many women (Berg & Dahlberg, 1995; Sjorgren, 1997). Further fueling this lack of choice and control, many of the women perceived that if complications occurred during a pregnancy or birth, such as an undiagnosed breech, then choices would no longer be available, potentially lowering their childbirth self-efficacy and fueling further the belief. Lack of choice should not usually be the case as women should still be informed of why decisions are being made on their behalf even if they are not being allowed to make them themselves for emergency reasons (RCOG, 2017).

Vicarious learning could explain why women feel they would not be given choices in emergency or complicated situations, such as that that could potentially occur with an undiagnosed breech birth. This is because hearing others 'horror stories' regarding such

incidences (Fischer, Hauck & Fenwick, 2006) potential 'myths' believed by lay-people surrounding the management of breech birth as well as arguably misleading previous research such as the 'Term Breech Trial' could serve to inform women's attitudes about whether they will be listened to or have choices before they have even experienced a breech birthing situation first-hand. This could consequently lead to raised levels of fear regarding childbirth (Fischer, Hauck & Fenwick, 2006). Observing negative aspects in others breech birth accounts means that modelling occurs and the same is likely to occur in the learner's situation, especially if they are anxious and fearful about the same scenario happening to them. Essentially, exposure to negative depictions of childbirth can change social constructions of childbirth and increase feelings of fear surrounding it (Stoll & Hall, 2013) and associated expectations of choice or control via vicarious reinforcement.

Ultimately though, regardless of potential vicarious learning, women should be entitled to the best advice and care (Tiran, 2004) and legally and morally they should be provided with unbiased information about different birthing options (Powell et al, 2015). If this is done explicitly then it is hoped that women will perceive they have been given some choices. However, in many cases here, women expressed the perception that removal of choices had not been explained to them; this may be because they expected more choices than could safely be given or because the nature of the situation did not involve discussion of choices.

This perceived lack of choice goes hand in hand with the notion that women appear to feel they have not been listened to throughout their undiagnosed breech experience; they feel their concerns have not been listened to and reasonable requests made by them regarding births or pregnancies are or have been ignored. In some respects, it appears from the data that a woman's thoughts regarding her own body are perceived as being ignored even though she is probably the expert in the feelings and pains she is experiencing. This issue was very evident in the posts from women who feared another undiagnosed breech baby after having one before; they felt healthcare professionals were not listening to them when they were experiencing physical feelings and signs that their new baby was in a breech position. For some women, feelings of anger had materialised and when reflecting on their experiences (both past and future) they viewed them as a fight between themselves and a system (and the healthcare professionals within it) who would not listen. Loss of control

and feeling not listened to at any stage of a pregnancy are both associated with maternal anxiety (Cheung, Ip & Chan, 2007) and experiencing birth trauma symptoms post-natally (BTA, 2015) so this is a concerning situation and has clear implications for women's antenatal and post-natal wellbeing.

Although there were no baby mortalities reported by women posting on the discussion boards for this data set, there were many reports of morbidities occurring because of an undiagnosed breech birth and pregnancy, which was evident in the data for Theme D. Most of these morbidities took the form of physical abnormalities such as hip dysplasia and plagiocephaly (misshapen head). Whilst these morbidities may not seem concerning to some, the concern felt by the women about these physical deformities was clear to see and they were very unexpected due to the nature of an undiagnosed breech presentation. Nobody expects to have a baby with physical abnormalities but this was a very real part of the undiagnosed breech birthing experience of many of these women. In fact, Kok et al (2008) identified that the most concerning factor regarding birth and a new baby for expectant parents is fearing a disabled child. This is synonymous with Geissbuehler & Eberhard's (2009) findings one of the most common fears for a pregnant woman is a fear for the child's health. Therefore, regardless of how a baby is presenting, health and the absence of illness or disability is a genuine cause for concern of many parents awaiting the arrival of a baby. The women in this study were not only upset because these physical issues they may have feared could have been prevented with earlier diagnosis of the breech presentation but more so because the permanence of these morbidities was unknown. Many women had to attend hospital scans with their babies because of hip dysplasia and some babies had a pelvic harness fitted for several months. This had implications for both the women and their babies and anxieties and concerns were shared on the discussion board regarding everyday procedures that may have to change due to the fitting of the harness. Such procedures included wearing sleepsuits and using prams and car seats. Some women reported a lack of support and reassurance regarding these unexpected morbidities they and their baby had to contend with that were a very salient part of many of their undiagnosed breech birth experiences, creating further prolonged anxiety.

Suitably trained Health Psychologists could play an active role in helping women to reduce the anxieties regarding the morbidities of their baby through providing emotional support in tailored sessions or support groups for those with babies who have similar morbidities. Additionally, educating all relevant healthcare professionals where necessary on the psychological impacts on parents of the physical morbidities observed in some babies due to breech birth would be useful so they feel more supported in dealing with them emotionally.

Furthermore, it also became clear when reading the posts shared by women here that they felt unhappy about the prospect of being 'watched' during labour or had been 'watched' during labour by many midwives due to an undiagnosed breech vaginal birth being a spectacle many had not witnessed before. This undoubtedly made some women feel very uneasy about an already difficult or complicated situation. In support, the same issue was identified by Elmir et al (2010) where women reported their distaste at people 'watching' their births without consent.

A few women also shared that their baby appeared lifeless at birth due to the trauma they had incurred. For these women, this would have been an horrific, anxiety-provoking moment for them to cope with as they came face to face with the perceived potential death of their baby. Thankfully most reported improvements after 5 minutes but with a consequent admission of the baby to Neonatal Intensive Care. Facing death of a baby or of themselves in labour during a complicated delivery is significantly associated with fearing delivery in future pregnancy and fearing a loss of control (Sjorgren, 1997). This is concerning as those women who reported a complicated or traumatic birth where their baby appeared lifeless may inevitably have to deal with the long-term psychological impacts of facing death that may affect them in the short-term or long-term future if unresolved, especially if they go on to have future pregnancies.

In addition, Warwick et al (2013) found that babies who suffered physical trauma because of their undiagnosed breech birth had increased hospital admission times. As a further consequence of this parental anxiety also increased. This has implications once again for the psychological wellbeing of the mother but also financially for the hospital; if a breech baby can be diagnosed earlier, physical trauma could be minimised due to attempts to turn the baby via ECV or deliver the baby earlier via an EMCS. Consequently, the baby may not require treatment for physical abnormalities incurred or an extended stay in Neonatal

Intensive Care, which unfortunately has not been the case for some women who shared their undiagnosed breech birth experiences in this research.

In summary, when considering data from key themes in answering RQ1, it appears that women's experiences of undiagnosed breech birth are generally perceived as negative and anxiety provoking. This appears to be driven by a perception that women have had no control or choice and a feeling that they have been 'unlucky' that the scenario for them played out the way it did, perhaps due to having had to have emergency medical procedures due to the absence of diagnosis of breech until labour and the absence in some cases of trained clinicians. Some positive experiences of undiagnosed breech births have been reported but these appear to be more synonymous with the characteristics of a 'normal' birth where no complications have arisen and choices have been perceived; these women have felt 'lucky' as regardless of positive or negative experience, women contributing to this data set do not regard breech birth as the 'norm'. Furthermore, many women's negative and sometimes stressful experiences have continued post-natally. This is because they have had to contend with dealing with the physical abnormalities present in their babies and the psychological consequences of those that have occurred due to their babies unknowingly lying in a breech position.

Discussion of key findings relating to RQ2: Are there any common psychological/affective themes that can be drawn from these experiences and what are they?

It is apparent when considering the data **for Theme A** that **s**ome users of the discussion board appear to harbour unresolved psychological issues, predominately anxiety, relating to the birth that are not being dealt with, or support is not being provided or taken up to help overcome them. As is arguably evident in the data here, birth is seen or reflected upon as a crisis for many women regardless of breech birth (Erkaya et al., 2017) supporting the finding that one in five pregnant women report some degree of anxiety perinatally and postnatally (COPE, 2017). Lack of support can exacerbate anxieties (NHS Quality Improvement, Scotland, 2005) and in turn, significant anxiety has been linked to childbirth fear (Hall et al., 2009). Furthermore, Rondung et al. (2016) identified that a negative birth experience perhaps resulting in anxiety gives rise to anxiety in future pregnancy - this is discussed further in relation to RQ3 in the next section. Ultimately, clear themes of anxiety

and fear appeared to be present within the data presented for Theme A, perhaps due to the predominately negative experiences they shared of undiagnosed breech birth as discussed in relation to RQ1. In a few women's cases, they suggested they had made use of online or physical resources to help overcome anxieties regarding their past birth experience and to aid decision making for the future. This is interesting as these women are demonstrating the use of telling their stories on discussion boards as a self-help intervention to aid with their anxieties and fears, which is something that is considered as a practice recommendation later on in this discussion chapter. Berg & Dahlberg (1995) advocated sharing stories in the conclusion of their research on complicated births by suggesting that doing this is therapeutic and allows women to feel supported. In turn, social support may improve self-efficacy levels relating to pregnancy and childbirth and reduce future childbirth fears. This may be the case as Schwarz et al. (2015) found that childbirth self-efficacy is strongly and negatively correlated with childbirth fear.

In other cases here, women requested or had a debriefing from a care provider to settle their anxiety. Again, demonstrating a strong sense of feeling anxiety after an undiagnosed breech birth for some of these women and a need to overcome it. This need for targeted debriefing after traumatising births has been recognised in research by Sheen and Slade (2015) who suggest implementing a 'childbirth review' for such women, which would help prevent development of distress symptoms before they begin. Unfortunately, one woman here had still not received a debrief 10 months after the birth of their baby,

'My 10m [10 month old] dd [darling daughter] was an undiagnosed breech... How do you go about getting a debrief?' (Egg1).

In relation to specific mental health conditions, it is unclear from the data whether any women have had a formal diagnosis of post-natal PTSD or PND after experiencing an undiagnosed breech birth as none described this explicitly in their posts, but some women report some of the known symptoms of post-natal PTSD such as anxiety, anger, bad memories of the birth and avoidance of anything related to the negative birth experience (BTA, 2015). In one case, a direct causal link is made between having a baby in the breech position that was undiagnosed until labour and having PTSD; although, it is unclear

whether the PTSD was diagnosed or whether the woman perceived she had PTSD. The women reporting such traumatic symptoms or experiences on the discussion forum could also be quite dismissive of their feelings of trauma, anxiety and general negative feelings, which could be regarded as avoidance behaviour. This is concerning as dismissing or avoiding facing the psychological impacts of any birth and not addressing them could lead to a vicious cycle of anxiety or fear being maintained (Beck et al. 1979, 1985). Ultimately, through experiencing a perceived negative or traumatic experience, these women may have experienced feelings of anxiety that they are now attempting to escape or avoid for temporary relief. This may be beneficial in the short-term where avoidance can be an adaptive coping strategy as it can allow for the regulation of emotion and the preservation of individual's self-esteem (Centre for Substance Abuse and Treatment, 2014). Nevertheless, if such feelings of fear or anxiety are unresolved in the long-term, this could lead to loss of confidence in coping, more worry and use of other avoidance behaviours to enable coping in the future (Beck, 1985). Therefore, in time, the anxiety symptoms may worsen and will be unable to be dismissed in some cases. Perhaps some women may genuinely believe they don't need support and may not, others may be unsure as to whether the emotions they have felt or feel are 'normal' after childbirth or may want to deal with things alone (Kingston et al. 2015) which are both potentially barriers to addressing anxiety and fear issues that may arise in some from undiagnosed breech birth, or indeed other complicated or negatively perceived births.

There was also a common belief in the data that even though a traumatic or negative situation had occurred in the past, the situation was okay now so therefore 'you just have to get on with it', which was evident when considering data from the **subtheme A1** 'just got to work through it and keep on swimming'. This reflected a strength in women, rather than a dismissal of what had happened, that shone through very clearly from the posts even at the face of difficult events that could not be planned or prepared for. Perhaps this stoicism reflects a cultural attribute within the United Kingdom or maybe it is something women have no choice over as due to the perceived lack of accessible or available support for some in the UK after experiencing birth difficulties; they simply just have to carry on. Noticeably, some users had a change in position over time regarding the reporting of their experiences, signifying for them that time aided in the psychological healing and acceptance process. A similar conclusion was made by Guittier et al (2011) who suggested women go through several emotional phases to reach acceptance of a non-idealised birth.

This could be reflected in the Stages of Grief Model (Kubler-Ross, 1969) who suggested five emotional phases can occur in varying orders when grieving for a person or event such as a non-idealised birth, including denial, anger, bargaining, depression and acceptance, some of which appeared in the accounts here such as anger and acceptance. In other words, a mourning process had to occur to come to accept a lost or stolen ideal birth experience. However, the Stages of Grief Model (Kubler-Ross, 1969) has limited application as it does not consider the fluid nature of grief and loss and how feelings can change from one day to the next regarding a negative event. In reality, neat psychological stages are arguably rarely passed through before moving on to a further stage and mourning does not just neatly end at a given time.

It is quite revealing that many women who have used the discussion boards refer to their baby as 'an undiagnosed breech'. I think this subtle observation demonstrates the significance of such an experience that the resultant baby is labelled with the way he or she was birthed. Women generally do not refer to babies born presenting cephalically as 'a cephalic' as this aspect of the birth is probably not salient enough to them to label their baby with it. This labelling could arguably reflect the trauma that was suffered and the need to share and make others take note of what has happened. Ultimately, these women are defining their baby by the experience they have had and medicalising their baby; perhaps in reflection of their perceptions of a medicalized birth where they felt control was lost.

It was clear when considering the **Theme E** data that involves women expressing their feelings post-birth, that some women have strong feelings of inadequacy surrounding their ability to birth a child and some believe that their body let them down. Commonly, they report feelings of guilt about an undiagnosed breech birth happening and the way it happened. In some respect, they feel angry with their bodies for allowing this to happen and therefore, some have developed compensatory behaviours to try to prove their body or themselves to others and themselves. Such compensatory behaviours reported by women posting on the discussion boards include breastfeeding and expressing milk. This supports findings in previous research (Beck & Watson, 2008; Elmir et al, 2010) where after a traumatic birth, women used breastfeeding or persevered with breastfeeding even when obstacles were in the way in an attempt to prove they were successful mothers and to try to overcome the trauma they had experienced. Such behaviours become an element of life that can be controlled so women became quite fixated on them. This is supported by Hall &

Wittkowski (2006) who found that many women feel they must show they are coping once a baby is born and feel the need to be perfect; these women were not depressed and had not necessarily experienced trauma yet still had such feelings. Not all women may have felt strong feelings of trauma in this research but as already uncovered in relation to the Theme A data, anxiety was a common trait expressed by many contributors and this may also lead to overly fixating upon certain tasks such as breastfeeding. This could have implications for the wellbeing of the mother as perceived failure at breastfeeding may worsen anxiety and feelings of inadequacy as a mother (Fox et al, 2015). This in turn could lead to a reluctance to ask for help with breastfeeding due to feeling inadequate and in turn, a vicious cycle could ensue. In addition to this, using tasks such as breastfeeding as a potential 'avoidance behavior' instead of resolving anxiety or trauma related to birth could also be problematic in the long term as such psychological issues could remain unresolved and new anxieties may occur relating to the new behavior being fixated upon in addition to those already experienced. A woman who experienced birth trauma could find that her 'social rapport' is damaged because of the trauma and its associated issues, and consequently, she could become more isolated (Taghizadeh, 2013). This is evident in one of the posts in this study where a mother was not only fixated on breastfeeding and expressing but also insisted nobody else could feed her baby but herself, potentially leading to withdrawal of support from others and potential family conflict, a finding supported by Elmir et al (2010). This is concerning as lack of support from a partner has been found to be a risk factor for postnatal depression (Milgrom et al, 2008).

In summary, when considering the data from across different themes in answering RQ2, there are common psychological/affective themes that have arisen. Feelings of anxiety are most common and as discussed here, feelings of fear, trauma, inadequacy and guilt also appear. Both fear and anxiety are explored further when considering RQ3 in the next session. All issues identified in the data relating to these commonly appearing psychological impacts could be minimized or overcome with the practical and psychological support of a variety of health professionals. Both ante-natal and peri-natal support could be useful if such resources were readily available for pregnant and post-partum women and if health professionals were afforded the time to deliver them. This is further discussed relating to RQ4 later in this chapter.

Discussion of key findings relating to RQ3: Have women's future decisions relating to having further children and the expectations of future childbirth experiences been impacted upon because of an undiagnosed breech birth?

Again, when considering the data from **Theme A** and the hierarchically related **subtheme A2** 'you just don't know what will happen!' for some women, anxiety appeared to have given rise to fear both during labour and when considering the prospect of a future pregnancy. This finding is in line with other research that has identified fear as being a significant factor relating to breech birth (Founds, 2007; Guittier et al, 2011). In some cases in this research, women were so frightened that they may have a repeat experience or a recurrent undiagnosed breech that they appeared to infer they may not have another pregnancy (or would not have done if their baby who had been breech had been their first baby) a finding supported by previous research on women's experience of breech birth (Founds, 2007) and general birth trauma (Taghizadeh, 2013).

'My 3rd DC [darling child] was a footling breech, delivered vaginally. If he had been my first he would have been my last' (Lilly)

Such fear could potentially result in low self-efficacy relating to childbirth (the belief that one will not be able to birth a child successfully) that could be related to past experiences as found by Hofberg & Ward (2003) who identified that previous delivery will affect the level of fear felt in future pregnancies and deliveries. This is further supported by research that found low birth self-efficacy is strongly correlated with high levels of fear relating to childbirth (Lowe, 2000; Schwarz, Toohill, Creedy et al., 2015). Those with low childbirth self-efficacy also had a greater presentation of learned helplessness relating to childbirth (Lowe, 2000). Feeling learned helplessness in relation to labouring a child could potentially 'put off' some women from future pregnancy.

In this research, some women may have low childbirth self-efficacy meaning they are unable to approach childbirth as a challenge or recover from setbacks that have arisen previously (undiagnosed breech experience potentially) meaning if childbirth were to happen again they may not feel they would have enough control over the situation to cope with it (Bandura, 1994). This could result in a vicious cycle of anxiety and fear relating to

childbirth for some women where they avoid or escape the feared scenario from occurring so they do not have to deal with it (Beck, 1985). For example, an association of fear and previous subjective negative birth related experience (Melender, 2002; Storksen et al., 2013) could correspond with the maintenance of a vicious cycle and produce concerns the same may happen again in a subsequent birth. Ultimately, for some women, this frightening prospect may be enough to stop them having further children.

Furthermore, some of those women who posted on the discussion board who were experiencing subsequent pregnancies at the time of posting appear to have become very fixed on doing all they could to ensure their new baby was not breech. Of course, this may not be something they could entirely control but the perception for them was that they could have some control and this eases anxiety. Many of the women experiencing a pregnancy following their undiagnosed breech experience reported requesting repeat scans, especially in the third trimester, to reassure themselves that their baby was not in a breech position and to take some control. In turn, this would naturally reduce the chances of having to experience an undiagnosed breech birth again. Some women also explicitly expressed they would chose a different birth mode with a new pregnancy; in most cases they reported they wanted a caesarean next time rather than a repeat vaginal delivery.

'My 10m dd [10-month darling daughter] was an undiagnosed breech, she came out bum, foot, cord, whole placenta, foot, body, head, arms. If I have another I'm having an elective c-section' (Egg1)

In support, research has highlighted that women with childbirth fear see a caesarean as a method to exert control over their birth and to alleviate fear whilst offering safety (Fenwick et al., 2010). Other women also made it clear they would probably want to deliver their next baby in hospital due to concerns relating to another undiagnosed breech occurring or complications arising that could not be dealt with in a home birth. This reflects findings from Hoffberg and Brockington (2000) in a study into Tokophobia (an unreasoning dread of childbirth) who reported that 14 of 26 women who were opting for elective caesarean section for an impending birth were doing so because they had experienced trauma from previous birth experiences.

In summary, when considering RQ3 it appears that for some women in this research, decisions about future children have been impacted upon or perhaps much more closely considered than they may have been if their previous birth had not been perceived negatively. It is evident that for women who were pregnant again following an undiagnosed breech birth, they were frightened and anxious about their next birth so in some cases tried to exert control by making specific medical requests such as asking for extra scans or a caesarean section. This was done to try to ensure a repeat experience of their previous birth did not occur. This provides some evidence that future childbirth experiences have been impacted upon in this group of women either specifically because of the previous undiagnosed breech birth or because their previous experience was perceived as negative. For example, for some women their next childbirth experience following an undiagnosed breech birth may have involved a caesarean section, whereas if they had not had a previous negative birth experience potentially due to an undiagnosed breech birth, they may not have opted for a caesarean section when birthing a baby in the future.

Discussion of key findings relating to RQ4: Are there any potential support mechanisms that could be put in place in clinical practice and beyond for women who experience undiagnosed breech birth?

RQ4 has been addressed by considering the answers to RQ1-3 previously discussed in this chapter and forming practice recommendations and implications in the following section in response to commonly arising issues. The role of health psychologists is then considered later in this chapter with further consideration to these recommendations.

Practice Implications and Recommendations

The findings of this study appear to challenge current clinical guidelines on breech birth (RCM, 2005; NICE, 2012; RCOG, 2017) that do not stipulate or acknowledge that psychological support may be required for women **after** they have experienced an undiagnosed breech birth. It is clear from the accounts reported in this study that women who have had such an experience feel a variety of emotions about their undiagnosed breech birth, most of which are negative emotions such as fear and anxiety that may often

be difficult to deal with. In some cases, these feelings could persist for many months or potentially years after the experience occurred and for some, could potentially conclude with the diagnosis of post-natal PTSD, PND or generalized anxiety among other disorders. This lack of acknowledgement that psychological support may be required could arguably have implications for not only women who have birthed an undiagnosed breech baby but also for the health professionals working to support these women as it may be that some psychological impacts identified could be minimised if identified or revealed earlier than may currently be the case.

Although post-partum mental health conditions were not an outcome being specifically looked at in this study, many women who posted messages demonstrated evidence of anxiety, inadequacy and/or trauma in their posts. Although, it is important to stress than no women actually declared having actually been diagnosed with a mental health condition post-natally. Even so, this research highlights the need for all healthcare professionals to have an increased awareness of psychological symptoms of common and less common post-partum mental health conditions when they routinely psychologically screen a woman in the weeks after she has given birth (NICE, 2014). This is important to ensure symptoms do not develop further unnecessarily. The nature of psychological symptoms such as those experienced in PND such as feeling low and hopeless or post-natal PTSD such as anxiety and avoidance also mean that new mothers may not report them if they are not asked about them even if they do not understand already why they may be experiencing such emotions (Taghizadeh, 2013, NICE, 2014).

Following on from this, psychological issues can be difficult for women to discuss with healthcare professionals involved with their post-natal care as it has been reported that other women cannot always understand their angst about the birth and will just tell them to 'put it behind them' (BTA, 2015) without trying to facilitate understanding. Most midwives are female in the UK (103 male midwives compared to 31,189 females, Telegraph, 2014) so women may not want to confide in them as they may not want to be judged as an inadequate mother and feel they have no common ground to discuss their experiences. This distrust was expressed by some women in this research as they felt judged by their midwife due to making decisions they perceived their midwife disagreed with or requesting procedures their midwife did not feel necessary, such as an elective CS, due to a past difficult birth. This is supported by research by the Association for Improvements in Maternity Services (AIMS) (2012) who collated decades of data linked to

women's experiences of pregnancy and childbirth in the UK and produced a document titled 'Top Ten Tips' in order to promote change in midwifery care. The 'Tips' were written because 'increasingly, women and midwives are unable to form trusting relationships, and women are aware that part of the midwife's role has become one of surveillance rather than support' (AIMS, 2012). Two of the 'tips' recommended to Midwives by the Association for Improvement to Midwifery Services (AIMS) (2012) include being an advocate for women and making them feel supported when they are vulnerable and understanding the process of informed decision making by accepting that 'informed refusal' is also a viable option. There is no evidence to suggest that midwives are not following such recommendations yet having such 'tips' in place could serve to reassure women who have had negative birth experiences that they can trust their midwife if they choose to be open and honest with them about how they might feel.

Even though NICE (2014) recommends in their guideline on antenatal and postnatal mental health that health professionals should be aware of the full range and variety of anxiety and depressive disorders including panic disorders, phobias and post-natal PTSD, the NHS Choices (2015) website has a page dedicated to PND but not to Post-natal PTSD or social anxiety specifically arising from childbirth. This means that if a woman were to search online for psychological symptoms relating to childbirth, she would be directed to the PND page on NHS Choices. This is problematic if she is experiencing symptoms other than those relating to PND. There is a section on general PTSD (not post-natal) social anxiety and panic disorder (not specifically related to pregnancy or birth) at the bottom of the PND page (NHS Choices, 2015) but there is much material to read above it on PND before it would be seen. This has implications for women who are trying to access the internet for some answers regarding their psychological symptoms as they may not have PND but a different type of depression or anxiety disorder. In this study, women reported accessing the internet for help and advice after experiencing a traumatic undiagnosed breech birth so perhaps health advice information needs to be updated to raise further awareness of the symptoms of all post-natal mental health conditions. This is an important issue as the NICE Caesarean Section Guideline (2012) for example, claims that women experiencing breech presentation who had an EMCS or assisted vaginal delivery were more likely to have PTSD 1-2 years after the birth than women who had had a planned vaginal birth. An undiagnosed breech would have not allowed for a 'planned' vaginal birth due to the nature of it so ensuring the

provision and accessibility of education for all pregnant women on all psychological disorders such as post-natal PTSD may be useful to allow them to have more insight into why there are feeling the way they do if they experience psychological symptoms such as those commonly occurring in this research after childbirth.

The provision of psycho-education from healthcare professionals has been shown to increase the women's knowledge of birth (Rahimparvar et al., 2012) and may assist in improving the psychological wellbeing of pregnant women and those who have had difficult or negative experiences of childbirth. For example, Toohill et al., (2014b) found that when delivering psycho-education to women with high levels of childbirth fear, their childbirth self-efficacy and fear levels improved. Fenwick et al., (2015) found psychoeducation administered via telephone was effective in reducing depressive symptoms, reducing the incidence of distressing flashbacks of birth, which could be sign of birth trauma, and improved confidence in parenting. The use of a decision aids as part of the educational intervention also lead to decreased levels of fear. However, depressive symptoms and improved confidence in parenting also improved substantially with usual care (Fenwick et al., 2015). Even so, the psycho-educational intervention was superior at reducing flashbacks and fear levels so had some clinical and psychological benefit. In support, Schwartz et al., (2015) claim that ultimately, strengthening resilience via educational resources will improve women's preparation and experience of birth. Therefore, this has implications for practice in that encouraging those who provide care in maternity services to develop or deliver psycho-education to women who are experiencing psychological symptoms relating to childbirth, such as some of those in this research, could be beneficial in improving symptoms and changing perceptions of future experiences. There arguably potential cost implications, yet Turkstra et al., (2017) considered the economic impact of the psycho-educational intervention used in Fenwick et al., (2015) study and found that it had no overall impact on care costs so could be cost-effective for those women who report high childbirth fear.

As well as potentially raising awareness of psychological symptoms occurring in women after an undiagnosed breech birth (or indeed any birth) through education, it should also be highlighted that such symptoms, if salient and traumatic enough, could impact future thinking around childbirth. As earlier discussed, many women reported on the discussion boards that their previous experience of an undiagnosed breech birth was creating fear and anxiety for them in considering a subsequent pregnancy. For some, it meant they would

not be willing to go through another pregnancy as they were so fearful the same might happen again. Nilsson & Lundgren (2009) identified that in multiparous women previous birth experience was the central factor that was contributing to their fear in a new pregnancy. Experiences were reported to be related to suffering due to the care they received during previous childbirth, pain and negative experiences with staff, all of which have also been expressed by those women in this research study whom reported a negatively perceived experience of an undiagnosed breech birth.

Importantly though, the consideration of future thinking around childbirth has not been attended to in any previous research that has exclusively looked at undiagnosed breech births. Although, Founds (2007) did report in her qualitative study on women's experiences of breech birth that one of her participants claimed they would never have another baby due to their diagnosed breech birth; although future thinking around childbirth was not an outcome being specifically considered in the study. Furthermore, Beck & Watson (2008) considered subsequent childbirth after a previous traumatic birth and found it had the potential to either heal or re-traumatise women, especially if they have not overcome their previous trauma. Following on from this, the findings from this research with regards to anxieties relating to subsequent birth after an undiagnosed breech birth highlight the need perhaps to increasingly consider a woman's psychological readiness for birth during her ante-natal appointments with midwives rather than focusing pre-dominantly on her physical readiness. NICE (2014) support this notion as they recommend that women are offered preconception counselling or support early on in pregnancy if they have experienced previous mental health problems and that all women are monitored regularly throughout the entire pregnancy and post-natal period for potential psychological symptoms relating to pregnancy or childbirth. Furthermore, Schwartz et al., (2015) suggest that addressing women's emotional and physical health prior to birth may also help to reveal their childbirth self-efficacy, which could be helpful in providing the correct support. Erkaya, Karabulutlu & Yesilcicek Calek (2017) also recommended that those working with women ante-natally should try to determine the birth fear and anxiety pregnant women feel and offer them the relevant counselling. However, the study involved Turkish women using the Turkish healthcare system so recommendations may have very limited application in the UK. Regardless, perhaps more debriefing is also required for all women after birth (a birth review) in order to uncover any anxieties about their experiences immediately so they can be monitored and do not worsen ((Sheen & Slade, 2015).

It has been reported in previous research that an intervention that could be effective in improving the psychological wellbeing of those with particular healthcare issues is the use of peer communication methods on the internet (Mo & Coulson, 2012) such as the use of discussion boards. It has been suggested that discussion boards can serve as a useful self-help intervention as they provide a level of anonymity not available elsewhere and may allow the user to feel they can disclose information about issues that people may not be so willing to discuss face to face due to stigma (Buchanan & Coulson, 2007; Coulson, 2005). Additionally, participating in any group online and feeling connected is an essential component of feeling part of a community, where members learn from and support one another (Goetzman, 2014). Ultimately, health-related discussion boards allow users to seek support from those who appear to have had similar health issues or experiences. It appears that the women in this research appeared to gain some comfort from one another in discussing perceived shared experiences and in many cases women were explicitly asking other posters for their thoughts and opinions perhaps to reassure them or to recognize, acknowledge and validate their feelings or experience.

Therefore, although the medium in which these women have shared their experiences was a discussion board, it may have also served to act as an intervention for them in coming to terms with or accepting their experiences. This may be because other posters acted as mentors to aid in the acceptance process or to encourage new behaviours in response to issues women declared online. In support, Goetzman (2014) stated that in technological learning environments such as discussion boards, any person with an understanding or knowledge of a particular subject matter can share this information in the capacity of a well-informed individual or a mentor. In this research, this element of online communication may also have facilitated vicarious learning whereby women may have trialed new behaviours to help them deal with the anxiety of a breech baby or requesting scans for example, as they had been suggested by other women who had found them successful in their own cases.

The consideration of discussion boards as interventions has implications when considering possible practice recommendations as it may be that referral to the use of discussion forums that are communication channels of specific online support groups related to birth may be helpful alongside or instead of face to face support or therapy. Caution would need to be applied though as the self-acquired and unaudited information gained from sources such as the internet and books can be misinterpreted and could further increase anxiety

levels related to childbirth (Erkaya, Karabulutlu & Yesilcicek Calek; 2017) rather than providing support. However, in a systematic review on health-related virtual communities and electronic support groups, Eysenbach et al., (2004) found no evidence of any harmful effects to individuals of online communities. In fact, discussion boards could potentially serve to provide users with improved coping abilities and a sense of empowerment (Mo & Coulson, 2012) which can only be regarded as positive and therapeutic. Importantly, coping strategies specifically for fear of childbirth have been shown to have been positively impacted as well as self-confidence and birthing attitudes when women have made use of internet administered self-help (Nieminen et al., 2015). However, this was not through the use of open discussion boards but through use of resources based on cognitive behavioral therapy (CBT).

Internet based CBT has been shown to be effective in reducing the anxieties and fears of women with severe childbirth fear over 8 weeks (Nieminen et al., 2015). These women were fearful for various reasons but overall their feelings of anxiety were replaced with some hope. Importantly, the women in Nieminen et al., (2015) study were wary of healthcare professionals and believed they would be unavailable and would not listen to them prior to CBT, but afterwards this belief changed to thinking healthcare professionals would be helpful and available. Ultimately, these women were initially fearful of childbirth and had low childbirth self-efficacy; they were using avoidance behaviours to cope. After an 8-week course of CBT they were actively coping with the idea of labour and their childbirth self-efficacy had seemingly improved (Nieminen et al., 2015). This has implications for all women who experience fear of childbirth including those with past negative experiences such as those women in this research who may fear having further children due to an undiagnosed breech birth as engaging in online CBT meant the childbirth expectations of women in Nieminen et al., (2015) study became more positive. It is also evident in this research that many women believed they were not being listened to and this may have been a source of fear for them too. Perhaps it could be recommended that online CBT could be explored and trialed in the UK to assess for impacts on childbirth fear and anxiety levels as it is not routinely offered specifically for this. This would arguably be more cost effective than traditional corporeal CBT as it is self-administered so would not require a therapist, midwife or psychologist to intensely deliver it.

How women are treated and cared for during an undiagnosed breech birth and the aftermath is important. Psychological symptoms such as anxiety and fear can occur due to reasons such as loss of control, not being listened to and having emergency birth procedures (BTA, 2015). If these could be overcome or prevented in some way then there would be a reduced risk of such symptoms occurring in women and potentially increased perceptions from women that their birth was positive rather than negative. In this research, some women reported positive undiagnosed breech experiences but most reported negative experiences; lack of choice and not being listened to appear to be contributing factors to this perception. Nilsson & Lundgren (2009) have recommended more support for women who are fearful of childbirth and the importance of the role of the midwife in being able to free the woman from her loneliness of not feeling listened to and restore the woman's trust in herself that she can birth a baby; in other words, increase her birth self-efficacy. For this reason, encouraging hospital trusts to provide training on effective listening and refresher training on consultation shills to all healthcare professionals working in antenatal and postnatal care in order to perhaps refresh, share or update their skills and to potentially improve women's perceptions may be useful in some cases. In turn, this may reduce psychological symptoms and curtail any future anxieties regarding future pregnancies. Furthermore, the development and use of brief patient decision aids where they do not exist may contribute to making women feel more listened to before and during labour and would perhaps also help to ensure that women feel they have some control and are being allowed to make informed decisions about their own care.

Being able to make decisions about births that followed an undiagnosed breech birth seemed particularly important to the women who posted messages in this study. Say et al (2011) advocated shared decision making in pregnancy and maternity services but they acknowledged that healthcare professionals often found it difficult. They suggested the use of patient decision aids alongside shared decision making reduced anxiety and allowed women to feel they had made an informed choice. Nassar et al (2007) also found that using patient decision aids helped women to make informed decisions about their breech presentation but they noted that women still felt anxious about the situation even after using them. Therefore, focusing on improving the perception of having choices alone may not be the lone solution to improving psychological symptoms. Even so, use of patient decision aids that are unbiased would allow women at least to feel listened to. In addition

to this, healthcare professionals could explicitly create spaces for dialogue with pregnant women regarding mode of childbirth where useful material is shared to make a woman feel she is in a shared process (Guittier, 2011). Importantly, delivery option advice for women in labour with an undiagnosed breech baby should be different to that offered to women ante-natally (Lawson, 2012) but nevertheless, delivery option advice should still exist in a briefer and perhaps more limited format due to certain options no longer being safe for some women. Options should be considered perhaps on a case by case basis as suggested by RCOG (2017) due to physical and clinical differences between women that may lead to better vaginal birth outcomes such as pelvis size (Van Loon et al, 1997; Leung et al, 1999) and dilation of cervix (Leung et al, 1999). For example, Michel et al (2011) found an increase in vaginal breech birth with no worsening in neonatal condition after trialing a decision protocol that considered pelvis adequacy.

Finally, ensuring that continuity of care occurs has personal implications for women experiencing childbirth due to it potentially affecting their perceived subjective experience and financial implications for the healthcare system in the long term as it could potentially ensure that warning signs do not go unnoticed due to a change in personnel each time an ante-natal appointment occurs. If warning signs are more likely to be noted then problems may be less likely to occur later that may increase risk of negative birth experiences and associated anxieties. The requirement for continuity of care has already been implemented in the NICE Quality Standard for Antenatal Care (2012) with regard to midwives and is also advocated in the Government Policy titled 'Giving all children a healthy start in life' (Department of Health, 2013). The benefit of this was evident in those who reported they had continuity of care in this research as the same women also appeared to report positive experiences of breech birth overall or acknowledged the importance of having the same midwife.

Role of Health Psychologists/Health Psychology

It is clear from considering the findings of this research that there could be a role that Health Psychologists can play in the perinatal period in maternity and community settings. In the British Psychological Society (BPS) Briefing Paper titled 'Perinatal Service Provision: The role of Perinatal Clinical Psychology' (2016) the role of clinical psychologists in such settings was clearly described but unfortunately as yet there appears to be no call for the equally valid role that suitably trained health psychologists could play in such settings. Some Health psychologists have been trained sufficiently to be able to consider the psychological effects of a birth on a woman and to provide the appropriate support and psychological interventions that are specific to her needs, such as Cognitive Behavioural Therapy or Motivational Interviewing. Other Health Psychologists with less or no experience in delivering such therapies could also be trained to assist with such provision. This is an important role that evidently needs to be filled as the BPS (2016) states that,

'Women often have a clear preference for psychological support for mental health problems over more medicalised interventions such as pharmacology in the perinatal period'. (pg. 5)

However, it must be acknowledged of course, that if CBT were rolled out to all women experiencing severe or persistent psychological symptoms before or after childbirth then there would be cost implications and a potential lack of funding for such interventions to be effective on a large scale. In turn, the effectiveness of such interventions to assist with perinatal and postnatal psychological symptoms would also need to be further demonstrated before such a program would even be considered.

Even so, if a woman does appear to have psychological symptoms such as fear, anxiety and guilt after a negative birth experience or during pregnancy, when assessed on a one-to-one basis, it could be regarded the use of Internet CBT (ICBT) by midwives or health psychologists working in maternity services could be helpful in providing support, as recommended in the previous section of this chapter.

Health Psychology models could be used within ICBT to help to ascertain individual women's maladaptive thinking patterns and the barriers that have occurred because of the psychological symptoms they are trying to cope with relating to childbirth, such as anxiety and fear. The goal of such CBT is to enable and empower women to feel they no longer

need to use safety behaviours and the perceived ongoing threat can be overcome (Pandas Foundation, 2016). In Nieminen et al., (2015) research, Internet CBT (ICBT) involved 8 weeks of self-help CBT including elements of psycho—education, cognitive restructuring and relapse prevention. Women were also asked to self-train daily and to complete homework for which they got some written feedback. As with traditional CBT, if (ICBT) was to be delivered by Health Psychologists for childbirth fear or anxiety, assessment could involve re-visiting a previous fearful experience and formulation and intervention may involve teaching relaxation skills and breathing techniques to overcome safety behaviours or avoided behaviours and experiences. First, provision of information may be required to help women to realise that many of their fears will be unlikely to happen and cognitive restricting can occur as a result. Overall, an ICBT program would hopefully reduce fear and anxiety and improve childbirth self-efficacy as has been previously demonstrated (Nieminen et al. 2015).

As previously mentioned, Health Psychology models could be used to ascertain the main cognitive areas that need to be addressed for each individual woman within an ICBT program, for example, the COM-B Model (Michie et al, 2011) could be used to address whether capability, opportunity or motivation is the main barrier in preventing a change in thinking to occur around the undiagnosed breech birth that has already happened or in relation to a subsequent birth. The PWP Training Review (2015) claims that using COM-B can be very helpful in facilitating clients to gain as much benefit as possible from interventions. Furthermore, as was the case in Nieminen et al., (2015) research, psychoeducation can also be used as a part of ICBT, which is where women may be educated on new ways to think about birth and motherhood to help dispel maladaptive thinking. This can also be related to the Theory of Planned Behaviour (Azjen, 1985) where if behavioral beliefs and attitudes towards certain behaviours result in a certain behavior, such as having difficulty in forming an attachment with a child or being frightened to become pregnant again in these cases, then educational intervention could be used to attempt to change behavioural beliefs and overall attitudes to such behaviours. In turn, this would enable behaviors to be changed, or at least an intention to change behavior may result from such educational intervention. Beliefs could also be targeted using the Health Belief Model (Rosenstock et al, 1988) as perceived severity and susceptibility regarding having further birth complications if a negative experience has previously occurred may be preventing a woman from considering a further pregnancy even if she really wants another child. If

psycho-educational intervention could assist in challenging such beliefs then a change in behaviour may also occur as well as a change in cognitions relating to fear and anxiety regarding childbirth.

If women appear to have a specific mental health disorder following a negative childbirth experience such as PTSD or PND rather than a cluster of psychological symptoms, research evidence also suggests that CBT is effective for both acute and chronic PTSD (Kar, 2011) yet there is a little research that has focused specifically on the effectiveness of CBT for postnatal PTSD. A protocol has recently been published (Furuta et al, 2016) for a systematic review that will compare the effectiveness of CBT with usual post-natal care for post-natal PTSD symptoms in women who have had a traumatic birth; but, as yet this has not been completed. However, ICBT has been found to be a feasible and successful intervention that can improve antenatal depression symptoms (Forsell et al., 2017). Perhaps trialing the provision of ICBT in some of areas of the UK on a small scale and encouraging those in maternity settings to encourage women to engage with it during 'usual care' may lend itself to an increase in research in this area through a collaboration of midwives, health psychologists and health visitors. This could potentially allow a wider evidence-base to be built for the implementation of ICBT in antenatal and postnatal settings to help women deal with psychological impacts of birth and improve their psychological health.

Health psychologists could additionally act as an advocate for women when they are feeling they have few choices and are potentially too anxious or frightened to challenge clinicians by providing an opportunity for open and honest dialogue in an informal setting. From this research it is clear that women feel they are not always asked about how they are feeling after giving birth to a child, regardless of how the baby is presenting so offering all women a short session with a health psychologist ante-natally and post-natally would potentially uncover any concerns or fears regarding the birth and any psychological impacts that have occurred afterwards. Although, once again, the funding implications of this would be very great and research evidence would be required to demonstrate the effectiveness of such a strategy. However, continuity of care from a health psychologist who is suitably qualified to work with a woman regarding any psychological concerns would be beneficial. Such a session could also be used to discuss anything that a woman had not felt she could

raise in a debriefing she would receive from a midwife regarding her birth; the post-natal session could potentially be one aspect of a 'childbirth review' but independent from the debrief provided by other healthcare professionals. A health psychology referral system may also be useful for all involved in maternity services to enable women to have improved access to further outpatient psychological intervention when they have had experiences such as an undiagnosed breech birth if they have concerns about the psychological impacts of their birth or are fearful of future pregnancy as a consequence. Of course, an audit would be required within specific maternity services to address whether this would be beneficial and would address gaps in provision in individual services.

As discussed in the previous section, the use of psycho-education interventions has been demonstrated to be effective in improving childbirth self-efficacy and lowering childbirth fear levels (Toohil et al., 2014b) as well as reducing flashbacks due to a difficult past birth experience (Fenwick et al., 2015). In both studies, midwives successfully facilitated the interventions via telephone. Psycho-educational interventions to assist with childbirth involve a review of childbirth expectations, something which may have been impacted upon in those women in this research who had an undiagnosed breech birth, working through distressing elements of previous birth, developing networking strategies for support and developing a birth plan (Fenwick et al., 2013). All these processes could of course be followed face to face but using an online format is thought to be less time-consuming for the midwife who is facilitating.

Perhaps Health Psychologists working in maternity services or with an interest in childbirth could use their core training on 'teaching and training' to educate midwives on specific psycho-educational interventions for childbirth fear for example, and how they might facilitate the intervention with their patients. This would enable midwives to feel they can provide further psychological support to the women they want to support and could lead to an overall improvement in psychological wellbeing for women who participate. This suggestion would of course need to be trialed on a small scale within one hospital trust to start with and effectiveness would need to be demonstrated for a wider scale trial to occur. A comparison of psycho-education alone and ICBT may also be a useful piece of research that those working within Health Psychology could complete, as it would be interesting to uncover whether it is the psycho-education element of ICBT that also leads to its effectiveness or whether the other aspects also have some benefit. If trialed and researched more extensively to demonstrate feasibility and suitability, both ICBT and

psycho-education could have the potential to improve childbirth self-efficacy and prevent avoidance behaviours and vicious cycles from being established in women who have reported negative birth experiences and/or may suffer anxiety or fear as a result. In turn, this could also have positive impacts on decisions relating to future pregnancy and childbirth.

Another aspect that could be addressed by health psychologists is to educate colleagues on the potential of discussion forums as interventions to provide support for those dealing with psychological issues surrounding birth. Of course, encouraging health psychologists within academia to perform research in this area is required to investigate whether forum participation over time can alleviate certain psychological symptoms occurring due to negative experiences of childbirth. Nevertheless, in the interim, educating those working in maternity services to encourage women to make use of relevant and appropriate online support groups should do no harm as reported in a recent systematic review (Eysenbach et al., 2004) as previously mentioned. The women in this study used a discussion forum to ask questions, share stories and support one another, which many appeared to find helpful and some may have found empowering as reflected in previous research (Mo & Coulson, 2012). Ultimately, investigating this area further will enable a greater understanding of the potential of use of discussion forums for childbirth experiences.

The provision of evidence-based psychological interventions, perinatal training for front-line staff, continuity of care and incorporation of holistic care across various healthcare settings have been advocated by the Joint Commissioning Panel for Mental Health (JCPMH, 2012) and the National Institute for Health and Care Excellence (NICE) (2014) in their 'Antenatal and Postnatal Mental Health' guidance. Therefore, allowing suitably trained health psychologists to work alongside maternity experts by providing training on potentially effective psychological interventions for women who have experienced negative births could be beneficial. Encouraging all who work in maternity services and those health psychologists in academia with an interest in psychological impacts of childbirth to engage with more research in this area will also help to strengthen the evidence-base and widen participation in potential interventions and in some cases could also lead to the actual or perceived provision of more holistic care.

Strengths and Limitations

One potential limitation of this study is the representativeness of experience of undiagnosed breech pregnancy. It may be that users of forums such as Mumsnet may be more likely to post information regarding negative experiences rather than positive experiences, perhaps to vent their frustrations and to feel listened to. People may feel less inclined or motivated to report positive experiences on discussion boards as they may feel they do not have an interesting story to tell although this has not been considered in research. Furthermore, although Mumsnet was chosen as the source of secondary data due to more UK users than Netmums, it is impossible to say when using secondary data how many of those women who contributed to the discussion boards were based in the UK, unless provided explicit information to uncover their location in their posts. For this reason, representativeness of the sample and generalizability to UK healthcare and services is limited as it is conceivable that many contributors were from countries other than the UK. Nevertheless, when considering the demographics that had been revealed, the contributors did appear to consist of those from a wide number of locations within the UK in addition to those unknown locations.

Additionally, dominant voices can also be problematic when carrying out Thematic Analysis and this is something that was considered here but it was felt that no single contributor was leading the discussions in a dominant or persuasive manner. The only exception to the non-dominance in this data was the monologue provided by user 'yellowbrickroad' outlined in the results section, which in this case, provided a useful insight into the changing emotions of one user over a few days.

As discussed in-depth in the 'Philosophy of Research' section earlier in this thesis, being an 'insider researcher' may also be considered a limitation of this research although due to the methods used and the use of secondary data, I feel being an 'insider researcher' has influenced the research and the processes positively overall.

The main strength of this study is that a previously understudied experience was explored. Sharing health stories online can impact the health of the story teller and the reader in many ways including feeling supported, maintaining relationships and experiencing new health services (Zeibland & Wyke, 2012). Blainey and Slade (2015) explored the process of writing about and sharing traumatic birth stories online and found that women wanted to share stories to help themselves and others and although it was emotional it was regarded

as a positive activity. Blainey and Slade (2015) concluded that writing traumatic birth stories online may be a useful self-help intervention as it allows women to help to organize and understand what happened to them. Disseminating the stories further such as those told in this research could help more women to feel supported and understood and is mentioned further in the next section of this chapter.

As outlined in the introduction, little past research has looked at experiences of breech birth and none has considered women's experiences of undiagnosed breech birth exclusively. It is important for this distinction to be made as experiencing a diagnosed breech is very different to experiencing an undiagnosed breech birth due to the nature of an 'undiagnosis'. This research also considered the effects of breech birth on decisions and expectations women may have about future pregnancy, which again has not been previously considered exclusively to undiagnosed breech birth experiences. Allowing women to tell their stories has allowed real experiences to be shared and has facilitated an improved understanding of the decisions women may make about future childbirth and what they expect to happen 'next time' after experiencing an undiagnosed breech birth. Using secondary data to gather such information has been helpful as responses were not limited or 'tamed' as a result of forum users feeling their experiences need to be reported in a certain manner or that particular elements may not be important for the research. This curtailing of the data may have been more likely if a different method of data collection had been used.

Future Directions

Further research into women's experiences of undiagnosed breech birth is required to strengthen and support conclusions that have been made here. If this research study were to be repeated, use of a wider range of websites may be useful to provide a potentially larger amount of secondary data and to potentially improve representativeness. It may also be helpful to consider the psychological impacts on partners and families in response to an undiagnosed breech experience and how this may compare to the women's stories. Etheridge and Slade (2017) considered the experiences of fathers recruited via parenting and birth trauma websites who found childbirth traumatic and identified that men's feelings and fears mirrored their partners and childbirth was a 'rollercoaster of emotions

due to unexpected events'. Unfortunately, these men felt their emotional responses were not justified as they had not been the one giving birth so they turned to avoidance instead even though they knew they needed support. Etheridge and Slade (2017) research therefore suggests that fathers as well as mothers need psychological and emotional support in the perinatal period, which is a conclusion supported by Poh et al (2014) in a review on father's experiences during pregnancy and childbirth. Even in relation to nontraumatic childbirth, it has been found that men report sharing a 'mutually shared process' with their partner during childbirth but experiencing the woman in pain is difficult to deal with (Premberg et al, 2011). Essentially, more research into undiagnosed breech birth experiences can only serve to strengthen the knowledge base and in turn, encourage further consideration of recruiting suitably experienced health psychologists into maternity settings or to encourage hospital trusts to provide further training to those already working in maternity settings to provide perinatal support for both parents after childbirth where possible. Further research that potentially uncovers psychological impacts of breech birth could also drive the call for current clinical guidelines to be modified to further incorporate consideration of the psychological aspects of an undiagnosed breech birth and the later potential effects on future childbirth. Considering childbirth fear specifically related to undiagnosed breech birth and the interventions that may be effective in assisting with it may also be useful in understanding further how breech birth can impact expectations of future pregnancy and how these could be changed.

Future studies could also consider the impact of individual differences on experience of undiagnosed breech birth such as culture or parity. Founds (2007) acknowledged in her research on women's experiences of breech birth in Jamaica that cultural differences exist in relation to the consequences and meaning of having a breech baby as well as differences in the support provided. Assessing further cultural differences around breech birth may allow better tailoring of support and interventions, especially as there are women from many different cultures living in the United Kingdom who will inevitably birth children in the United Kingdom and may need psychological support post birth. In relation to parity, Ford et al (2010) considered recurrence of breech birth after previous breech births and identified that the risk of breech increases with each subsequent breech baby. Such research may aid in anticipating those who pregnant women who may be in need of extra monitoring and resources but also those who may need extra psychological support if they have a series of breech births (diagnosed or undiagnosed) that they may regard as anxiety

provoking or as something to fear. Ultimately, knowing if there are specific individual factors that mean a woman is more likely to perceive a negative experience of an undiagnosed breech birth may be helpful in allocating psychological support and relevant resources ante-natally in a bid to prevent further negative experience and associated fear and anxiety symptoms from occurring.

As mentioned earlier in this discussion section there is also an existing gap in the research on decisions and expectations regarding future childbirth generally, whether after a breech birth or a cephalic birth that is regarded as 'normal' or 'complicated'. Perhaps comparing thoughts on future thinking around childbirth between women who have had a breech 'normal birth' compared to a breech 'complicated birth' would provide useful insight into whether the same prolonged beliefs of fear around future childbirth are present in women experiencing breech birth generally regardless of perception and 'normality' of previous birthing experience.

Furthermore, as previously mentioned in this chapter, sharing stories and discussing health issues online using discussion forums for example, can serve to have positive effects on those experiencing specific health conditions and situations. It would be interesting to complete research that specifically focuses on the effectiveness of discussion boards as an intervention for undiagnosed breech birth or more generally, anxiety and fear relating to past experiences of childbirth, which were prevalent psychological themes identified in this research. If found to be effective, such forums could be developed to provide support and guidance to women and to allow them to share their stories in a safe environment. In addition, further research is required on the effectiveness of ICBT for the psychological symptoms relating to negative perceptions and experiences of childbirth and whether this could be equally as effective as more time-consuming traditional CBT or usual care.

Conclusion

In conclusion, the findings of this research suggest that women generally perceive their experiences of undiagnosed breech birth negatively and harbour negative emotions relating to those experiences. Commonly occurring psychological impacts included feelings of anxiety, fear, guilt and trauma. Importantly, some women expressed fears or anxieties related to new pregnancies due to their past negative birthing experience. Some women also considered very carefully whether they would have another baby following an undiagnosed breech birth due to the events and feelings they had experienced as a result. It is therefore clear that common psychological themes have arisen in women as a response to undiagnosed breech birth and future decisions and expectations regarding future pregnancies have clearly been impacted. Women generally expected another negative or breech experience when pregnant again and feared not being listened to in their requests for extra intervention or reassurance with their new pregnancy. These women revealed these stories of mainly negative birthing experiences on a publicly accessible discussion board, which may be surprising, yet the process may have been empowering, supportive or perhaps simply a way to find information or seek out others with similar experiences. The potential of discussion boards as interventions needs to be researched further as a way of addressing psychological symptoms arising from negative perceptions of childbirth as this has not been specifically investigated already.

Women's experiences of undiagnosed breech birth have never been considered exclusively before in research, nor with a focus on psychological impacts rather than clinical.

Therefore, this research has probably provided further support to the notion that negative childbirth experiences can have immediate or lasting psychological impact. This research has also provided an understanding that was previously unknown that undiagnosed breech birth specifically can affect a woman's psychological well-being, especially her anxiety and fear levels, as well as her thoughts regarding having future children. To address and manage such psychological impacts, health psychologists could work with those in maternity services to collaboratively engage in more research in this area. Health psychologists could also support women more directly via referrals or train other healthcare professionals in facilitation of psychological interventions such as ICBT or psycho-education once more evidence is produced on their effectiveness for childbirth related psychological symptoms.

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CHAPTER 8: Appendices

Appendix A: Effectiveness of Psychological Interventions for Smoking Cessation in Adults with Mental Health Issues: A Systematic Review and Meta-Analysis

ABSTRACT

Objective: To assess whether psychological interventions are effective in aiding smoking cessation in adults with mental health issues.

Design: Systematic review and meta-analysis examining differences in effectiveness between different psychological interventions and cessation treatment combinations, including psychological combined with pharmacotherapy.

Data Sources: Electronic databases searched for RCTs investigating provision of psychological smoking cessation interventions for mental health patients used alone or combined with pharmacotherapy between 1999 and 2014. Grey literature also searched.

Eligibility Criteria: Adults diagnosed with a mental health condition who smoke 5+ cigarettes per day. RCTs assessing outcomes that involve changes in smoking behaviour that are attributable to single or combined psychological interventions.

Results: Nine studies identified involving 745 participants. Limited evidence that psychological interventions combined with pharmacotherapy can be effective in the short-term (during intervention) and the long term (18 months post intervention) in aiding smoking abstinence in mental health patients. Also limited evidence that psychological interventions combined with NRT may be useful in reducing smoking in the short and medium term. Intensity of intervention does not seem to influence effectiveness.

Conclusions: Psychological interventions alone or combined with pharmacotherapy can have some positive effects on reducing smoking in mental health populations over the short and medium term. Continuous abstinence could potentially be achieved in the long term. Incorporating psychological interventions into smoking cessation programs for mental health populations could be worthwhile but more methodologically sound research is required.

INTRODUCTION

There are estimated to be 10 million smokers in the UK (ASH, 2015). Of these, 3 million are thought to have experienced mental health disorder of some kind (RCP, 2013). Mental health disorders can be characterised by 'a combination of abnormal thoughts, behaviours, emotions and relationships with others' (WHO, 2014) that may present as a wide array of disorders including depression, schizophrenia and anxiety.

The 2010 Health Survey for England found that smoking prevalence in those with a longstanding mental health issue was 17% higher than in the general population; 37% vs. 20% (NHS Information Service, 2011). Further evidence proposes an association between smoking and mental health disorders, which is not exclusive to the UK but evident in Spain, USA and Australia (Jorm et al, 1999; Farrell et al, 2001; De Leon et al, 2002). In some cases it has been found that those with mental health issues are twice as likely to smoke as those who do not (Lasser et al, 2000; Lawrence, Mitrou & Zubrick, 2009). Furthermore, type of mental disorder also appears to influence the strength of association with smoking; in those with psychosis prevalence is 56% (NHS, 2014) and for those with chronic schizophrenia prevalence is reported as high as 70-90% (Ziedonis & George, 1997). Ultimately, mental illness severity can further increase the likelihood of smoking (Vanable et al, 2003). In fact, although smoking prevalence in the general UK adult population has declined considerably from 45% in 1974 to just 19% in 2013 (ONS, 2014); smoking prevalence among those with mental disorders has not changed significantly at all over the same length of time (RCP, 2013). This evidence therefore highlights a need to address smoking prevalence in the population with mental health issues.

Due to the lack of reduction in smoking prevalence among those with mental health issues, it is also evidenced that those with mental health issues are more likely to experience serious harm to their health from smoking (Lawrence, Mitrou & Zubrick, 2009). In 2006, Colton and Manderscheid identified that US smokers with mental health problems were more likely to die at a younger age and more likely to die from illnesses commonly related to smoking such as heart disease and cancer. This was supported by earlier UK research that found people with severe mental health problems are two-three times more likely to suffer from smoking related illnesses such as cardiovascular disease and cancer (Osborn et al, 2001). Worryingly, for those with schizophrenia the outlook is more concerning; they

are 10 times more likely to die from respiratory diseases than the general population (Joukamaa et al, 2001). This is a very disquieting trend and indicates that more needs to be done to address smoking and related illness in the mental health population to help patients but also to improve the economic situation. The RCP (2013) reported that smoking related diseases in people with mental health issues costs the NHS approximately £720million each year.

It would be easy to infer that smoking prevalence rates in the mentally disordered population might be high due to an unwillingness to quit smoking but those with mental health issues are not less likely to be willing to guit but are more likely to be heavily addicted and to foresee difficulties in the quitting process (RCP, 2013). The 2010 Health Survey for England found two thirds of all smokers with mental health issues would like to quit. Nevertheless, those with mental illness are less likely to be given support to quit smoking than those in the general population and many health professionals are failing to take those with mental disorders seriously when it comes to helping with their physical health (Rethink, 2013). It is clearly imperative that those with mental disorders are offered smoking cessation services equal to those without mental illness and more exploration is needed into the cessation interventions that are most effective in this population. Those who work in mental health services need to be further educated in the importance of supporting people with mental health issues to access smoking cessation services. Where care for physical health is denied to patients, it is not due to a lack of NHS funding but due to a lack of perceived importance of caring for the physical health of those with mental health problems (Rethink, 2013). In one study, psychiatrists were found to rarely discuss smoking with their patients or to record nicotine dependence in patient notes (Lawrie et al, 1995). Nursing staff also believe that encouraging smoking cessation may provide additional symptoms for the patient to deal with on top of their psychiatric symptoms so may not engage in supporting patients (Lawn & Pols, 2003). Regrettably, this is supported by Kelly (2012) who found that smoking is condoned and encouraged in some mental health settings and is often seen as a means of social stimulation, especially for those with schizophrenia. As a result, mental health professionals may not try to discourage smoking and may actually use cigarettes as a positive reinforcer for controlling compliance or behaviour (Lawn & Pols, 2003). Many mental health professionals regard smoking as a legitimate coping mechanism or a means of self-medication (Lawn & Condon, 2006).

Even though hospitals in the UK have generally moved towards smoke-free policies and only allow smoking in designated places due to the Health Act (2006) and the consequent smoking ban of 2007, mental health facilities are still lagging behind in smoke-free enforcement and the cessation support they offer (Olivier et al, 2007). Mental health institutions were afforded a 1 year delay in complying to the 2007 ban meaning it was not enforceable by law until July 2008 (Smokefree England, 2007) Nevertheless, smoking in psychiatric settings appears to still be continually neglected. Ratschen et al (2011) found that in one local NHS service, a smoke-free policy that had been implemented to cover grounds and buildings was only partially implemented in mental health settings. Exemptions were being offered in many outside spaces meaning smoking outside for mental health patients continued to be the norm. Where smoke-free psychiatric units do exist, patients do manage to abstain from smoking, especially with the provision of NRT, but within less than 5 weeks of leaving the unit, they return to smoking again (Prochaska et al, 2006). Therefore it appears that more needs to be done to enforce smoke free policy and to follow up patients after discharge and ensure they are supported in the long term with their cessation efforts.

As smoking appears to be engrained in the culture of mental health settings it is an urgent priority to provide appropriate cessation support to all of those with mental health issues and training for staff in order to change attitudes regarding smoking cessation in this population (RCP, 2013). Currently, NICE guidelines (2013) recommend that mental health service users who smoke are identified at the first opportunity, advised to stop, given pharmacotherapy and offered psychological therapy to aid quitting. But cessation care is not offered consistently and to the same level across different hospital trusts; although in 80% of trusts questioned, NHS Stop Smoking Services were being advertised in some way (Ratschen et al, 2009). Ultimately, it is imperative that effective cessation interventions are identified and enforced consistently regardless of place of care.

The RCP (2013) reports that combined behavioural and pharmacotherapy interventions are generally effective for smoking cessation in the general population so there is no reason why these should not be equally effective in those with mental disorders. A recent review identified that some combined behavioural and pharmacotherapy interventions do appear to be as effective in a schizophrenic population as the general population (Tsoi et al, 2010) yet a later review found that psychosocial interventions provided little benefit for those with schizophrenia (Tsoi et al, 2013). Therefore, further investigation is required to

consider appropriate smoking cessation interventions for a range of mental health issues and to identify which interventions are most effective.

Objectives

To examine whether psychological interventions or combined pharmacotherapypsychological interventions are effective in changing smoking behaviour RCTs were reviewed that assessed the efficacy of these interventions compared to similar interventions or to usual care alone in adult smokers with current mental health problems who were based in any setting.

METHODS

This systematic review followed the PRISMA Statement for Reporting Systematic Reviews (Liberati et al, 2009). Inclusion criteria were specified in advance and documented in a published protocol registered as CRD42014014159 and available at http://www.crd.york.ac.uk/PROSPERO/. Methods of analysis were not decided upon in advance as it was unknown at the outset whether meta-analysis would be required or not.

Eligibility Criteria

Studies were eligible if they included adults (people over 16 years of age) who had been diagnosed with, and/or were currently receiving treatment for a mental health issue recognised by DSM-IV or ICD-10 with the exception of addiction. This is because smoking is also an addictive behaviour so if addiction was accepted as a mental health issue for this review any adult smokers would have been eligible. Adults were stipulated as it is illegal to smoke in the UK if a person is under 16 years of age so the aim was to address interventions that might be effective for a population who might reasonably be offered or request such cessation interventions. Studies were considered if people were clinically stable and were being treated in the community, at hospital or home or as an out-patient. Research involving mental well people could have been included if the 'mentally healthy' group were being used as a control to those with mental health issues. Importantly, only studies involving people who claimed to be regular smokers (smoked 5 or more cigarettes each day) were eligible. Kenford et al (2005) categorised light-daily smokers as smoking <5

cigarettes per day; 45% quit without intervention so light smokers would not always be a target for cessation interventions.

Research that involved any psychological intervention that intended to aid cessation of smoking or to prevent relapse, whether for the first time or subsequent times was included. Such interventions may have included motivational interventions, educational strategies, cognitive behavioural therapy, coping skills training, behavioural skills training and thought restructuring. Studies that involved the use of pharmacotherapy combined with psychological interventions were considered as long as a comparison could be made against a differing intervention. Combination interventions were accepted as it was expected they would be prominent in the literature as the RCP (2013) suggests that any type of nicotine quit attempt should be supported with nicotine replacement therapy (NRT) regardless of other interventions being administered. NICE (2013) also recommends the provision of pharmacotherapy and integrated behavioural treatments for tobacco harm reduction in secondary care services, including mental health services. Studies that used biological therapies as a comparison/control intervention to psychological interventions were also eligible. Interventions involving exercise or token economy were not considered to be psychological interventions but physical and incentive based interventions, hence they were not eligible for inclusion.

The primary outcomes of interest for this review were changes in smoking behaviour, which included continuous abstinence and number of cigarettes smoked per day. Objective physiological measures such as biochemically verified 7 day point prevalence abstinence were also of interest.

Randomised clinical trials (RCTs) including pilot RCTs, were considered as they are more likely to have internal validity or a lower risk of bias than other study designs in reviews considering effectiveness of interventions (Petticrew & Gilbody, 2007). Published and unpublished articles were also considered. Only studies carried out from 1999 onwards were included due to the release in 1998 of the white paper titled 'Smoking Kills' (Stationery Office, 1998) that resulted in the development of NHS Smoking Services across England. Prior to this, stop smoking services were not compulsory so very few cessation interventions may have been used by or would have been accessible to mental health patients. In addition, only papers written in English were included for practical readability reasons and non-availability of translation services.

Information Sources

Research studies were identified by searching electronic databases, scanning contents and reference lists and by contacting relevant researchers where necessary. The database search involved 7 databases including CINAHL Plus, MEDLINE, AMED and PSYCHINFO via EBSCO Host (all 1999 - Present) and Embase via OVID, PUBMED and Cochrane Library (all 1999-Present). The searches occurred in May and June 2014; the last search was run on 5th June 2014. The main author developed the search criteria and also conducted the database search. The databases were chosen to attempt to best characterise source material in the fields of health psychology and public health. Two experts were also contacted via email in order to ascertain whether they had any published or unpublished work they were willing to share relevant to the question posed. One expert responded with a paper but the remaining two did not respond. One expert was also contacted regarding a missing full report of a study but no information was forthcoming. Grey Literature was searched in June 2014 using 'Open Grey' and the contents pages of the Journal of Smoking Cessation were screened for potentially eligible papers going back to the inception of the journal in May 2009. Cited references in two clearly eligible papers found from the database search were also scanned for any potentially eligible studies.

Search

A variety of search terms were used for the database searches including terms relevant to psychological interventions, smoking, cessation and mental illness. The limits used on all databases were 1999 to present (May/June 2014) and English language only (see appendix A for full search terms and strategy).

Study Selection & Data Extraction

The studies emerging from the search were checked for duplicates using 'Refworks' then title screened by the main author. Any title that clearly and obviously did not reflect the nature of the review was removed; otherwise studies were retained for further analysis. Following this, abstract screening to assess eligibility was done separately and independently by two of the review authors. Beforehand, the form to be used was discussed to ensure standardisation in assessment. There were minimal disagreements and these were resolved in a meeting afterwards based on consensus.

Following abstract screening, data collection was carried out on the papers deemed eligible from the previous process by the same two reviewers using full study reports. Both reviewers extracted all information. Again, this was done independently and information extracted was compared afterwards. Any disagreements were once again resolved using consensus, further paper checks or attempted author contact but these discrepancies were very minimal. One author was contacted to request the full paper but they did not respond to the request so the paper was removed at this stage. A revised version of a data extraction form was developed based on the Cochrane Group's Data Extraction Template and was used by both reviewers for the data extraction process (see appendix B). Before the data collection process began the form was pilot tested on one included study by the main author and no tweaks were deemed necessary.

Studies were included in the review if they were written in English and fulfilled all eligibility criteria. The PRISMA flow-diagram demonstrates how the selection processes outlined resulted in the inclusion of 9 studies (see Fig.1). For one researcher, both the pilot RCT and main RCT following on from the pilot are included as they were published as separate studies and the participants were not the same for both. There were no overlapping or duplicate reports included in the final review.

Data Items

Information was extracted from each included study on characteristics of trial participants (including age, sex, race, number of cigarettes smoked per day and type of mental health issue) and on the study's inclusion and exclusion criteria. Information on interventions was also extracted and this included type, setting, duration, dosage if involving pharmacotherapy and mode of delivery. Length of follow up and type of outcome measure (including where measured continuous abstinence, change in CO expired, number of cigarettes smoked per day and 7 day point prevalence) were also extracted if available. When a study stated 'adults' as the study participants, it was explored in further detail by reading the paper to check this meant over 16 years of age. In all cases 'adults' was referring to people who were 16 years or older. It was important to check this distinction as interventions may vary in effectiveness when comparing adults to younger adolescents. With regard to number of cigarettes smoked per day, the data in the report was always checked to ensure that all participants were smoking 5 or more cigarettes per day; if the

information had not been present then contact with the trial's authors would have been made but this was not necessary for any of the included studies.

Risk of bias in individual studies

To assess the risk of bias involved within the nine eligible RCTs, both the main author and the second reviewer independently implemented the Cochrane Risk of Bias Tool (Higgins et al, 2011). This validity checking instrument was chosen due to being recommended for use with RCTs and for the adaptability of the tool when used for non-pharmacological interventions. Bias risk was considered by the reviewers at the same time data extraction occurred. The Cochrane Risk of Bias Tool determines the risk of bias across several domains including randomisation, allocation concealment, blinding of participants and outcomes, incomplete outcome data, selective outcome reporting and other design or study-specific bias. Each domain covers a different type of bias that could occur in research (Higgins et al, 2011). After consideration of all domains each study was allocated an overall risk of bias (low, high, unclear) of which the two reviewers decided independently and agreed collaboratively for all eligible RCTs (Table 1). There was no disagreement between reviewers on overall risk of bias judgements.

Table 1: Risk of bias for included studies

Risk of bias items											
Author	1	2	3	4	5	6	7	Overall judgement of risk			
Baker (2006)	Low	Low	Low	Low	Low	Low	Low	Low			
Evins (2001)	Unclear	Unclear	Low	Unclear	Low	Low	High	High			
Evins (2005)	Unclear	Unclear	Low	Unclear	Low	Low	Unclear	Unclear			
Evins (2007)	Unclear	Unclear	Low	Low	Low	Low	Low	Unclear			
Evins (2014)	Low	Low	Unclear	Low	Low	Low	Low	Unclear			
Morris (2011)	Unclear	Unclear	Unclear	Unclear	High	Low	High	High			
Prochaska (2014)	Low	Low	Low	Low	Low	Low	Low	Low			
Steinberg (2003)	Unclear	Unclear	Unclear	Low	Low	Low	Unclear	Unclear			
Williams (2010)	Low	Unclear	High	Unclear	Low	Low	High	High			

(1) Randomisation, (2) allocation concealment, (3) blinding of Ps, (4) blinding of outcomes, (5) incomplete outcome data, (6) selective outcome reporting, (7) other

Assessment of heterogeneity

Heterogeneity of included studies was analysed by two reviewers by inspecting data extraction forms and the characteristics of included studies table (see appendix C). Between-study variability was considered in relation to study population including type of mental disorder, cultural and healthcare setting, intervention type, duration and delivery and outcome measures.

Planned Method of Analysis and Synthesis of Results

If studies were regarded as markedly heterogeneous in relation to population, setting, intervention or outcome it was decided a narrative synthesis of results would be presented. Additionally, it was judged by both reviewers that heterogeneity across 4 studies was not considerable enough in relation to population, setting and intervention and therefore a meta-analysis would be conducted.

Data from the included studies was synthesised and recorded by consideration of change in smoking behaviour between the target quit date and the end of the intervention and a change in smoking behaviour between the target quit date/end of intervention and post intervention follow up (short, medium and long term). Data was also recorded regarding the number of cigarettes smoked per day during the intervention and post-intervention. No assumptions were made about access or use of smoking cessation services outside that provided by the study interventions. For the meta-analysis a random effects model was used as there was some variability in length of intervention and type of drug in the 4 studies included in the pooled analysis so a random effects model would provide some control for unobserved heterogeneity. To achieve the overall effect and pooled odds ratio, data were used on the number of incidences of an event (e.g. abstinence) and the number of participants in each sample at different time points during the intervention and post intervention (short, medium and long term). Data on continuous abstinence were dichotomous and data on number of cigarettes smoked per day was continuous. To achieve the mean difference in number of cigarettes smoked per day during and post intervention, data providing mean, SD and sample size were utilised. Again, a random effects model was used in order to acknowledge unobserved heterogeneity. All meta-analyses were completed using Revman software package. All results are presented with 95% confidence intervals and extent of heterogeneity was considered using the I2 statistic where a lower % score indicates lesser extent of heterogeneity (Higgins et al, 2011). Nevertheless, due to a

limited amount of data for some outcomes heterogeneity measures were not always applicable as I2 lacked sufficient power.

RESULTS

The initial electronic database search yielded 913 results and a grey literature search, hand journal search and reference list search elicited a further 9 results combined. After duplicates were removed a total of 781 papers were screened for eligibility and of those, 717 were removed. Any ambiguous papers went on to be considered at the full paper review stage. At the full text stage we considered 64 papers for potential eligibility by comparing them against the predetermined eligibility criteria. Following this, 55 papers did not meet the eligibility criteria whilst 9 papers did and were consequently included in the review.

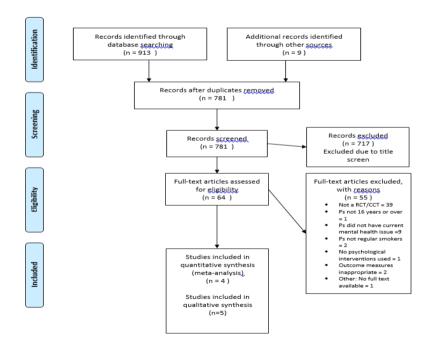


Figure 1. PRISMA Flow diagram summarising the results of the search

No studies were excluded for having a high or unclear risk of bias. Two studies were deemed as low risk but of those with unclear bias risk (4 studies) it was noticeable that the reports had not been transparent in their randomisation and allocation concealment reporting so suffered selection bias. In addition, detection and performance bias was

present as blinding of outcomes and participants appeared to be vague. With regard to the 3 studies with high risk of bias, the bias area of most concern related to other sources. These sources included monetary incentives (Evins, 2001; Williams, 2010) small sample size (Evins, 2001; Morris, 2011) differences in physiological measures taken between patients (Evins, 2001) and information on use or dosage of NRT and resultant effects (Morris, 2011; Williams, 2010.) None of the included studies appeared to encounter attrition bias as there was no evidence of selective outcome reporting.

Study Characteristics

All included studies were published between 2001 and 2014. In relation to setting, 8 of 9 studies were located in the USA and 1 study occurred in Australia. Of the American studies, 5 involved community mental health centres. These centres were urban based in 4 studies and both urban and rural for the remaining study. Two of the remaining USA studies involved settings linked to university programmes and the final USA study was based at a locked psychiatric institution. The Australian study involved treatment either at a community clinic or at the patient's home. A total of 745 participants were exposed to psychological interventions for smoking cessation whether provided alone or combined with pharmacotherapy or placebo. Psychological interventions were used on a broad range of mental health issues such as Major Depressive Disorder, Anxiety (Morris et al, 2011) and Bipolar Disorder (Evins, 2014) but 5 of 9 studies involved those on the schizophrenic spectrum exclusively (Steinberg, 2003; Williams, 2010; Evins, 2001, 2005 & 2007).

The grand mean age of participants across all included studies was 43 years and the majority of participants were male (60%). One study did not provide data on gender. These grand means could potentially reflect the greater number of men than women who suffer from schizophrenic spectrum disorders in the USA and the higher prevalence of smoking in men than women who smoke in the USA (CDC, 2015). The grand mean number of cigarettes smoked per day was 27.52 and the highest proportion of participants was white Caucasian (75%) followed by African American (14%). Other ethnicities represented included Hispanic, Asian and others. Three studies did not provide data on cigarettes smoked per day and/or ethnicity.

Interventions were varied across studies; 4 of 9 studies involved the use of pharmacotherapy (drug) combined with Cognitive Behavioural Therapy (CBT) compared with a placebo and CBT combined (Evins 2001; 2005; 2007; 2014). Frequency and intensity of sessions as well as the skills covered as part of the therapy differed slightly between studies from 9 sessions in Evins et al (2001) study to 15 sessions in Evins et al (2014) trial. Dosage of drug also differed slightly between studies. Both Baker et al (2006) and Procheska et al (2014) compared psychological intervention combined with nicotine replacement therapy (NRT) with 'usual care' also involving optional NRT. Additionally, 2 of the included studies compared the effectiveness of different types of psychological intervention. Information on the delivery of psychological interventions was described to some extent for all included studies and in all cases providers were specially trained healthcare professionals including nurses, therapists and psychologists.

For the included studies, smoking cessation was the only outcome in 2 studies, the primary outcome in 6 studies and the secondary outcome in one study. Smoking cessation was operationalised in a variety of ways including continuous abstinence, cigarettes smoked per day, 7 day point-prevalence and expired carbon monoxide.

Psychological intervention + NRT versus Usual Care + NRT

Two studies considered the effectiveness of a psychological intervention provided with NRT compared to usual care (Baker et al, 2006; Prochaska et al, 2014). Baker et al (2006) looked at the effectiveness of a smoking cessation program that involved delivery of MI, CBT and NRT over 10 weeks with follow up at 3, 6 and 12 months post intervention. The control group received standard usual care although it was unclear what this entailed and whether this included NRT as it was not detailed in the study description. Both continuous abstinence and 7 day point-prevalence abstinence were study outcomes but no significant overall differences were found between groups in either outcome at any time point across the trial. Nevertheless, although the intervention group displayed no more complete abstinence than the control group, significant differences were found between groups in relation to reduction in smoking by at least 50% compared to baseline at 3 month (OR=3.89; p<0.001) and 12 month follow up (OR=2.09; p<0.01). A subgroup analysis also identified attendance at all treatment sessions for the intervention group as a key discriminator in improving continuous abstinence, 7-day point prevalence and 50%

smoking reduction at the 3 month follow up assessment compared to the control group. Prochaska et al (2014) also considered 7-day point prevalence abstinence over the treatment phase as well as at 3, 6, 12 and 18 month post intervention when comparing the effectiveness of Motivation Cessation Treatment (partly computer based) used with NRT and a usual care control. Although the trial involved a similar intervention and control comparison to that in Baker et al (2006) study, the setting was quite dissimilar; it began in a locked psychiatric hospital and follow up occurred post-hospitalisation, whereas Baker et al (2006) used participants who were based at home throughout. Even so, Prochaska et al (2014) also found significant differences between groups at 3 months follow up; in this case differences were identified in abstinence rather than smoking reduction as identified by Baker et al (2006). Across all time points within the trial the treatment group demonstrated a greater percentage of abstinence than the control group and after testing abstinence over 18 months, the two conditions evidenced significant differences (OR=3.15; 95%CI = 1.22, 8.14; P=0.018).

Psychological Intervention A versus Psychological Intervention B

Both Steinberg et al (2003) and Williams et al (2010) compared the effectiveness of two different psychological interventions for smoking cessation in outpatients on the schizophrenic spectrum based in the USA. Williams et al (2010) made use of a specialised high intensity therapy titled Treatment of Addiction to Nicotine in Schizophrenia (TANS) and compared this to Medication Management (MM) a medium intensity therapy. Both lasted 26 weeks and both allowed optional use of NRT, although there is very limited information on NRT take-up provided. A number of cessation outcomes were considered and no between group differences were found between time to first cigarette relapse in the first 12 weeks, reduction in expired carbon monoxide (CO) (Wilks' Lambda = 0.999; p=0.758) or cigarettes per day (cpd) (Wilks' Lambda = 0.984; p=0.351) between baseline and week 17. Regardless of this, when considering subjects rather than groups, there was an overall significant reduction in both expired CO (Wilks' Lambda = 0.865; p<0.001) and reduction in cpd (Wilks' Lambda=0.608; p<0.001) between baseline and week 17. Steinberg et al (2003) compared brief MI based interventions (MI, Psycho-education and referral only (control)) to elicit their effectiveness in facilitating referral to tobacco cessation treatment. Secondary outcomes included expired CO and cpd at 1 week and 1 month post baseline. As in Williams et al (2010) there were no between group differences found in reduction of cpd (F(4,150) = 1.741; p=0.144) or expired CO (F(2,73) = 1.475; p=0.236). Yet within group differences were found between baseline and 1 month where reduction of cpd was significant in the MI group (p<0.05) and the Psycho-education group (p<0.01). Overall, cigarettes smoked per day decreased over time (F(2,150) = 6.471; p=0.002).

Quitline + NRT versus Cessation group counselling + Quitline + NRT

Morris et al (2011) considered the use of Quitline combined with NRT and specialist schizophrenia cessation counselling to identify whether either combination would significantly reduce cigarette consumption over time. Although details are sketchy regarding the length, duration and fidelity of Quitline it was found that 15% of patients achieved a smoking reduction of 50%+ at 6 month follow up. Intention-to-treat analysis showed an association between treatment group and achieving 50% reduction in smoking, which favoured the cessation group condition (v(1df)2 = 4.01; p=0.0451). After adjusting for education level, those in the cessation group plus Quitline condition were more likely to achieve a 50% reduction in smoking than patients in the Quitline condition (v(1df)2=4.09; p=0.0431, adj OR=3.16 (95% CI 1.04, 9.65). Nevertheless, there were no significant differences between groups in the number of cpd but there was a significant decrease in reported cpd overall (F(1,79) = 16.99; p<0.0001). Even so, it is unclear which patients made use of NRT throughout the trial.

Meta-Analysis

Pooled analysis was performed on 4 studies that compared pharmacotherapy and CBT with Placebo and CBT (Evins 2001; 2005; 2007; 2014). Nine outcome measures were analysed, each relating to continuous abstinence at different time points across the trials or number of cigarettes smoked per day during or after intervention phases. The results of the meta-analysis are summarised in Table 2. Statistically significant differences in continuous abstinence between treatment intervention (Pharmacotherapy + CBT) and control (Placebo + CBT) groups were found at weeks 4-5, 4-8, 4-52, 12-64 and 12-76. In each case, greater abstinence was observed in the intervention group. For the remaining continuous abstinence measures, the effects were not statistically significant. In relation to number of cpd, there was a statistically significant difference between groups during the active

intervention phase; those in the intervention group smoked significantly more cigarettes than those in the control group. For the remaining cigarettes smoked per day outcome, there were no significant effects.

There was zero heterogeneity in 2 of the analyses yet a heterogeneity measure could not be calculated for 7 of the analyses partially due to 5 outcomes being uncommon across all studies and no outcomes being present in all 4 included studies in the pooled analysis. The 2 analyses (continuous abstinence at week 4-24 and week 4-52) with no observed heterogeneity indicate there would little variability between studies that could not be explained by chance. This perceived homogeneity resulting from calculating I2 may be unlikely to depend on the small number of studies involved in the analysis compared to when using other consistency statistics (Higgins et al, 2003).

Table 2: Summary meta-analysis results table for each outcome measure

Outcome Measure	N	Effect	95% Cls	Heterogeneity	Test for Overall Effect
Continuous Abstinence week 4-5	53	7.31	(1.40 to 38.22)	N/A	Z=2.36 (P=0.02)
Continuous Abstinence week 4-8	51	4.55	(1.30 t0 15.91)	N/A	Z=2.37 (P=0.02)
Continuous Abstinence week 4-12	51	2.36	(-0.66 to 8.43)	N/A	Z=1.32 (P=0.19)
Continuous Abstinence week 4-24	69	3.07	(-0.66 to 14.40)	Tau ₂ = 0.00; Chi ₂ = 0.00, df=1 (P=0.95) I_2 = 0%	Z=1.42 (P=0.15)
Continuous Abstinence week 4-52	138	3.69	(1.51 to 9.02)	Tau ₂ = 0.00; Chi ₂ = 0.93, df=1 (P=0.34) I ₂ = 0%	Z=2.86 (P=0.004)
Continuous Abstinence week 12-64	87	5.60	(1.82 to 17.21)	N/A	Z=3.01 (P=0.003)
Continuous Abstinence week 12-76	87	3.60	(1.14 to 11.34)	N/A	Z=2.19 (P=0.03)
CPD During Intervention	104	16.30	(8.24 to 24.36)	N/A	Z=3.96 (P<0.0001)
CPD Post Intervention (week 14-24)	104	-1.00	(-7.38 to 5.38)	N/A	Z=0.31 (P=0.76)

CPD, Cigarettes per day

DISCUSSION

Principal Findings

This systematic review and meta-analysis provide limited evidence that the use of psychological interventions as part of a smoking cessation treatment regime can result in an increased likelihood of continuous abstinence, reduction in cpd smoked and expired CO in those with mental health issues during intervention and post intervention. With regard to continuous abstinence, significant findings have resulted from the use of psychological therapies that have been combined with pharmacotherapy rather than use of psychological intervention alone. When taking a cessation drug as well as CBT it is significantly more successful for abstinence in the short term (up to 8 weeks) and long term (12-18 months post intervention) than using CBT combined with a placebo. This therefore potentially demonstrates the usefulness of combined therapy for those with mental health issues needing assistance to quit smoking. When comparing use of psychological interventions alongside NRT to usual care it appears that there is not always evidence of significant differences between groups in continuous abstinence measures whether during or post intervention suggesting that psychological interventions may be no more advantageous in yielding complete abstinence than usual care. Nevertheless, it appears that psychological interventions combined with NRT are significantly superior to usual care and NRT in reducing smoking by at least 50% from baseline, suggesting that psychological interventions may be better at facilitating reduction of smoking rather than complete cessation in this population. It seems that when 2 different psychological interventions are compared, whether use of NRT is also present or not, there are few or no significant differences between groups in abstinence, reduction of cpd or CO expired at 1 month post baseline or several months later. Yet, when considering overall effects of intervention across all participants, it appears that no psychological intervention, regardless of intensity is preferable over another as significant within group differences were present for reduction in cpd as well as CO expired. This suggests that intensity and type of psychological therapy is not crucial when considering reduction in smoking but the use of any psychological therapy may have an advantageous effect in the short and medium term for smoking reduction in those with mental health issues.

Strengths and Limitations

The strengths of this review are that studies relating to treatment of smoking cessation in mental health patients were systematically sought out to allow careful and extensive analysis of 9 studies involving a total of 745 mental health patients participating in a variety of psychological and pharmacological smoking cessation interventions. The review has established that smoking cessation or reduction treatment is potentially viable and worthwhile in community and hospital settings for mental health patients. A meta-analysis has allowed for 9 separate analyses to provide some evidence for the successful contribution of psychological interventions to combined smoking cessation treatment regimes. Limitations of the review are that only studies written in English were considered so other potentially relevant articles may have been missed. Additionally, the majority of the included studies were of medium or high risk of bias meaning only limited conclusions can be drawn. Nevertheless, to minimise further bias in the review process, two reviewers were used to identify relevant research.

Agreements and Disagreements with other reviews

Tsoi et al (2013) considered smoking cessation interventions in schizophrenics and found differing results to those in this review. The focus of Tsoi et al (2013) review differed to this review in that pharmacological therapies alone were also considered but there was no evidence for the benefit of use of NRT and psychosocial interventions in aiding those with schizophrenia to stop or reduce smoking. This contrasts with the limited findings of this review where it is indicated that psychological interventions alone or combined with NRT may be useful in the short-term for reduction of smoking in a mental health population. Tsoi et al (2013) also identified that contingency reinforcements may increase smoking reduction but such behavioural interventions were not considered by this review as they were not regarded as psychological interventions. Nevertheless, payment was received by schizophrenic patients in one study in this review (Evins et al, 2001) but the use of reward could have over-inflated the apparent effectiveness of the treatments used. Lancaster et al (2005) conducted a review on individual counselling for smoking cessation provided by trained therapists and found that such one-to-one counselling can aid smoking reduction although there was little evidence for differences in effect depending on intensity of therapy, which supports the findings of this review. Although this support is treated with

great caution as Lancaster et al (2005) were not exclusively considering mental health populations.

Implications for further research

Testing the effectiveness of psychological interventions for smoking cessation in mental health populations can prove challenging due to the wide variety of interventions under scrutiny and the combination of therapies that can be implemented. This is made more difficult due to the limited information provided in many cases on intervention description, delivery, intensity and fidelity. Therefore, it would be difficult to consider successful aspects of differing psychological therapies and potentially develop new interventions or suggest those that are more effective in mental health populations. It would be more appropriate to use standardised, validated interventions on large sample sizes to allow for more detail to be known regarding the interventions tested, greater power and precise conclusions to be drawn. The usefulness of such studies will also improve if the use of NRT becomes more transparent. In 4 of the 9 included studies (Baker et al, 2006; Williams et al, 2010; Morris et al, 2010; Prochaska et al, 2014) use of NRT was optional or presumed compulsory yet little detail was provided on uptake and the potential effects of this when considering the effectiveness of simultaneously used interventions. It would be difficult to separate the effects of NRT from other interventions and therefore the conclusions that can be drawn about the effectiveness of psychological interventions alone or combined with NRT are limited. In some cases, it was also unknown whether patients were receiving medication that may have interfered with the action of NRT. Consequently, future research should detail use of NRT where necessary, dosages used and participant uptake.

Trials over a longer duration of time would also be beneficial otherwise there are limits to the conclusions that can be drawn with regard to the long term effects of therapies for smoking cessation. Only 2 included studies (Evins 2014; Prochaska 2014) assessed cessation behaviours beyond one year follow up.

Conclusions and meaning of the study for healthcare professionals

This systematic review with meta-analysis has found that psychological interventions used alone or combined with pharmacotherapy can have some positive effects on reducing smoking and expired CO in mental health populations over the short and medium term. There is also some evidence for continuous abstinence when using cessation drugs alongside CBT in the short and long term. Incorporating psychological interventions into smoking cessation programs for mental health populations could be a feasible and worthwhile strategy in a variety of settings even if it yields a small reduction in smoking in such a disadvantaged population. Further research is needed on intensity and type of intervention to create more solid conclusions on specific intervention effectiveness yet steps could begin to be taken to ensure the mental health patient population are fully considered when developing new smoking cessation strategies.

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Appendix B: PPI Schedule/Request

MEDIA: Katie Lightfoot Tue 23-Aug-16 14:38:58

Hello Mums

My name is Katie Lightfoot and am studying for a Doctorate in Health Psychology and am a Trainee Health Psychologist. For the final part of my course I am completing research on 'Women's experiences of undiagnosed breech birth and the impact on future childbirth decisions and expectations'. The reason I am going to do the research is because I recently had an undiagnosed breech birth of my own and want to know about other mums' experiences and the support they received.

This is not a call for participants at this stage but a request for you to help me to decide on the methods you think would be best to use if you were a participant in such a study.

TO HELP ME WITH THIS REQUEST, YOU DO NOT NEED TO HAVE HAD A BREECH BIRTH OF ANY KIND; I would just like some public involvement in my planning. Please could you help with the following questions:

- 1. I plan to use email interviews to gather women's experiences in my study. These interviews would not occur in real-time but participants would be allowed to answer when they have a moment and feel like they can. If you were participating in such a study, would you prefer to receive all questions for the interview at once so you could work through them at your own pace OR would you prefer to receive one question at a time where you could respond at your own pace but would only receive the next question once you have emailed the answer to the previous one?
- 2. I plan to tell participants during recruitment of my research that I have experienced my own undiagnosed breech birth. If you were a participant in this study would knowing that I (the researcher) had experienced the same thing as you mean you might be more willing to share your experience with me OR would it make you less willing to share you experience with me?
- 3. If you were a participant in this study would you be happy if I gave you a reasonable time deadline (3 days or 2 weeks for example) for completing interview questions?
- 4. The participants in my research will remain anonymous when I write up my research. When recruiting I would ask participants to provide me with a secure, confidential email I could send all questions and responses to. Would you be happy if you were asked to do this if you were a participant in such a study?

Please feel free to post me your thoughts on my questions; I would really appreciate your input to allow me to make my research as effective and useful as possible.

Thank-you



Appendix C: APPLICATION FOR ETHICAL REVIEW OF RESEARCH INVOLVING HUMAN PARTICIPANTS

This application form should be completed by members of staff and PhD/ Prof Doc students undertaking research which involves human participants. U/G and M level students are required to complete this application form where their project has been referred for review by a supervisor to a Faculty Research Ethics Committee (FREC) in accordance with the policy at http://www1.uwe.ac.uk/research/researchethics. For research using human tissue, please see separate policy, procedures and guidance linked from http://www1.uwe.ac.uk/hls/research/researchethicsandgovernance.aspx

Please note that the process takes <u>up to six weeks</u> from receipt of a valid application. The research should not commence until written approval has been received from the University Research Ethics Committee (UREC) or Faculty Research Ethics Committee (FREC). You should bear this in mind when setting a start date for the project.

APPLICANT DETAILS

Name of Applicant	Katie Lightfoot		
Faculty	HAS	Department	Health & Social Sciences
Status: Staff/PG Student/ MSc Student/ Undergraduate	Prof Doc Student	Email address	
Contact postal address			
Name of co- researchers (where applicable)	N/A		

FOR STUDENT APPLICANTS ONLY

Name of Supervisor/Director of Studies	Dr Rachel Gillibrand (DoS) Dr Elizabeth Jenkinson (Second Supervisor)
Detail of course/degree for which research is being undertaken	Professional Doctorate Health Psychology
Supervisor's/Director of Studies' email address	
Supervisor's/ Director of Studies' comments	Please note the supervisor must add comments here. Failure to do so will result in the application being returned.

For student applications, supervisors should ensure that all of the following are satisfied before the study begins:

- The topic merits further research;
- The student has the skills to carry out the research;
- The participant information sheet is appropriate;
- The procedures for recruitment of research participants and obtained informed consent are appropriate.

PROJECT DETAILS

Project title	Women's experiences of undiagnosed breech birth and the effects on future childbirth decisions and expectations		
Is this project externally funded?	Yes/No There is no f	unding for this research	
If externally funded please give PASS reference	N/A		
Proposed project start date	July 2016	Anticipated project end date	Feb/March 2017

DETAILS OF THE PROPOSED WORK

1. AIMS, OBJECTIVES OF AND BACKGROUND TO THE RESEARCH

This should provide the reviewer of the application with sufficient detail to allow them to understand the nature of the project and its rationale, in terms which are clear to a lay reader. Do not assume that the reader knows you or your area of work. You may provide a copy of your research proposal in addition to completing this section.

Background

Breech pregnancy is where the baby is lying bottom first or feet first in the uterus rather than being in the usual 'head-down' cephalic position (RCOG, 2008). At term (40 weeks) breech presentation is apparent in approximately 3-4% of all births (RCOG, 2006). Breech presentations are usually diagnosed antenatally, where obstetricians will attempt to turn the baby to a cephalic position in a process called External Cephalic Version (ECV). ECV is thought to be successful in 50% of diagnosed breech babies (NHS, 2014). Nevertheless, estimates vary on the incidence of undiagnosed breech presentation, which is where it only becomes evident the baby is not in a cephalic position during established labour (RCM, 2016). Nwosu et al (1993) found 25% of cases of breech presentation were undiagnosed over a 3 year period and concluded this was a significant amount despite assumed thorough antenatal examination. Similarly, Leung et al (1999) found that 21% of breech births over a 1 year period were undiagnosed. Of course, in such cases there is no time to plan or prepare for breech birth.

Usually in cases of undiagnosed breech birth, a vaginal birth or an emergency caesarean section could potentially be an option (RCOG, 2006). The RCOG (2006) also recommends that certain auditable standards be followed regarding breech birth such as discussing and reviewing the preferred mode of delivery with the woman and recording this in the notes. This is advocating shared decision making, which is where a health professional and their patient will reach a healthcare choice together after possible options are presented and reviewed (NHS Shared Decision Making, 2012). Although as Roberts et al (2004) stated in their study aiming to improve antenatal detection of breech presentation, 'antenatal detection of breech presentations at 35–37 weeks is necessary to allow adequate time for decision making about external cephalic version (ECV) and/or caesarean section'. It could be suggested that not diagnosing a breech birth until established labour removes all possibility of shared decision making. Say et al (2011) suggested in a systematic review that shared decision making is increasingly important in pregnancy and maternity services but health professionals find it difficult. They concluded that using patient decision aids and using shared decision making is associated with better health outcomes in women such as reduced anxiety and feeling an informed choice has been made. Unfortunately, the nature of undiagnosed breech birth presents an inability to plan, loss of control and no shared decision making. For this reason, the psychological impacts of undiagnosed breech birth need to be considered as ultimately, the process of having an undiagnosed breech baby may correspond with definitions of birth trauma for some women.

A traumatic event cannot only result in emotional upset but in some cases it can lead to Post-Traumatic Stress Disorder (PTSD) which is an anxiety disorder caused by very frightening or stressful events (NHS Choices, 2015). This possibility of developing such a disorder or symptoms relating to PTSD is seemingly being overlooked when considering undiagnosed breech birth. Therefore it is essential to attempt to identify women's experiences in this area and as an endpoint, consider what preventative or management support might be effective. The NICE Caesarean Section guideline (2011) details that women with breech presentation who had an emergency caesarean section or assisted vaginal delivery were more likely to have PTSD 1-2 years after the birth than women who had a planned vaginal birth. The BTA (2015) estimates that 10,000 women each year develop PTSD from birth trauma and 200,000 women each year develop symptoms of PTSD due to being traumatised by childbirth. Although these PTSD figures presented importantly include other birth traumas as well as undiagnosed breech births, no national framework exists on supporting women psychologically who have had an undiagnosed breech birth or generalised birth trauma.

In a 2013 paper on undiagnosed breech birth, Walker concludes that,

'As a diagnosis of breech presentation for the first time in labour affects approximately 1:100 women, maternity services should have a coherent, evidence-based strategy for continuing to provide all options of care. In order to offer truly woman-centred care...we also need to understand more about the choices women want (or would want) when confronted with an unanticipated diagnosis of breech presentation in labour, and how to deliver appropriate information in a way women experience as mostly supportive and enabling, rather than conflicted or coercive...A midwifery guideline for breech birth would include...appropriate woman-centred counselling'

This research is needed to ensure women's experiences of undiagnosed breech birth are being uncovered and for women to feel listened to. This really is a necessity as many women could be coping with the psychological effects of undiagnosed breech birth and related trauma alone or potentially getting misdiagnosed with other disorders such as post-natal depression. In 2004, BTA wrote a letter to Dr Stephen Ladyman, the Health Minister at the time, to highlight the need for more research into the psychological effects of birth trauma and potential implementation of psychological support for women but the situation remains unchanged. Therefore, this proposed research may go a short way in beginning to raise awareness of women's experiences of undiagnosed breech birth and allow potential support needs to begin to be considered.

Aims & Objectives

The aim of the research is to uncover the real experiences of women who have given birth to an undiagnosed breech baby; whether delivered vaginally or by emergency caesarean section. In addition, the study will aim to explore how, and if, this experience has affected the decision whether to have further children or what might be expected of a future

birthing experience if it were to occur. If experiences are explored and common psychological effects can be identified, they could potentially be used to provide insight into the psychological support women and their families may need after an undiagnosed breech birth and may provide evidence that could be used to implement policy change in the NHS regarding support for such women.

In summary, the principle objectives of the proposed research are:

- 1. To uncover and explore women's experiences of undiagnosed breech birth
- 2. To identify common psychological/cognitive themes drawn from these experiences
- 3. To identify if and how birthing experience has impacted upon the decision to have future children.
- 4. To identify if and how birthing experience has impacted upon expectations of experience regarding future childbirth.
- To use findings relating to experience to suggest potential support mechanisms that could be put in place by the NHS for women who experience undiagnosed breech birth

2. RESEARCH METHODOLOGY TO BE USED

You should explain how you plan to undertake your research. A copy of the interview schedule/ questionnaire/observation schedule/focus group topic guide should be attached where applicable.

An experiential qualitative study will be carried out whereby my main aim is to uncover the real experiences of participants.

A form of asynchronous semi structured email interview will be used to gather the data from individual participants in order to explore their individual participant experiences. Email interviews are fairly recent phenomena due to the increasing use of technology in research. In a review on the use of online, asynchronous, in-depth interviews such as email interviews, Meho (2006) states the following:

'...it is important to note that online, asynchronous, in-depth interviewing, which is usually conducted via e-mail, is, **unlike e-mail surveys**, semi-structured in nature and involves multiple e-mail exchanges between the interviewer and interviewee over an extended period of time' (pg.1284).

In a document titled 'Patient Perspectives' the NHS Institute for Innovation and Improvement (2008) suggested 4 possible methods to explore patient experience, one of which is semi-structured interviewing in any format as you can delve in more deeply into patient experience as well as producing ideas for service improvement that can be tested in practice.

Before the email interview questions are posed and after participants have provided informed consent, they will be asked to define themselves in a paragraph in their own

words. This is not only to put them at ease and start the conversational process but is an informal way of collecting demographic data so I will be able to make comparisons between individuals and check for diverse characteristics in my sample. The APA (2010) suggests demographic information needs to be gathered in order to be able to describe the sample. Gathering this information is also important as I will be using maximum variation sampling so will strive for a heterogeneous sample.

The email interviews for this research will contain 5 questions, which will be shown to participants once they have agreed to participate as to enable them to see there will not be many questions and hopefully this will make participation not appear to be daunting. Once participants have seen the questions they will be instructed to go through the questions in number order, sending responses to me as they go. I will then respond to them seeking clarification, more information on or with another question. Alternatively, I will ask them to go on to the next question. For each question they will be asked to respond in 5 days. All interaction will take place via an exclusively set up secure gmail account that is for use for this research study only, as recommended by Gibson (2010). Due to the nature of email, all responses will be evidenced for each individual as a thread below the conversation/question that is currently being asked. This is useful for organization of each participant's responses.

These design decisions have been made through the use of PPI using Mumsnet members (the website where I shall recruit participants) and mothers from a nursery who had a mixed response in whether they would prefer questions one at a time or at the start. The compromise was to provide all questions at the start and work through each one (explained above). PPI also uncovered a preference for deadlines for interview questions otherwise they anticipated they would not 'get on with it'. It was agreed 5 days was a reasonable deadline. Naturally, if a participant takes 7 days to respond to a question they will not be excluded or penalized. Gibson (2010) has done extensive research on email interviews and proposed a realities toolkit. She successfully used the interview strategy I propose in a study on music scenes in older music fans; she provided some of the questions first and participants had to answer them one at a time.

Specific questions that may be asked in the email interviews have been decided upon (see Interview Schedule attached). They are open ended to allow a rich, in-depth response. In addition, these interviews are semi-structured and therefore some questions will not be planned in advance as the interviews will run like an online conversation as suggested by NHSIII (2008). Five general questions will be used for all participants and focus on the life-World experience of the interviewee as they will allow the participant to give an extended personal account of their thoughts and feelings (French, Yardley and Sutton, 2005). The questions are based on the following key areas:

The participant's story: Participants will be asked to tell their story of their unique experience from start to finish.

Psychological effects in particular how the participant feels: Feelings may be uncovered by asking the interviewee for their story and are important as they may help to uncover some of the psychological effects that an undiagnosed breech pregnancy may be associated with. Participants will be asked how they feel.

Future expectations and decisions relating to childbirth: Expectations can be changed due to negative experiences and can influence future experience. Nillson and Lundgren (2009) found that women seeking help for fear of childbirth reported that it was due to the suffering they experienced the last time due to the care they received and the negative experiences with healthcare staff. Larkin et al (2012) interviewed women 3 months after childbirth and claimed that midwives play a pivotal role in enabling or preventing positive experiences of birth. The women felt alone and unsupported and the busy ward stopped women centre care from happening. Some said they would not have another baby due to their experiences. Therefore, it seems appropriate that for the proposed research women will be asked about both future expectations and decisions on childbirth.

Once the email interviews are complete, participants will be asked if they have any questions, will be provided with a Birth Trauma Association leaflet (electronic pdf version attached to email) and will be offered an email summary of the research. This is suggested by Braun and Clark (2013) on Qualitative Research as an alternative to a debriefing sheet. Participants will also be asked as a final question (not part of the interview schedule) 'what would your advice be to the next woman who has an undiagnosed breech birth?'. This question may uncover some new knowledge as well as some insight into the support they may have liked to receive themselves (if relevant).

Transcription will not be necessary due to the nature of email interviews and email threads copied from the original emails will only be stored on an encrypted memory stick owned by the researcher. They will also be shared with the Director of Studies and Second Supervisor. An experiential thematic analysis will then be carried out on the data to attempt to uncover patterns and themes in experience.. As Joffe and Yardley (2004) suggested, Thematic Analysis is more concerned with investigating themes in context rather than trying to develop a reliable coding strategy. Thematic Analysis will involve gathering the data and then devising and exploring themes as part of the analytical process; an inductive rather than a deductive process. At the same time, I will need to be reflexive during analysis whereby a conscious critical awareness will need to be made of how my own experience (an undiagnosed breech birth) will positively influence the research and the interpretation of the data (King, 1996). In addition, it may be useful to incorporate a triangulation strategy whereby different data sources collected using different methods could be compared to check for agreement of interpretation (Huberman and Miles, 1994). This might involve asking participants if my understanding is accurate through clarifying their responses.

3.	SELECTION OF PARTICIPANTS	
Will the participants be from any of the following groups? ('x' as appropriate)		
	Children under 18*	
	Adults who are unable to consent for themselves	
	Adults who are unconscious, very severely ill or have a terminal illness	
	Adults in emergency situations	
	Adults with mental illness (particularly if detained under Mental Health Legislation)	
	Prisoners	
	Young Offenders	
	Healthy Volunteers (where procedures may be adverse or invasive)	
□ inve	Those who could be considered to have a particularly dependent relationship with the estigator, e.g. those in care homes, medical students	
	Other vulnerable groups	
	None of the above	
* If you are researching with children please provide details of completed relevant safeguarding training.		
If a	If any of the above applies, please justify their inclusion in this research.	
The research will involve open recruitment and vulnerable participants with potential mental health issues are therefore not the focus or being specifically sought after. For this reason, participants will not be categorized as 'vulnerable'. The point of the research is to come up with recommendations for the NHS of how women might be supported, if required, after an undiagnosed breech birth.		
4.	4. PLEASE EXPLAIN HOW YOU WILL DETERMINE YOUR SAMPLE SIZE/RECRUITMENT STRATEGY, AND IDENTIFY, APPROACH AND RECRUIT YOUR PARTICIPANTS. PLEASE EXPLAIN ARRANGEMENTS MADE FOR PARTICIPANTS WHO MAY NOT ADEQUATELY UNDERSTAND VERBAL EXPLANATIONS OR WRITTEN INFORMATION IN ENGLISH	

In this section, you should explain the rationale for your sample size and describe how you will identify and approach potential participants and recruit them to your study.

It is hoped that participants will vary in age, ethnicity and background. But, as the endpoint of the research is to potentially inform support for undiagnosed breech birth in the UK patients will need to be living in Great Britain. It is hoped that up to 15 volunteers will come forward in total. This small number of participants is anticipated because undiagnosed breech birth is uncommon (1:100) and due to the time constraints of the proposed research, this seems a realistic number of participants to gather information from in the time frame whilst still allowing potential themes to be identified. Morse and Field (2002) suggest in their book on Nursing Research that we need an appropriate sample that not only fits our research question and aims but provides an adequate amount of data to fully analyse a topic and answer the questions we have. In this case, 15 participants should be able to fulfill this as the data provided should be rich as the topic is narrow and I am using repeated indepth interviews (Braun and Clarke, 2013). Additionally, as stated by Braun and Clarke (2013) based on the method I am using (interviews) 10-20 participants is sufficient. Based on the analysis technique (TA) a small-moderate sample size is also only required.

The sampling strategy to be used is a form of purposive sampling called maximum variation sampling. This type of sampling aims to seek diverse perspectives (Festinger, 2005) and will allow focus on depth of information rather than being concerned with generalisability. It basically involves trying to select the most heterogeneous sample as possible. As mentioned previously, some demographic information will be gained from participants in order to identify individual differences as well as to ensure a range of different people have participated. I have developed an inclusion and exclusion framework. Participants will not be able to participate if they are not living in Great Britain or have not had an undiagnosed breech birth. Participants must also be women as this research focuses on women's' experience. Furthermore, if a participant cannot write in eligible English they will not be able to participate as I do not have the resources to employ an interpreter. Finally, women will only be included if they have had a breech birth in the last 9 years (since Jan 2007) as clinical practice changes over time and the aim of the research is to inform practice and improve the provision currently offered, not what used to be offered. The RCOG (2006) Management of Breech Presentations Guideline was last revised in December 2006, so any undiagnosed breech births prior to the revision may have been dealt with differently, yielding a different experience. All adult ages, ethnicities, sexualities, classes, socioeconomic backgrounds and geographic locations within the UK will be included in the research. Whether the birth being discussed was a first, second, third birth etc. how the baby was delivered and what type of institution he/she was delivered in will also not matter regarding inclusion in the study. Once participants have given consent to participate they will be invited to write a paragraph about themselves and who they are. This will uncover their demographics. I will seek clarification or ask for more information if I am unsure whether they have any of the exclusion criteria. Once I feel I have 15-20 diverse participants I will refrain from accepting any more. I will initially accept 20 participants to allow for potential attrition.

To recruit participants I will create or enter relevant discussion forums on MumsNet as a MumsNet user. My username will not be my real name. After discussions with potential participants on the discussion forums I will invite those who I feel may fit the inclusion criteria to participate in my study via a private message thread. I will reveal my real name at this point and provide a participant information sheet (see attached). This recruitment strategy is commonplace in email interview research and is advocated by Gibson (2010) who followed the same procedure when recruiting for a study on music scenes. The information sheet will invite willing participants to email the gmail account I have sent up exclusively for the research to express their interest and from there I will send them the consent form to electronically sign and will conduct the interview once consent has been gained. All communication will take place during the research via the gmail email account. Participants may have email addresses that contain their real names, but as identified in the PPI I conducted, contributors didn't feel this was an issue as long as their email address was not shared elsewhere or published; which of course it won't be. If names are revealed in email addresses I will not use the names for any purpose.

I will reveal to participants on the information sheet and before the research begins that I have had an undiagnosed breech birth myself in an attempt to build rapport and trust by explicitly being an 'insider'. Again, the face-to-face PPI with mums revealed they would open up more if they knew a researcher had been through a similar experience.

5. WHAT ARE YOUR ARRANGEMENTS FOR OBTAINING INFORMED CONSENT WHETHER WRITTEN, VERBAL OR OTHER? (WHERE APPLICABLE, COPIES OF PARTICIPANT INFORMATION SHEETS AND CONSENT FORMS SHOULD BE PROVIDED)

Informed consent is an ethical requirement of most research. Applicants should demonstrate that they are conversant with and have given due consideration to the need for informed consent and that any consent forms prepared for the study ensure that potential research participants are given sufficient information about a study, in a format they understand, to enable them to exercise their right to make an informed decision whether or not to participate in a research study.

You should describe how you will obtain informed consent from the participants and, where this is written consent, include copies of participant information sheets and consent forms. Where other forms of consent are obtained (eg verbal, recorded) you should explain the processes you intend to use. If you do not intend to seek consent or are using covert methods, you need to explain and justify your approach. Please consider carefully whether or not you need to seek consent for archiving or re-use of data.

Written informed consent will be gained from participants by sending a consent form attached to an email to women who have expressed an interest in participating (see

attached consent form). Participants will be required to electronically sign the consent form and return it to me before the interviews can commence. The consent forms will be saved to a password protected encrypted memory stick that only I will have access to. The consent form ensures that participants are aware of their right to withdraw and fully discloses the potential risks of the research as well as the purpose and processes of the research.

Consent will also be gained on the consent form for storage of data and anonymity (see section 7 below).

Furthermore, participants will be provided with a participant information sheet (see attached) before they express they would like to take part/are sent the consent form in order to ensure they have been given as much information as possible to ensure they can make an informed and explicit decision about participation. They will also be given the opportunity to ask any questions they have via email if they are unsure about what the research entails.

6. WHAT ARRANGEMENTS ARE IN PLACE FOR PARTICIPANTS TO WITHDRAW FROM THE STUDY?

Consent must be freely given with sufficient detail to indicate what participating in the study will involve and how they may withdraw. There should be no penalty for withdrawing and the participant is not required to provide any reason.

Please note: allowing participants to withdraw at any time could prejudice your ability to complete your research. It may be appropriate to set a fixed final withdrawal date.

Participants will be free to withdraw up until 4 weeks after consent has been provided. This is because it is anticipated that given the 5 day deadline, 5 questions would take 25 days to respond to if the maximum 5 days was taken for each response. At this point data analysis will properly begin and withdrawal would be more difficult. In addition, the research could be compromised if participants withdraw at any time, especially when there is a timeframe for the research. The right to withdraw is explicitly mentioned on the consent form.

Participants will not need to provide reasons for withdrawal and it is assumed that if they have not made contact via the gmail email for two weeks that they have withdrawn. If participants have not responded within the 5 day deadline to a question I will send a friendly email reminder to them but if there is still no response within the next 9 days (two weeks since last contact) I will assume withdrawal. Withdrawal will need to be assumed and I will no longer contact participants who demonstrate such a silence as when completing online research informed consent is not just something you gain at the start of the study but has to be sustained throughout the entire study and silence could indicate temporary or permanent withdrawal and may not be open to investigation (James and Busher, 2009).

Internet research poses some different issues to face to face. As suggested by James and Busher (2009) in their book on Online Interviewing, using Netiquette Guidelines such as those proposed by Hall et al (2004) can be useful in producing a good ethical framework. Therefore, I will follow the 6 Netiquette guidelines proposed by Hall et al. (2004) when

communicating with participants and when I send a reminder to them if they have missed the deadline. The Netiquette guidelines include ensuring that the subject header in any email must not misinform the participant, self-identification and self-presentation of the researcher is critical and ensuring respect for those being researched by being familiar with acronyms or jargon for example. Other guidelines include asking appropriate questions and an obligation to inform participants about research purpose, procedures and risks. These are being dealt with on the consent form and participant information sheet.

7. IF THE RESEARCH GENERATES PERSONAL DATA, PLEASE DESCRIBE THE ARRANGEMENTS FOR MAINTAINING ANONYMITY AND CONFIDENTIALITY (OR THE REASONS FOR NOT DOING SO)

You should explain what measures you plan to take to ensure that the information provided by research participants is anonymised/pseudonymised (where appropriate) and how it will be kept confidential. In the event that the data are not to be anonymised/pseudonymised, please provide a justification.

Personal data is defined as 'personal information about a living person which is being, or which will be processed as part of a relevant filing system. This personal information includes for example, opinions, photographs and voice recordings' (UWE Data Protection Act 1998, Guidance for Employees).

Participants will only be conversing with me via email. If they have personal details in their email addresses, these will not used and no participants email will be recorded in the report or published anywhere. Participants will also not be made aware at any point of other participant details, experiences or email addresses. PPI revealed that people had no problem with sharing personal details in their email addresses as long as the email address was not used to identify them and was not published anywhere. In the transcripts that may appear in the final report or any published material participants' will be anonymised by being given false names and any material that may identify a participant will be removed or adjusted. For example, if somebody mentions the name of their partner or the name of a midwife or hospital, these elements would be removed from a transcript or adapted to ensure privacy of the participant and to ensure they could not be identified from these details.

All of these details will be made clear to participants' on the consent form. Ensuring that an environment that is secure as possible for participants is important for online research as if participants feel their anonymity is being protected they may be more likely to be open in their responses (James and Busher, 2009).

8. PLEASE DESCRIBE HOW YOU WILL STORE DATA COLLECTED IN THE COURSE OF YOUR RESEARCH AND MAINTAIN DATA SECURITY AND PROTECTION.

Describe how you will store the data, who will have access to it, and what happens to it at

the end of the project, including any arrangements for long-term storage of data and potential re-use. If your research is externally funded, the research sponsors may have specific requirements for retention of records. You should consult the terms and conditions of grant awards for details.

It may be appropriate for the research data to be offered to a data archive for re-use. If this is the case, it is important that consent for this is included in the participant consent form.

UWE IT Services provides data protection and encryption facilities - see http://www.uwe.ac.uk/its-

staff/corporate/ourpolicies/intranet/encryption facilities provided by uwe itservices.shtml

The email interviews will yield personal data about participants' experiences. This data will initially be saved as the interviews are progressing in the Inbox of the secure Gmail account. This is necessary as the thread for each participant will need to build as the interview progresses so each participant's transcript is ultimately on just one email. Once the interview process has finished, participant emails will be saved and stored on a password accessible encrypted memory stick which I (the main researcher) have access to; nobody else will be able to access this memory stick. The DoS and Second Supervisor will be given the password to the gmail account and will have access to the transcripts through this medium but will not participate in the interviews or send/receive emails from the gmail account.

Once signed consent forms are received via email from participants, these will also be saved to the secure encrypted memory stick. Consent forms will be immediately deleted from the email account once saved as it is not deemed necessary to keep them on the email account for continuous access by the research team and also, they will not form part of the interview email thread. When the consent forms are downloaded to be saved, they will be deleted from the 'downloads' folder on the computer they are being downloaded on, which will be my personal laptop. In this way, they will only be on the memory stick and will remain confidential.

Once the research is complete and the final report has been written and ratified, the gmail account used and the email responses will be deleted. The data will not be used for any future research.

9. WHAT RISKS (EG PHYSICAL, PSYCHOLOGICAL, SOCIAL, LEGAL OR ECONOMIC), IF ANY, DO THE PARTICIPANTS FACE IN TAKING PART IN THIS RESEARCH AND HOW WILL YOU ADDRESS THESE RISKS?

Describe ethical issues related to the physical, psychological and emotional wellbeing of the

participants, and what you will do to protect their wellbeing. If you do not envisage there being any risks to the participants, please make it clear that you have considered the possibility and justify your approach.

Potential psychological risks have been considered but as the sample is self-selecting, the researcher will need to honour that volunteers have self-certified that they are ready to share their stories. Therefore, it must be expected that participants feel they are ready and able to share a potentially emotional experience. Nevertheless, participants will be provided with a support leaflet produced by the Birth Trauma Association at the end of the study with details of where they might access support if necessary. If participants write particularly concerning or suicidal responses to the interview questions, they would be sent the leaflet prior to the end of the study. Participants will also be able to decide on how much information they provide due to the nature of the research. There are no physical risks to participants from participating in the research study.

There are no social risks involved with participation; in fact by including possible understudied groups such as lesbian women and having a heterogeneous sample, it will prevent further social harm from occurring caused by the non inclusion of such groups in research.

Participants will not be required to pay expenses to participate and will not need to travel. They will be able to answer the questions in their own time from work or home. Therefore there are no economic risks involved with the research.

Legally, it will be made clear on the consent form that the information participants provide will be seen and accessed by only me, the DoS and my second supervisor. Any extracts from transcripts published will be anonymised. Therefore, it will be made clear that although the internet is a public space, the interviews I will conduct and the responses provided will all be kept securely and will be only used for my research and anonymised when used.

10. ARE THERE ANY POTENTIAL RISKS TO RESEARCHERS AND ANY OTHER PEOPLE IMPACTED BY THIS STUDY AS A CONSEQUENCE OF UNDERTAKING THIS RESEARCH THAT ARE GREATER THAN THOSE ENCOUNTERED IN NORMAL DAY TO DAY LIFE?

Describe any health and safety issues including risks and dangers for both the participants and yourself (if appropriate) and what you will do about them. This might include, for instance, arrangements to ensure that a supervisor or co-researcher has details of your whereabouts and a means of contacting you when you conduct interviews away from your base; or ensuring that a 'chaperone' is available if necessary for one-to-one interviews.

Please check to confirm you have carried out a risk assessment for your research \Box

There are no physical risks to me in completing this research due to the nature of email interviews. I will not have to travel or attend participant's houses; everything will be carried out online. I will never need to meet participants face to face and they will only know my name and my email contact details. Nevertheless, I have considered my emotional wellbeing as I will be gathering in-depth data on a potentially sensitive and emotive topic area, which has personal resonance as I experienced my own undiagnosed breech birth. In order to

No

address this I will keep a reflexive diary throughout the research process where I can record my thoughts and feelings on a number of elements of the research and will discuss reflexivity in supervision sessions. This will be an important 'offloading' tool. There are no other risks in the research that are deemed greater than that I would be exposed to in everyday life and arguably hearing the stories of others may be therapeutic in itself; a feature of 'insider research'. 11. HOW WILL THE RESULTS OF THE RESEARCH BE REPORTED AND DISSEMINATED? Please indicate in which forms and formats the results of the research will be communicated. (Select all that apply) Peer reviewed journal Conference presentation ☐ Internal report □ Dissertation/Thesis ☐ Other publication ☐ Written feedback to research participants ☐ Presentation to participants or relevant community groups ☐ Digital Media ☐ Other (Please specify below) 12. WILL YOUR RESEARCH BE TAKING PLACE OVERSEAS? NO. THE RESEARCH WILL TAKE PLACE IN THE UK. 13. ARE THERE ANY OTHER ETHICAL ISSUES THAT HAVE NOT BEEN ADDRESSED WHICH YOU WOULD WISH TO BRING TO THE ATTENTION OF THE FACULTY AND/OR **UNIVERSITY RESEARCH ETHICS COMMITTEE?** This gives the researcher the opportunity to raise any other ethical issues considered in planning the research or which the researcher feels need raising with the Committee.

CHECKLIST

Please complete before submitting the form

	Yes/No
Is a copy of the research proposal attached?	Yes
Have you explained how you will select the participants?	Yes
Is a participant information sheet attached?	Yes
Is a participant consent form attached?	Yes
Is a copy of your questionnaire/topic guide attached?	Yes
Have you described the ethical issues related to the well-being of participants?	Yes
Have you described fully how you will maintain confidentiality?	Yes
Have you included details of data protection including data storage?	Yes
Where applicable, is evidence of a current DBS (formerly CRB) check attached?	N/A
Is a Risk Assessment form attached? (HAS only)	Yes
Have you considered health and safety issues for the participants and researchers?	Yes

DECLARATION

The information contained in this application, including any accompanying information, is to the best of my knowledge, complete and correct. I have attempted to identify all risks related to the research that may arise in conducting this research and acknowledge my obligations and the right of the participants.

Principal Investigator name	Katie Lightfoot
Signature	Katíe Líghtfoot
Date	29 th September 2016
Supervisor or module leader name	Dr Rachel Gillibrand
(where	Dr Liz Jenkinson
appropriate)	
Signature	
Date	3 rd October 2016

The signed form should be submitted electronically to Committee Services: researchethics@uwe.ac.uk and email copied to the Supervisor/Director of Studies where applicable together with all supporting documentation (research proposal, participant information sheet, consent form etc).

For student applications where an electronic signature is not available from the Supervisor we will require an email from the Supervisor confirming support.

Please provide all the information requested and justify where appropriate.

For further guidance, please see http://www1.uwe.ac.uk/research/researchethics (applicants' information)



Appendix D: Amendment to Existing Ethics Application (Approval)

Please complete this form if you wish to make an alteration or amendment to a study that has already been scrutinised and approved by the Faculty Research Ethics Committee and forward it electronically to the Officer of FREC (researchethics@uwe.ac.uk)

UWE research ethics UWE REC REF No: HAS.16.10.027

reference number:

Title of project: Women's experiences of undiagnosed breech birth and the

effects on future childbirth decisions and expectations

Date of original approval: 20th October 2016

Researcher: Katie Lightfoot

Supervisor (if applicable) Dr Rachel Gillibrand (DOS)

Dr Liz Jenkinson (Second Supervisor)

1. Proposed amendment: Please outline the proposed amendment to the existing approved proposal.

I was anticipating that I would be carrying out online interviews with participants via email but unfortunately I have had no participants come forward. As a result I now intend to analyse pre-existing discussion boards (already in the public domain) about undiagnosed breech birth on Mumsnet. My analysis procedures will not change and I will use my previously advised semi-structured interview questions as a basis for initially coding the discussion board data when carrying out the intended experiential Thematic Analysis.

2. Reason for amendment. Please state the reason for the proposed amendment.

No participants have come forward for online interviewing. I have waited for 3 months but now would like to make this amendment due to time implications.

3. Ethical issues. Please outline any ethical issues that arise from the amendment that have not already addressed in the original ethical approval. Please also state how these will be addressed.

None. The amendment will mean there is no direct contact with contributors to the discussion boards. Therefore consent forms, participant information forms and debriefing

will no longer be necessary. Permission has been granted from Mumsnet to use their members pre-existing data that is already in the public domain (discussion board data).

To be completed by supervisor/ Lead researcher:		
Signature:	Katíe Lightfoot	
Date:	2 nd February 2017	
To be completed by Research	Ethics Chair:	
Send out for review:	Yes	
	x No	
Comments:	This data is in the public domain and because no personnel	
	details are present, it is acceptable to analyse the forums in	
	this way.	
Outcome:	X Approve	
	Approve subject to conditions	
	Refer to Research Ethics Committee	
Date approved:	3 rd Feb 2017	
Signature:	Dr Julie Woodley (via e-mail)	

Guidance on notifying UREC/FREC of an amendment.

Your study was approved based on the information provided at the time of application. If the study design changes significantly, for example a new population is to be recruited, a different method of recruitment is planned, new or different methods of data collection are planned then you need to inform the REC and explain what the ethical implications might be. Significant changes in participant information sheets, consent forms should be notified to the REC for review with an explanation of the need for changes. Any other significant changes to the protocol with ethical implications should be submitted as substantial amendments to the original application. If you are unsure about whether or not notification of an amendment is necessary please consult your departmental ethics lead or Chair of FREC.

Appendix E: Permission from Mumsnet to recruit participants

From: MN Report Post

Sent: 10 November 2016 14:10:14 UTC

To: Katie-Rose Dyble

Subject: Re: Permission to recruit participants

Hi Katie,

Sure! Send us a copy over when your research is finished.

If you need anything else then please don't hesitate to get in touch.

Best, Lorna MNHQ

{#HS:275707028-607099#}

On Thu, Nov 10, 2016 at 2:04 PM GMT, Katie-Rose Dyble > wrote:

Hi Lorna

Thank-you so much for your quick response. I fully understand and that is fine with me.

Please be assured I will anonymise all posters identities in my research and will acknowledge Mumsnet. I have already received Ethical clearance from the Ethics and Research Committee at UWE to ensure all involved will be protected ethically.

I could send you a copy of my report once complete if you are interested. I am hoping to go on to publish something from it.

Kind Regards

Katie

On Thu, Nov 10, 2016 at 1:53 PM GMT, MN Report Post hs_report_post@mumsnet.com> wrote: Hi Katie,

Thanks so much for reaching out. Your research sounds very interesting!

Unfortunately, we can't give you permission to post on our chat boards.

You'll need to post in our NFP section (this is free).

Our users take a very dim view of this type of thing across the boards and won't hesitate to report it to us so please do take advantage of our research section.

If we allowed you to post research on the boards then everybody would want to do it. We hope you understand where we're coming from.

We're sure there are Mumsnetters out there who would consider being case studies.

Please acknowledge Mumsnet in the sources and keep the posters' identity anonymous (ie please don't use identifying details or their real life or usernames).

Please put your request in our Surveys/Students/Nonprofits topic: www.mumsnet.com/Talk/surveys_students_non_profits_and_start_ups P.S you can reply to users on threads started in this section.

We don't allow research to be conducted anywhere else on our site, though as long as you didn't start a thread, you're free to quote our site as long as Mumsnet is credited. What this means is that if mums are already discussing something relevant to your needs on our site, you can quote from their threads, but not start one yourself with the purpose of eliciting responses.

We wish you the very best of luck with it.

Best wishes, Lorna MNHQ

On Thu, Nov 10, 2016 at 1:46 PM GMT, Katie-Rose Dyble wrote:

My name is Katie Lightfoot. I am a mum and have joined Mumsnet as a member.

I am going to be carrying out some qualitative research on women's experience of undiagnosed breech pregnancy as it is an area that is understudied and I feel it is important to know more about how women felt when they had an undiagnosed breech birth. I had an undiagnosed breech birth of my own last December and for me it was quite traumatic but I am keen to learn about other women's experiences. I am doing this research in order to complete my Doctoral research at UWE, Bristol.

The research will involve email interviews (on a separate Gmail account; not on Mumsnet) but I would love to recruit my participants from Mumsnet via a discussion thread titled 'Undiagnosed breech pregnancy'. When women click on it I

propose then I put a little about myself and then an email address (the Gmail one reserved for my study) for them to contact me on if they wish to participate.

Would you have any objection in me doing this? I would rather use the discussion boards then the non-member requests as I will reach more people and it seems more real to participants. In addition, if people have any questions for me about participation I can answer them on the thread; I can't do this on the non-member requests. I did some Participant Patient Involvement using the non-member requests and did not get much response.

Thank-you for your help and for reading my email.

Kind Regards

Katie Lightfoot