

Exploring the psychological impact of miscarriage on men.

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The candidate confirms that the work submitted is her own and that appropriate credit has been given where reference has been made to the work of others.

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Abstract

Miscarriage is the most common complication of pregnancy, with 1 in every 4 known pregnancies ending in a miscarriage (Tommy's, 2018). The grief experienced as a result of pregnancy loss has been found to be similar in intensity to other loss scenarios (Kersting & Wagner, 2012). Yet, men's perspectives have been largely overlooked in research. A Priority Setting Partnership highlighted the importance of understanding the emotional impact of miscarriage on women and their partners (Prior et al., 2017), therefore the current research aimed to establish if men experience any psychological difficulties following miscarriage, what factors may predict this, and if men accessed any support. A mixed methods design was used. 512 men completed an online questionnaire which asked questions about their personal circumstances, such as, the number of miscarriages they have experienced and, if so, the stage of pregnancy they occurred. The questionnaire also used measures to identify depression, anxiety, grief and conformity to masculinity. Descriptive statistics were produced and stepwise multiple regressions were conducted. In addition, 7 men were interviewed, interviews were transcribed verbatim and thematically analysed.

The results indicated that miscarriage may affect mood, anxiety and produce a significant grief response in men. However, it is difficult to establish a causal link from this research. Furthermore, qualitative data found men may experience these feelings, but push them to one side whilst trying to support and protect their partners through their grieving process. Once their wives feel more emotionally stable, men are able to acknowledge and express this emotional response they are feeling when they have the space to do so. Quantitative analysis highlighted a number of factors

as predictors for these psychological difficulties, including the stage of pregnancy, religion, age, whether they had subsequent children following the miscarriage and the time since the miscarriage. Only one-quarter of men sought support following miscarriage. However, regardless of whether men had accessed support or not, the two main sources of support they favoured were through family and friends or psychological counselling. It was difficult to isolate specific facilitators, but two main barriers were identified: societal and cultural influences, and the role that masculinity plays. These findings provide important information for health care providers in offering support to men following a miscarriage. Support should be person-centred, focusing on validating the loss that men have experienced and the grief response that follows this. Furthermore, it may also be important to acknowledge the difficult position that men may be in following a miscarriage, as they may feel a sense of duty to maintain their role as protector and supporter, whilst also grieving.

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List of Abbreviations

ANOVA: Analysis of Variance

CMNI: Conformity to Masculine Norms Inventory

GAD-7: Generalised Anxiety Disorder-7

M: Mean

MSS: Male Symptom Scale

N: Sample size

NHS: National Health Service

NICE: The National Institute for Health and Care Excellence

PHQ-9: Patient Health Questionnaire-9

SD: Standard Deviation

SPSS: Statistical Package for Social Sciences

VIF: Variance Inflation Factor

WHO: World Health Organisation

Introduction

Miscarriage is the most common complication of pregnancy, with one in every four known pregnancies ending in a miscarriage (Tommy's, 2018). Given that it is such a common life event, it is unsurprising that research is frequently carried out, exploring the causes and impact of miscarriage. There are dedicated research centres around the UK which are solely used as hubs for researching pregnancy loss. Whilst this is positive and provides information for the advancement of care during pregnancy and loss of pregnancy, little research is conducted exploring the psychological impact of pregnancy loss. Moreover, even less research is conducted exploring this from a man's perspective. The aim of this thesis is to establish if men experience any psychological difficulties following a miscarriage, what factors may predict this, and if men access any support. The following literature review will give a brief introduction about miscarriage. This will be followed by an exploration of the literature on the impact that miscarriage has on both women and men, and any factors that can influence the response that men and women may have. Furthermore, research around loss and grief will be explored, as will the process of seeking support following loss, and help seeking behaviour in men. As the focus of the research is men's experiences, the literature review will also explore theories of masculinity and how they relate to loss.

Miscarriage/ Pregnancy loss

Prior to 1985 the words 'miscarriage' and 'abortion' were used interchangeably; therefore there was not a distinction between the spontaneous and induced loss of a baby (Moscrop, 2013). The change in language, making more of a distinction

between the two, was meant as a way of ensuring that medical professionals created more empathy for women experiencing miscarriage, however, whether this has translated into practice is unknown (Moscrop, 2013). The language used around miscarriage is still contested (see discussion chapter for a discussion of terms used in this research), however the word ‘miscarriage’ is currently most widely used and accepted worldwide. This study will use the terms ‘pregnancy loss’ and ‘miscarriage’. This is partly due to the fact that miscarriage is the most widely acknowledged term for pregnancy loss until 24 weeks, and partly because of the terminology used in the literature cited. Furthermore, the term ‘pregnancy loss’ seemed to be the most widely accepted term from organisations and participants. According to the World Health Organisation (WHO), miscarriage is defined as the “spontaneous loss of pregnancy before the foetus reaches viability” (WHO, 2017). In the UK, this includes all pregnancy losses up to 24 weeks as babies are only considered ‘viable’ after this stage (National Health Service, NHS, 2017). It is important to note that definitions vary internationally, so whilst the current study will use the definition proposed in the UK, the definitions used in the literature reviewed will vary. For example, in the US the definition of ‘miscarriage’ includes all pregnancy losses up to 20 weeks (Centers for Disease Control and Prevention, 2017). After 20 weeks in the US (Centers for Disease Control and Prevention, 2018) and 24 weeks in the UK (NHS, 2018), a loss is classified as a stillbirth.

According to Tommy’s, the UK’s largest organisation that funds both research and support of pregnancy loss, one in four women experience miscarriage and 1 in 100 women experience three or more miscarriages. This is a high proportion and yet the true prevalence cannot really be known as not all pregnancies are confirmed

(Freda, Devine & Semelsberger, 2003) and not all women seek medical support following a miscarriage (Hemminki, 1998). Despite this, it is clear that miscarriage is a very common occurrence that affects a large proportion of the population. The way in which miscarriage is managed varies depending on length of gestation. According to NICE guidelines (2018), if the loss occurs before 12 weeks gestation, known as an 'early miscarriage', the miscarriage may happen naturally, resulting in bleeding and painful cramping for women, until the foetus has passed. If this has not happened naturally but there is no longer a heartbeat, women may be offered medication to induce the same natural response described above. In some circumstances surgery may be required. If the loss occurs after 13 weeks gestation, known as a 'late miscarriage', women will be given medication to induce labour, in order for them to give birth to the baby (Saraswat, Ashok, & Mathur, 2014).

Research into miscarriage has mainly focused on the medical causes and management of miscarriage. This is very important research, however, the fact that a miscarriage is an emotional experience, as well as a physical one, has been overlooked and there has been little priority placed on exploring the psychological well-being of women and men after experiencing a miscarriage (Prior, Bagness, Brewin, Coomarasamy, Easthope, et al., 2017). A recent paper was published outlining the top ten research priorities for miscarriage in the UK. These were decided upon by performing a Priority Setting Partnership which considered the opinions of those who are directly affected by miscarriage (women, men, family and health professionals) (Prior et al., 2017). Of the ten research priorities, two focus on the emotional well-being of women and their partners with the view to understand what the emotional and mental health impacts of miscarriage are in the short and

long term, and to establish what emotional support is effective for women and their partners after miscarriage. This highlights the importance of carrying out research around the psychological impact of miscarriage on men.

Psychological impact of miscarriage

Miscarriage can have a significant impact on parents' psychological well-being. The following section will outline the literature detailing the impact that miscarriage has on women and men. When discussing the impact on men, this section will also explore the way in which men's mental health presentation may differ from women's, and the role that masculine norms may play in this. This is followed by a summary of factors that influence well-being according to the literature. Finally, the way in which impact can be measured is outlined.

The grief experienced as a result of pregnancy loss has been found to be similar in intensity to other loss scenarios (Kersting & Wagner, 2012). In addition to this, is the loss of future dreams and hopes for the child and for the parent (Adolfsson, Larsson, Wijma, Bertero, 2004). Miscarriage takes away the opportunity for the mother and father to become parents, to raise a child and to form a new identity as a parent (van den Akker, 2011). This then raises the question of when a person's identity transitions to become a mother or father. Planning for the future role as a parent starts in the early stages of pregnancy and instigates a change in self-identity (Adolfsson, et al., 2004). Therefore, it is no surprise that if a pregnancy is lost, even at an early stage in the pregnancy, there is a significant impact on individuals, as their identity and role as a potential parent has been taken away from them. The experience of miscarriage may not only have an impact on individuals, but also an

impact on the relationship of the couple (Kersting & Wagner, 2012). Perinatal death has been identified as a risk factor for the breakdown of relationships (Vance, Boyle, Najman, & Thearle, 2002). However, this does not have to be the case; research has found that couples who openly communicate through the grieving process report less severe grief reactions and greater partner satisfaction (Buchi, Morgeli, Schnyder, Jenewein, Glaser, et al., 2009). Thus, some couples report that loss has brought the relationship closer together (Cacciatore, DeFrain, Jones, & Jones, 2008).

Impact on women

Badenhorst and Hughes (2007) discussed that the earliest paper detailing distress in relation to miscarriage was in the 1950s and focused on women's distress. Although sympathetic, the advice was to encourage women to "put the loss behind her and have another baby" (Elia, 1959). Research and advice have developed substantially since then, with change starting in the 1970s when research began exploring the emotional impact of losing a baby on women, and the factors which may influence this (e.g. Giles, 1970). Now that the distress of pregnancy loss is more widely recognised, research has moved to establish the extent of this distress. It is estimated that 50% of women who experience miscarriage also experience some sort of psychological distress in the weeks and months following the loss (Lok & Neugebauer, 2007). Recent research has found that 45% of women reported post-traumatic stress disorder symptoms 1-month post miscarriage (Farren, Jalmbrant, Ameye, Joash, Mitchell-Jones, et al., 2016). Furthermore, 3-months post miscarriage, many women experience anxiety and depression (Farren et al., 2016). A large epidemiological based study in the US found that women who experienced a perinatal loss (from 20 weeks gestation) were four times more likely to experience

depression than women who had a live birth and seven times more likely to experience post-traumatic stress disorder, after controlling for demographic and personal risk factors (Gold, Leon, Boggs & Sen, 2016). Similarly, compared with women who have had a live birth, women who have experienced perinatal loss were twice as likely to experience generalised anxiety (Gold, Boggs, Muzik & Sen, 2014). Although this research was conducted with women who experienced stillbirth, miscarriage has also been found to have an impact on women's psychological well-being, and the physical, emotional and psychological impact may last throughout life (Cahill, 2015).

Adolfsson and Larsson (2010) found that a key difference between the grief experienced by women who experience miscarriage compared to other losses is that there are no memories, there is no object to grieve and other people may be unaware of the woman's loss. Although their study was conducted with women, the same underlying principle of the grief feeling 'disenfranchised' also applies to men. The term 'disenfranchised grief' was coined by Doka (1999), who defined it as the grief experienced by people who incur a loss that is not openly acknowledged or supported by others. Qualitative research conducted with women highlighted a strong theme around a lack of acknowledgement of the reality of their loss from family members, society in general, and the medical community (Rowlands, & Lee, 2010). Furthermore, the majority of women described situations in which they felt that others failed to recognise the significance of miscarriage (Rowlands & Lee, 2010). The role that others play in women's well-being following a miscarriage was further illustrated in a study by Bellhouse, Temple-Smith, Watson, and Bilardi (2018). They found that women reported significant levels of grief, loss and distress

associated with miscarriage, and this was worsened by negative experiences with health care providers. These negative experiences included lack of information, insensitive comments and lack of emotional support from a variety of health care professionals (Bellhouse et al., 2018).

Qualitative analysis with 13 couples by Lang, Fleiszer, Duhamel, Sword, Gilbert and Corsini-Munt (2011) identified ‘disenfranchised grief’ as one of the main themes. They categorised this into three sections; within a marriage, by health care professionals and on a societal level. They found that within couples there were different expectations of how to respond to a miscarriage, how to grieve and the length of time to grieve. They also found that couples felt that health care professionals minimised their loss; implying that this loss was seen by professionals as being less significant than other losses. Finally, Lang et al. (2011) described that couples felt that extended family and communities did not have a good understanding of perinatal loss and the impact that it had on their lives. Thus, highlighting that both men and women feel that their loss is not fully acknowledged by others. However, although the authors note that they did not directly ask participants about ambiguous or disenfranchised grief during interviews, the objective of their research was to explore ambiguous and disenfranchised grief in relation to perinatal loss and their themes reflect the aims of the study. Therefore, it is difficult to establish true reliability of the findings and does not necessarily reflect the true nature of grief experienced by couples who have experienced a perinatal loss.

Impact on men

Research has suggested that women report more intense and enduring grief than men following an infant loss (Murray, Terry, Vance, Battistutta, & Connolly 2000).

However, Rinehart and Kiselica (2010) reviewed the literature around men and miscarriage and they discuss how quantitative research using the Perinatal Grief Scale (PGS; Potvin, Lasker & Toedter, 1989) has shown that men and women score very similarly, thus indicating that men experience significant grief after miscarriage, just as research has highlighted that women do. Men and women's grief responses tend to be similar in that both report experiencing shock, anger, emptiness and helplessness. However, men did not report feelings of guilt, whereas women did (Badenhorst, Riches, Turton, & Hughes, 2006). Badenhorst et al., (2006) did not offer an explanation for this, which could have been helpful by providing more of an insight into the difference between men and women's guilt responses following a perinatal loss and possibly reasons behind this.

Badenhorst and Hughes (2007) comment that fathers' feelings were not discussed in any of the early papers on pregnancy loss and noted that these papers illustrated that the dominant narrative was that a man's role was to support his wife. Over sixty years on from these early papers, in a leaflet by the Miscarriage Association (2007), there is still evidence that "the person who is most often forgotten in a family bereaved by a miscarriage is the father". Thus, it appears that despite there being an awareness that the impact of miscarriage on men should be considered (Geller, Kerns & Klier, 2004), research has continued to mainly focus on the mother's perspective. This is surprising considering it is not novel information

that men form bonds with their unborn children, as highlighted in research by McGreal, Evans and Burrows in 1997.

Whilst some studies have been conducted exploring the impact of miscarriage on men (e.g. McCreight, 2004; Cumming, Klein, Boslover, Lee, Alexander et al., 2007), a number of drawbacks have been highlighted. Firstly, although research has acknowledged that miscarriage can have a psychological impact on men, the nature and prevalence of this negative impact is still unknown (Lewis & Azar, 2015). Secondly, in their review, Lewis and Azar (2015), highlight that the sample sizes for the four empirical studies they presented were very small. Moreover, much of the research in this area is over ten years old, with current research needed to answer the research priorities of establishing the psychological impact of miscarriage on men, what difficulties they present with, and what factors may influence this (Prior, et al., 2017), in order to shape services to better support men.

Men's presentation

Men's grief may look different to women's, with men preferring to talk less, often presenting as irritable, and also reporting increased alcohol consumption (Klier, Geller & Ritscher, 2002). Kong, Chung, Lai and Lok (2010) conducted a longitudinal study over the course of a year exploring couples' responses to miscarriage. They found that although women's scores on both a generalised psychological distress measure (General Health Questionnaire-12, GHQ-12) and a depression measure (Beck Depression Inventory, BDI) were significantly higher than men's, over 43% of men scored above the cut-off score of 4 (classified as a high score) on the GHQ-12 and almost 17% scored highly (scored 12 or above) on the BDI. Lewis and Azar's 2015 review discussed the possibility that overall, the

rate of depression in men within the research could be significantly underestimated. This could be for a number of reasons: firstly, research consistently suggests that men feel the need to be the ‘supporter’ for their partner (O’Leary, & Thorwick, 2006) and therefore do not disclose their true feelings. Secondly, men may not be recognising their depression (Sharpley, Bitsika, & Christie, 2016). Thirdly, men’s presentation of depression may manifest in an unconventional way, such as irritability, alcohol and substance abuse and difficulty exercising self-control (Smith, Kyle, Forty, Cooper, Walters, et al., 2008). Fourthly, male specific depression measures do not tend to be used and, therefore, may not capture the way in which men present with depression. Lewis and Azar (2015) also highlighted the fact that the psychological impact of miscarriage on men is generally under-explored. Furthermore, the review emphasised the need for research to use male-specific measures of depression, in order to ensure that any psychological needs that may not be highlighted through standard measures which are applied to both males and females, may be highlighted. This seems important given that men and women may present differently following experiencing a miscarriage.

Cumming et al. (2007) identified an interesting point when exploring men’s reactions to miscarriage; they suggest that miscarriage could be perceived by men as a failure to achieve the goal of having a child. In dealing with these feelings of failure, men may suppress their emotions rather than express them; highlighting a difference in the way that women may respond to the same situation. This emotional suppression can be a consequence of men feeling unhappy but feeling like they should be able to “handle it like a man” (Flynn, Hollenstein, Mackey, 2010). Alternatively, the emotional suppression could in fact be a way for men to distance

themselves from their emotions as a way of coping with the strong emotions they are feeling (Beutel, Willner, Deckardt, Von Rad, & Weiner, 1996). Furthermore, the lack of physical connection with the pregnancy may contribute to the emotional suppression following a miscarriage (Lewis & Azar, 2015).

Masculinity

Men may disregard symptoms of depression as they may perceive them as being incompatible with traditional masculine norms, such as self-reliance and avoiding emotions (Rochlen, Paterniti, Epstein, Duberstein, Willeford, & Kravitz, 2010). Therefore, men can often self-medicate with alcohol or drugs, masking the symptoms of depression, making it difficult to detect. Furthermore, men may be more likely to report symptoms that are more acceptable to dominant masculine norms such as preoccupation with work failure and social withdrawal (Magovcevic & Addis, 2008). Research has looked at the different presentations of depression between men and women and tried to establish a biological explanation for these differences, however, effect sizes tend to be small, and the variability within the sexes is substantially greater than the variability between the sexes (Hyde, 2005). Mahalik (2008) explained that to fully understand depression in men it is important to see it as influenced by social context. Society categorises emotions, traits and conditions as either masculine or feminine, with depression being categorised as 'feminine' (Magovcevic & Addis, 2008). For men who identify with traditional norms of masculinity, such as avoiding emotions, vulnerabilities and intimacy, feeling powerful and in control, having a successful career and believing that men are superior to women (O'Neil, 1990), acknowledging that they might have a 'feminine' issue such as depression may be difficult. However, O'Neil (1990)

documented these norms of masculinity almost 30 years ago, and more recent papers have noted that ‘masculinity’ has changed over these years (e.g. Anderson, 2005).

Nowadays, men are more likely to take on roles that require them to be more involved in parenting, cooking and self-care; a role that men of previous generations rarely dealt with (Gough, Hall, & Seymour-Smith, 2014). With this brings an opportunity to challenge traditional roles of masculinity (e.g. avoiding emotions, feeling powerful and in control and being work-obsessed) and embrace a more modern inclusive masculinity (less focus on masculine and feminine behaviours, support for homosexuality and self-care; Anderson, 2005). Despite the fact that ‘masculinity’ changes as societal values change, within the context of reproductive care, there still seems to be a clear distinction, and inequality in the way men and women are treated. The concept of ‘reproductive masculinity’, proposed by Daniels (2006), suggests that there are gendered roles within reproductive situations, where men are seen as being on the periphery with regards to reproductive situations. This may help to give context and understand why men present in the way that they do following a miscarriage. Hanna and Gough (2017) analysed men’s accounts of infertility based on their posts on online forums and found that men reported feeling that there was an imbalance of experiences between them and their partners, with more ‘power’ given to women, as a result of their biological closeness to the infertility and their perceived increased knowledge in relation to infertility; hence reinforcing the concept of reproductive masculinity. However, they found that men still experienced distress through their experiences (Hanna & Gough, 2017), which does allow for questioning of the concept of ‘reproductive masculinity’ which assumes men to be unaffected by fertility related issues (Daniels, 2006).

Furthermore, perhaps the issue of having a ‘feminine’ emotional response to a reproductive event is compounded by it relating to an area of ‘feminine’ concern. This research focuses on infertility and little research has highlighted the role ‘reproductive masculinity’ may play in the event of a miscarriage, so it would be interesting to explore this further.

Darwin, Galdas, Hinchliff, Littlewood, McMillan et al. (2017) conducted qualitative research which provides an insight into men’s views of their mental health during and after pregnancy. They briefly highlighted the role that masculinity plays on men’s ability to express the emotions associated with pregnancy, as well as the support that they are willing to receive (Darwin et al., 2017). One father used the phrase ‘battle on through’, as if he was having to fight to keep going, because it would be ‘unmanly’ to express his emotions or seek support (Darwin et al., 2017). He also stated that he ‘didn’t know where it came from’, ‘it’ being the need to tell himself to ‘man up’. Darwin et al (2017) interpreted this as a need to be self-reliant and stoical, as well as how the perceived expectations of masculinity and negative attitudes towards depression impacted on the men’s experiences and behaviour during pregnancy and postnatally. This suggests that some men may perceive that there are ‘gender appropriate’ ways to behave in situations surrounding pregnancy. This perception raises the question whether understandings of masculinity could have an impact upon the way in which men experience miscarriage and/or seek support after miscarriage.

Factors that influence well-being following miscarriage

It is important to acknowledge what factors may influence the effect of miscarriage. Various factors have been addressed in the literature as being either protective or

risk factors for parents following a miscarriage, such as, whether couples experience multiple miscarriages and whether the pregnancy was planned (Lok & Neugebauer, 2007). The main factors identified in the literature are: whether couples went on to have children following the miscarriage, what stage of the pregnancy the miscarriage took place, religion, and whether family and friends had experienced a miscarriage. The literature for each factor is outlined below.

Children following miscarriage

Having children following a miscarriage seems to affect the grief response. One study with women found that participants who had had a subsequent pregnancy following a miscarriage or perinatal death displayed a significant decrease in grief levels compared with women who had not yet had another child (Cuisinier, Janssen, DeGraauw, Baker & Hoogdiun, 1996). Franche and Bulow (1999) compared the experiences of women and their partners who had experienced a miscarriage and had subsequently become pregnant, with women and their partners who had experienced a miscarriage and not become pregnant. They found that women who were pregnant experienced significantly lower levels of despair and difficulty coping. However, their grief intensity remained just as high as in the other group. Thus, suggesting that although a subsequent pregnancy may lessen the active grief response, it does not change the fact that the women are still mourning a loss. Interestingly, within the study, the men who were expecting another child did not report lower levels of grief, anxiety or depression compared with men who were not expecting, although scores for both groups were low (Franche & Bulow, 1999). Given that this research was conducted 20 years ago, and men were not the sole focus of the research, it would be

interesting to explore whether having a child following a miscarriage would have an impact on men's psychological well-being.

Stage of pregnancy

Research is extremely varied with regards to the impact that stage of pregnancy at the time of loss has on psychological and emotional well-being. Some research states that early pregnancy loss can produce a similar grief response to the loss of any loved one (Lok & Neugebauer, 2007). Other research has found that the length of gestation does not seem to impact on the intensity or duration of the grief experienced by women (Klier, et al., 2002). Research on men is limited with regards to stage of pregnancy. Some research has found that men's grief scores increase as length of pregnancy increases (Puddifoot & Johnson, 1999). However, other research has suggested that length of pregnancy does not impact on grief response (Johnson & Puddifoot, 1996). Sample sizes were small in these studies as they were conducted over 20 years ago, therefore, it would be interesting to establish whether stage of pregnancy at the time of the miscarriage has an impact on the psychological well-being of men given that the research is inconsistent and dated.

Religion

Religion has been found to both help and hinder coping following loss. Some research suggests that regular attendance at religious services is associated with fewer symptoms of depression and anxiety (Sternthal, Williams, Musick & Buck, 2010). Moreover, religion can offer a framework for coping, for example, Christianity, Islam and Judaism offer a framework to grieve following loss, which may provide some structure to individuals going through miscarriage, at such a confusing time (Allahdadian & Irajpour, 2015). Religious participation can affect an

individual's belief system and therefore may help with the grieving process by giving meaning as to why the loss has occurred (Brier, 2008). However, religion has also been found make coping more difficult. For example engaging in negative religious coping, such as feeling abandoned by God or feeling frustrated by the community, is positively associated with anxiety and depression (Sternthal et al., 2010).

When discussing how people may cope with miscarriage, research has been just as mixed in relation to the impact religion has. Some research has suggested that if women have stronger religious beliefs it can help them to grieve in a more positive way following a pregnancy loss (Cowchock, Ellestad, Meador, Koenig, Hooten, & Swamy, 2011). However, negative religious coping has also been found to be associated with higher levels of grief for women who have experienced pregnancy loss (Cowchock, Lasker, Toedter, Skumanich & Koenig, 2010). Allahdadian and Irajpour (2015) describe how Islam does not underestimate the grief associated with perinatal loss and recognises it as a real death; however, they do not expand on whether other religions share similar views. A recent study has highlighted that religious participation is associated with better mental health for women following a miscarriage (Petts, 2018). Research appears limited on the impact that various religions may have on well-being following a miscarriage, in particular for men.

Family and friends experienced miscarriage

Rowlands and Lee (2010), in their qualitative research, found that women felt that their most valuable support was from family and friends who had also experienced pregnancy loss, with many women noting that gaining emotional support from others was essential during this time. High levels of social support generally has

been found to be a protective factor in preventing psychological distress after miscarriage (Kersting & Wagner, 2012). Despite this evidence, there is also evidence to suggest that although family and friends may be supportive during pregnancy, they may withdraw that support at the time of a perinatal loss as they do not know how to offer support and manage the loss (Rajan, 1994). Further to this, Rajan (1994) wrote how women most frequently complained that people who they considered friends ignored them following the loss. However, it is important to note that this research is 25 years old and the discourse around pregnancy loss in society has potentially changed in this time, although Petts (2018) does write that miscarriage remains a socially taboo topic. More recent evidence emphasises that social support is not only valuable but necessary for managing loss (e.g. Van & Meleis, 2002). Little research had explored the role of family and friends for men, until recent research by Wagner, Vaughn and Tuazon (2018) highlighted the important role family and friends play in providing support to men, in particular support from those who have had previous experience of miscarriage.

Measurement of impact

When considering the impact of miscarriage on men and women, it is difficult to distinguish exactly what they are experiencing into a single construct, such as ‘depression’, ‘anxiety’ or ‘grief’. Adolfsson (2011) outlined a distinction between depression and grief in women who experienced a miscarriage. She stated that although some symptoms may overlap, depression is often seen as an ‘illness’ and grief is seen as a normal response to a distressing event. However, it is important to identify when people are experiencing grief outside of what would be perceived as ‘normal’ limits, known as ‘complicated grief,’ and described further below. Using

standardised measures is a way of establishing whether someone's response to a miscarriage is more aligned with grief, anxiety or depression, without having to diagnose individuals with these labels. As a way of specifically measuring grief after perinatal loss, a self-reported measure was developed, the Perinatal Grief Scale (PGS; Potvin, et al., 1989), which provides an indication of how individuals are coping following pregnancy loss. Although originally developed for women, the scale has been used in research to establish grief responses in men as well as women, and results have indicated similarities in men and women's responses on the measure (Toedter, Lasker, & Janssen, 2001). Furthermore, there does not seem to be other reliable measures of perinatal grief that are used within the literature; the Perinatal Bereavement Grief Scale (Ritsher, & Neugebauer, 2002) was developed as a measure to assess yearning for the pregnancy and baby and preoccupation with the baby rather than an assessment of grief. Therefore, the PGS is a useful measure for obtaining scores related to grief for men.

In order to measure anxiety, Generalised Anxiety Disorder-7 (GAD-7) is most commonly used both clinically and within research and is seen as a valid and reliable tool (Mills, Fox, Malcarne, Roesch, Champagne & Sadler, 2014). The most commonly used measure for assessing depression is the Patient Health Questionnaire (PHQ) which uses the Diagnostic and Statistical Manual of Mental Disorders (DSM) criteria of depression as a basis for the items (Lowe, Unutzer, Callahan, Perkins & Kroenke, 2004). The DSM-5 criteria of major depressive disorder outlines symptoms such as depressed mood, significant weight loss, feelings of worthlessness and fatigue (American Psychiatric Association, 2013), which may not be the way in which men experience depression. Martin (2010)

argues that as a result of this gendered presentation of symptoms, there is a lack of recognition that what men are experiencing is depression. Furthermore, men are less likely to report their symptoms as they often clash with the ideals of masculinity and the social construction of gender roles (Martin, 2010). Male measures of depression have been developed in order to capture the different presentation that is often seen in men. Measures such as the Male Symptoms Scale (MSS; Martin, Neighbors & Griffith, 2013) include items which ask about alcohol consumption, anger and aggression, and stress; which are items not covered by standard depression measures such as the PHQ, and are therefore useful to use in addition to the PHQ to indicate any masculine traits of depression.

Summary of impact of miscarriage

Miscarriage has been found to have a psychological impact on women and men resulting in grief, anxiety and depression. A number of factors have been highlighted as influencing well-being following a miscarriage, such as whether couples have another child or whether family and friends have experienced a miscarriage.

However, men's perspectives have still been largely overlooked in the literature or only addressed as part of couple focused studies. Perhaps this is due to 'reproductive masculinity', in which men are seen to be on the periphery in relation to reproduction, or perhaps because the presentation of psychological difficulties may appear differently in men.

Loss and grief

Some say that in order to fully understand life and living, people must first learn about death and dying (Corr, Corr & Doka, 2017). Bereavement will almost

certainly affect every individual at some point in their lives and, therefore, can be viewed as a natural human experience, which most people manage to come to terms with over the course of time (Stroebe, Schut & Stroebe, 2007). Nevertheless, loss is associated with a period of suffering for most individuals, which leads to an increased risk of developing mental and physical health problems (Stroebe, et al., 2007). Grief is defined as a primarily emotional reaction which includes physiological and psychological reactions (Stroebe, Hansson, Stroebe & Schut, 2001). Grief is seen as a normal response to loss that should not be pathologised, but when symptoms of grief become more intense and last for a prolonged period of time then this can be categorised as ‘complicated grief’ (Shear, Simon, Wall, Zisook, Neimeyer et al., 2011). Shear et al (2011) highlight the necessity for complicated grief being included as part of the DSM, due to it having a unique presentation and associated risk factors that requires targeted treatment. It has since been included in the DSM-5 as ‘persistent complex bereavement disorder’ and about 10% of all bereaved people develop this following a loss (Shear et al., 2011). As grief is a normal response to a loss, it may be difficult to understand grief as being pathologised; however, it is important that those who are struggling after loss receive appropriate care and support, to aid them in accepting and adapting to life without their loved one.

Grief and loss of a child

Although loss is experienced by all of humanity, and therefore is normalised, the death of a child is only experienced by some and is, therefore, seen as incomprehensible (Arnold & Gemma, 2008) and may cause intense grief (Rando, 2000). This may be because it is not merely the loss of the child that the parents must

cope with, but also loss of a role as parent and loss of dreams of the child's future (Christ, Bonanno, Malkinson, & Rubin, 2003). The death of a child at the time of birth is one of the most stressful life events in adult life (Bonanno & Kaltman, 2001) and has a long-term impact on parents' well-being (Kersting & Wagner, 2012). Research has found that bereaved parents are at increased risk of hospitalisation for their psychiatric health (Li, Laursen, Precht, Olsen & Mortensen, 2005). In a population-based sample, parents who had lost a child showed the highest prevalence of complicated grief (Kersting, Braehler, Glaesmer & Wagner, 2011a) and although the grief may become more manageable over time, the grief can continue throughout their lives (Christ et al, 2003). Furthermore, grief following a perinatal loss has been found to be similar to that of other losses, including complicated grief responses (Kersting et al., 2011a). Perhaps this is in part due to the fact that pregnancy loss is sudden and unexpected (Bhat & Byatt, 2016) or because grief associated with pregnancy loss is often not openly acknowledged within society, in particular within Western cultures (Mulvihill & Walsh, 2013). This is possibly because within Western cultures people often do not disclose pregnancy until 12 weeks gestation and, therefore, miscarriage before 12 weeks is rarely spoken about.

Theories and models of grief

The following section will consider the relevant theories and models of grief available in the literature. Grief is a unique experience and theories of grief and bereavement can help to consolidate the many ideas about how people deal with the death of a loved one. There are a number of theories and models proposed for understanding loss and grief.

The most well-known model of understanding grief is the stage model proposed by Kubler-Ross (1969); outlining five distinct stages of denial, anger, bargaining, depression and acceptance. This original model was criticised as oversimplifying the grieving process and the complex nature of dealing with a loss (Stroebe, Schut, & Boerner, 2017). Over the years Kubler-Ross evolved her stage model from one in which people move through in a linear fashion, to one which acknowledges that not everyone will go through all of the stages in the order she originally proposed (Kubler-Ross & Kessler, 2005). However, the stage model has still received criticism, noting that if people will not go through all of the stages or in order, and grief is unique to each individual, there cannot be a stage model that universally represents individual's response to loss (Friedman and James, 2008). Furthermore, there is currently minimal evidence to suggest whether grief following a pregnancy loss is reflective of the stages presented by Kubler-Ross (Mcgee, PettyJohn, & Gallus, 2018). A recent paper by Stroebe et al. (2017) highlighted that there is still a need for an easily accessible, comprehensible, informative model, based on theory, that substitutes the stage model and attempts to explain the process of dealing with loss and life thereafter. The fact that a model of this nature has not been produced to date perhaps indicates the complexity of grief and that loss is difficult to conceptualise into a single model.

A model of grief proposed by Stroebe and Schut (1999) focuses on coping and adaptation to loss rather than a broad model aimed at attempting to understand the phenomena that is bereavement and seems less prescriptive than the stage model presented by Kubler-Ross. They initially proposed this model as an alternative to the stage models of understanding grief as they felt that those models seemed passive, as

if a person is being put through a situation rather than actively dealing with it, and therefore incorporating the effortful struggle that is part of grieving into their model. Their dual process model of grief provides two components; one is focused on the intrusion of the loss and confronting the loss and the other component focuses on restoration and distraction from the grief. A distinguishing feature of this model is that it emphasises that life after loss involves an oscillating processes between these two components which is unique to each individual. When this oscillation does not occur complicated grief may occur with people potentially becoming stuck in either component (Stroebe & Schut, 2010). Stroebe and Schut (2001) recognised that the motivating factor adaptation to loss and allowing for the oscillation to occur is the search for meaning, both in the loss and the new life. Finding meaning in loss following a miscarriage seems to be an important part of the grieving process for women (Mcgee, et al., 2018) and therefore perhaps a framework based on meaning-making (e.g. meaning reconstruction (Gillies & Neimeyer, 2006)) could be relevant for giving individual support following a miscarriage, rather than the expectation that experiences of grief are universal.

A key foundation for understanding loss and mourning comes from attachment theory which posits that well-functioning bonds developed in early life are important in providing a secure base which in turn allows an individual to develop independence and resilience and strive for goals (Bowlby, 1969). Based on this theory, Bowlby and Parkes (1970) outline a four-phase model of mourning which includes shock and numbness, yearning and searching, disorganisation and despair, and reorganisation. These four phases are characterised by the response of bonds being disrupted when death occurs and, as those bonds cannot be regained, this may

lead to protest and despair. According to attachment theory, grief is a natural response for an individual who is wanting to keep a closeness with the deceased and minimise separation (Brier, 2008). This may be a helpful framework for understanding grief after miscarriage as there is a strong sense of yearning for an anticipated, mostly imagined relationship (Brier, 2008).

The prenatal attachment theory recognises the bond that forms between the unborn child and mother (DiPietro, 2010) and father (Vreeswijk, Maas, Rijk & van Bakel, 2014) during pregnancy, and this ongoing relationship can be an important part of how parents will adapt to the loss (Field, 2006). In modern times, prenatal attachment is facilitated by the availability of graphic ultrasound imaging, as it provides parents with the opportunity to visually bond with their unborn baby (Robinson, Baker, & Nackerud, 1999) and therefore it is reasonable to expect fathers to develop more of a bond with an unborn baby and, thus, gives reason for the evidence which suggests an intense grief response experienced by men following a loss. However, in the UK the NHS provide an ultrasound scan at 12 weeks gestation and, prior to this, couples would have to pay for a scan privately; therefore, it would be interesting for more current research to establish whether prenatal attachment changes pre and post the 12-week scan. Using attachment theory, or models of grief based upon it, to better understand grief in relation to miscarriage may be important for health care professionals in that it may help them to acknowledge the severity of the loss and provide support accordingly. However, the prenatal attachment research has largely focused on women and therefore development of better understanding of fathers prenatal attachment would be beneficial.

The Kubler-Ross (1969) and Bowlby and Parkes (1970) phase models provide concise ideas of how some people may experience bereavement and are a helpful way of finding patterns in human behaviour in order to promote these stages or phases as a shared experience. However, grief is complicated and attempting to find similarities in the way that people grieve does not account for individual uniqueness. Therefore, when considering the theoretical underpinnings of loss, it is important to keep in mind that not every loss will fit into the categories posited by the theories or models. The experience of loss can vary by intensity, duration and the way in which individuals express it (Center for the Advancement of Health, 2004). Individuals are uniquely different and are partly a product of the society and culture they live in, therefore, the way that they deal with loss will differ. Using attachment theory more broadly may offer a more universal understanding of loss that is more easily generalised, rather than a particular model, as there is recognition that bonds between parent and child begin in utero (DiPietro, 2010; Vreeswijk et al., 2014) and these bonds can continue after a perinatal death (Neimeyer, Burke, Mackay, & van Dyke Stringer, 2010).

Summary of loss and grief

Grief is a normal response to a loss and experiences of grief varies by individual. In some circumstances, such as perinatal loss, when grief becomes more intense and lasts for longer, it is categorised as ‘complicated grief’ and this is when it may be helpful for health care professionals to use theory in order to better understand grief and loss. There are a number of models and theories addressing grief and it is important to consider the grief response in individuals who have experienced

miscarriage and whether this links to the theories of grief and compares to grief responses to other losses.

Support

An important reason for trying to gain an understanding of the grief experienced by people following a loss is to ensure that the correct provision of care and support is offered. This section will explore what sources of support are available for people generally, followed by the literature around support that might be available following loss, and perinatal loss in particular. Help can be sought from a wide variety of sources and is often split into two categories; formal and informal support. Formal support is provided by a professional as part of an organisation whereas informal support is provided by social support such as family and friends (Lipman & Longino, 1982).

Support available for loss

Following a death, support may be provided in a number of ways, however it is argued that the need for support must first be acknowledged by the mourner (Breen & O'Connor, 2011). Primary sources of support following a loss may come from partners, family members, friends, colleagues, and the wider social and community networks (Taylor, 2007). The largest proportion of care for griever comes from community-based social networks as opposed to professionals (Aoun, Breen, Howting, Rumbold, McNamara & Hegney, 2015). For most people, grieving in the context of their family and friends is sufficient and they do not require formal services (Aoun et al., 2015). This research was based in Australia and was not specific to men or miscarriage, but general bereavement. It would therefore be

interesting to assess whether these findings are also applicable to men who have experienced pregnancy loss. Within research, emphasis has been placed on mourners making meaning of the loss in order to adapt to life without the deceased (Neimeyer, 2011). This may be alone or with family and friends, or perhaps with a grief counsellor or organisation specialising in grief work, for example Cruse.

Bereaved parents most commonly seek support from family and friends, religious representatives, hospital and specific charities (Banerjee, Kaur, Ramaiah, Roy & Aladangady, 2016). Banerjee et al (2016) highlight that very little research has been conducted looking at factors associated with seeking support after a stillbirth or neonatal death. They conducted research over a six-year period at two neonatal units in the UK and found that parents who had previously experienced a miscarriage or stillbirth and parents of African or Afro-Caribbean ethnicity were more likely to access support services. Furthermore, their results showed that those parents who were married or co-habiting were significantly more likely to seek support. Their paper is focused on stillbirth rather than miscarriage, and does not distinguish between men and women (it refers to ‘parents’) and, therefore, it seems important to establish whether these same factors influence men’s support seeking behaviour after miscarriage.

Support available for miscarriage

In their 2013 review, Koopmans, Wilson, Cacciatore and Flenad noted that no robust studies had been undertaken to determine the effect of grief counselling or psychotherapy on parental grief following pregnancy loss. They highlighted the important role that psychosocial support plays for women and families following a stillbirth (Froen, Cacciatore, McClure, Kuti, Jokhio, Islam et al., 2011). However,

little is mentioned regarding the psychosocial support for women and men following a miscarriage. The support that follows a pregnancy loss is vital in preventing complicated grief (Shear, 2012). Sadly, research has illustrated that women are often dissatisfied with the care and support they received following a miscarriage (Geller, Psaros, & Kornfield, 2010) due to insensitive comments made by staff, a lack of empathy and poor resources (Lang et al., 2011). Findings from recent research with men from Australia have echoed the findings from women, stating inconsistent hospital experiences following a miscarriage (Obst & Due, 2019). Interestingly, a study exploring health care professionals (gynaecologists, general practitioners, midwives and sonographer) views of their roles in supporting women following a miscarriage, found that they prioritise the physical needs of women over the psychological needs (Jensen, Temple-Smith, & Bilardi, 2018). This perhaps gives an indication of why men and women feel that the care following a miscarriage is inconsistent, as the care does not address the emotional impact a miscarriage may have. The NHS only published their first guidelines around care following miscarriage in 2012, which emphasised the importance of support and follow-up care for women (NICE, 2012). Although partners are discussed in this document, they are only mentioned a handful of times and very little emphasis is placed on the impact that miscarriage may have on partners, including men, and the support they may require. Perhaps the lack of emphasis is due to the fact that it is largely unknown what would be the most appropriate support to be offered following a miscarriage, in particular to men.

Research has found that there is a correlation with support, from medical staff and friends and family, and lower levels of anxiety and depression in mothers

following a perinatal loss, with family support being the most significantly helpful (Cacciatore, Schnebly, & Froen, 2009). Wagner et al., (2018) found that when men received support from others this validated their experience of loss, and when they did not feel validated, they were less likely to seek support. In Western cultures, people often wait until they are past 12 weeks gestation before announcing their pregnancy. This potentially means that support networks may be unaware of pregnancies and thus an early miscarriage, and, therefore, may not be able to offer support. This is why charities and support groups are important for providing support to those who have not yet disclosed their pregnancy to family and friends. One of these charities, Tommy's, is a UK based charity which provides information around pregnancy loss and funds research in the area. They also provide support over the phone and online following a perinatal loss or in subsequent pregnancies. Their aim is to open up conversations, allowing people to talk about their experiences, to reduce shame that can be associated with miscarriage. There are a number of other charities and organisations that provide support following a miscarriage, such as the Miscarriage Association and 4Louis, and religion specific charities such as Children of Jannah and Chana.

Obst and Due (2019) found that some men who had experienced miscarriage found more informal tools of support helpful, such as literature about grief and practical advice, whereas others needed more formal support such as individual counselling or support groups. However, despite feeling the need for more formal support, Obst and Due (2019) reported that the men in their study reported discomfort with seeking that support and instead relied on informal support from family and friends. Perhaps a way of reaching more men who feel uncomfortable

seeking formal support, and therefore providing a more inclusive and supportive service, is through the use of online platforms. Seeking support online, such as through forums, has become a growing resource in recent years (Tanis, 2008). It provides an accessible platform for people to share experiences and seek help and support. According to Colineau and Paris (2010), seeking emotional support is the main reason people use health-related social networks.

Online support is often seen as a useful source of psycho-education and may provide a source of emotional support (Glanz, Rimer & Viswanath, 2008). A recent qualitative study with 12 women explored how and what information women sought online following a miscarriage (Pang, Temple-Smith, Bellhouse, Trieu, Kiropoulos, Williams, et al., 2018). They found that women search for causes and preventative strategies to give information for future pregnancies. Furthermore, women also seek psychological support and emotional relief by reading other people's experiences (Pang et al., 2018). General web-based mental health services can provide information, self-help groups and virtual counselling services for specific mental health problems such as post-traumatic stress (Knaevelsrud & Maercker, 2007) and complicated grief (Wagner, Knaevelsrud, & Maercker, 2006). These services may be able to provide appropriate services for parents who experience perinatal death (Kersting, Kroker, Schlicht & Wagner, 2011b).

Kersting et al., (2011b) present a case study which aimed to reduce grief symptoms for a woman following a miscarriage, through internet-based therapeutic support. The treatment led to a significant reduction in grief symptoms. However, there were a number of drawbacks of this case study, mainly that it was difficult to

account for and manage any risk and also that it is difficult for a therapist to respond in a timely manner (Kersting, et al., 2011b). Although different to specific internet-based therapeutic support, Andalibi, Ozturk and Forte (2017) found that people do use social media outlets, such as Instagram, to seek social support around difficult life experiences. With online support being so readily available nowadays, it is important that research moves to establish whether there are changes in the way people seek support now. Moreover, as there is a large number of people who are constantly available to give timely responses on social media and in online communities, this may provide a solution to the drawback of online treatment programmes that therapists are unable to respond in a timely manner. The responses given by members of these communities may not be the same responses a therapist may give, but potentially they can provide a supportive environment for individuals to express their feelings and find support. Perhaps whether online support, either through specific therapeutic programmes or through social media outlets, is beneficial for men following miscarriage should be explored further.

Summary of support

People seek support in a variety of ways. Following a loss, research has indicated that people primarily seek support from family and friends. This is also true following a perinatal loss. However, women have reported feeling dissatisfied with the care and support they received following a miscarriage. Perhaps a way of addressing this is for health care providers to provide support through online platforms, alongside face-to-face support, as they are growing in popularity. Little is known about the support men may seek following a miscarriage and therefore, it is

important to establish what support men have sought following a miscarriage and if they are satisfied with this.

Help-seeking with men

Men seem to exhibit reluctance to seeking help (Hammer, Vogel & Heimerdinger-Edwards, 2013), which is of concern given the public health concerns regarding higher rates of suicide in men compared to women (Oquendo, Ellis, Greenwald, Malone, Weissman, & Mann, 2001) and higher rates of alcohol abuse in men (Karlman, Zhou, Reuben, Greendale & Moore, 2006). As stated above, Berger, Levant, McMillan, Kelleher and Sellers (2005) found that men who adhered to traditional masculine ideologies (e.g. aggression, achievement-status, restrictive emotionality, attitudes towards sex) were less likely to seek psychological help. Furthermore, research has consistently found that regardless of age, ethnicity or social background, men are less likely than women to seek support for any mental or physical problems (Addis & Mahalik, 2003). This may be for a number of reasons, one proposed in the literature is that men may want to avoid being diagnosed with a stigmatised mental health label such as ‘anxiety’ or ‘depression’ and therefore refrain from seeking help (Berger, Addis, Green, Mackowiak & Goldberg, 2013). Another possible explanation is because when men do disclose feeling depressed, the response they receive is usually disbelief, which can lead to feelings of rejection (Ramirez & Badger, 2014).

Understanding men’s help-seeking behaviour plays a crucial part in effective health care service delivery. Having more of an understanding will enable services to provide more personal and targeted care to men who require it. Some research has

used hegemonic masculine norms to promote help-seeking, such as redefining seeing support as demonstrating autonomy and strength (Roy, Tremblay & Roberts, 2014). The use of a specific measure, such as the Conformity to Masculine Norms Inventory (CMNI; Mahalik, Locke, Diemer, Ludlow, Scott, Gottfried, & Freitas, 2003), to assess how much men feel they adhere to masculine norms is important in establishing whether a relationship exists between men who adhere to masculine norms and help seeking behaviour. Although it is important to consider trends as it may allow for better understanding of what may make a difference to help-seeking, it is important to bear in mind that men are individuals and some men who adhere to traditional masculine norms may seek help and cry in some situations, just as some men who do not subscribe to masculine norms may not seek help (Addis & Mahalik, 2003).

Summary of help seeking

The literature evidences that men are reluctant to seek help for psychological issues. It is important to understand why this is the case. Some research links adhering to masculine norms with seeking help and therefore it would be beneficial to establish whether masculine traits are related to help-seeking following a miscarriage. This in turn could help health care providers better support men in seeking help.

Summary of literature review

Miscarriage is the most common complication of pregnancy, with one in every four known pregnancies ending in a miscarriage (Tommy's, 2018). The grief experienced as a result of pregnancy loss has been found to be similar in intensity to other loss scenarios (Kersting & Wagner, 2012). Yet, men's perspectives and experiences of

miscarriage have still been largely overlooked in research. Even when men are included in the research it has been suggested that the overall rate of mental health difficulties, including depression, in men within the research could be significantly underestimated (Lewis and Azar, 2015). This could be for a number of reasons; firstly, men may not be recognising their depression (Sharpley et al., 2016), secondly, men's presentation of depression may manifest in an unconventional way, such as irritability, alcohol and substance abuse and difficulty exercising self-control (Smith et al., 2008), and thirdly, masculine specific depression measures do not tend to be used and therefore may not capture the way in which men present with depression. Therefore, it is important that the current research takes this gender-specific underestimation of depression into consideration, in order to explore the experiences that men have following a miscarriage in a way that is relevant for men. In addition, little is known about whether any particular factors may influence the response men have following a miscarriage and therefore this should be explored further.

Grief is a normal response to a loss and experiences of grief varies by individual. The use of the PGS has been a useful tool in highlighting that men and women can experience similar levels of grief (Potvin, et al., 1989). In some circumstances, such as perinatal loss, when grief becomes more intense and lasts for longer, it is categorised as 'complicated grief' (Shear et al., 2011) and this is when it may be helpful for health care professionals to use theory in order to better understand grief and loss. There are a number of models and theories addressing grief, in particular the use of attachment theory to understand perinatal loss may be helpful as the prenatal attachment theory recognises the bond that forms between the

unborn child and mother (DiPietro, 2010) and father (Vreeswijk et al., 2014) during pregnancy and this ongoing relationship can be an important part of what parents will do to adapt to the loss (Field, 2006). Support following a miscarriage can be provided in a number of ways, and perhaps understanding underlying theories of attachment would be a good foundation for health care providers to provide a supportive service for those who have experienced a miscarriage. Little is known about the support that men may seek following a miscarriage and therefore, it is important to establish what support men have sought following a miscarriage and if they are satisfied with it. This may prove difficult as men seem to exhibit reluctance to seeking help (Hammer et al., 2013). Some research has suggested that this is related to whether men adhere to traditional masculine norms (Hammer et al., 2013) and therefore it would be beneficial to establish whether masculine traits are related to help-seeking following a miscarriage, and more generally what other factors may be facilitating or preventing men from seeking support.

Research Aims & Questions:

As the Priority Setting Partnership highlighted the importance of understanding the emotional impact of miscarriage on women and their partners (Prior et al., 2017), the current research aims to explore the emotional experiences of men after miscarriage. Specifically, the aim is to establish if men experience any psychological difficulties, what factors may predict this, and if men accessed any support. The research attempts to answer the following research questions:

- Do men experience psychological difficulties post miscarriage?
- What factors predict these psychological difficulties?

- What support do men require?
- What are the facilitators and barriers for men accessing support post miscarriage?

Method

This chapter presents the chosen design to answer the research questions followed by detailing the measures used to do this. This is followed by an outline of the research procedure including details of the participants involved and the analysis undertaken. To conclude this section a commentary of my personal positioning and reflective process as a qualitative researcher is included.

Design

To answer the research questions outlined in the introduction, and due to the fact that the research is exploratory in nature, a mixed methods design was undertaken. In order to establish prevalence of psychological difficulties in men post miscarriage and factors that may predict this, a quantitative correlational design was used. To gain a deeper understanding of men's personal experiences, their psychological well-being, and their opinions of the support available and the support they would like to have received, including any facilitators and barriers, a qualitative design was used.

In terms of the philosophical paradigm, it has been proposed that pragmatism is the best paradigm for mixed methods research (Teddlie and Tashakkori, 2009), as it places less emphasis on philosophical assumptions and allows the researcher more flexibility in conducting the research in an appropriate way to best fit the research questions. On the other hand, a critical realism paradigm has been suggested to bridge divides between quantitative and qualitative approaches and suggests that theories on reality are partial and therefore places emphasis on different viewpoints (Shannon-Baker, 2016). The philosophical stance that I have taken to conduct this mixed methods research is somewhat in between the pragmatic and critical realist

paradigms. Whilst I ensured that there was a strong emphasis on the research questions and shared meaning making of experiences, as dictated by a pragmatic approach, I was also aware of the many layers of reality that exist and that the men who partook in this research gave me their version of events that they wished to portray to me.

Participants

Participants were invited to take part in the online questionnaire if they were men over the age of 18, who have experienced miscarriage, and living in the UK. There was no time-limit as to when the miscarriage took place as Lin and Lasker (1996) found that grief following pregnancy loss is still present over two years later. Furthermore, research has indicated that grieving is a lifelong process (Betz & Thorngren, 2006) and, therefore, the timeframe was kept as open as possible to ensure that the views of all men who have experienced a miscarriage were captured. In addition to this, the Priority Setting Partnership outlined the importance of establishing the emotional impact of miscarriage both in the short and long term (Prior et al., 2017) and, therefore, keeping the timeframe open for all men to participate is important to capture the long-term impact.

Five hundred and twelve men completed the online questionnaire in total. Demographic information for these participants is presented in the results section. Nineteen men expressed an interest in being interviewed for the research. However, due to location of the interviews or work commitments most could not attend. The final qualitative sample was seven interviews.

Sample size

In planning the research, it was calculated through the G*Power program that 64 participants would be needed for the regression analysis to detect a medium effect size, using the standard α -level of 0.05 and wanting to achieve a power of 0.8.

Measures

An online questionnaire was developed through Online Surveys and included questions to obtain demographic information, such as age and religion, as well as topics such as the length of gestation prior to the loss, whether they had children before or after the miscarriage, and how long it had been since the miscarriage (see Appendix B for the full online questionnaire). These questions were used to assess what, if any, factors impact upon psychological well-being in men after experiencing a miscarriage. Additionally, the psychometric measures that are discussed below were included to assess psychological well-being, in particular depression, anxiety and grief, as they were highlighted within the literature as most commonly expressed concerns following a miscarriage. The questionnaire was checked and approved by Tommy's head of communications to ensure that the questions were appropriate and worded sensitively.

The Patient Health Questionnaire- 9 (PHQ-9)

The PHQ-9 comprises 9 questions which evaluate the presence of the nine DSM-IV (American Psychiatric Association, 2000) criteria for major depressive disorder in the previous two weeks. The statements include topics such as whether the individual has felt 'down, depressed or hopeless' or if they've had 'trouble falling asleep or staying asleep or sleeping too much'. Individuals were asked to rate their

answer based on a four-point scale – ‘not at all’ (score of 0), ‘several days’ (score of 1), ‘more than half the days’ (score of 2), ‘nearly every day’ (score of 3). The total score on the measure is 27, which indicates an increased severity of symptoms (Kroenke, Spitzer, & Williams, 2001). Whilst the PHQ-9 was not included to be used as a diagnostic tool, it is useful to keep in mind the established cut-offs of 5, 10, 15, and 20 which represent mild, moderate, moderately severe, and severe levels of depressive symptoms, respectively (Kroenke, Spitzer, Williams, & Lowe et al., 2010). The PHQ-9 has sound psychometric properties with Cronbach alpha of 0.86, indicating a strong internal reliability (Kroenke et al., 2001). Furthermore, Kroenke et al. (2001) assessed data from 6000 patients in 2 studies and found strong evidence for the validity of the PHQ-9.

Generalised Anxiety Disorder- 7 (GAD-7)

The GAD-7 is a 7 item self-reported questionnaire for measuring generalised anxiety. The items are based on the most prominent features of the DSM-IV diagnostic criteria for generalised anxiety (American Psychiatric Association, 2000). The questionnaire asked individuals if they have been bothered by each of the 7 statements over the past 2 weeks. The statements include ‘feeling nervous, anxious or on edge’ and ‘becoming easily annoyed or irritable’. Individuals were asked to rate their answer based on a four point scale – ‘not at all’ (score of 0), ‘several days’ (score of 1), ‘more than half the days’ (score of 2), ‘nearly every day’ (score of 3). The total score on the measure is 21, with higher scores indicating higher severity of symptoms. As with the PHQ9, the GAD7 was not included to be used as a diagnostic tool but it is useful to know the cut-off scores of 5, 10 and 15 represent mild, moderate and severe anxiety symptom levels respectively (Spitzer, Kroenke,

Williams, & Lowe, 2006). Mills et al. (2014) reported that the GAD-7 has good psychometric properties with Cronbach's alpha of 0.92, indicating good internal reliability. They explain that convergent validity has been shown by comparing the GAD-7 with two other anxiety measures and construct validity was shown by increasing GAD-7 scores correlating with functional decline.

Male Symptoms Scale (MSS)

The MSS is a scale developed by Martin et al. (2013). It exclusively includes symptoms of depression described as 'male-type'. It assesses eight constructs (irritability, anger and aggression, sleep, alcohol and drug use, risk taking behaviour, hyperactivity, stress and loss of interest) using yes or no questions. There is a score of 1 given for each symptom endorsed. As sleep and loss of interest are asked about in the PHQ-9, those items were excluded from the MSS, to reduce the number of duplicate questions asked. Therefore, rather than 8 questions, 6 questions were used and the maximum total score on the MSS became 6. Internal consistency was measured by Cronbach α and was 0.71 demonstrating a relatively high internal consistency. Martin et al. (2013) also tested the concurrent validity of the MSS compared with a lifetime diagnosis of major depressive episode and found that the correlation coefficient was 0.70. The MSS is a male depression scale developed in the US, and not used with UK population before and therefore it will be interesting to assess its use with a UK sample.

Perinatal Grief Scale (PGS)

The PGS (Potvin et al., 1989) shortened version consists of 33 items which incorporates the many different dimensions of grief (Toedter et al., 2001). The PGS includes items such as 'the best part of me died with the baby' and 'I very much

miss the baby'. The PGS is scored by reversing all items apart from two, and then adding the scores together. Scores range from 33-165. A higher total score reflects more intense grief. The internal consistency of the PGS is very high, with Cronbach α being 0.95 (Potvin et al., 1989). Hunfeld, Wladimiroff, Passchier, Uniken Venema-van Uden, Fets and Verhage (1993) assessed the validity of the PGS by comparing it to the Impact of Events Scale and a clinical diagnosis of psychological instability and found that it is a valid assessment for women who have experienced pregnancy loss. The PGS has been used in research to establish grief responses in men, and results have indicated similarities in men and women's responses on the measure (Toedter, et al., 2001).

Conformity to Masculine Norms Inventory (CMNI)

The CMNI (Mahalik et al., 2003) contains 94 items answered on a 4-point Likert scale from strongly disagree to strongly agree. It is designed to measure attitudes, behaviours and cognitions reflecting conformity to and non-conformity to eleven masculine norms. These eleven norms are winning, emotional control, risk-taking, violence, power over women, dominance, playboy, self-reliance, primacy of work, disdain for homosexuals and pursuit of status. Higher scores on the CMNI reflect greater conformity to the identified masculine norm. To answer all 94 items would take approximately 10-15 minutes and therefore only some of the eleven subscales were included due to wanting to limit time spent answering the online questionnaire. The three subscales included in the current research were self-reliance, emotional control and risk-taking. Construct validity was supported initially by Mahalik et al. (2003) and has been reaffirmed since by a number of studies (e.g. Wong, Owen, & Shea, 2012) . Permission to use the CMNI for the current research was granted by

the leading author Dr Mahalik. Although the CMNI was developed in the US, and therefore the norms may be more applicable to US masculine norms, the measure has been used with UK samples (e.g. Gattario, Frisé, Fuller-Tyszkiewicz, Ricciardelli, Diedrichs, Yager, et al., 2015). It is important to note that this measure was developed over 15 years ago and that social changes may have perhaps influenced some of the notions of masculinity portrayed in the CMNI. For example, disdain of homosexuals may not necessarily be such a prominent aspect of masculinity, as in the past 15 years there has been an improvement in attitudes towards homosexuality generally (Mucherah, Owino & McCoy, 2016). However, it is important to measure men's conformity to masculine norms as this may influence their support access.

Help-Seeking

As the literature in the introduction outlined, men are more reluctant to seek help. In the current research, help-seeking behaviour was measured by asking two questions on the online questionnaire. Firstly, it asked if the participants have spoken to any family or friends about their experiences of miscarriage. This was because research discussed in the introduction chapter highlighted that those people who had family and friends with experience of miscarriage found this to be the most helpful source of support (Rowlands and Lee, 2010). Secondly, it asked if they sought support following the miscarriage; if they did, they were asked what method of support they used and, if they did not, they were asked if there would be any support services they think they would have benefited from using. This question was asked because there is limited knowledge on what support is sought by men following a miscarriage and if they would benefit from other sources of support. Help-seeking

behaviour was also discussed during the interview by asking questions such as ‘did you seek help for the emotional/psychological impact of the miscarriage?’ and ‘how long had you been experiencing problems when you decided to seek help?’.

Procedure

Participants for the questionnaire were recruited through Tommy’s, using advertisements on their social media pages such as Twitter, Instagram and Facebook. Additionally, participants were recruited through the social media channels of a number of different miscarriage, loss and parent groups, such as Daddy’s with Angels, an online community for men who have lost children, 4Louis, a charity which provides keepsake boxes for parents who have experienced pregnancy loss, and Bear for an Angel, an organisation who provide teddy bear packages for bereaved parents and offer online emotional support. A full list of all the individuals and organisations who have helped publicise the research is in the appendices (Appendix A). The same statement was written on each social media post detailing who we were inviting to take part in the research, who I am, why I was conducting the research and what I was hoping to achieve, with the link to the online questionnaire (Appendix C). All posts asked followers to re-tweet or share the questionnaire advertisement to ensure that as many men as possible were reached through the social media recruitment.

In addition to this method of recruitment, I was also actively involved in Baby Loss Awareness Week 2018, promoting the research on social media. I conducted an online interview with The Legacy of Leo founder, Jess, giving details about the research I was conducting and encouraging people to take part. During the recruitment phase I was also a guest on a BBC Radio 5 Live programme about the

impact of miscarriage on men which opened up a discussion around the impact on men and my research (Singer, 2018).

Participants for the interview were recruited through a separate link at the end of the online survey. The separate link ensured that the online questionnaire remained anonymous when men registered interest in the qualitative element of the research. For logistical purposes, the interviews only took place in Manchester or Leeds and this was made clear prior to registering interest in being part of the interview process. Semi-structured interviews were used to give further depth and contextual information to survey data and allowed space for men to explore their thoughts and feelings in a contained way about a potentially difficult experience to discuss. Furthermore, other methods of qualitative sampling such as focus groups or qualitative questionnaires did not seem appropriate given the sensitive nature of the topic. The interview schedule (Appendix D) included questions around the miscarriage, the impact it had on the participant's life and questions around seeking support. The schedule questions were generated in relation to the literature and research questions. The questions were developed in order to give some structure to the interview and answer the research questions without guiding the participants too much. The interview questions remained the same and provided the basic structure for all seven interviews. The interviews were conducted in a safe, comfortable room either in the Worsley Building at the University of Leeds or in Tommy's Research Centre at Manchester Children's Hospital. The interviews were digitally recorded and lasted between 30 and 90 minutes.

Recruitment for the research lasted for five months, with the questionnaire being released online at the beginning of June 2018 and was closed at the beginning

of November 2018. The interviews were arranged anonymously through the online questionnaire and began in July 2018 and finished in October 2018.

Ethics

Ethical clearance

Ethical approval was obtained on 16th May 2018 (MREC17-082). An amendment was submitted to allow for a broader recruitment strategy, and this was approved on 22nd October 2018 (MREC17-082 – Amd 1). Both approval letters are included in the appendices (Appendix E).

Ethical considerations

Distress

Although the research was not intended to cause any emotional distress, due to the emotional nature of this topic it could potentially have caused distress to participants. In order to ensure that participants were informed of the content of the questionnaire, an ‘information page’ was included prior to starting the questionnaire which detailed the aims of the research, what participants were required to do, any advantages and disadvantages of taking part in the research, information about confidentiality and withdrawing, and the researcher’s contact details. Furthermore, at the end of the questionnaire there was a reference to seeking support through their GP as well as providing contact details for Tommy’s and the Samaritans should anyone have felt they needed to access support.

Similarly, for the interview part of the research, participants were given an information sheet at the beginning of the interview which detailed the aims of the

research, what participants were required to do, any advantages and disadvantages of taking part in the research, information about confidentiality and withdrawing, and the researcher's contact details (Appendix F). At the end of each interview, the participants were given an information sheet listing support services and resources available for managing emotional distress, such as Tommy's, Samaritans, Daddy's with Angels and the Miscarriage Association (Appendix G). Additionally, I signposted participants to their GP if they felt they needed that support. I finished the interviews by closing down the topic and checking in with the participant's well-being.

In order to manage my own emotions in relation to the topic I used both my reflective diary and supervision to discuss my reactions to the interview process. I also took a break when I felt that the topic was becoming too intense for me, giving me some space away from the research.

Confidentiality

Participants who completed the questionnaire were informed that they will remain anonymous throughout the research process to ensure confidentiality. All data were non-identifiable and was stored on Online Surveys, a secure server, until downloaded onto Statistical Package for Social Sciences (SPSS). The SPSS document was saved onto a secure University drive and was only accessed by me and my supervisory team.

Participants who wanted to be interviewed chose to give their details through a separate web link to ensure their questionnaire remained anonymous. They were then contacted by me. They were informed that the recording of the interview was

stored securely on a password protected University system and anonymised during transcription. Identifiable information within the interview was kept to a minimum. Transcription was carried out by me and all identifiable information was removed during the transcription process.

Researcher safety

Participants were offered an interview either in Leeds or Manchester, based on how convenient this was for them. Interviews at the University of Leeds were held in a safe, quiet room within the Clinical Psychology department. Those participants who chose to be interviewed in Manchester were interviewed in an interview room at Tommy's in Manchester to ensure an appropriate setting for the interview and to ensure safety for the researcher. For each interview, my supervisor, Dr Tom Cliffe, was aware when and where interviews were taking place and he was contactable around that time.

Participant feedback

The general response to the research when posted on social media was very positive. Many people got in touch with me to express gratitude that this research was taking place as so many people felt that men's voices within the miscarriage conversation were often not heard. I developed a good relationship with Tommy's, who were very keen to publicise this research and consider the findings in relation to the work they do. I also developed good relationships with founders of many other smaller organisations working with people who have experienced pregnancy loss. I was in regular contact with all of the organisations to encourage them to publicise the research once a month during the six-month recruitment phase. Developing these

good relationships, along with the excitement of others that this research was being conducted, contributed to the large number of men who completed the study.

One piece of feedback I received from a number of people was about my use of the word ‘miscarriage’. At the start of the research I used the word ‘miscarriage’ throughout the online questionnaire. However, I was asked by a number of individuals to consider changing the wording to ‘pregnancy loss’ as they felt that this word more sensitively captured people’s experiences. Following this I changed the wording of my social media posts and questionnaire accordingly to ensure that I clarified my use of the word ‘miscarriage’ and also included the phrase ‘pregnancy loss’.

Analysis

Quantitative

Statistical analysis was conducted using the SPSS version 22.0 IBM software program. In order to answer the research question around whether men experience psychological difficulties following a miscarriage and the question around what support men require, descriptive statistics were produced from the data collected from the standardised measures on the online questionnaire. Professor Robert West, a statistician from the Leeds Institute of Health Sciences was consulted to inform the analysis strategy.

In terms of answering the research question around what factors predict these psychological difficulties, stepwise multiple regressions were conducted. Initially dummy variables were created for variables with numerous categories, such as age range or religion. This was done so that each group could be represented using zeros

and ones so that each group within these categories (e.g. no religion, Christian, Muslim, Jewish etc) could be represented as an individual variable. Once the dummy variables were created, all the independent and dependent variables were inputted in to SPSS in order to generate a model for each measure.

Stepwise regression was used because the research was exploratory in nature and this analysis allowed for all of the data to be used in order to find the factors which were the best predictors, whilst also removing those which were not significant (Field, 2013). A critique of using stepwise multiple regression is that because the criterion for keeping the variables is based on statistical significance, the sample size affects the model produced. Therefore, although there are many positives to having a sample size of over 500, in this case the large sample size may result in some predictors being retained which may in fact make little contribution to the predicting outcome.

Assumptions

In order to check the validity of the results, and to ensure the generalisability of the model, tests were conducted to see if the data met the assumptions required (Field, 2013). If assumptions are met then the parameters of the regression equation are deemed 'unbiased' which means that the model from the sample has a higher chance of being the same as the population model. Each of these assumptions will now be discussed. In order to check the models produced in the stepwise multiple regression, both backward and forward regressions were conducted which produced the same models.

Firstly, the dependent variables for all of the standardised measures (PHQ-9, GAD-7, MSS and PGS) were continuous variable. Secondly, there were more than

two independent variables. Thirdly, the data met the assumption of independent errors (PHQ-9, Durbin-Watson value = 2.02; GAD-7, Durbin-Watson value = 1.93; MSS, Durbin-Watson value = 2.03; PGS, Durbin-Watson value = 1.92). Fourthly, when looking at the scatterplots and partial regression plots, a linear relationship could be seen between the all the standardised measures scores and each of the independent variables. Furthermore, normal distributions were clear from the histograms and the normal P-P plots of standardised residuals showed that points were close to the line in all cases. Finally, measures of collinearity (tolerance and VIF statistics; presented in appendix H) indicated that perfect multicollinearity was not found. Thus, the assumptions were met.

Cross-validation

Assessing the accuracy of the model across different samples, known as cross-validation, is another way of predicting how well the sample accurately represents the entire population (Field, 2013). There are two main methods of cross-validation: using adjusted R^2 values and splitting the data. The adjusted value of R indicates the loss of predictive power in the data. The adjusted R^2 values were very similar to the R^2 values, indicating the validity of the model for predicting the outcome.

For splitting the data, Field (2013) and Tabachnick and Fidell (2013) suggest running the original stepwise regression on a random selection of 80% of cases (known as the training model) and then forcing this model on the remaining 20% of the data (known as the test model). For each training model produced from the 80% of the data, most of the predictor variables were retained from the original model, with some additional variables also added. When comparing the R^2 between both models (the training and tests models) to establish how well the original model

generalises, there was a greater than 2% difference between both the models for each dependent variable. Therefore, there is only partial evidence for cross-validation through data splitting. However, although the splitting of the data did not provide complete assurance that the overall models can be generalised, the large sample size of 512 participants and adjusted R^2 values offer more confidence for generalising these.

Supplementary quantitative analysis

Correlations between the scores on the standardised measures were conducted to establish whether the responses on each measure were related; this analysis is in the supplementary section in the appendices (Appendix I). Furthermore, following research conducted illustrating that men who adhere to traditional masculine norms are less likely to seek psychological support (Berger et al., 2005), an ANOVA was conducted to establish whether there was a difference between those men who sought support following the miscarriage and those who did not in relation to whether they adhered more to masculine norms, as measured through the CMNI; this analysis is in the supplementary section in the appendices (Appendix H).

Qualitative

Pen portraits of each participant have been outlined in Table 1. Table 1 uses pseudonyms, which were either chosen by the participant themselves or by me, the researcher, and also gives an overview of the age of each participant, how many losses they experienced, what stage the losses occurred and whether they were still in a relationship with the mother. The participants were those who were interested in and invested in sharing their accounts and experience of miscarriage. The seven participants account for only 0.01% of the participants who answered the

questionnaire and it is therefore important to bare that in mind when considering the analysis. The interviews varied in length and lasted between 30-90 minutes to ensure that the participants had the time they needed to share their experiences. After the interviews were completed and transcribed to familiarise myself with the data, thematic analysis was used in order to establish codes and topics and later themes within the data. Thematic analysis was used as the research was exploratory in nature and therefore using another form of analysis, such as Interpretative Phenomenological Analysis (IPA), which has more of an idiographic focus and gives a detailed account of individual's experiences in a given context (Flowers, Larkin & Smith, 2009), would not have been as appropriate.

Although each man's journey and experience was unique, the research questions go beyond the individual's experience and therefore finding patterns within the transcripts enabled more general categories to be identified in the data. Braun and Clarke (2006) outline a six-phase method for carrying out the analysis; familiarising self with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes and producing the report. In practice this meant that I read through each transcript separately, once I had read the transcript I went through and coded it (see Appendix J for example of coding). Once the entire transcript was coded I went through the transcript again and grouped the codes to find common topics and drew them in mind maps (see Appendix K). I did this with all seven transcripts and then collated the topics into four relevant themes. The thematic analysis occurred inductively, with the themes being strongly linked to the data, rather than theory-driven. This was so the men's voices were heard and represented without the need to fit into a pre-existing theory or model. Amy M. Russell checked the analysis quality by reviewing parts of transcripts and analysing

them herself. Within supervision the themes were discussed to ensure that there was consistency among the themes being produced.

Table 1 Pen Portraits of participants

Pseudonym of participant	Age	Number of losses	Stage of gestation of loss(es)	Relationship status
Steve	30	4	i. 8 weeks ii. 21 weeks iii. 6 weeks iv. IVF egg didn't catch	Married to mother of baby
Ahmed	39	1	8 weeks	Married to mother of baby
John	38	2	i. 10 weeks ii. 12 weeks	Married to mother of baby
Greg	40	2	i. 8 weeks ii. 19 weeks	Married to mother of baby
Brendan	29	1	12 weeks	Married to mother of baby
Mark	27	1	24 weeks	In a relationship with mother of baby
Peter	39	2	Twins at 17 weeks	Married to mother of babies

Self-reflexivity

Reflexivity is a defining feature of qualitative research and it is important to acknowledge the role that I, as the researcher, have played in collection, selection and interpretation of the data (Finlay, 2003). This self-reflexivity section will focus on personal reflexivity rather than situating the research within wider institutional and cultural contexts; which although this type of reflexivity may appear one dimensional (Gough, 2003), seems the most important for situating the researcher within the context of the research and ensuring openness and honesty about what I bring to all stages of the research. Furthermore, the wider social and cultural contexts have been covered in the discussion chapter of the thesis.

I am a 28-year-old, heterosexual, married woman who has never experienced a miscarriage and who at the time of submitting this thesis is 30 weeks pregnant. I came to research this topic as I have long been interested in reproductive health and the psychological perspectives associated with reproductive events. Furthermore, I am interested in researching men's experiences and psychological perspectives, in particular within reproductive events, as their viewpoints are so often unheard. From a medical perspective I have little understanding of miscarriages and so was aware that I was going in to this research from a curious and exploratory perspective, rather than one of expertise. From a personal perspective, I have friends and family who have experienced a miscarriage at various stages of pregnancy, and have witnessed the various ways this has impacted on individuals, relationships and subsequent pregnancies. Interestingly, it is a topic that I have found only to be discussed a period of time after the miscarriage has taken place, perhaps when the couple have felt ready to talk about it. It is also worth noting that I am Jewish and

some of my friends and contacts are also Jewish. When recruiting participants, some of my friends and contacts shared the research questionnaire. This has resulted in more Jewish people responding to the questionnaire than is representative of the UK population. However, the vast majority of participants were recruited through specific miscarriage groups and therefore the sample does reflect the population of those groups.

This research has allowed me to think more about my thoughts on men's role in society. My views on this have been largely influenced by being brought up in a middle-class house with a dad and two older brothers in a Western society. Growing up I had never seen a man cry and, although it may never have been articulated, the message of my childhood was definitely one that it was important to have a stiff upper lip and emotions were rarely discussed. Perhaps with this as inspiration, I have chosen a career path in clinical psychology where I encourage expression and exploration of emotions. I do not have a particular special interest in men's mental health, but I do advocate challenging societal expectations of traditional gender roles, in particular around mental health. Furthermore, it feels important to me to note that when writing up this thesis I was aware of not wanting to exclude anyone, including women. When I refer to research about men and my findings about men, it is not with the intention of excluding women, but more highlighting men's experiences. These experiences, could of course be true for women as well, but women were not the focus of this research.

I am aware that who I am in society, my life experiences and my understanding of miscarriage has influenced the research and there are two aspects of the research which I feel particularly resonated with my personal experiences. Firstly, it would be

remiss not to acknowledge that a miscarriage is a death of a loved one. Having recently lost my dad, just before starting the recruitment for this research, I feel that I could closely relate to the deep sense of grief described by most of the men I interviewed. It is important for me to acknowledge that whilst I feel that my own experiences of loss helped me to empathise further, I am aware that I went into the room holding my own personal experiences and views on loss and grief. I did my best to remain neutral and did not bring my own experiences into any of the interviews and stuck to the interview schedule as planned. Thus, I do not feel these personal experiences had an impact on the interviews. Perhaps my recent loss could have played more of a role in the analysis stage, emphasising discussions of grief. However, I do believe grief was a significant theme for my participants, regardless of my input.

Secondly, after finishing recruitment, and just before starting analysis, I found out I was pregnant. I do feel this influenced my analysis as I was much more cautious and sensitive with the data. Furthermore, I felt that I could again relate with the participants who shared that their pregnancies following miscarriage had been affected and the joy had largely been removed. Although I feel incredibly grateful, every day, that I have not experienced a miscarriage and that I am progressing well with a healthy pregnancy, I too feel that the analysis and write up of this research has taken much of the joy out of my own pregnancy.

I also feel it is important for me to recognise that as a young woman interviewing men, they may have given me the story they wanted me to hear. However, this is a possible limitation with any research using interviews. Furthermore, for some men it might be difficult to express emotions freely or to talk

about letting their partners down or not being there for them in this setting, perhaps in particular in front of a women. The seven men who were interviewed were not all similar and therefore it is difficult to know how this would have affected their presentation. Five of the seven participants presented more similarly than the other two participants in the sense that I was moved by all of their accounts of their experiences and they displayed similar levels of emotion throughout the interviews. The other two interviews were portrayed from different angles and gave me an insight into the role that culture and previous mental health difficulties may play in their experiences of miscarriage. None of these experiences affected the questions I asked in the interviews as I asked all of the participants the same questions. However, it may have affected the way I asked the questions and the responses they gave.

Results

The four research questions outlined in the introduction were answered using both quantitative and qualitative methods. The quantitative results will attempt to address the questions around whether men experience any psychological difficulties after a miscarriage, what factors are associated with these psychological difficulties and what support men may require. The qualitative results will look at answering the questions around whether men experience any psychological difficulties after a miscarriage, what the facilitators and barriers may be in accessing support and what support men may require.

Quantitative Results

Participant Characteristics

Five hundred and twelve men who experienced a pregnancy loss up to 24 weeks completed the online questionnaire. However, not all 512 men completed every question throughout the online questionnaire and therefore the total completed number varied depending on how many men completed all the questions on the standardised measures and for the initial questions about participant characteristics. All categorical variables are reported with frequencies and percentages in Table 2, and all continuous variables are reported with means and standard deviations in the standardised measures section.

Most of the participants (84.4%) were aged between 25-44. Most of the men identified as either having no religion (56.4%) or as Christian (37.3%). Almost half of the men (49.2%) experienced one miscarriage and over a quarter of the men experienced two miscarriages (26.2%). Over 11% of the sample experienced three

miscarriages, 6.6% experienced four miscarriages and 6.1% experienced five or more miscarriages. Of all the miscarriages 4.6% occurred between 1-4 weeks of pregnancy, 27.3% occurred between 4-8 weeks of pregnancy, 33.9% occurred between 8-12 weeks of pregnancy, 12.3% occurred between 12-16 weeks of pregnancy, 8.1% occurred between 16-20 weeks of pregnancy and 13.8% occurred between 20-24 weeks of pregnancy. Twenty two percent stated that it had been over five years since their first loss, 31.6% said that it had been between 2-5 years since their first loss, 19.3% reported that it had been between 1-2 years and approximately one quarter of the participants experienced their first loss within the past 12 months. The most recent loss for 9.8% of participants was over 5 years ago, 23% reported that their most recent loss was 2-5 years ago, 21.5% reported that their most recent loss was 1-2 years ago and 44% experienced their most recent loss within the past 12 months prior to completing the questionnaire.

Of 509 men who answered, 81.8% said that the lost pregnancy was planned and 94.7% stated they were still in a relationship with the mother of their child at the time of completing the questionnaire. Men who had children prior to their miscarriage accounted for 39.6% of the sample and 53.1% reported having children after having a miscarriage. 71.5% reported that family or friends had experienced a miscarriage. 24% of 512 men reported seeking help following the miscarriage.

Table 2 Sample Characteristics

Characteristic	Total Sample (N)	Frequency	Percent
Age	510		
18-24		26	5.1
25-34		222	43.4

35-44		210	41.0
45-55		41	8.0
55+		11	2.1
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Religion	511		
No religion		289	56.4
Christian		191	37.3
Buddhist		1	0.2
Hindu		1	0.2
Jewish		12	2.3
Muslim		4	0.8
Sikh		1	0.2
Prefer not to say		6	1.2
Other		6	1.2
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Number of miscarriages	509		
1		252	49.2
2		134	26.2
3		58	11.3
4		34	6.6
5+		31	6.1
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Stage of Pregnancy	512		
1-4 weeks		34	4.6
4-8 weeks		198	27.3
8-12 weeks		246	33.9
12-16 weeks		89	12.3
16-20 weeks		59	8.1
20-24 weeks		100	13.8
<hr/>			

Time since first loss	509		
Within a week		3	0.6
Within a month		14	2.7
Within 6 months		61	11.9
6-12 months		56	10.9
1-2 years		99	19.3
2-5 years		162	31.6
5+ years		114	22.3
Most recent loss	503		
Within a week		5	1.0
Within a month		38	7.4
Within 6 months		95	18.6
6-12 months		87	17.0
1-2 years		110	21.5
2-5 years		118	23.0
5+ years		50	9.8
Planned pregnancy	509		
Yes		419	81.8
No		90	17.6
Currently still in a relationship with mother	509		
Yes		485	94.7
No		24	4.7
Children prior	508		
Yes		203	39.6
No		305	59.6

Children after	509		
Yes		272	53.1
No		237	46.3
Friends & Family had miscarriage	510		
Yes		366	71.5
No		144	28.1
Seek support	512		
Yes		123	24.0
No		389	76.0

Note. Percentages for ‘stage of pregnancy’ were not calculated in SPSS and therefore they were manually calculated based on the total number of responses.

Standardised Measures Scores

Mean scores on the PHQ-9 (N= 491) and GAD-7 (N = 501) were 7.54 (*SD* = 6.34) and 6.42 (*SD* = 5.57) respectively, which equates to mild depression and moderate anxiety (Kroenke, Spitzer, Williams, & Lowe et al., 2010). The mean scores on the MSS (N = 495) indicated lower levels of male-specific depression experienced compared with depression on the PHQ-9 (*M* = 2.24, *SD* = 1.59). The mean score on the PGS (N = 483) was 85.26 with a standard deviation of 27.29, indicating a large range in experiences of grief. The mean score on the CMNI (N = 473) was 41.18 (*SD* = 10.26) which suggests that there was not a strong conformity to masculine norms as a whole throughout the data.

Seeking Help

All 512 men answered the question asking if they sought support or not following the miscarriage. One hundred and twenty-three men (24%) reported seeking support and they were then asked what support they had sought; answers are presented in

Table 3. Three hundred and eighty-nine (76%) participants said they had not sought support following the miscarriage. They were asked if there was any support they would have liked; their answers are presented in Table 4.

Table 3 Support men sought

Source of support	Frequency	Percent
Psychological counselling	53	43.1
Online support	32	26
Social media	23	23.6
Medical doctor	23	18.7
Family and friends	73	59.3
Religious mentor	7	5.7
Other	10	8.1

Note. Participants were able to choose more than one option for this and therefore the percentages do not add up to 100.

Table 4 Support men would have liked but did not receive and did not seek

Source of support	Frequency	Percent
Psychological counselling	127	32.6
Online support	107	27.5
Social media	51	13.1
Medical doctor	52	13.4
Family and friends	115	29.6
Religious mentor	8	2.1
Other	13	3.3

Note. Participants were able to choose more than one option for this and therefore the percentages do not add up to 100.

Regression Analyses

Stepwise multiple regressions were conducted to see if any of the characteristics outlined in Table 2, predicted the scores on the standardised measures of psychological well-being (PHQ-9, GAD-7, MSS and PGS).

PHQ-9

The model produced from the stepwise regression identified five predictors that predicted the scores of the PHQ-9 (see Table 5 for the overall model). These five predictors were whether men had children after the miscarriage, if the miscarriage occurred between 20-24 weeks, if the men were aged between 18-24, if they were Jewish and if they had not experienced a miscarriage between 4-8 weeks. A significant regression equation was found for predicting PHQ-9 scores based on whether men had children after the miscarriage ($F(1, 489) = 16.21, p < .001$), with an R^2 of .032. Participants who had children after the miscarriage scored 2.28 points lower on the PHQ-9. A significant regression equation was found for predicting PHQ-9 scores based on whether the miscarriage occurred between 20-24 weeks ($F(2, 488) = 15.34, p < .001$), with an R^2 of .027. If the miscarriage occurred between 20-24 weeks this increased PHQ-9 scores by 2.61 points. A significant regression equation was found for predicting the PHQ-9 scores based on if participants were aged 18-24 ($F(3, 487) = 13.08, p < .001$), with an R^2 of .015. Those participants aged between 18-24 scored higher on the PHQ-9 by 3.58 points. A significant regression equation was found for predicting PHQ-9 scores based on whether the men were Jewish ($F(4, 486) = 11.39, p < .001$), with an R^2 of .011. Those participants who were Jewish scored 4.55 points lower on the PHQ-9. A significant regression equation was found for predicting PHQ-9 scores based on

whether the men had experienced a miscarriage between 4-8 weeks ($F(5, 485) = 10.24, p < .001$), with an R^2 of .010. Men who had not experienced miscarriage between 4-8 weeks tended to score 1.33 points higher on the PHQ-9. All of these characteristics were significant predictors of PHQ-9 scores.

Table 5 Coefficient values for predictors of the PHQ-9 stepwise regression model

Model	<i>B</i>	<i>SE B</i>	β	R^2
Step 1				
Constant	8.76	0.41		
Children after the miscarriage	-2.28	0.57	-.179**	.032
Step 2				
Constant	8.24	0.43		
Children after the miscarriage	-2.27	0.56	-.178**	
If the miscarriage occurred between 20-24	2.61	0.70	.164**	.059
Step 3				
Constant	8.02	0.44		
Children after the miscarriage	-2.23	0.55	-.175**	
If the miscarriage occurred between 20-24	2.65	0.69	.167**	

Aged 18-24	3.58	1.26	.124**	.075
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Step 4

Constant	8.10	0.43		
Children after the miscarriage	-2.11	0.55	-.166**	
If the miscarriage occurred between 20-24	2.53	0.69	.159**	
Aged 18-24	3.47	1.25	.120**	
Identify as being Jewish	-4.55	1.87	-.106*	.086

Step 5

Constant	7.39	0.53		
Children after the miscarriage	-2.21	0.55	-.174**	
If the miscarriage occurred between 20-24	2.16	0.71	.136**	
Aged 18-24	3.59	1.25	.125**	
Identify as being Jewish	-4.37	1.86	-.102*	
Men who had not experienced miscarriage between 4-8 weeks	1.33	0.58	.102*	.095

Note. * values significant with respect to a p-value of 0.05. ** values significant with respect to a p-value of 0.01.

GAD-7

The model produced from the stepwise regression identified three predictors that influenced the scores of the GAD-7 (see Table 6 for the whole model). A significant regression equation was found for each of the three factors. A significant regression equation was found for predicting GAD-7 scores based on whether men had not experienced a miscarriage between 20-24 weeks ($F(1, 499) = 13.47, p < .001$), with an R^2 of .026. Men who had not experienced a miscarriage between 20-24 weeks scored lower on the GAD-7 by 2.27 points. Furthermore, a significant regression equation was found for predicting GAD-7 scores based on whether men had children following the miscarriage ($F(2, 498) = 9.43, p < .001$), with an R^2 of .010. If men had children following the miscarriage, their GAD-7 scores were reduced by 1.13 points. A significant regression equation was found for predicting GAD-7 scores based on whether men were aged 18-24 ($F(3, 497) = 7.80, p < .001$), with an R^2 of .008. Those participants aged between 18-24 scored higher on the GAD-7 by 2.36 points. All of these factors were significant predictors of GAD-7 scores.

Table 6 Coefficient values for predictors of the GAD-7 stepwise regression model

Model	<i>B</i>	<i>SE B</i>	β	R^2
Step 1				
Constant	8.24	0.55		
Men who had not experienced a miscarriage	-2.27	0.62	-.162**	.026

between 20-24
weeks

Step 2				
Constant	8.85	0.61		
Men who had not experienced a miscarriage between 20-24 weeks	-2.26	0.62	-.162**	
Children after the miscarriage	-1.13	0.49	-.101*	.036
Step 3				
Constant	8.74	0.61		
Men who had not experienced a miscarriage between 20-24 weeks	-2.29	0.61	-.164**	
Children after the miscarriage	-1.10	0.49	-.098*	
Aged 18-24	2.36	1.12	.092*	.045

Note. * values significant with respect to a p-value of 0.05. ** values significant with respect to a p-value of 0.01.

MSS

The model produced from the stepwise regression identified four predictors that influenced the scores of the MSS (see Table 7 for the whole model). A significant regression equation was found for each of these factors. Participants' MSS scores

increased by 1.32 points if men were no longer in a relationship with the mother at the time of completing the questionnaire. A significant regression equation was found for predicting MSS scores based on whether men were still in a relationship with the mother ($F(1, 493) = 14.83, p < .001$), with an R^2 of .029. The other three predictors offered slight, but significant changes in MSS scores. A significant regression equation was found for predicting MSS scores based on whether men had experienced a miscarriage outside of 8-12 weeks ($F(2, 492) = 11.35, p < .001$), with an R^2 of .015. Men who experienced miscarriage that was not between 8-12 weeks scored higher on the MSS by 0.39 points. A significant regression equation was found for predicting MSS scores based on whether men's most recent miscarriage was 2-5 years ago ($F(3, 491) = 9.04, p < .001$), with an R^2 of .008. Those participants whose most recent miscarriage was 2-5 years scored higher on the MSS by 0.34 points. A significant regression equation was found predicting this ($F(4, 490) = 7.90, p < .001$), with an R^2 of .008. For men who had had children after the miscarriage, their MSS scores were lower by 0.31 points. All of these factors were significant predictors of MSS scores.

Table 7 Coefficient values for predictors of the MSS stepwise regression model

Model	<i>B</i>	<i>SE B</i>	β	R^2
Step 1				
Constant	2.18	0.07		
No longer in a relationship with mother	1.32	0.34	.171**	.029
Step 2				

Constant	1.98	0.10		
No longer in a relationship with mother	1.31	0.34	.169**	
Miscarriage that was not between 8-12 weeks	.39	0.14	.122**	.044

Step 3

Constant	1.91	0.11		
No longer in a relationship with mother	1.27	0.34	.165**	
Miscarriage that was not between 8-12 weeks	.38	0.14	.118**	
Most recent miscarriage was 2-5 years	.34	0.166	.091*	.052

Step 4

Constant	2.06	0.13		
No longer in a relationship with mother	1.29	0.34	.168**	
Miscarriage that was not between 8-12 weeks	.35	0.14	.110**	
Most recent miscarriage was 2-5 years	.49	0.18	.130**	

Children after the miscarriage	-.31	0.15	-.099*	.061
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Note. * values significant with respect to a p-value of 0.05. ** values significant with respect to a p-value of 0.01.

PGS

The model produced from the stepwise regression identified six predictors that influenced the scores of the PGS (see Table 8 for the whole model). A significant regression equation was found for each of these factors. A significant regression equation was found for this in relation to predicting MSS scores ($F(1, 481) = 31.88$, $p < .001$), with an R^2 of .062. Participants' PGS scores increased by 16.83 points if the miscarriage occurred between 20-24 weeks. A significant regression equation was found for predicting the MSS score based on whether men had children following the miscarriage ($F(2, 480) = 28.47$, $p < .001$), with an R^2 of .044. If men had children following the miscarriage their PGS scores decreased by 11.45 points. A significant regression equation was found for predicting PGS scores based on whether men were aged 18-24 ($F(3, 479) = 24.03$, $p < .001$), with an R^2 of .025. Those participants aged between 18-24 scored higher on the PGS by 20.14 points. A significant regression equation was found for predicting PGS scores based on whether men had not experienced a miscarriage between 16-20 weeks ($F(4, 478) = 20.32$, $p < .001$), with an R^2 of .015. Men who had not experienced a miscarriage between 16-20 weeks scored lower on the PGS by 10.14. A significant regression equation was found for predicting PGS scores based on whether the participants were Jewish ($F(5, 477) = 17.53$, $p < .001$), with an R^2 of .010. Those participants who were Jewish scored 19.20 points lower on the PGS. Finally, a significant regression equation was found for predicting PGS scores based on whether men had

family or friends who had experienced a miscarriage ($F(6, 476) = 15.36, p < .001$), with an R^2 of .007. Men who said that family and friends had not experienced a miscarriage scored 5.14 points higher on the PGS. All of these factors were significant predictors of PGS scores.

Table 8 Coefficient values for predictors of the PGS stepwise regression model

Model	<i>B</i>	<i>SE B</i>	β	R^2
Step 1				
Constant	81.81	1.35		
Miscarriage occurred between 20-24 weeks	16.83	2.98	.249**	0.62
Step 2				
Constant	87.96	1.83		
Miscarriage occurred between 20-24 weeks	16.82	2.91	.249**	
Children after the miscarriage	-11.45	2.36	-.210**	.106
Step 3				
Constant	86.84	1.83		
Miscarriage occurred between 20-24 weeks	17.00	2.88	.252**	

Children after the miscarriage	-11.23	2.33	-.205**	
Aged 18-24	20.14	5.46	.157**	.131

Step 4

Constant	95.68	3.59		
Miscarriage occurred between 20-24 weeks	17.51	2.86	.259**	
Children after the miscarriage	-11.30	2.31	-.207**	
Aged 18-24	20.50	5.42	.160**	
Not experienced a miscarriage between 16-20 weeks	-10.14	3.55	-.121**	.145

Step 5

Constant	95.54	3.57		
Miscarriage occurred between 20-24 weeks	16.98	2.86	.251**	
Children after the miscarriage	-10.88	2.31	-.199**	
Aged 18-24	20.08	5.39	.157**	
Not experienced a miscarriage	-9.64	3.54	-.115**	

between 16-20 weeks				
Identify as being Jewish	-19.20	8.12	-.100*	.155

Step 6				
Constant	94.02	3.65		
Miscarriage occurred between 20-24 weeks	16.38	2.86	.243**	
Children after the miscarriage	-10.66	2.30	-.195**	
Aged 18-24	19.48	5.39	.152**	
Not experienced a miscarriage between 16-20 weeks	-9.52	3.53	-.113**	
Identify as being Jewish	-17.97	8.12	-.094*	
Friends and family had not experienced miscarriage	5.14	2.59	.084*	.162

Note. * values significant with respect to a p-value of 0.05. ** values significant with respect to a p-value of 0.01

Summary of quantitative results

The quantitative analysis provided details around certain characteristics of the participants which were important to note, such as number of losses experienced and

length of gestation at the time of loss. It also provided information that only one quarter of the participants had sought support following the miscarriage, and gave information of what support they sought. Furthermore, for the three quarters of men who did not seek support, the analysis highlighted what support they would have liked to have sought. For both groups of men, seeking support from family and friends or psychological counselling were the two most popular options. In addition, four measures of well-being were used in the questionnaire, PHQ-9, GAD-7, MSS and PGS, and a stepwise multiple regression was conducted in order to establish whether any characteristics predicted scores on these measures. The one characteristic that predicted scores on all four measures was whether or not the men had children after the miscarriage. Whether the miscarriage occurred between 20-24 weeks and if the men were aged between 18-24 years old were both predictors of scores on PHQ-9, GAD-7 and PGS. Whether or not the participants identified as being Jewish predicted scores on the PHQ-9 and PGS. Other characteristics identified as being predictors for some of the measures were whether the men were still in a relationship with the mother of the baby and whether any friends and family had experienced a miscarriage.

Qualitative Results

In this chapter the qualitative findings of the seven interviews will be outlined. Four main themes were identified during the qualitative analysis. The first theme was ‘the role of the protector’ which highlights the role that men adopted in ensuring they protected and supported their wives and other family members, even to the detriment of their own grieving process.

The second theme, which occurred when they no longer needed to be in the role of protector, was 'tidal wave'. This theme detailed the point at which the men were able to express their emotions when they refocussed their attention on to themselves and were given space.

The third theme was 'validating grief' and this focused on how the participants emphasised that they had experienced a 'real loss' which resulted in a grief response, as any loss would. They spoke of the need to have this loss validated by others and the practices that they engaged in to ensure that their baby's memory wasn't forgotten.

The final theme was 'life changing experience' and seemed to occur after the periods of time consumed by the 'role of protector' and 'tidal wave'. This theme details the aftermath following the miscarriage and the impact it had on their lives. Details of the processes through which the men were able to move beyond the experience and on with their lives are outlined.

The Role of the Protector

The first theme of 'the role of the protector' highlights the role participants adopted, sometimes absorbing their partner's grief and ignoring their own emotions. Six of the seven participants described becoming a protector; of their partners, children and other family members, often to the detriment to their own grieving process. Some of the men reflected on this themselves, whereas others seemed less aware. This was a role that the men seemed to take seriously, hence ensuring that they remained in control of their emotions to support their families.

Being strong for her

This role as protector meant that the men put their own emotions to one side in order to support their partner and family fully. The support that the men showed to their wives and family came at all stages from the moment the miscarriage started to throughout the whole grieving process.

“I was with her every step of the way as I wasn’t leaving her side to go through that” [John]

“I’ve really tried to just focus my efforts on supporting my wife” [Peter]

“I would try and be the backbone for the relationship” [Brendan]

When making difficult decisions throughout the grieving process, although the couples seemed to discuss them, it seemed that final decisions were made by the men’s partners. Whilst in this ‘protector role’, men placed importance on ensuring that their partners came first. For example, Greg spoke about the difficult decision they had to make about whether they wanted to see their baby once she was born and how, although he did not think he would want to see their baby, his protector role of being there for his wife took priority:

“I was there to support Michelle. She said she definitely wanted to see Amy when she was born. I wasn’t so sure, and I said that to Michelle and the midwife but when she was born I didn’t want to leave Michelle’s side.” [Greg]

Peter recalled a very similar story to Greg when he spoke of the decision to see their twin boys following the birth. Both Peter and Greg, despite thinking they did not want to see the babies once they had been born, stayed with their wives and

therefore met their babies. This was expressed as a positive experience for both of them, in hindsight. Perhaps viewing it as a positive experience helped them to cope with the fact that they had just experienced something they did not want to.

“I wasn’t sure about it to be honest at the time, we were given the option, what do you want us to do when they are delivered and my wife immediately was like, what do you mean what do I want to do? I want to meet them! Whereas for me it was, I wasn’t quite sure whether I did or not”. [Peter]

Part of the protector role involved bearing witness to their partner’s grief. This meant that participant’s wives were freely expressing their emotions while the men were witnessing those emotions. In order to stay in the role of the protector they continued to support their wives through their grief and did not show their emotions. However, continuously seeing their wives so distressed had an impact on them.

“to be woken up in the morning to the sound of your wife crying in the bathroom every single day – that’s by far the hardest thing I’ve had to get through in my life” [Steve]

“I was staying strong for Michelle. To be there for her and help her because she would spend the days just sobbing. We’d go to bed at night and she would sob her heart out and I’d never heard her cry like that, or since, and that was really hard, really hard to deal with but it was something I could deal with so I could be the man and be there to look after my wife” [Greg]

Stay in role

There were three factors that seemed to contribute to keeping the men in the role of protector. Firstly, was the belief that the experience was more difficult for their wives. Secondly, there seemed to be a societal and cultural influence on the way the men adopted this role. Finally, the fact that others also assumed a position that the women came first cemented this.

Participants felt that the process was more difficult for their wives than for them. This belief acted as encouragement for them to assume this protector role.

“I probably just tried to invest my time in my wife and my daughter because my wife has struggled far more than I have” [Peter]

Although it may be the case that men’s belief that their wives were suffering physically as well as emotionally encouraged them to stay in this protector role, there is also the factor of social or cultural expectations that could have influenced them to act in this protective and supportive way.

“Obviously to show some sort of support to my wife is important but I don’t know as a guy whether you’re supposed to cry or not.” [Ahmed]

Ahmed conveyed this as if he was not really being true to himself but thinking more about what would be socially or culturally acceptable in the way that he acted or expressed emotion.

“I think with men within an Asian culture, I think there’s not much emotion discussed on that. It’s just well it’s a woman’s thing” [Ahmed]

With Ahmed, cultural influences seemed to be at the forefront of his mind and he was clearly aware of the way in which he was expected to behave in society as a result of these influences. However, in other interviews the influence that cultural or societal norms had on the men's lives were more implicit. For example, when reading stories on the online forums, Brendan described situations where some women's partners had not been supportive, and his instinctive response was

“you'd think your partner would be the supportive one to help you through this. I was surprised when I read that their husbands were no support at all.” [Brendan]

This norm of men being the protector and ensuring that they are the supportive one is so engrained in Brendan that it was the obvious and correct role for him to take on in the situation and he was surprised that other men would not also automatically take on this role.

It was not only the participants who prioritised their partner's feelings and well-being over their own. This was echoed in the way in which men were treated by parents and medical professionals and contributed to the men remaining in this role. Steve's account of when his parents-in-law visited highlights the discrepancy between the experiences between men and women throughout this whole process.

“I know they didn't mean to but they came into the room and we both stood up and they both went and just hugged Anna and so I was just stood there” [Steve]

Participants also recounted how medical professionals also left them feeling excluded in the process, highlighting the difference between how men and women are treated in this situation.

“I felt forgotten about. It wasn’t like they were blatantly ignoring me, there were just no practices in there for them to actually deal with the partner....it would have been nice to hear a voice somewhere saying are you ok?” [John]

Interestingly, although John spoke about how there were times when he felt excluded by the team in the hospital, he “wasn’t too bothered at the time because [he] was concentrating on [his] wife and making sure she was fine”. Thus, indicating that the role of protector that he took on to ensure his wife’s well-being was the priority, and his needs were secondary.

Pragmatism is helpful

In order to maintain the role of protector it was important for the men to feel in control of their own emotions. Although they may have been feeling a certain way, they did not address these emotions and just carried on, keeping their emotions in check in order to focus on supporting their wives.

“I certainly didn’t make any time for emotions. I just carried on going to work as normal” [Greg]

Furthermore, Peter spoke of being there for everyone and focusing on how everyone else was coping, rather than himself. His way of coping was to actively seek out information about how he could best support his family and therefore be the best he could be in this role as protector and supporter; thus, indicating that he took the role of protector seriously and wanted to do his best for everyone.

“I had to balance all of that as well; my mum was devastated, Eva’s mum and my dad and my brother...me being pragmatic and going into

protective mode, it was about everybody else I suppose... [he sought]
Information about how parents grieve, how grandparents grieve and
about how other children in the family grieve as well, so it was just a
really good resource for to at least understand on the surface of it" [Peter]

The theme of the role of protector demonstrates how participants felt strongly about protecting their wives and other family members. In doing so they put their own emotions aside, potentially as a way of avoiding their emotions. This meant that they sometimes did things that they would not necessarily have done, for example seeing their baby, as their wives made these decisions. Three factors that kept the men in this role are that the men thought that their wives found the experience more difficult, societal and cultural pressures, and the way that others treated the couple.

Tidal wave

The second theme is based around the story the men told about being able to let go and express their emotions, once their protector role was no longer needed. The sense of being in control seemed to be important for the participants, and it was only when they were not engaged in the protector role, and for most participants, alone, that there was a turning point and the men were able to let go of this control and be in touch with their emotions.

Helplessness

Contrary to the feeling of being in control, a position most of the men were used to, there was a real sense of helplessness exuding from the participants' narratives. This helplessness seemed to be in relation to the unknown situation they were faced with and having to respond to it:

“I didn’t have a clue what was going on...it would have been nice to have been informed, at least know what happens and what the process is”

[John]

“I think it’s a fear of the unknown...it’s helplessness as well. I like being in control...and the control is taken away from you in that situation”

[Peter]

Ahmed described not knowing what to do in the situation or the appropriate way to act. The need for someone to help or tell him what the correct way to behave was really apparent in his narrative. This highlights how real the loss is and how no-one writes a manual for how to deal with the loss of a baby; there is no right or wrong and that can be unsettling for a person who is used to feeling in control.

“I don’t know whether it’s just because I didn’t know how to behave or how to react” [Ahmed]

Letting go and refocussing attention

There seemed to be a point for most of the men at the time when their wives were beginning to come to terms with the loss that they were able to let go of their defence barriers holding in their emotions and refocus their attention on themselves. Although this was not necessarily a conscious process, their partners needing less care and support allowed for some relief and freedom for them to express their grief themselves. And thus, this is the point at which they started their own grieving process. John recalled that he started to feel depressed,

“when [his] wife had started to calm down a little bit and then things were starting to revert back to normal and then everything just went boom” [John]

He stated that “as soon as she started feeling better that’s when I started to have a bit of time to think of myself”. Having been so engrossed in the role of protecting and supporting his wife, he had not given himself time to think of his own emotional response to the loss of their baby and therefore once his wife needed him less, he was able to have this space. Similarly, Greg also

“kept it together in inverted commas for several weeks whilst Michelle lost the plot and then several, maybe a couple of months later, I kind of had a breakdown at work” [Greg]

By stating that he was ‘keeping it together’ Greg was acknowledging that he was perhaps withholding how he was truly feeling in order to remain in this protector role, described in the first theme. He went on to explain that

“Michelle was starting to get back on track. ... it was at that point that I started thinking, shit, I’ve lost my daughter. I didn’t have to be strong for Michelle because she was starting to look after herself without needing that level of support from me” [Greg]

Without having this focus of having to care for his wife, he was able to have some space to reflect about the loss that he has experienced, and it was only then that he was able to process it.

This turning point of no longer being needed in the protector role is very significant for the men. Greg, John and Peter’s accounts indicated that once they had reached

this point it was sometimes difficult to have control over emotions. They found that at times their emotions just took over in an unknown situation and they were difficult to contain.

“then it was just like a tidal wave that came over and I was lost for a while” [John]

“I came in on the Monday and spoke to my boss, broke down in tears and that was the first time I cried...I don't do crying very often, especially in front of my boss...it was hard to be showing those emotions to another man in a business setting” [Greg]

“I feel like I let go a bit and allowed myself to just not really worry about whether my wife was OK and just be upset myself. But that period was probably quite short” [Peter]

Breathing space

A large part of feeling able to express their emotions was that the men felt they could only do this when they were not with their partners and when they had the space to ‘let go and refocus their attention’ on themselves. This may be in part due to remaining in the protector role and therefore wanted to remain in control of their emotions as a way of not burdening their partner.

“I don't think I was particularly upset around my wife... I probably did my being upset, grieving bit, in isolation, away from my wife.” [Peter]

“I took myself off for a bit and had a cry and then I came back” [Steve]

“I would break down by myself” [Brendan]

For some men, they used hobbies to ensure that they had this space and time alone to reflect or release emotions that they otherwise would be unable to do in the family home. Using the hobby was a practical way for men to appear in control of their emotions whilst giving themselves space to be alone and unwind.

“although I never really enjoyed cycling that much – but that gave me a bit of me time even though it was just an hour” [Steve]

“running was hugely important, is hugely important to me... I didn’t run for a few weeks, and then for the first time I did, I was just crying for most of it whilst I was running” [Peter]

For most men, this release of emotion only happened when they were alone. Perhaps this releasing of emotions when alone was due to the societal norms and pressures placed on men to only show certain emotions; which were reinforced, as described in the first theme. Peter spoke of feeling that it was acceptable for him to openly discuss things on a superficial level:

“I spoke to my brother about it quite a bit, I spoke to my mum and dad about it, not on a particularly deep level, but I was able to at least talk”
[Peter]

He explained that this surface-level conversation meant that he was not truly honest with them about how he was feeling.

“I probably wasn’t as honest with them about how I was feeling, definitely about how upset and frustrated I was; well I was probably clear about how angry I was” [Peter]

Thus, perhaps indicating a social influence of how it is more acceptable for men to feel and show anger, but less acceptable to speak openly about other emotions. Therefore, even when they felt able to release their emotions, there was sometimes still an element of control over who to share them with and in what situations.

“Now the whole mental health thing is completely different but back then it was not really talked about as much and plus there was this thing of ‘I’m a man and I don’t speak about feelings’ and things like that. I was very much one of them” [John]

The theme of tidal wave illustrates the time men had for themselves to freely express their emotions in relation to their loss. This acknowledgement of their own emotional response happened when they no longer needed to be in the role of protector and were able to refocus their attention onto themselves and find some space to express their emotions. For most men then was when they were alone, but most significantly this was when they were not with their partners.

Validating grief

The third theme was around validating the grief that underpinned the emotional response outlined in the ‘tidal wave’ theme. This theme focuses on the validation that men sought in acknowledging that they had experienced a real loss which results in a real grief response. They also explored the unfairness around how they perceive their grief of losing a child in utero not to be acknowledged by society; and thus, the need for validation is present. This theme also identifies that as part of working through their grief, the men worked at ways to try and keep their baby’s memory alive to ensure that they would not be forgotten.

Real loss and grief

It felt very important that the men received acknowledgment and recognition that their baby existed in their lives and, therefore, they had experienced a significant loss. Peter spoke passionately and emotively about wanting to ensure that his sons were acknowledged as being real and therefore this was a true loss for him and his family.

“I know, I was there, and it was a labour and they entered the world physically and OK clinically they weren’t alive, but they were born at that point” [Peter]

For Peter he wanted to get the message across that their lives had mattered too, even if it was just for a short period of time. Having a service to commemorate them was an important part of their grieving process.

“we were able to have a service for them, they didn’t just exist and then disappear...The boys were living, and they died, they just died inside the womb as opposed to dying outside” [Peter]

Mark noted that the charity that supported him and his partner did a fantastic job in acknowledging their baby’s existence and allowed them the time and space they needed to spend with their baby. This seemed to be an important part of acknowledgement that their baby was real and had existed.

“we stayed there [at the children’s hospice] for about 5 days and spent time with him... the hospice came and dressed him... like a normal baby” [Mark]

Just as it was important to acknowledge that this loss for them was a real loss, similar to any other loss, it is important to acknowledge that the response to this loss is also similar. The grieving process that the men described was individual, as with all grief, and yet similar to other grieving patterns, such as the intensity of the grief response reducing over time and finding it difficult to be faced with reminders. Some similarities that were identified were that over time they were able to feel a little better about the loss:

“I think had we had this conversation 7 months ago I would be a lot more emotional, but I think that time has obviously allowed me to talk about it a little bit more rationally” [Peter]

Additionally, reminders or anniversaries of the loss were difficult times for the men. For example, Peter expressed finding it difficult seeing his nephew, who was born soon after they lost their twins.

“I see my nephew and that makes me upset, rightly or wrongly” [Peter]

However, although there are similarities between the grief the participants described and the grief documented in research as natural grief processes, there are two main differences with the grief that they experienced. The first is the unfairness around losing a child, and one they have not yet shared any memories with. The second is that losing a child means that grief must be navigated with someone else, a partner, and this can make the grieving process more difficult.

The unfairness that is felt around how parents should not out-live their children was expressed during some of the interviews. Further to this, which is different again to even the loss of a child, the unfairness that women had to go through the hard work of labour knowing that they were not going to hold their living child.

“giving birth to your dead daughter is pretty hard... Very very sad that I’d lost my daughter and parents shouldn’t survive their children” [Greg]

Furthermore, the interesting factor to consider with this grief is that, when a parent loses a child, they must navigate their own personal grief alongside their partners. In the previous themes we have seen participants sublimate their wishes and emotions for the sake of their partners. However, this suppression of emotions would be difficult to continue throughout the grieving process “otherwise you’d just, the best way to describe it is, otherwise you’d just burst”, as stated by Brendan. People respond to loss in such personal ways, with different styles of grieving, and this in turn may lead to initial difficulties in relationships.

“obviously we have different paths and grief is different for everyone...we’re in the same boat but we’re on different paths” [Steve]

“maybe my grieving is indicative of my nature anyway, I don’t like to dwell on things and that’s been a source of quite a lot of disagreements with my wife about the grieving process” [Peter]

Disenfranchised grief

Despite the real loss and grief described by the men, this loss and grief can often be dismissed in society. There is a feeling that it is less socially acceptable to grieve for the loss of a baby lost in utero rather than one who has been born. Brendan found that his work, although they were supportive, were dismissive of the impact that the loss could have had on his mental health.

“they don’t see the actual mental, psychological part that goes with it. So they just see the actual statistics and they’re like OK yeah it’s common”

[Brendan]

Perhaps this is due to the fact that people do not tend to talk about pregnancy loss much in society and therefore there is less of an awareness and understanding about losses than can occur during pregnancy. Steve felt strongly that most people do not understand the pain around fertility and pregnancy loss. He explained that he felt there was an assumed trajectory of pregnancy within society that people were able to quickly get pregnant and once they were pregnant, nine months later they would have a baby. The fact that this is not the case for everyone is rarely spoken about within society.

“Ignorance is bliss... having nice meals and going along and oh, they’re pregnant and they’re having a baby straight away and there’s no pain”

[Steve]

Brendan explained that it was only after they had spoken up about their experience of miscarriage that friends disclosed that they had also experienced miscarriage.

“Because my wife also told me that two of her friends, who she didn’t even know had had miscarriages, came out and told her ‘oh yeah we’ve had a miscarriage as well’ ... my wife summed it up as something that you shouldn’t be ashamed of, some people are ashamed of it but you shouldn’t be” [Brendan]

He deduced that this was due to shame and therefore people did not feel comfortable talking about their experiences. Perhaps this shame is somewhat perpetuated by societal ignorance and unease around pregnancy loss and therefore means that open

conversations are less likely to happen. For example, Mark explained that when he had tried to talk about his experience of miscarriage with friends “they just tried to avoid the question or topic”. This may make it more difficult for the men to feel that their grief is valid when others around them are unable to discuss it.

Never forget

With four of the interviews it was evident how important it was for the participants to speak of their children who they had lost as if they would about any of their children. They spoke of various things they have done as a family to ensure that their babies are not forgotten such as regularly speaking about them and designing remembrance boxes. This was evident when Greg started his interview by saying “I think Amy would have been four now had she been born”. The way that the men spoke of this was in a way that they wanted to ensure that this baby was part of their family and to continue a bond with them.

“I don’t want to forget Jeremy – I want to talk about him every day”

[Steve]

“Jodie [other daughter] knows who Amy is. Sometimes when we’re having a drink and we say ‘let’s say cheers’, Jodie says ‘and cheers to Amy’ which is lovely, and Sarah [other daughter] will know about Amy as well” [Greg]

It is a difficult reality to face that as parents they do not have these children to hold. There is nothing physically to see or hold on to and therefore it is unsurprising that many of the men and their wives keep memory boxes, or boxes of ashes, out on display to give their babies more of a physical presence and place within the family.

“She is still in our thoughts. Her ashes are still on my chest of drawers in my bedroom. We were going to do something with them, but Michelle doesn’t want to part with them” [Greg]

“We have created a remembrance box type thing...we’ve got that as a little remembrance as well as tattoos. I believe that helped us as well”
[Brendan]

For Steve and Peter, they noted that this physical presence of their babies gave them permission to speak to them and include them in their nightly routines. This is perhaps reflective of a nightly routine that they would have in place had their babies been alive.

“We say goodnight to him every night, he has his little shrine in the corner with his ashes” [Steve]

“We recently had a box made with their names inscribed on it and I was able to sort that out and do that.... I’m always last to go to bed on a night, so I always say goodnight to them on a night. And that’s been great to have them there, you know, they’re visible, and they’re in the living room with all of us” [Peter]

Despite all of these efforts to keep their baby’s memory alive, something difficult for one participant in particular (Peter) was that because the babies were born before 24 weeks gestation, they were unable to be registered and therefore do not have birth certificates. This was very difficult for Peter, who felt that this meant that there was no proof of his twins’ existence and therefore in years to come they will be forgotten about. This is precisely what these families are trying to prevent by talking about their babies or making memorabilia.

“[One thing that] is really important is around how we were able, or not able, to register the life of the boys. They, to all intents and purposes, didn’t exist because of the term of pregnancy when the procedure happened” [Peter]

The theme of validating grief demonstrates how participants described their loss and grief process. Their expression of loss and grief was natural and compared with other accounts of loss and grief in research. However, they felt a societal stigma around grieving and a taboo around speaking about pregnancy loss which results in them feeling their experiences are less valid. In response to this and to facilitate their own grief they engage in memorial practices to emphasise the existence of the child they lost.

Life Changing Experience

The final theme demonstrates what a life-changing experience the miscarriage had been for the men. The theme discusses the impact that the experience has had on their lives in terms of changing perspectives and relationships. Part of this was establishing their identity post-miscarriage, both personally and within their relationships with their partners. The participants spoke of seeking support or joining an online community which allowed them to feel a connection with others who have had similar experiences. The final part of the theme documents the personal growth the men experienced as a result of their experiences.

New supported identity

As part of the grieving process, and one of the first steps towards being supported and moving forward, the men spoke of joining an online community of people who have also experienced miscarriage. They spoke of how it provided information but

also how others shared their stories which were relatable and provided a source of support, removing the taboo of speaking about pregnancy loss that was discussed in the previous theme as well as providing a place where validation could be found. Having the ability to share stories and connect with other people about similar experiences helped with feelings of isolation that may occur through grief and meant that the men perhaps felt less alone during this time.

“immensely comforting at the time, to know that other people had gone through similar things that we’d gone through” [Peter]

“there’s different groups that have actually gone through miscarriage, like other people and you can see what they’re experiencing as well, so it’s not just you”. [Brendan]

“then I realised other dads were opening up and sharing and getting advice and that taught me it’s OK not to be OK” [John]

Although four of the men spoke of joining a community being beneficial, this seemed to be personal preference and not everyone sought support through online communities or miscarriage support charities. For Mark, he felt that it was more important for him to receive support from professionals as opposed to joining a community or being supported by family.

“The family were quite supportive but because there’s only so much support they can give, you need a lot of specialist support from psychologists and counsellors to help” [Mark]

Similarly, Ahmed explained that he did not feel at the time that he needed to seek any support from professionals or online communities. However, during our

interview, on reflection he stated that “perhaps had we gone to a post miscarriage counselling session that might have helped”. Thus, we can see that for some men these online support networks and miscarriage specific charities provide much needed support, but this type of help does not suit everyone.

Interestingly, some men noted that although they had joined the online communities, and they had spoken of the benefits of joining these communities, they mainly used them to read and not to share. They explained that their wives sometimes shared information, but they did not. This is interesting to consider as it is clear that the men benefitted from reading shared experiences and gaining more information. However, this was in their control and some did not feel the need to then go on to share their own personal information. Furthermore, perhaps these men felt that it was less socially acceptable for men to so openly share their experiences.

“I don’t really share, my wife did, but I was reading about different things different women were going through” [Brendan]

A changed man

Life events, like loss, can cause transformations in people’s lives, from changing perspectives on life to more fundamental changes such as disturbances in relationships. Greg detailed how he felt he had been through so much hardship with the miscarriage that nothing was as serious and upsetting to him as that was. Furthermore, he noted that losing their daughter had also changed his perspective on how he parented his two living daughters, with him being more protective of them since the miscarriage.

“nothing is so serious anymore... it’s funny, we were talking about something at work and people get really worked up about it and I just

thought in the back of my head, you know what, it's not dead babies"

[Greg]

"We are much more protective now, both with Jodie and Sarah" [Greg]

Through navigating their grief, the men inevitably changed throughout the process, as did their wives, as they described. In trying to move forward they not only had to come to terms with loss and the impact this had had on their lives, but also the impact the loss had had on their wife's life, and ultimately on their relationship. Grieving patterns are different and may cause strain on relationships and therefore as part of moving forward, the men described having to work hard at rebuilding their relationship again following the loss.

"you meet each other, and you mould together and it's like we've been pulled apart and then completely changed in a lot of ways and we're trying to reconnect" [Steve]

"I mean we've been together 15 years now, so we know each other inside out, but you see a completely different, you become different people when this happens....my wife and I's relationship is definitely different to what it was previously. We tried really hard to be open and honest with each other and we came to an agreement that whilst we don't have to understand each other we just have to accept it and I think that was a real turning point" [Peter]

Part of the life-changing aspect of having experienced miscarriage was the unfairness that comes with having a miscarriage in that it robbed the men of their joy and excitement when it came to subsequent pregnancy following the loss. Four of the seven participants have had children following the loss and three of them noted the

difficulties they experienced during these subsequent pregnancies. Whereas with other pregnancies they were blissfully unaware of any issues that could arise during pregnancy, after experiencing the miscarriage they were hyper-aware of the issues which lead to anxiety throughout the whole pregnancy.

“I would listen to the heartbeat hourly...both of us were very anxious about anything going wrong because anything can go wrong all the way through. So, we were still in the back of our minds thinking something could still happen” [John]

“The pregnancy was horrendous from a worry point of view.... After she was born we realised how horrible the whole pregnancy had been”

[Greg]

“I’m really nervous obviously. I want to be excited but I’m nervous about the whole thing happening again” [Brendan]

Personal growth

It was interesting how, despite the difficult time they had been through, four of the men spoke positively about at least one aspect of their experiences. Perhaps this was a coping mechanism, or in fact a normal part of the grieving process, but they found a positive to speak of and acknowledged an element of personal growth following a devastating experience.

“in some ways it was horrendous, but it was also really nice because we got to meet them, we got to bring them into the world and meet them”

[Peter]

“we look back on Jeremy very fondly” [Steve]

“After that things were alright and we were kind of thankful to Amy for Sarah because without her, we wouldn’t have had Sarah” [Greg]

John also spoke of how his experiences had changed his life in general, for the better. It had given him a new perspective and opened his eyes to a world of men expressing emotions and supporting one another. John used his difficult experiences to not only join a community but lead a community for dads where is he now able to share his experiences and help others.

“I think that if I hadn’t gone through what I went through, I wouldn’t be the person I am now.... Everything comes off the back of what’s happened” [John]

Similarly, Peter explained that him and his wife had decided to volunteer with a local charity which helps families who have experienced pregnancy loss. Neither John nor Peter had had this support when they lost their baby and so perhaps them giving support to local families is a way of hoping that others do not have similar experiences to them.

“We support a local charity at the hospital now, which we gather things for what’s called comfort bags” [Peter]

Participants were clear that they were changed by their experiences, in both beneficial and detrimental ways. Subsequent pregnancies brought great anxiety and were not celebrated or enjoyed until the baby had safely arrived. However, some were able to use their experiences to help support others in similar positions. It was evident that seeking support, whether through online communities, informally through family or from professionals, was a great source of support for the men.

Discussion

Initially the aims of the research will be outlined followed by a summary of both the quantitative and qualitative results. This discussion will be split into two sections; the first section will directly address the research questions in relation to the wider literature, and the second section will cover other important findings that arose through the qualitative interviews and are important in this research area.

Reflections of the strengths and limitations of the research will then be highlighted, followed by considerations of the clinical implications and future research.

Research aims and questions

The aim of the current research was to explore the emotional experiences of men after miscarriage. Specifically, the aim was to establish if men experience any psychological difficulties, what factors may predict this, and if men access any support. The following research questions were proposed:

- Do men experience psychological difficulties post miscarriage?
- What factors predict these psychological difficulties?
- What support do men require?
- What are the facilitators and barriers for men accessing support post miscarriage?

Summary of quantitative results

The analysis of the standardised measures used in the online questionnaires found that on average, participants scored in the mild range for depression and anxiety

using the PHQ-9 and GAD-7 measures. The male-specific depression measure, MSS, indicated low levels of depression based on male-specific depression characteristics used in the measure. The use of the PGS, a grief scale, showed that there was a large range of experiences of grief amongst the participants, with scores ranging from 57.97 to 112.55. Finally, measuring adherence to masculine norms using the CMNI suggested that there was not a strong conformity to masculine norms within this sample.

With regards to seeking support, one-quarter of the participants reported seeking support. Of those, 59% sought support from family and friends, followed by psychological counselling. Approximately one-quarter sought support online and through social media. Similarly, with those who did not seek support (three quarters of the participants), when asked what support they would have liked to receive approximately a third stated that they would have liked psychological counselling or support from family and friends. Approximately one-quarter stated they would have liked to have sought support online.

Stepwise multiple regressions were conducted to establish whether any characteristics predicted scores on the standardised measures for well-being.

For the PHQ-9 the model identified five characteristics that were significant predictors of the scores:

- if men had children after the miscarriage, they scored lower on the PHQ-9
- if the miscarriage occurred between 20-24 weeks, they scored higher on the PHQ-9
- if the men were aged 18-24 years old, they scored higher on the PHQ-9
- if they identified as being Jewish, they scored lower on the PHQ-9

- if the miscarriage did not occur between 4-8 weeks, they scored higher on the PHQ-9

For the GAD-7 the model identified three characteristics that were significant predictors of the scores:

- if the miscarriage occurred between 20-24 weeks, they scored higher on the GAD-7
- if men had children after the miscarriage, they scored lower on the GAD-7
- if the men were aged 18-24 years old, they scored higher on the GAD-7

For the MSS, the model identified four characteristics that were significant predictors of the scores:

- if the men were no longer in a relationship with the mother of the baby, they scored higher on the MSS
- if the miscarriage did not occur between 8-12 weeks, they scored higher on the MSS
- if the most recent miscarriage for the men was between 2-5 years prior to completing the questionnaire, they scored higher on the MSS
- if men had children after the miscarriage, they scored lower on the MSS

For the PGS, the model identified six characteristics that were significant predictors of the scores:

- if the miscarriage occurred between 20-24 weeks, they scored higher on the PGS
- if men had children after the miscarriage, they scored lower on the PGS
- if the men were aged 18-24 years old, they scored higher on the PGS

- if the miscarriage did not occur between 16-20 weeks, they scored lower on the PGS
- if they identified as being Jewish, they scored lower on the PGS
- if men stated that their family and friends had not experienced a miscarriage, they scored higher on the PGS

Summary of qualitative results

The qualitative analysis identified four main themes; ‘the role of protector’, ‘tidal wave’, ‘validating grief’ and ‘life changing experience’. The first theme of ‘the role of protector’ illustrates the role that men adopted in ensuring they protected and supported their wives and other family members, even to the detriment of their own grieving process. It was clear that the men felt compelled to be strong for their wives by putting their emotions to one side and quietly observing their partner’s grief. They seemed to stay in this role for a number of reasons such as the men thought that their wives found the experience more difficult, societal and cultural pressures, and the way that others treated the couple.

The second theme identified was ‘tidal wave’ which detailed the point at which the men were able to express their emotions, when they felt that they no longer needed to be in the role of protector. Although men felt helpless and therefore not in control, they ensured they were in control of their emotions for whatever period of time they needed to be for their wife. When they felt able to, usually when they perceived that their wives needed less support, they found some time to be alone to express their emotions.

The third theme was ‘validating grief’ and this focused on how the participants emphasised that they had experienced a ‘real loss’ which resulted in a grief response, as any loss would. However, despite feeling such a great loss, there was a sense that this loss was not validated by society and they therefore felt less able to fully express their emotions regarding the miscarriage. In response to this and to help in their own grief process they engage in memorial practices to emphasise the existence of the child they lost.

The final theme was ‘life changing experience’ and details the aftermath following the miscarriage and the impact it had on their lives. It initially outlines the support that the men sought from others in order to allow them to move forward following the loss. The theme then details the ways in which the men, and their lives, have changed since the loss including the way in which they felt they have developed from a personal perspective.

Research questions addressed

Psychological impact

The first research question was designed to establish whether men experienced psychological difficulties following the miscarriage. This was answered through both the quantitative and qualitative aspects of the research. In the quantitative part of the research, standardised measures were used to attempt to quantify how the men were feeling from an emotional perspective. The measures used were the PHQ-9 and MSS which both measured mood, GAD-7 which measured anxiety and PGS which measured grief.

Out of the 491 participants who completed it, the average total score on the PHQ-9 was 7.54 which equates to mild depression. The scores ranged from 1.2 (minimal or no depression) to 13.88 (moderate depression). In a study of 580 primary care patients, Kroenke et al. (2001) found that 93% of people with no depressive disorder had a PHQ-9 of less than 10 and scores of 5-9 predominantly represented people with either no depression or subthreshold depression. Thus, although on average the scores indicate that men who have experienced a miscarriage reported lower mood scores, this was not in a range whereby the men would meet the criteria for a depression diagnosis. However, the aim of this research was not to diagnose depression but instead it was interested in whether or not there were any psychological difficulties present for the men, and the PHQ-9 did allow for a way of establishing this. Furthermore, as the current research was not designed to provide a causal link and was designed more to provide an indication of how men were feeling at the time they completed the questionnaire, it is difficult to tease apart whether the indication of psychological difficulties is as a result of the miscarriage or other life factors that could contribute to lowered mood.

The MSS was also used as a measure of mood, as this measure took into consideration that some men experiencing mood difficulties could perhaps display more male-specific traits of depression, not otherwise captured by the PHQ-9. The participants' total score on the MSS was, on average, 2.24 with a range of 0.65 to 3.38. When using the full MSS measure, the cut-off score for depression would be a score of 5 or more (Martin, 2010). Given that the current study did not use the full measure it is difficult to establish where the cut-off would be for the participants in this research. On the one hand it could be suggested that a mean score of 2.24 and a highest score of 3.38, out of 6, would indicate that some men did experience

depression based on the male-specific measure. However, on the other hand, given that the highest score on the MSS could have been 6 and the highest score that any man scored was 3.38 this could indicate that few men experienced male-specific depression. As the measure was not used in the way that it was developed by Martin (2010), future research would benefit from using the MSS as initially used by the originators. There are a number of factors to consider when evaluating the MSS scores in this study. Firstly, the participants in this research did not score particularly highly on the CMNI and, therefore, on average, did not adhere strongly to masculine traits. Perhaps their experiences of low mood were in line with the generalised view of depression (as portrayed on the PHQ-9). Therefore, it is interesting to consider whether it is necessary to have a measure of depression specifically for those who adhere more to masculine norms. Or alternatively, perhaps there is a place for this measure and that those men who are willing to take the time to complete this research about their psychological well-being may not be those who score highly on the CMNI and therefore may not find the MSS as relevant.

The GAD-7 was used to measure anxiety, and of the 501 participants who completed it, the mean score was 6.42 which indicated a mild score of anxiety. The scores ranged from 0.85 (minimal or no anxiety) to 11.99 (moderate anxiety). The mean score of these participants was slightly higher than the mean score of 4.9 in a population of people without generalised anxiety disorder (Spitzer et al., 2006), indicating that although the participants of this study did not meet any criteria for being diagnosed with anxiety, which was not the purpose of this study, they were still exhibiting some form of anxiety. As with the PHQ-9, it is difficult to infer that these scores from the GAD-7 are reflective of the impact that the miscarriage had on the men's lives, given that many aspects of life can contribute to anxiety.

The PGS was used to quantify the grief that the participants may or may not have been experiencing. Of the 483 men who completed the PGS questions, the mean score was 85.26 and the range of scores was 57.97 to 112.55, indicating a large range in experiences of grief. The authors of the PGS noted that, based on data from 1,589 bereaved women and 654 bereaved men, the PGS total score will, 95% of the time, fall between 78 and 91; therefore considering a score of 91 as reflective of a high degree of grief (Toedter, et al., 2001). The average score of 85.26 in the current study therefore reflects moderately high levels of grief in this population of men who have experienced miscarriage. These results are also comparative to research conducted with 126 men who had experienced miscarriage, which found that the mean score on the PGS was 83.8, which the authors classified as high (Johnson & Puddifoot, 1996). Rich (2000) conducted research with 249 mothers and 114 of their male partners who had experienced perinatal loss from 2-42 weeks (therefore including miscarried and stillborn babies) and found that the mean score on the PGS for women was 92.48 and the mean score for men was 73.99. The results from the current research are not dissimilar and the mean score of 85.26 falls between the scores for men and women in Rich's study, therefore indicating that the current findings fit with the existing literature. As Rich's study includes all pregnancy loss it makes it more difficult to compare the results. However, it would be interesting to explore further to assess whether, in men, there are any differences in grief response depending on length of gestation of pregnancy.

The themes of 'the role of protector' and 'tidal wave' established in the qualitative analysis were primarily around the psychological impact that the miscarriage had on the men; they had felt upset by the miscarriage but were unable to express their emotions fully whilst trying to support their wives and other family

members. The theme of ‘tidal wave’ detailed that eventually they were able to express their emotions, once their wives were starting to feel able to manage a bit more, and therefore the men felt that their support was needed less. Furthermore, this release of emotions was only done at a time when the participants had the space to, usually when alone. These findings add to the existing evidence by highlighting that men are psychologically affected by miscarriage, and they are not giving themselves the space to explore these feelings until they feel that they no longer have a role to play in supporting their wives. This is in line with previous research which indicates that men set aside their own grief and emotional needs to support their partner following a pregnancy loss (McCreight, 2004). An article written in the *Lancet* detailed partners’ experiences, indicating that they shared the same feelings of grief and sadness as their wives but felt they had to hide their feelings and be strong for their wives (Boynton, 2015). Although this is exactly what was found in the current research, Boynton did not carry out formal investigation of this; the article was a personal reflection, and so it is valuable that the current research endorses and extends this perspective using a systematic design and analysis. Although this may perhaps be portrayed as a negative for the men’s own mental health, it must also be highlighted what a strength this is for men, who prioritised their partner’s well-being and strived to be protective and supportive at such a difficult time in their lives. However, one novel finding was that it was important for most men to be alone to express their emotion. To the researcher’s knowledge, to date, the only research to demonstrate similar findings is a recent paper by Wagner et al., (2018) who illustrated that men did have periods where they “broke down” but that this was not something they did in front of their wives. This is not a surprising finding given that research consistently finds that gender norms may influence

emotional expression, i.e. men do not cry (Fischer, & LaFrance, 2015). Furthermore, the finding that the men waited their turn to express their emotions, is also novel. Therefore, when thinking about men's distress following miscarriage it is important to understand it in the context of his relationship.

Summary

In summary, the results from this research indicate that men do experience psychological difficulties following a miscarriage. Miscarriage may affect mood, anxiety and produce a significant grief response in men, however it is difficult to establish a causal link from this research. Furthermore, men may experience this distress, but push their feelings to one side whilst trying to support and protect their wives through their grieving process. Once their wives feel more emotionally stable, men are able to acknowledge and express this emotional response they are feeling when they are by themselves. These findings are in line with published literature available which indicate that miscarriage can produce a grief response in men (Rinehart and Kiselica, 2010) despite not always showing this to others. With previous research discussing the inequality between men and women in relation to reproductive events, with men being seen as being on the periphery with reproductive events (Daniels, 2006), it is important that the current findings have shown that men too are highly affected by their experiences of miscarriage. Therefore urging for more equality in the way that men and women are treated following a miscarriage.

Protective or risk factors

The second research question aimed to explore what factors might predict any psychological difficulties experienced by men. These factors mainly emerged

through the regression analysis as part of the quantitative research, although some factors were discussed during the interviews as part of the qualitative research.

Stage of pregnancy

Despite previous research indicating that the length of gestation does not necessarily correlate with the length or intensity of distress (Klier, et al., 2002; Obst & Due, 2019), the current research indicated otherwise. The quantitative analysis illustrated that a miscarriage between 20-24 weeks predicted significantly higher scores on the PHQ-9, GAD-7 and PGS. Thus, indicating higher levels of low mood, anxiety and grief the further along in pregnancy the miscarriage took place. Furthermore, the qualitative analysis highlighted the deep distress that those men faced when their wives had to give birth to their babies, knowing that they would not be alive. It is interesting to begin to think about why this might be the case; for example whether it is because the baby is more developed, whether it is because the method to end the pregnancy is more distressing due to having to give birth, or whether because the pregnancy has been longer, perhaps there is a greater bond with the unborn baby and more detailed conversations were had around a future with this baby. A number of factors could be assumed but further research would need to take place in order to fully understand the reasons behind this. Klier et al. (2002) detail a number of studies which conclude that length of gestation is not correlated with psychological symptoms. All of these studies were conducted on women and none considered men's responses based on length of gestation. The current research offers novel findings, which are different to those already portrayed in the literature. Perhaps these differences are related to the fact that for women, stage of pregnancy is less related to their well-being because they are experiencing physical changes from

early on, but men may only start to connect with their baby when they can start to see a bump or feel movement, which does not happen until later in the pregnancy.

However, this should not detract from how some men experienced earlier stage miscarriages. One of the participants of the qualitative research, John, experienced two miscarriages at 10 and 12 weeks and described how he was hit by feelings of depression once his wife had started to feel a little better. Thus, his loss and grief experiences were comparable to those men who had experienced later stage miscarriages. Perhaps John's response was in relation to experiencing more than one miscarriage, or perhaps it was in relation to John's specific context of not having a supportive social network, which could present as a factor which affects well-being, as discussed further below. Therefore, although this research indicates that the further along in pregnancy, the more difficult can be to cope following the loss, the effect of earlier losses should not be diminished.

Religion

In the quantitative element of the research it was highlighted that identifying as being Jewish significantly predicted lower scores on the PHQ-9 and the PGS, indicating lower levels of low mood and grief following their loss. From this it cannot be assumed that being Jewish is a protective factor, however, perhaps there is an element of community support available, either formally or through family and friends which is protective in nature. Furthermore, religions such as Judaism, Islam and Christianity offer frameworks for understanding loss and managing grief would possibly be helpful for people (Allahdadian & Irajpour, 2015). It would be interesting to further explore the role that religion may play in the grieving process following a miscarriage, for both men and women. The current research did not

represent a diverse enough population, with almost 94% of the participants identifying as having no religion or being Christian, in order to proffer any conclusions about the role that religion plays in the loss of a pregnancy for men. Furthermore, the spread of religions in the sample did not represent the UK population, with little participation from men from Muslim or Hindu religions, and more participation from men from Jewish backgrounds (12 men, 2.3% of the sample), than is represented in the general population.

Age of men

It was interesting that the younger men who completed the questionnaire, those aged 18-24, scored higher on the PHQ-9, GAD-7 and PGS in this research. Although age of participants was collected, it does not seem to have been a factor that has been previously discussed in the literature as having an impact on well-being following miscarriage (eg. Beutel et al., 1996; Kong et al., 2010). It is interesting to assess why age has not been acknowledged as playing an important role in previous literature. Research by Martins, Sheppes, Gross and Mather (2016) reports that older adults (aged 57-86) are more inclined to maintain positive emotions than younger adults (aged 17-23). Perhaps this is reflective of the current research in that younger adults may focus on the negative emotions, thus finding it more difficult to cope with the loss of the pregnancy. Furthermore, this age group of men may be different to men in older age brackets in that they may have had less life experience to deal with loss and therefore less resources to cope, including being less socialised to talking about difficulties. Furthermore, the analysis in the current research indicated that having children following a miscarriage could be a protective factor, and perhaps this age range of men have had less opportunity to have a subsequent child. Despite this,

men aged 18-24 accounted for only 5% of the sample (26 men), and therefore it may be helpful to use future research to further explore whether age is a factor that influences well-being after miscarriage in order to establish whether more support, or age specific support, is needed for younger fathers following a loss.

Children after miscarriage

Whether the men had children after the miscarriage was the one factor that predicted scores on all four of the well-being measures in the quantitative element of the research. If men had children after the miscarriage the regression analysis found that they scored lower on the PHQ-9, GAD-7, MSS and PGS; indicating that they if they had had children after the miscarriage, they had lower levels of low mood, anxiety and grief. Interestingly, although having a child following the loss may indicate lower levels of distress for the men, the qualitative aspect of the research highlighted that although it might reduce levels of distress to have a second child, there are still long-lasting grief responses that remain even after a successful subsequent birth. Furthermore, the qualitative results highlighted the high levels of anxiety associated with a subsequent pregnancy, therefore indicating that it should not be assumed that having a subsequent pregnancy will reduce anxiety or grief responses. Taking both the qualitative and quantitative findings together perhaps highlights that men may continue to grieve for the baby they have lost whilst also finding some hope and positivity in moving forward with a subsequent pregnancy. Some previous research has found that having subsequent children decreases the rates of anxiety and depression experienced after a miscarriage (Adolfsson, Bertero & Larsson, 2006). However, other research has found that the psychological symptoms experienced as a result of pregnancy loss are not resolved by the birth of another child (Robertson

Blackmore, Cote-Arsenault, Tang, Glover, Evans et al., 2011). This conflicting evidence is in line with the findings from the current study as it highlights that although there may be a decrease in psychological distress following the birth of a subsequent child, it does not mitigate the distress fully. Furthermore, both of these previous studies only included women and therefore the current study enhances the evidence base and shows that this is also applicable to men.

Time since miscarriage

The results from the quantitative analysis indicated that those men who had experienced their most recent miscarriage between 2-5 years ago predicted higher scores on the MSS, indicating higher levels of male-specific depression. This is interesting to note as it was the male-specific measure in particular that picked this up, indicating that perhaps those men who more strongly exhibit male-specific depression traits, also more strongly take on the role of protector, as outlined in the qualitative results section, and therefore it takes them more time to address their own grief. Previous research has highlighted that men and women have different grieving styles and roles that they assume when they lose a child (Avelin, Radestad, Saflund, Wredling & Erlandsson, 2013) and perhaps men may experience grief for longer due to them not expressing how they are feeling early on, or addressing their feelings at a later stage. Furthermore, although symptoms of grief typically subside within 6-12 months (Shear et al., 2011), grief in relation to perinatal loss has been reported to take as long as 5-18 years to reduce (Gravensteen, Helgadottir, Jacobsen, Sandset, & Ekeberg, 2012).

This does not mean that men only experience grief, or the emotional impact of miscarriage after 2 years. However, it does highlight that grief is a life-long process

and this is true of the grief experienced following a miscarriage. This is not a novel concept, as grief has often been written about as being a life-long process to live with (Arnold & Gemma., 2008). However, this is an important finding in relation to miscarriage, as most of the research conducted uses timeframes to cut-off when people have experienced the miscarriage, such as participants must have experienced miscarriage within the past year (e.g. Kong et al., 2010; Tian & Solomon, 2018) and so the findings of the current study indicate that this should not be the case and that participants should be included regardless of when they experienced the miscarriage. The fact that the current research did not restrict the time since the miscarriage is a strength as it allowed for this finding that men who had experienced miscarriage between 2-5 years ago reported higher levels of male-specific depression. Perhaps this is particularly true for men who could have delayed responses to the loss, as described in the theme ‘tidal wave’. If men express their emotions in relation to the miscarriage once they feel their wives are more physically and emotionally stable, there is an unknown period of time as to how long their wives will take to grieve and, therefore, men’s emotional turning point may be at a much later stage.

Support

The third research question asked what support men require following a miscarriage. The quantitative analysis addressed this through asking whether men had sought support and if so, what avenue of support they had sought. Previous research has not seemed to highlight proportions of the population who have sought support following a miscarriage, although Sejourne, Callahan and Chabrol (2010) noted that despite the psychological impact miscarriage may have on women, they are less

likely to be associated with support services than those women who have had experienced later perinatal losses. The current research found that a mere quarter of the participants had sought support following their experience of miscarriage. They had sought support mainly from family and friends or a psychological counsellor. One-quarter of those who had sought support stated they had done so through online support or social media. Of the three-quarters of men who had not sought support, those who would have liked to have received support stated that they would have liked support from family and friends or a psychological counsellor. Twenty seven percent stated that they would have liked online support. This research did not explore directly why they did not seek the support, although the qualitative aspect of the research did show certain factors as potentially being important for why men did not seek help; such as being a protector for their partner.

Interestingly, those men who reported that family and friends had not experienced a miscarriage scored higher on the PGS, indicating higher levels of grief experienced. Thus, potentially indicating that those who have had family and friends who have experienced miscarriage may have more open conversations about their experiences, leading to greater social support during a difficult time and therefore helping with the grieving process. Research has found that social support, including support through family and friends, was the most likely avenue of support sought by both men and women following a pregnancy loss (Rich, 2000). A lack of social support has been associated with complicated grief (Lasker & Toedter, 1991). Furthermore, recent research has noted that men found support from others who had experienced a miscarriage particularly meaningful and felt better understood by family and friends who had experience of the same life event (Wagner et al., 2018).

During the interviews, some participants explained that following the miscarriage they joined an online community which allowed them to read about other people's experiences of miscarriage. However, the men explained that they were not active in sharing their own experiences in these groups, instead using them primarily to learn about others' experiences and finding comfort that they had been through similar events as others. This is perhaps reflective of the support that men need following a miscarriage, indicating that they may be less likely to share in group situations, and therefore group therapy may perhaps not be as helpful as 1:1 therapy for men. Perhaps this is due to men finding it difficult to share vulnerabilities in front of others, as sharing emotions is not seen as a 'masculine' trait (Mahalik et al., 2003). Furthermore, perhaps this is due to men preferring to opt for problem-focused (the use of cognitive or behavioural strategies to manage stressors) rather than emotion-focused (changing emotional responses to stressors) coping strategies (Matud, 2004). Online forums seem to be useful support resources for finding comfort in reading similar stories to their own but not for sharing, and therefore still have their place in supporting men. Previous research has noted that if men do not have the opportunity to openly grieve following a loss, they are more reluctant to seek support within group settings (O'Leary & Thorwick, 2005). Therefore, perhaps online resources are an excellent way for men to gain information they need without having to share their own emotions with others, which may feel uncomfortable for them. They can then seek alternative methods of support for sharing their own experiences.

An additional factor to consider when assessing what support men require is what time point in their grieving process they would require the support. From the qualitative analysis, it was evident that from the outset men take on the role of

protector to ensure that their wives, and other family members, are well supported and able to grieve themselves. Therefore, the men may not be in a position to express how they are feeling and how they are coping with their loss as their minds are occupied. Thus, men are not in a place where they could accept or seek support until their wives are less in need of the support from their husbands. This poses an issue for when support should be offered to men and advocates for a more person-centred approach to care. Some men may need a space where they have permission to no longer be 'strong' and, therefore, support offered from the beginning would be important. However, other men may not feel able to focus on themselves at that point and, therefore, if they could not be encouraged to seek the support to ensure they stay mentally well, then support should also be offered at a later stage for them. It may be important for organisations to consider this when offering couples support following a miscarriage, as this could influence the way in which support is offered and they could perhaps offer a follow-up check-up with men at a later stage.

Facilitators and barriers for accessing support

The fourth research question aimed to establish the facilitators and barriers for men accessing support post miscarriage. It was more difficult to isolate specific facilitators for accessing support within the data. However, through the quantitative research, it was apparent that a facilitator for seeking social support was whether or not a family member or friend had previously experienced a miscarriage. A number of barriers have been identified within the current research, including societal and cultural influences and the role that masculinity plays.

Societal influences could perhaps be a barrier for men in seeking help. If, firstly, they are prioritising their wife, and then they feel that they are not able to openly

express their emotions, this may prevent them from seeking the appropriate support. This barrier for seeking support could be a result of two societal issues. Firstly, the taboo around discussing pregnancy loss may be tied in with societal taboos around discussing topics which are viewed as intimate, for example, menstruation as it is seen as dirty (Murphy & Philpin, 2010). Linking to miscarriage, Murphy and Philpin (2010) identified that an early miscarriage could also be seen as 'dirty'. Secondly, the fact that people feel that their loss is not acknowledged and validated within society could be a barrier for men to seek help following a miscarriage. Feeling shame or feeling stigmatised can often be a barrier for people seeking support for psychological services (Calloway, 2008; Setiawan 2006). Therefore, the first stage of supporting men after pregnancy loss may be acknowledging that they, and their partners, have experienced a real loss which activates a real grief response and therefore they may require support for this.

Cultural influences may also be a barrier for seeking support following a miscarriage. In the qualitative aspect of the research, one participant, Ahmed, spoke of the role that his culture, as a South Asian Muslim, played in his grieving process. He stated that for him, he was taught that miscarriages are for women to respond to and that men's role in this time is to support their wives emotionally and physically. Therefore, he stated that he felt his culture did not emphasise the importance of the man's emotional response of a miscarriage. This could be seen as a barrier for men to access support. Little research has been conducted exploring the cultural context of perinatal loss (Koopmans et al., 2013). However, it is acknowledged that it is important to provide culturally-sensitive care and support whilst also not imposing the grief culture from Western society, such as seeking support or where that support would be found, onto other cultures (Koopmans et al., 2013).

‘Masculinity’ may also play a role in support seeking. The results provided in the supplementary analysis section (Appendix I) suggest that men in the research who adhere to masculine norms may be less likely to seek help following a difficult life event, such as a miscarriage. These findings support previous research which indicates that for men, seeking help seems to represent a violation of each of the Western hegemonic masculine norms (Hammer, et al., 2013). Specifically, the traits of masculinity measured in this research were emotional control, risk taking and self-reliance and, therefore, it is these aspects of masculinity that the current research found to be associated with help-seeking. The need to be in control of emotions and self-reliant has also previously been found to be associated with help-seeking behaviour for men (Mansfield, Addis, & Courtenay, 2005). Although these findings are not novel, it is important for support providers to appreciate the role that ‘masculinity’ may play in seeking support and perhaps work with this trait rather than against it. For example, redefining how seeking support is seen, and using masculine norms to promote help-seeking as demonstrating men’s autonomy and strength (Roy et al., 2014).

There are a number of factors to consider for supporting men following a miscarriage. It is important to acknowledge that it is not just the miscarriage, but the context that the man is in, that needs to be considered when trying to understand the impact of the loss and the way in which men will go on to seek support. Therefore, professionals must take a systemic approach to supporting men through their loss. Health care professionals and charity organisations must consider the fact that men may want to be strong for their wives, and also grieve by themselves. Furthermore, the fact that there is a feeling of disenfranchisement of this loss must be considered

by professionals, so they reach out and ensure that they are validating the loss for men.

Other important findings

The information in this section of the discussion is not necessarily specifically related to the research questions but they were topics which were discussed in the qualitative interviews and were identified as part of the qualitative analysis as being important in this area of research. Where relevant, the topics will be linked to the research questions. The topics discussed will be real loss and grief, societal and cultural norms, language and the fact that having a miscarriage is a life-changing experience.

Real loss and grief

One of the themes identified in the qualitative analysis was around validating the loss and grief experienced by the men. Grief is a very painful process to have to navigate, but even more so it seems, when the loss experienced goes against the natural order of life, such as losing a child (Martinson, Davies, & McClowry, 1991). Losing a child at any stage, including in utero, is a difficult life loss for people to have to go through. Although it is a part of life to lose someone, it is not necessarily a part of everyone's life to lose a child. The loss of a child brings with it the loss of future dreams for that parent, the loss of plans that they had foreseen and made. Therefore, the grief experienced as a result of a miscarriage is not only the grief of the baby but also the grief of a future already planned. Furthermore, an added dimension is that the loss associated with miscarriage is minimised by others (Lang et al., 2011) and therefore this can lead to a lack of validation for people who

experience it. This has been found by Meaney, Corcoran, Spillane and O'Donoghue (2017) who conducted qualitative research with 10 women and 6 men around their experiences of miscarriage. The first theme they identified was around the acknowledgement of miscarriage as a valid loss and they noted importance of marking this loss for validation for the parents.

Two key factors identified in this research that make the grieving process different to that of most other losses, although still acknowledging that it is a real loss, is, firstly, that the loss may be navigated alongside a partner who is physically *and* emotionally affected by the loss and, secondly, the need to keep the baby's memory alive. Firstly, although when experiencing loss of anyone, an individual may go through the process of grieving with the support of their partner, who may also be grieving in their own way, when it is a child that they are both grieving for, and therefore the same relationship and loss experienced, the response must be carefully navigated together. This may be difficult, as indicated in the qualitative research of the current study, as grieving is such a personal experience and men and women may grieve at different times and at different rates. This may have implications on a number of levels; initially during the early stages following the loss and then if one person is ready to start trying to have another child and the other is not. As grief is so personal, often partners experience and express their grief in different ways, making it more difficult for them to comfort one another, which can cause conflict in the relationship (Toller & Braithwaite, 2009). Although difficulties within relationships were briefly spoken about within the qualitative interviews, it is interesting that this was not a topic discussed in depth by the men.

Secondly, another factor which was identified as being important from the qualitative analysis was that men described rituals of keeping each baby's memory alive to ensure that they were never forgotten. These usually involved creating a memory box of ashes, photographs and hospital name tags, or having pictures/ashes on the mantelpiece; all of which enabled the men to keep a bond with their unborn child. This type of practice is not uncommon following the death of a child and having a memory box with pictures or hospital name bracelets could be seen as a healing practice (Capitulo, 2005). Using the baby's name, having a ceremony and taking photographs have been found to be valuable practices in the creation of a bond (Koopmans et al., 2013). The need to keep a physical presence of the baby shows the deep connection men can have with the unborn baby prior to their birth and long after they have passed away. This is unsurprising given that previous research has illustrated that bonds between father and baby begin in utero (Vreeswijk et al., 2014) and these bonds can continue after a perinatal death (Neimeyer, et al., 2010). For one participant of the qualitative research in particular, Peter, something that was of great significance was that he was unable to obtain a birth certificate that acts as a proof of life for his twins who had died because they were born before 24 weeks gestation. For him this meant that keeping their babies' memory alive would be more difficult when he and his wife are no longer around to talk about them if there was no proof and therefore no acknowledgement of the impact the twins had on their lives.

Societal and cultural norms

Societal and cultural influences were featured in each theme of the qualitative analysis to certain degrees and so it is important to highlight the impact that these

have on the way in which men behave in response to a miscarriage, but also the way in which society and culture may dictate this. In the first theme it was apparent that men felt it was important to temporarily push their feelings to one side in order to protect and support their wives. It is interesting to explore where this behaviour comes from, and one of the possibilities discussed was that of societal and cultural influences. The protector role was not only found in the way the men reacted, but also the way in which family and staff responded to the situation and appeared to have their own expectations of roles in this situation. Research has found that men's grief may be overlooked as a result of the social expectations of how a man should act and the role he should play following a loss, such as not fully disclosing their feelings at the risk of seeming weak or vulnerable (Due, Chiarolli, & Riggs, 2017; Moore, Parrish, & Black, 2011). It is interesting to explore where these social expectations of how men should behave in these situations stem from. The norms that the men spoke of during the interviews were often implicit and therefore perhaps this suggests that discourses around masculine norms have not really shifted throughout the years.

In addition to the roles that seemed to have been shaped by society and culture, the way in which men express their emotions also seems to be dictated by societal norms. For example, although only one participant openly labelled that he felt able to express anger in front of others, but not sadness, it is possible that others also felt this way but had not reflected on sharing their emotions in this way. Some research has found that those men who adhere to hegemonic masculine norms were more likely to endorse anger related symptoms of depression (Nadeau, Balsan, & Rochlen, 2016). There seems to be some societal agreement that, despite men and

women experiencing similar emotions, men should display their emotions in a different way to women (Shelley, 2007). The masculinity measure used in the quantitative part of this research suggested that there was not a strong conformity to masculine norms as a whole throughout the data. If adhering to masculine norms holds men back from expressing emotions, then hopefully the participants were able to openly express how they were feeling as there was not a strong adherence to masculine norms. It is interesting to consider why the men who completed the research overall did not adhere strongly to the masculine norms. Perhaps, those men who do adhere strongly to masculine norms would be less likely to complete research around the psychological impact of miscarriage because completing research about psychological well-being may clash with values of being self-reliant and showing emotional control.

As discussed in the introduction, previous research has found that the grief that parents experience as a result of early pregnancy loss is often disenfranchised and not openly acknowledged within society, in particular within Western cultures (Mulvihill & Walsh, 2013). In a small qualitative study of women who have experienced miscarriage, Watson, Jewell and Smith (2018) found that women sought validation of their loss, as they had seen their losses as significant, difficult life events. Sadly, research has illustrated that men do not reveal their grief because of lack of acknowledgment by family, friends and healthcare professionals (Gray, 2001). This has also been evidenced in the current research, with men noting that they felt that it was less socially acceptable to openly grieve for their child lost in utero than it would be to grieve for another loss. Perhaps this is because within Western cultures people do not disclose pregnancy until 12 weeks and, therefore, miscarriage before 12 weeks is not spoken about. Therefore, there is a pressure for

men, although not always verbalised, to behave in a particular way in certain situations, which is reinforced by the way clinicians and family members interact (or fail to interact) with them. Perhaps in the situation of miscarriage, this expected way is to protect their wife and not show emotions openly. This may not necessarily be true of all cultures, as not all cultures view early pregnancy loss as a baby (Murphy & Philpin, 2010).

Language

As mentioned in the methods chapter, during recruitment I was asked to change the wording on the online questionnaire from ‘miscarriage’ to ‘pregnancy loss’. I responded by changing the wording on the questionnaire and my use of language through the interview. However, through the qualitative analysis it became apparent that participants did not view this as a ‘pregnancy’ loss, which does not imply the loss of a human being, their child, but merely the end of a pregnancy. I therefore reverted back to using the word ‘miscarriage’ during my write-up of the research as the medical definition of miscarriage is the ‘involuntary, spontaneous loss of a pregnancy before 24 weeks’ (WHO, 2017) and, therefore, although the use of this word does not encapsulate the emotion and deep loss experienced, it is still the most widely accepted word used for this life experience. However, it was something that Peter said, one of the participants who took part in the qualitative interviews, which really resonated with me, that these losses should not be treated as anything other than a death, which is what they are. Therefore, perhaps there does not need to be another word used.

Recent research exploring men’s experiences of miscarriage has highlighted the need to adopt more inclusive language for men, in particular in the hospital setting

(Obst & Due, 2019). The current research did not cover the language around miscarriage or the reasons behind why the use of the word is disliked but perhaps it is because the word is seen as a medical event rather than capturing the experience of losing a baby. Furthermore, it could be due to the fact that, in society, miscarriage is associated with early pregnancy loss where labour is not required and, therefore, some people who have given birth do not feel that the word fully reflects their experience. Or on the contrary, those who have experienced an early miscarriage and therefore not given birth, but who still feel the loss of their baby, may not be viewed as having experienced the same distressing loss as a later miscarriage or stillbirth in society. It is difficult to know, and words and language resonate with people in different ways, therefore it is a personal preference. This highlights the need for a person-centred approach to the support given to men; allowing them the opportunity to use the language that they most feel comfortable with and that best reflects their experiences.

Future research would benefit from exploring men and women's perspectives on the language used in relation to miscarriage. Although formal research has not covered this, there are some blogs and newspaper articles which highlight the issues with the language used in this context. For example, Katy Lindeman (2018) writes about how the language around pregnancy loss can imply failure and blame towards parents which adds an extra dimension to the grief they are already experiencing. Importantly, it was concluded that language around miscarriage will not begin to evolve unless it is spoken more openly about within society.

Life changing

The final theme in the qualitative analysis recognised the huge impact the miscarriage had on the men's lives, both in a negative and positive way. As described above, clearly the miscarriage had a negative impact from an emotional perspective. Furthermore, these emotions, in particular anxiety, were then continued into subsequent pregnancies. Additionally, some men in the qualitative research noted that the miscarriage had changed their perspective on life, and some noted changes in their relationships with their partner. However, the men also described positive changes that resulted from the miscarriage, including becoming more actively involved in miscarriage charities.

Men explained that they experienced anxiety in subsequent pregnancies, removing the joy and excitement that they may have felt in previous pregnancies. Previous research has also highlighted that higher levels of anxiety were experienced in subsequent pregnancies following a miscarriage (Meaney, et al., 2017). During the interviews, men also expressed how the miscarriage changed their perspective on life, noting that other stressors, such as work, did not seem as important anymore. Furthermore, for those men who had living children, they described feeling more protective of them and changing the way they parented. Interestingly, these findings are in contrast with previous research which has noted that experiencing a perinatal loss may have a negative impact on mother-infant relationships (Lamb, 2002).

Previous research has noted the impact that miscarriage can have on relationships (Kersting & Wagner, 2012), with perinatal death being identified as a risk factor for the breakdown of relationships (Vance, et al., 2002). The qualitative

analysis in the current research identified that navigating their grief alongside their partner may have caused a strain on their relationship. However, all men who were interviewed were still in a relationship with their partners and described having to work hard at their relationship through the grief. Similarly, the quantitative analysis showed that almost 95% of the men who answered the online questionnaire were still in relationship. Interestingly, the quantitative analysis also highlighted that if the men were no longer in a relationship with the mother of the baby (5% of the sample), they scored higher on the MSS, indicating higher levels of male-specific depression. Perhaps these higher scores of depression indicate that these men do not have someone who they can talk to about the baby, or someone who has a shared understanding of their experiences. Furthermore, as this was the male-specific measure of depression, perhaps those men whose depression presents in a way that shows more anger or relies on substance use more, are more likely to have a relationship breakdown, if this is not a compatible grieving style to their partner.

Although the miscarriage could be seen as life-changing in a negative way, there were also positive life changes that emerged for the men as a result of the miscarriage. Some men in the qualitative analysis explained that since their loss they had become more involved with miscarriage charities and helping other families who had been through similar losses. These findings contribute to existing literature which illustrates that grief for bereaved parents may result in both post-traumatic stress and post-traumatic growth (Krosch, & Shakespeare-Finch, 2017). Tian and Solomon (2018) examined the processes that can foster post-traumatic growth in women following a miscarriage and found that growth is most likely to occur when women experience moderate level of grief. Tian and Solomon (2018) used the meaning reconstruction model of bereavement, which features three mechanisms;

sense-making, benefit-finding and identity change (Gillies & Neimeyer, 2006) and found that meaning reconstruction of the miscarriage was an important factor in alleviating the negative impact of grief on post-traumatic growth. Successful adaptation following a loss has been found to depend on an individual's ability to make sense of the loss (Tian & Solomon, 2018) and people who engage in self-reflection and cognitive processing of the event may experience positive changes (Rozalski, Holland, & Neimeyer, 2016). Therefore, perhaps those men in the research who were able to find positive elements of the miscarriage had spent time making sense of their experience and relearning the world post-miscarriage. Together with previous literature, these findings illustrate the need for person-centred support following a miscarriage, preferably with the use of a meaning-making framework to encourage growth.

Strengths

One of the strengths of this research is its originality. Prior et al (2017) highlighted gaps in the research that needed addressing within the context of miscarriage and the research questions that this research tried to address were an attempt to shed light on some of these gaps. Exploring men's experiences of miscarriage, when their perspectives are often seen as secondary in this area, is hugely important and using both a quantitative and qualitative analysis meant that this research allowed for an under-researched topic to be explored fully with the view to making recommendations for clinical practice and future research. The current research highlighted findings which were novel and therefore extend understanding of men's experiences of miscarriage. The main novel findings are that men experienced higher levels of psychological distress if the pregnancy loss occurred at a later stage

of pregnancy. Furthermore, novel findings of this research, albeit from a small sample size, included that men may wait their turn, after their partner has shown their emotion, to express theirs, and some men prefer to be alone when expressing their emotions.

Another strength of this research is that in a relatively short space of time for recruitment, six months, over 500 men completed the online questionnaire. This is not only an indication of how powerful social media can be for research, but also emphasises how important the research is and how valuable this, and other research in this area, would be for men who have experienced a miscarriage. As highlighted in the introduction, there is very little research which considers men's perspective on miscarriage and therefore many men were obviously keen to be involved in the research and have their opinions heard. Giving men a voice in an area often understandably dominated by women's perspectives has highlighted how much more work is needed to ensure that men are fully supported following a miscarriage. It is not only important to give men a voice, but also to allow them space in which they are given permission to openly explore a topic that they may not usually be able to openly talk about.

This large sample size allowed for a large amount of data to be collected within the study. The quantitative online questionnaire contained a large range of measures which was appropriate given the exploratory nature of this research. Having such a large amount of data allowed for breadth and richness of data for the analysis phase which in turn allowed for some interesting and reliable results. An additional strength was that as there was such a large sample, the assumptions for the regression were met which allowed for more confidence in generalising the results that were found.

As well as strengths within the quantitative aspect of the research, there are a number of strengths in the qualitative aspect of the research. Yardley (2008) details four key methods for enhancing and demonstrating the quality of qualitative research. Firstly, demonstrating sensitivity to context; the current research has done this by ensuring that pre-conceived ideas of the topic were not imposed during the analysis phase and an awareness of participants' individual perspectives were considered. Secondly, commitment and rigour, which was demonstrated in the current research through in-depth engagement with the topic both in recruitment and analysis phases, and through undertaking detailed analysis, with the help of supervisors' expertise. Thirdly, transparency and coherence; it is hoped that the write-up of the current research has enabled the reader to clearly understand the interpretation of the data. Finally, impact and importance, this has been demonstrated through the acknowledgment that this research was answering questions that had left a gap in the literature. The findings have the potential to improve support offered to men following a miscarriage.

Limitations

Methodological limitations

It is worth noting that by recruiting via groups on Facebook and through Instagram accounts it was likely that many of the men recruited may have already accessed support through an online platform. However, with the results indicating that three quarters of the men stated that they had not sought any support, it is interesting to think that perhaps some people do not classify these online forums as support. Perhaps this is because they are not seen as formal sources of support, or alternatively many men found out about the research through sources that were not

support groups. Furthermore, 76% of Facebook users and 89% of Instagram users are between the ages of 18-45 (Statistica, 2014) therefore, recruiting through social media targets more of this age group than others. However, the WHO suggest that reproductive age is between 14 and 49 (WHO, 2016) and therefore this method of recruitment is mainly inclusive of those ages.

A limitation of the interviews was that they were only held in Manchester and Leeds for practical reasons, despite the online questionnaire being distributed nationally. A few men had expressed an interest in being part of the qualitative section of the research; however due to distance and other commitments were unable to attend. Travel expenses were offered to those who wanted to travel, however, as this was quite demanding, not many men were able to do this. Thus, more men, from other areas of the country, could have been offered the chance to be part of the research if the interviews were conducted in their homes instead. However, for researcher safety and to ensure a private, confidential space was provided, this was not given as an option. Furthermore, enough men in the North West and Yorkshire areas offered to attend for interview and, therefore, in terms of participant numbers it was not necessary to do this. Moreover, with the travel involved to the interview locations, only those men very committed to having their stories heard and willing to take up their personal time would volunteer for interview and this may have created a selection bias in the interviewees.

Limitations of measures

There are a number of limitations of using self-reported measures generally, but also the specific measures used in this research. In terms of using measures more generally, there is a risk that participants may under-report psychological distress

when using self-reported measures because they perceive that to be socially desirable (Nederhof, 1985). However, to mitigate against this, research participants were able to complete the online questionnaire privately and were assured that their answers would be anonymous and would remain confidential, which has shown to reduce the risk of social desirability (Paulhus, 1984). Despite limitations, throughout research self-reported measures are widely used and are a useful and accepted method of collecting information from a large number of participants (Haberer, Trabin, & Klinkman, 2013).

The PHQ-9 and GAD-7 are valid and reliable measures which are widely used as screening tools in primary care in the UK (Kroenke, Strine, Spitzer, Williams, Berry, & Mokdad, 2009). However, they are designed to be screening tools for depression and anxiety based on severity of symptoms and clinical cut-offs (Kroenke et al., 2010), and this was not the purpose of use for this research. The MSS is not a measure that has been widely used in research to establish male-specific depression and, to the researcher's knowledge, has only been used by the developers of the measure (Martin et al., 2013). Furthermore, the current research adapted the measure so that there were not repetitive questions in the online questionnaire, but this has made the data more difficult to analyse, as the cut-offs created by Martin et al., (2013) could not be used. The final measure of well-being used was the PGS and although this has been widely used and is deemed a reliable and valid measure, one limitation is that it has been found to overlap with markers of depression (Klier et al., 2002). However, it can be difficult to distinguish between depression and grief as they may present similarly, so it is difficult to eliminate that overlap.

Limitations of analysis

The use of stepwise multiple regression for the quantitative analysis did not come without its limitations. The main limitation of using stepwise regression is that the models produced are less likely to be able to be generalised because the way that the models select variables is affected by the sampling (Field, 2013). However, due to assumptions being met and cross-validation checks, we can have more confidence in generalising the model. Furthermore, as the criterion for keeping variables is based on statistical significance, it is affected by the sample size. Thus, a large sample size, such as in this study, may result in some predictors being retained which may make little contribution to the outcome. However, as this research was exploratory in nature, given the lack of research previously in this area, a stepwise multiple regression was helpful to use to build models designed to inform future research in this area. Furthermore, a large sample size gives more reliable results with greater power and this is advantageous for generalising the results.

Although thematic analysis was an appropriate choice for this research it is not without its limitations. One limitation which felt particularly poignant for this topic was that thematic analysis does not allow for any acknowledgement of the language used or the intricacies of conversations within the interviews (Braun & Clarke, 2006). As language within this context seems to be important for people, it may have been beneficial to draw on some of the language used by the men during the interviews. Furthermore, the use of qualitative analysis in research makes it difficult to generalise findings. However, generalisation is not the goal of using qualitative analysis; qualitative analysis is used to provide a more detailed understanding of an experience for particular individuals (Polit & Beck, 2010), and this research

succeeded in that. Furthermore, it has been helpful to have the quantitative analysis alongside the qualitative which provides more evidence to allow for more generalisable findings.

It would be remiss not to acknowledge that I, as the researcher, bring my own experiences and position to the analysis, and this can be viewed as a limitation. I have detailed my own personal reflections and positions in the method chapter and at the end of this chapter for full transparency. Therefore, I am not claiming that I have made ‘true’ interpretations of the data, merely my interpretation. It is hoped that through various methods we have tried to mitigate any impact that my personal beliefs and situation may have had on the analysis, such as both supervisors going through the analysis, in addition to the researcher. However, it may be that when others read this paper, they offer different interpretations of the extracts based on their own experiences and context.

Clinical Implications

It is important to note that many of the participants in the qualitative research praised staff in services and charities for their hard work, and kind and caring nature in responding to their difficult circumstances. Most of the men who were interviewed reported how impressed they were with the care they received, in particular the care their wives received during their time in hospital. However, the interviewed men were not representative of all men who have experienced miscarriage and there is research which implies the need for better care for men and women during miscarriage (e.g Geller et al., 2010). The current research still highlighted some negative stories of levels of care and there are a number of recommendations that have been identified through this research.

First and foremost, it is important that men's experiences are validated right from the beginning, as soon as the couple present in hospital. Although all men acknowledged that they did not want any care or support to be taken away from women, they also thought it would be helpful to have their own experiences validated by hospital staff as this was also a new and overwhelming experience for them too. Recent research has found that if men's loss is not validated, they are less likely to seek support (Wagner et al., 2018). Therefore, it is crucial that men feel that their loss has been acknowledged to ensure that they seek the support they need at a time that is right for them.

There are a number of appropriate avenues of support that could be offered to men, based on the current findings. Firstly, it was found that men benefitted from talking to others who had previous experience of miscarriage and therefore perhaps face-to-face support groups could be set up, where people could listen and share their experiences, which could be beneficial for men. For those who find it useful to hear these stories but are not comfortable sharing in this setting, 1:1, person-centred psychological support may be useful. These sessions could be used to validate their loss, normalise the emotions they are experiencing and attempt to find meaning within the context of the loss of their baby, and the loss of their identity as a father. Furthermore, these sessions could spend time acknowledging the difficulties men may face in ensuring that they maintain their role as protector and supporter, whilst also grieving.

With regard to timings of interventions it is important to acknowledge the different grief responses by men and women. Although men and women may be offered support immediately after a miscarriage, as it has been highlighted in this

write up, men may not be in a place where they can accept or seek support immediately as they are focused on their role as protector, supporting their wives and families through the grief process. Men should be offered support and be given the opportunity to relax from their role as protector and supporter, in order to explore their own emotions. However, some men may not feel able to focus on themselves at an early stage, and therefore, it may be helpful for services, such as miscarriage charities or bereavement midwives, to check in and offer support to men at a later stage to ensure that they are being given a chance to express their emotions regarding the loss at a time that feels more appropriate for them.

A further recommendation around support would be that many men spoke of the need to have more information to access. This would be information regarding the physical process of going through a miscarriage, at any stage, and also any services that may be helpful during this time, such as photographers to take pictures with the baby and any specific support services for them as individuals and also for the rest of the family. For men, having information may be more important to them than offering any specific type of support. During the qualitative interviews, all men mentioned the importance of having all the information they needed. Furthermore, when discussing joining the online community, those who had joined explained that they had joined to read other people's experiences rather than share their own. Perhaps men need the information in order to process their own thoughts and feelings alone before feeling the need to share, either in a group setting or in individual therapy. Having this information readily available may make it easier for men to seek support when the time is right for them, ensuring that they are fully equipped with the information they need for specialist services who can offer support rather than having to sit on waiting lists for general psychological services.

A difficulty with providing information to men and women prior to a miscarriage happening is the cultural norm in the UK that pregnancy is not disclosed prior to 12 weeks. This norm is embedded in society and therefore is not easily changeable, furthermore it is personal choice whether women, or couples, wish to announce their pregnancy before 12 weeks. However, in terms of public health it may be helpful for a more open dialogue around miscarriage to be encouraged within society which would provide information to men and women should the situation arise for them. Opening up these conversations may reduce the taboo around miscarriage which in turn will help families who experience it.

Future research

To build on the findings from the current research, future work would benefit from exploring some of the factors that may impact psychological distress following a miscarriage, such as age or stage of pregnancy. Furthermore, one factor that was not considered in this research was how long the couple had been trying to conceive. Previous research has highlighted that the longer a couple is trying to conceive, the more they report anxiety and rumination (Sweeny, Andrews, Nelson, & Robbins, 2015). Thus, if a couple experience a miscarriage after trying to conceive for a significant period, it could be assumed that this could predict further distress for parents, with the potential to lead to complicated grief. Therefore, further work could consider exploring this.

It would be interesting to compare these factors between men and women, as previous research conducted with women has highlighted different results. Generally including women in research with men may be helpful to highlight any similarities and differences between their grieving processes and would also lend itself to

exploring the impact miscarriage has on the relationship. As well as this, it would create an opportunity to establish whether women are aware that their partners are putting their emotions to one side to allow them to better support their wives.

Further work could also look into the psychological impact of parenting after loss and pregnancy after loss, as part of the findings of this research demonstrated that the experience of having a miscarriage greatly affected life, including subsequent pregnancies and parenting.

As part of this write up, language has briefly been touched upon as being a complex but interesting topic in relation to miscarriage. Language is personal and it is difficult to find a common language that can best describe everyone's experiences. However, future research would benefit from exploring people's perspectives on the language used in society and by medical professionals in relation to miscarriage.

Finally, the sample of the current research was recruited in the UK and 94% identified as being either 'no religion' or 'Christian' and therefore the findings cannot be generalised to other populations and cultures. Although culture has been discussed briefly within this research it would be beneficial for future research to explore men's responses to grief within different cultures and the role that culture, and religion may play in their grief journey.

Reflections

Men's experiences of miscarriage have been relatively neglected in previous research. Prior to starting the research, I was intrigued as to what the outcome would be, and whether we would encounter hurdles which would have explained the

scarcity of literature. However, I was overwhelmed by the response to the research, which only highlighted to me how important it is to give men the opportunity to be heard, on a topic that is largely dominated by women's perspectives, and even then there is a paucity of research. I feel privileged to be in a position where I could give these men a voice and begin to create an evidence base that may facilitate the development of services which can respond more effectively to the needs of men in these difficult situations based on their responses.

I feel very grateful to have been given an insight into the online community that the men spoke of in their interviews. By joining Facebook groups and following accounts on Instagram I have had the rare opportunity to read stories that people only read when they sadly 'join the club'. Being part of these allowed me to immerse even further into this field of research and encouraged me to work harder to try to start thinking more about what could be of help for men following a miscarriage. Just one piece of research cannot revolutionise the way that men are cared for and supported after a miscarriage. However, I would like to think that this piece of research could be the catalyst for further research and implementation of recommendations produced from the research.

Conclusion

The first research question aimed to be answered by this research was whether men experience psychological difficulties post miscarriage. The results indicated that miscarriage may affect mood, anxiety and produce a significant grief response in men, however it is difficult to establish a causal link from this research.

Furthermore, men may experience this, but push their feelings to one side whilst trying to support and protect their wives through their grieving process. Once their

wives feel more emotionally stable, men are able to acknowledge and express this emotional response they are feeling when they are by themselves. The second research question aimed to establish what factors predicted these psychological difficulties. A number of factors were highlighted as predicting these psychological difficulties, including stage of pregnancy, religion, age, whether they had subsequent children following the miscarriage and the time since the miscarriage.

The third question aimed to explore what support men required. Whether men had accessed support or not the two main sources of support they favoured were through family and friends or psychological counselling. The final question aimed to establish what facilitators and barriers there were for men accessing support post miscarriage. It was difficult to isolate specific facilitators, but two main barriers were identified; societal and cultural influences and the role that masculinity plays. These findings culminate to provide important information for providing support to men following miscarriage. Support should be person-centred, focusing on validating the loss that men have experienced and the grief response that follows this. Furthermore, it may also be important to acknowledge the difficult position men may be in following a miscarriage, as they may have to maintain their role as protector and supporter whilst also grieving.

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Appendices

Appendix A: List of individuals and organisations who publicised the research

Instagram

- The Psychology Mum
- The Modern Midwife
- Papa Pukka
- The Naked Professor

Facebook Groups and Pages

- Babies babies babies
- Top tips for mums
- Prestwich mums
- Didsbury mums and dads
- Mums, dads & bumps
- Top tips for mums and dads
- Miscarriage awareness and support
- UK miscarriage support group
- Try to conceive after loss and pregnancy support
- Over the rainbow miscarriage and baby loss journal
- Aching Arms UK
- Angel parents, mums and dads, rainbows and TTC
- Plymouth miscarriage support
- Baby loss awareness UK
- Daddy's with Angels
- Tommy's
- The Dad Network
- Parents of angels
- Kicks count
- Bolton miscarriage support group
- Leeds Dad
- Mums & Dads magazine
- Children of Jannah
- Life begins at mum
- The London mother
- The Lily Mae Foundation
- Charlies Angel Centre

- Hope bereavement support
- Rainbow baby
- Mummy's and daddy's UK
- Miscarriage Support Blackpool, Wyre and Fylde
- Petals
- Rainbow babies
- HUG helpusgrieve
- Footsteps Counselling and Care
- NCT Bolton and North West Manchester Branch
- Our Missing Peace
- Bear for an Angel
- Miscarriage Support
- Our Angel bears
- Missed miscarriage
- The Family Network UK
- Baby Sensory West Manchester
- Early miscarriage awareness day
- Little baby & Co

Twitter

Many people and organisations retweeted my tweets about my research but a special mention must go to Dr Andy Mayers who shared the research many times throughout the recruitment stages.

Appendix B: Online Questionnaire

Information Sheet

Exploring the Psychological Impact of Miscarriage on Men

You are being invited to take part in a research project. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish.

What is the purpose of the project?

According to the Tommys website, 1 in 4 pregnancies end in miscarriage (pregnancy loss up to 24 weeks), and yet very little research has focused on men's experiences of this. The NHS define the boundary of miscarriage as pregnancy loss up to 24 weeks and whilst it is appreciated that some would define it differently, this is what will be used for the study (if you have any comments/concerns regarding this please feel free to get in touch with Lucy Singer using the email address below). The aim of the project is to gain insight into the impact that miscarriage has on men. There are findings pertaining to women and so the aim of this research is to see what factors are most important in understanding men's experience. Additionally, we would like to know what support services are available and if men are accessing these. As part of the research we will also be conducting interviews. If you are interested in being part of the interviews there is a link at the end of this online questionnaire.

Why have I been chosen?

We are inviting any man over the age of 18 who has experienced miscarriage to partake in this online questionnaire.

Do I have to take part?

You do not have to take part in this research, it is entirely voluntary.

If you do wish to take part, the online questionnaire will be completely anonymous to ensure confidentiality and to allow you to feel safe to be as open and honest as possible when answering the questions.

What do I have to do?

If, after reading the information sheet, you would still like to take part in the research, please read the consent form on the next page. Once you have consented, the questionnaire will take approximately 10 minutes to complete. There will be some questions around details of the miscarriage/s and any potential factors that may have influenced your well-being. There will also be some measures used to identify levels of distress. These measures include the Patient Health Questionnaire (PHQ-9), the Generalised Anxiety Disorder (GAD-7), the Perinatal Grief Scale (PGS) and the Male Symptoms Scale (MSS). Some questions from the Conformity to Masculine Norms Inventory (CMNI) will also be used to assess masculinity traits.

If at any point you do not wish to continue with the questionnaire you can exit without completing and your answers will not be saved.

What are the possible disadvantages and risks of taking part?

The questionnaire will ask you some personal questions around miscarriage, your experiences and the impact this had on your life. Reliving these memories may cause distress for some people. If that is the case, please do speak to your GP if you feel you need extra support.

Tommy's provide support after miscarriage and can be contacted on 08000147800 Monday-Friday 9-5.

The Samaritans services are available for support 24/7 and can be contacted on 116 123.

What are the possible benefits of taking part?

Whilst there are no immediate benefits for those people participating in the project, it is hoped that this work will shed light on men's experiences of miscarriage and in turn this will help to shape services for the future.

Will my taking part in this project be kept confidential?

All the information that we collect will be kept strictly confidential. You will not be able to be identified in any reports or publications as you will remain anonymous throughout the questionnaire.

If you choose to contact us for any reason we will not know your answers on the questionnaire and so your answers will still remain anonymous.

Can I withdraw from the research?

Once you have finished the online questionnaire you are unable to withdraw your completed survey but you are able to withdraw at any point up until the final page.

Who is organising the research?

The research is being conducted as part of Lucy Singer's Doctorate in Clinical Psychology training at the University of Leeds, supervised by Dr Thomas Cliffe.

Contact for further information

If you require any further information about the research please don't hesitate to contact us.

Lucy Singer (Clinical Psychologist in Training)

Ps09lc@leeds.ac.uk

Dr Tom Cliffe (Lecturer in Clinical Psychology)

T.D.Cliffe@leeds.ac.uk

Dr Amy Russell (Senior Research Fellow)

A.M.Russell@leeds.ac.uk

Page 2: Consent

After reading the information on the previous page please indicate whether you consent to participate in this study. Required

- I consent
- I do not consent

p. 3 Demographic Information

What is your age range?

- 18-24
- 25-34
- 35-44
- 45-54
- 55+

Show less

What is your religion?

- No religion
- Christian
- Buddhist
- Hindu
- Jewish
- Muslim
- Sikh
- Prefer not to say
- Other

Show less

a If you selected Other, please specify:

Where did you hear about the questionnaire?

- Social media
- Tommy's
- Daddy's with Angels
- Dad Network
- Other

Show less

a If you selected Other, please specify:

How many children have you lost through miscarriage?

- 1
- 2
- 3
- 4
- 5+

Show less

When was your first loss?

- Within the last week
- Within the last month
- Within the last 6 months
- 6-12 months ago
- 1-2 years ago
- 2-5 years ago
- 5+ years ago

Show less

When was your most recent loss?

- Within a week

- Within a month
- Within 6 months
- 6-12 months ago
- 1-2 years ago
- 2-5 years ago
- 5+ years ago

Show less

At what stage in the pregnancy did the miscarriage take place? (If you have experienced more than one miscarriage in different time points please select more than one answer)

- 1-4 weeks
- 4-8 weeks
- 8-12 weeks
- 12-16 weeks
- 16-20 weeks
- 20-24 weeks

Show less

Was the pregnancy planned?

- Yes
- No

Are you still in a relationship with the mother of your baby?

- Yes
- No

Did you have any children prior to the miscarriage?

- Yes
- No

Have you had any children since the miscarriage?

- Yes
- No

Are there any other factors that you can identify that have impacted on your well-being following miscarriage?

Have any close family or friends experienced a miscarriage?

- Yes
- No

If yes, have you spoken to them about your experience?

- Yes
- No

Did you seek support after the miscarriage?

- Yes
- No

a If no, would you have liked to have accessed support through one of the following avenues?

- Psychological counselling
 - Online support group
 - Social media
 - Medical doctor
 - Family and friends
 - Religious mentor
 - Other
 - N/A
- Show less

i If you selected Other, please specify:

b If yes, which of the following support avenues did you choose?

- Psychological counselling
 - Online support group
 - Social media
 - Medical doctor
 - Family and friends
 - Religious mentor
 - Other
 - N/A
- Show less

i If you selected Other, please specify:

Page 4: PHQ9

Over the last 2 weeks, how often have you been bothered by any of the following problems?

	Not at all	Several days	More than half the days	Nearly every day
Little interest or pleasure in doing things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Feeling down, depressed or hopeless	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trouble falling or staying asleep, or sleeping too much	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feeling tired or having little energy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poor appetite or overeating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feeling bad about yourself — or that you are a failure or have let yourself or your family down	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trouble concentrating on things, such as reading the newspaper or watching television	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thoughts that you would be better off dead or of hurting yourself in some way	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How much has your experience of miscarriage influenced your answers to these questions?

- To a Great Extent
- Somewhat
- Very Little
- Not at All

Over the last 2 weeks, how often have you been bothered by the following problems?

	Not at all	Several days	More than half the days	Nearly every day
Feeling nervous, anxious or on edge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not being able to stop or control worrying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worrying too much about different things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trouble relaxing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Being so restless that it is hard to sit still	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Becoming easily annoyed or irritable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feeling afraid as if something awful might happen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How much has your experience of miscarriage influenced your answers to these questions?

- To a Great Extent
- Somewhat

Very Little

Not at All

Page 6: MSS

Please answer the following questions using the scale below.

	Yes	No	Don't know
Have you ever had a period of time lasting several days or longer when most of the time you were very irritable, grumpy or in a bad mood?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did you ever use alcohol or drugs so much that it caused repeated arguments or problems either with your family or friends, people at work, or with the police?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you ever had a period of time lasting several days or longer when you lost interest in most things you usually enjoy like work, hobbies and personal relationships?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
During an irritable episode, were you interested in seeking pleasure in ways that you'd usually consider risky - like casual or unsafe sexual activity, buying sprees or reckless driving?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Some people have periods of time last several days or longer when they feel much more excited and full of energy than usual. Their minds go too fast, they talk a lot. They are very restless or unable to sit still and they sometimes do things that are unusual for them, such as driving too fast or spending too much money.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Have you ever had a period of time like this lasting several days or longer?

Have you ever had an attack of anger when all of a sudden you lost control and hit or tried to hit someone?

How much has your experience of miscarriage influenced your answers to these questions?

- To a Great Extent
- Somewhat
- Very Little
- Not at All

Page 7: PGS

Each of the items is a statement of thoughts and feelings that some people have concerning a loss such as yours. There are no right or wrong responses to these statements. For each item, click under the response that best indicates the extent to which you agree or disagree with it at the present time. If you are not certain, use the 'neither' category. Please try to use this category only when you truly have no opinion.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I feel depressed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I find it hard to get along with certain people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel empty inside	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I can't keep up with my normal activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel a need to talk about the baby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am grieving for the baby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am frightened	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have considered suicide since the loss	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I take medicine for my nerves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I very much miss the baby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel I have adjusted well to the loss	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is painful to recall memories of the loss	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I get upset when I think about the baby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I cry when I think about him/her	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I feel guilty when I think about the baby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel physically ill when I think about the baby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel unprotected in a dangerous world since he/she died	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I try to laugh, but nothing seems funny anymore	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Time passes so slowly since the baby died	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The best part of me died with the baby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have let people down since the baby died	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel worthless since he/she died	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I blame myself for the baby's death	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I get cross at my friends and relatives more than I should	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sometimes I feel like I need a professional counsellor to help me get my life back together again	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel as though I'm just existing and not really living since he/she died	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel so lonely since he/she died	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel somewhat apart and remote, even among friends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It's safer not to love	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I find it difficult to make decisions since the baby died	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I worry about what my future will be like	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Being a bereaved parent means being a "second class citizen"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It feels great to be alive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The following statements are designed to measure attitudes, beliefs, and behaviors associated with both traditional and non-traditional masculine gender roles.

Thinking about your own actions, feelings and beliefs, please indicate how much you personally agree or disagree with each statement by clicking on either "Strongly Disagree", "Disagree", "Agree", or "Strongly agree". There are no right or wrong responses to the statements. You should give the responses that most accurately describe your personal actions, feelings and beliefs. It is best if you respond with your first impression when answering.

	Strongly Disagree	Disagree	Agree	Strongly Agree
It is best to keep your emotions hidden	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I hate asking for help	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Taking dangerous risks helps me to prove myself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I should take every opportunity to show my feelings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In general, I do not like risky situations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feelings are important to show	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I enjoy taking risks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I love to explore my feelings with others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I ask for help when I need it	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I never take chances	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I bring up my feelings when talking to others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I take risks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I never share my feelings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Asking for help is a sign of failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I like to talk about my feelings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I never ask for help	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is foolish to take risks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I frequently put myself in risky situations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I tend to keep my feelings to myself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am happiest when I'm risking danger	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am not ashamed to ask for help	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I tend to share my feelings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I prefer to be safe and careful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It bothers me when I have to ask for help	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I hate it when people ask me to talk about my feelings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I hate any kind of risk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I prefer to stay unemotional	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Final points

Thank you for taking part in our research and completing the questionnaire.

If you have found the content of the questionnaire distressing we would advise that you contact your GP. Furthermore if you would like support now please contact the Samaritans on 116 123 whose phonelines are open 24 hours a day, 7 days a week. Tommy's also provide support in relation to miscarriage and they can be contacted on 08000147800 9-5 Monday-Friday.

If you have any questions related to the research please feel free to contact Lucy on ps09lc@leeds.ac.uk. Please be aware that the questionnaire answers will remain anonymous and therefore we will be unable to identify your questionnaire if you do contact us.

We are also conducting research where we will be interviewing men about their experiences of miscarriage and the support they have or have not received. If you would be interested in being interviewed please click on the following link to fill in your contact details. The link is not connected to this online questionnaire and therefore the questionnaire will remain anonymous. <https://leeds.onlinesurveys.ac.uk/interview-invitation>

Appendix C: Social media statement

Hi, I am a Trainee Clinical Psychologist and currently doing my thesis research. I am looking for men in the UK who have experienced miscarriage (pregnancy loss up to 24 weeks) to complete an anonymous online questionnaire exploring the psychological impact of miscarriage (link below).

If you are a man reading this and this applies to you I'd really appreciate if you could complete the questionnaire. If you are a woman and you know any men who have experienced miscarriage (partners, family members, friends) please do share the questionnaire link with them.

Please do share far and wide.

<https://leeds.onlinesurveys.ac.uk/questionnaire-6>

Please feel free to message me if you have any questions.

Thanks,

Lucy

Appendix D: Interview schedule

Miscarriage experience

- Do you want to start by telling me about your experience of miscarriage?
 - How long ago was it?

Impact

- Short term impact – do you recall the [psychological/emotional] impact that this had at the time?
- Have there been any longer lasting effects that you are aware of?
- Do you feel that there were any factors that helped/hindered your emotional well-being?

Seeking help

- Did you seek help for the emotional/psychological impact of the miscarriage?
- How long had you been experiencing problems when you decided to seek help?
- Were there any barriers which prevented you from seeking help?
- What factors encouraged you to seek help?
- What was your experience of seeking help?
- Were there any positive/negative aspects of your experience of seeking help? Why?

Support

- What was your experience of any support services you have used?
- Would you change anything about health services to ensure that men are supported after miscarriage?



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Appendix E: Ethical approval documents

Conditional Approval letter

**Faculty of Medicine and Health Research Office
School of Medicine Research Ethics Committee (SoMREC)**

Room 9.29, level 9
Worsley Building
Clarendon Way
Leeds, LS2 9NL
United Kingdom

& +44 (0) 113 343 1642

16 May 2018

Mrs Lucy Singer
Trainee Clinical Psychologist
Leeds Institute of Health
Clinical Psychology
Level 10, Worsley Building, University of Leeds
Leeds, LS2 9NL

Dear Lucy

Ref no: **MREC17-082**

Title: **Exploring the psychological impact of miscarriage on men**

Your research application has been reviewed by the School of Medicine Ethics Committee (SoMREC) and I can confirm that ethics approval is granted based on the following documentation received from you and subject to the following conditions which must be actioned prior to the study commencing:

- **It would be helpful to give a brief explanation of the organisation ‘Tommy’s’ when this is first mentioned on the application form for clarity – please add this**
- **Amend research dates to reflect period after approval**
- **Add space for Researcher signature to consent form**

<i>Document</i>	<i>Version</i>	<i>Date Submitted</i>
-----------------	----------------	-----------------------

Ethics form v1 22.02.18_signed	1.0	06/04/2018
Consent form v1 22.02.18	1.0	06/04/2018
Debrief Sheet for interview v1	1.0	06/04/2018
Information Sheet for interview v1 22.02.18	1.0	06/04/2018
Interview Schedule v1 04.01.18	1.0	06/04/2018
Online questionnaire	1.0	06/04/2018
Risk Ax form for Tommy's signed	1.0	06/04/2018

Please notify the committee if you intend to make any amendments to the original research ethics application or documentation. All changes must receive ethics approval prior to implementation. Please contact the Faculty Research Ethics Administrator for further information (fmhuniethics@leeds.ac.uk)

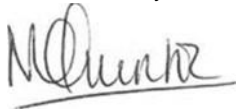
Ethics approval does not infer you have the right of access to any member of staff or student or documents and the premises of the University of Leeds. Nor does it imply any right of access to the premises of any other organisation, including clinical areas. The committee takes no responsibility for you gaining access to staff, students and/or premises prior to, during or following your research activities.

Please note: You are expected to keep a record of all your approved documentation, as well as documents such as sample consent forms, risk assessments and all other documents relating to the study. This should be kept in your study file, which should be readily available for audit purposes. You will be given a two week notice period if your project is to be audited.

It is our policy to remind everyone that it is your responsibility to comply with Health and Safety, Data Protection and any other legal and/or professional guidelines there may be.

We wish you every success with the project.

Yours sincerely



Dr Naomi Quinton, Co-Chair, SoMREC, University of Leeds
(Approval granted by Co-Chair Dr Naomi Quinton on behalf of the committee).

Approval confirmation email

Hi Lucy

MREC17-082 - Exploring the psychological impact of miscarriage on men

I can confirm you have met the conditions of approval and all is in order for the study to commence.

I think this is a record for gaining ethics approval – you only submitted 5 weeks ago. It just goes to demonstrate what a difference such a quality application can make.

Hope all goes well with the study.

Best wishes

Rachel

Rachel de Souza

Research Ethics & Governance Administrator

The Secretariat

Room 9.29, Level 9

Worsley Building, Clarendon Way

University of Leeds, LS2 9NL

Tel: 0113 3431642

r.e.desouza@leeds.ac.uk

Amendment approval letter



UNIVERSITY OF LEEDS

**Faculty of Medicine and Health Research Office
School of Medicine Research Ethics Committee (SoMREC)**

Room 9.29, Level 9
Worsley Building
Clarendon Way
Leeds, LS2 9NL
United Kingdom

& +44 (0) 113 343 1642

22 June 2018

Mrs Lucy Singer
Trainee Clinical Psychologist
Leeds Institute of Health
Clinical Psychology
Level 10, Worsley Building
University of Leeds
LEEDS LS2 9NL

Dear Lucy

Ref no: **MREC17-082**

Title: **Exploring the psychological impact of miscarriage on men**

We are pleased to inform you that your amendment to your research ethics application has been reviewed by the School of Medicine Research Ethics Committee (SoMREC) and we can confirm that ethics approval is granted based on the following documents received from you and subject to the following condition:

- **Evidence of organisational gatekeeper permission must be submitted.**

Further confirmation of approval is not required and the amendment may be implemented at each organisation as soon as the above condition has been met.

<i>Document</i>	<i>Version</i>	<i>Date submitted</i>
MREC17-082 Amendment form v1 May2018	1.0	25/05/2018

Please notify the committee if you intend to make any further amendments to the original research as submitted and approved to date. This includes recruitment methodology; all changes must receive ethical approval prior to implementation. Please contact the Faculty Research Ethics Administrator for further information (fmhuniethics@leeds.ac.uk)

Ethics approval does not infer you have the right of access to any member of staff or student or documents and the premises of the University of Leeds. Nor does it imply any right of access to the premises of any other organisation, including clinical areas. The committee takes no responsibility for you gaining access to staff, students and/or premises prior to, during or following your research activities.

Please note: You are expected to keep a record of all your approved documentation, as well as documents such as sample consent forms, risk assessments and other documents relating to the study. This should be kept in your study file, which should be readily available for audit purposes. You will be given a two week notice period if your project is to be audited.

It is our policy to remind everyone that it is your responsibility to comply with Health and Safety, Data Protection and any other legal and/or professional guidelines there may be.

We wish you continued success with the project.

Yours sincerely



Dr Naomi Quinton

Co-Chair, SoMREC, University of Leeds

(Approval granted by Dr Naomi Quinton on behalf of SoMREC Co-Chairs)

SoMREC Amendment approval letter vs2_0

September 2013

Appendix F: Information sheet for interview

Exploring the Psychological Impact of Miscarriage on Men

Interview Information Sheet

You are being invited to take part in a research project. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish.

What is the purpose of the project?

According to the NHS Choices website (2015) 1 in 6 pregnancies end in miscarriage, and yet very little research has focused on men's experiences of this. The aim of the project is to gain more of an insight into the impact that miscarriage may have on men's lives. Additionally, we would like to know what support services are available and if men are accessing these.

Why have I been chosen?

We are inviting any man who would be happy to be interviewed in Manchester or Leeds, over the age of 18 who has experienced miscarriage to partake in one 45-60 minute face-to-face interview.

Do I have to take part?

You do not have to take part in this research, it is entirely voluntary.

What do I have to do?

If, after reading the information sheet, you would still like to take part in the research, please read the consent form. Once you have consented, the interview will begin. The interview will take approximately 45-60 minutes and will be conducted by Lucy Singer, Clinical Psychologist in Training. Lucy will ask you questions around your experience of miscarriage, the impact this had on your life and any support you may have accessed.

What are the possible disadvantages and risks of taking part?

The interviewer will ask you some personal questions around miscarriage, your experiences and the impact this had on your life. Reliving these memories may cause distress for some people. If that is the case, please do speak to Lucy at the time of the interview. Furthermore, if you feel you need extra support we encourage you to contact your GP.

Tommy's provide support after miscarriage and can be contacted on 08000147800 and are available Monday-Friday 9-5.

The Samaritans are available for support 24/7 and can be contacted on 116 123.

What are the possible benefits of taking part?

Whilst there are no immediate benefits for those people participating in the project, it is hoped that this work will increase our awareness and understanding of on men's experiences of miscarriage and in turn that this will help to shape services for the future.

Will my taking part in this project be kept confidential?

All the information that we collect will be kept strictly confidential. You will not be able to be identified in any reports or publications. Direct quotes may be used, however if a name is used in the write up and publication of this research then it will be a pseudonym.

The interviews will be recorded on an encrypted Dictaphone and the recordings will be stored on a secure drive on the University of Leeds server. They will be transcribed by either a paid transcriber or the researcher, Lucy Singer and once transcribed, the digital recordings will be destroyed. The paid transcriber will be approved by the University of Leeds and bound by confidentiality. Data will be kept for 3 years and after which time it will be destroyed. Only the paid transcriber and Lucy Singer will have access to the recorded interviews.

Can I withdraw from the study?

If at any point you do not wish to continue with the interview you can stop the interview and withdraw from the research. If you have completed an interview, then you can withdraw your data up until the point when data analysis has begun by contacting Lucy Singer. You may withdraw from the research without giving a reason. Any data that has been collected prior to your withdrawal will be destroyed.

Who is organising the research?

The research is being conducted as part of Lucy Singer's Doctorate in Clinical Psychology training programme at the University of Leeds, supervised by Dr Thomas Cliffe.

Ethical approval has been sought from the School of Medicine Research Ethics Committee.

Contact for further information

If you require any further information about the research please don't hesitate to contact us.

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Appendix G: Debrief sheet for interview

Exploring the Psychological Impact of Miscarriage on Men

Interview Debrief Sheet

Thank you for taking part in this research project. The aim of the project is to gain more of an insight into the impact that miscarriage may have on men's lives. We appreciate the time you have given to help with this research.

Organisations that can offer support

If you feel you require any further support, please contact the following organisations who offer support for people following miscarriage.

Tommy's

An organisation that funds research and provides support to families following pregnancy loss.

They offer a Pregnancy Line Monday-Friday 9-5 on 08000147800

Daddy's with Angels

An online charity that supports all fathers who have experienced loss of a child/children.

They offer online groups which provide community support -

<https://www.facebook.com/DaddysWithAngels/>

They can also be found on Twitter, YouTube, Instagram, Pinterest and LinkedIn

Miscarriage Association

A charity which offers support and information around pregnancy loss.

They offer a helpline Monday-Friday 9-4 on 01924200799

Samaritans

A charity which provides telephone support to anyone who would like to speak to someone.

Their phonenumber is open 24/7 on 116123

Please contact your GP if you feel you would benefit from on-going support in relation to your psychological well-being.

Contact for further information

If you require any further information about the research please don't hesitate to contact us.

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Appendix H: Collinearity measures for each standardised measure

Measure	Factor	Tolerance	VIF
PHQ-9			

Children after miscarriage	1.0	1.001
Miscarriage between 20-24 weeks	1.0	1.001
Men aged 18-24	.999	1.001
Jewish	.986	1.014
Not experienced miscarriage between 4-8 weeks	.940	1.064

GAD-7

Miscarriage between 20-24 weeks	1.0	1.001
Children after miscarriage	1.0	1.001
Men aged 18-24	.999	1.001

MSS

No longer with the mother	1.0	1.001
did not experience a miscarriage between 8-12 weeks	1.0	1.001

Most recent miscarriage within 2-5 years	.996	1.004
Children after miscarriage	.841	1.189

PGS

Miscarriage between 20-24 weeks	1.0	1.001
Children after miscarriage	1.0	1.001
Men aged 18-24	.999	1.001
Did not experience a miscarriage between 16-20 weeks	.996	= 1.004
Jewish	.984	1.016
Friends and family had not experienced a miscarriage	.976	1.025

Appendix I: Supplementary Analysis Section

Correlations between measures

A Pearson product-moment correlation coefficient was computed to assess the relationship between all standardised measures used in the questionnaire. There was a significant correlation between the PHQ-9 and GAD-7 ($r=.803$, $n=489$, $p=.001$), the PHQ-9 and MSS ($r=.380$, $n=481$, $p=.001$), the PHQ-9 and PGS ($r=.681$, $n=470$, $p=.001$), the PHQ-9 and CMNI ($r=.275$, $n=460$, $p=.001$). Similarly there was a significant correlation between the GAD-7 and MSS ($r=.340$, $n=492$, $p=.001$), the GAD-7 and PGS ($r=.657$, $n=480$, $p=.001$) and the GAD-7 and CMNI ($r=.203$, $n=470$, $p=.001$). A significant correlation was also found between the MSS and PGS ($r=.436$, $n=474$, $p=.001$) and the MSS and CMNI ($r=.275$, $n=467$, $p=.001$). Finally, a significant correlation was found between the PGS and CMNI ($r=.234$, $n=453$, $p=.001$).

Masculinity and seeking support

A one-way between subjects analysis of variance (ANOVA) was conducted to compare the effect of adhering to masculine norms on seeking support. There was a significant effect of adhering to masculine norms on whether men sought support ($F(1, 471) = 10.894$, $p = .001$). Post hoc comparisons using the Tukey HSD test indicated that the mean score on the CMNI was significantly lower for men who sought help ($M = 38.46$, $SD = 10.09$) than for men who did not seek help ($M = 42.05$, $SD = 10.17$). These results suggest that men who adhere to masculine norms may be less likely to seek help following a difficult life event, such as a miscarriage.

Appendix J: Examples of coding

Interview 3	John	
	1 JOHN We had two miscarriages. The first time we obviously	
Worried about the process	2 <u>didn't have a clue what was going on</u> so when we found out that the	Feeling out of control
	3 baby didn't have a heartbeat, we had a <u>decision to make</u> as to what	
	4 route to go down. Erm, I mean when we sat down with the	
	5 bereavement counsellors initially, they talked of to my wife initially.	
Left out	6 <u>I was kind of left out the loop</u> erm so I just sat and listened and then	Feeling excluded
	7 once we left the room, me and my wife discussed things and we	
	8 came to a decision together. First we decided to go down the pill	
	9 miscarriage way so we went through that. <u>I was with her every step</u>	
By wife's side Protective of wife Helplessness / do whatever he could	10 <u>of the way as I wasn't leaving her side to go through that.</u>	Protecting wife / Guilt that she had to go through the process
	11 ME How far along in the pregnancy was this? The first one?	
	12 JOHN The first one was 10 weeks I think. Erm, and so anyway,	
	13 yeh, we got to the hospital again – I wasn't really, I was just kind of	
	14 treated as , granted she was going through all the physical aspect of	
Wish I could have helped - information	15 it but <u>it would have been nice to have been informed, at least know</u>	
	16 <u>what happens and what the process is.</u> So anyway, I was with her	out of control/ difficult to make decisions
	17 by her bedside all the time and then all of a sudden, <u>it happened</u>	
Details of miscarriage	18 <u>and it was horrific.</u> I had never read up on it and I'd never seen	
Traumatic	19 <u>anything like it.</u> It was kind of like a <u>crime scene</u> you would see on	Traumatizing
	20 TV. There was <u>blood everywhere</u> coz she didn't know what was	
	21 going on – it started while she was still in the bed so she had to get	
Helplessness / do what he can	22 up and go to the toilet and <u>I had to get a nurse to help.</u> At that	Helplessness / feeling excluded (although non intentionally)
	23 point it was just – there was blood everywhere. Erm, <u>it was horrific</u>	
	24 <u>to see and obviously hearing my wife going through the pain as well</u>	
Traumatic event	25 <u>was dreadful and awful</u> and then once they finally got my wife	Traumatizing

Interview 3

John

did whatever he could
 26 sorted, I just helped out where I could. Again, there was no *helplessness / loss*

felt forgotten
 27 information or are you ok. It was all about my wife, I totally *felt excluded*

No information, how does wife feel about it, what would have helped - acknowledged that he also is going through it
 28 understand because she was going through something horrific but it
 29 would have been nice to hear a voice somewhere saying are you ok?
 30 Are you going through it ok? Erm, so that was obviously at the
 31 hospital. Afterwards, it was more the mental side of it. Erm I

staying strong for wife
 32 needed to stay strong for my wife because she was falling to bits. *staying strong for wife*
 33 Erm, so I didn't really have a support network because we had
 34 moved out of town and all my friends kind of disappeared. So I'd *isolated*
 35 moved to a town with no friends, no one to talk to so I was kind of
 36 alone. Struggling for my wife to make sure she was alright. *staying strong for wife*
 37 it didn't affect me too much, the first one. The second one really did
 38 because we had decided we were going to give it another go and *being brave to try again*
 39 then 12 weeks, we had the same again.

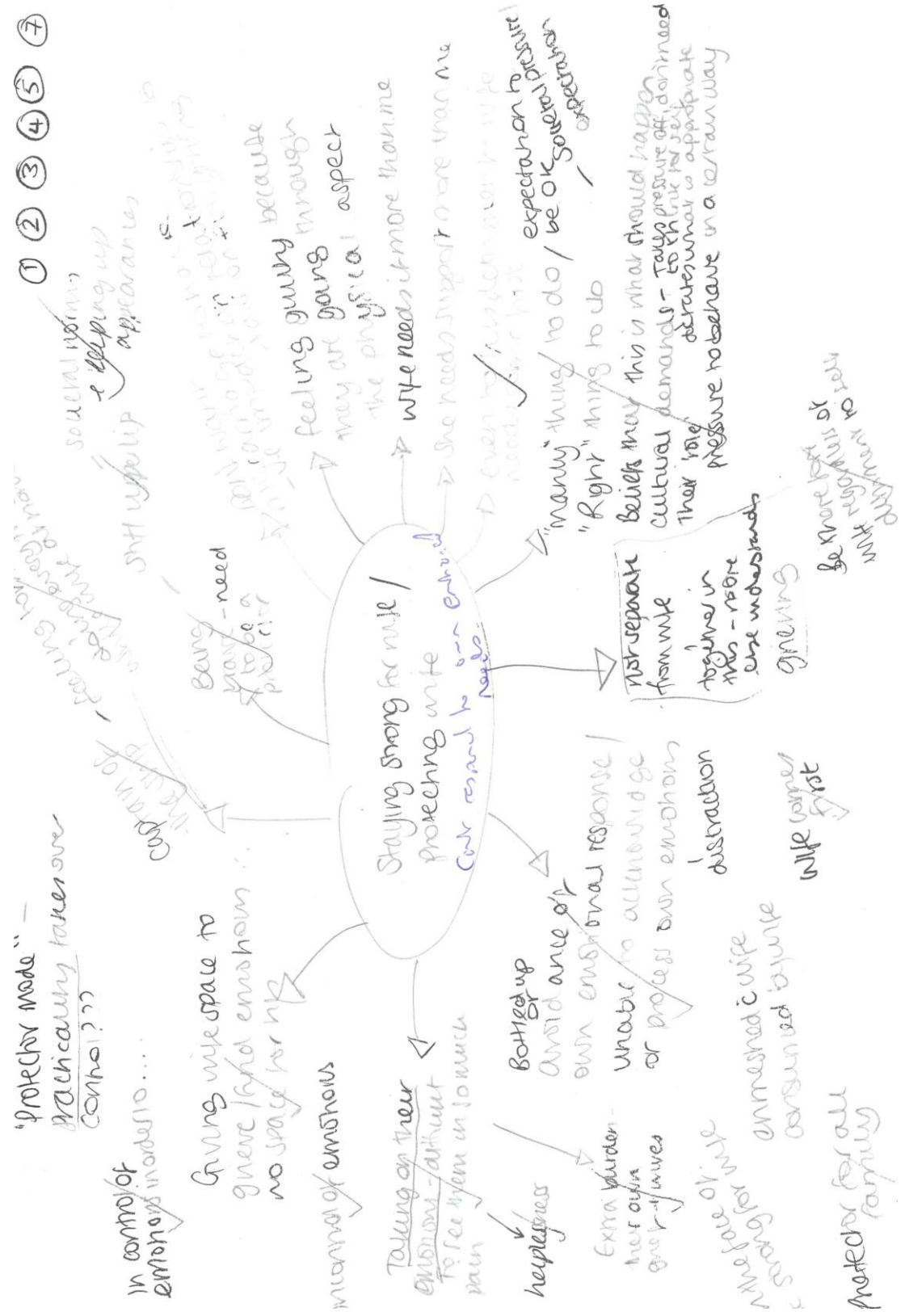
40 ME Was that 12 weeks after the miscarriage or
 41 JOHN No, at 12 weeks
 42 ME How long after the first
 43 JOHN Must have been about a year
 44 ME So a year later and then at 12 weeks, the same thing
 45 JOHN Yeh, at 12 weeks the same thing again. But we decided to
 46 go the surgical route this time because the last one was horrific.

Ignored lack of information
 47 Erm, and again, I was kept out the loop of all the information - I was *felt excluded*
 48 never talked to it was pretty much a carbon copy of the first time.
 49 Erm, there was no information leaflet - what you can do to get help *out of control*

Interview 3	John		
Supportive husband Right attitude?	50 51	<u>here or support</u> – erm so I was again there for my wife, by her bedside through everything. We talked everything through, what	Staying strong for wife
Good communication with wife	52 53	decisions we were going to make. Erm, luckily my wife is quite good – she likes to make decisions as a family not just one of us going	Joint decision-making importance of good relationships
	54 55	"well we'll do this or do that". So we went through the day and again, obviously everything happened. She had the surgery and	
	56 57	came back and then the mental aspects began and after, I don't think I had coped with the first one properly because the second	worse of course things
Emotional impact Staying strong for wife Hiding emotions	58 59	one really hit me hard. But again I was still trying to stay strong for the wife and that's when depression started kicking in. I'd lost. I	Staying strong for wife
Depression Impact on wife	60	stopped going to the gym, I stopped eating properly, I was just	Struggled to cope
Physical manifestations of depression	61 62	generally unhappy all the time. I even, at random times when I was on my own just burst out in tears. I was lonely. I was depressed. I	
Alone / Lonely	63	was struggling. Erm, and there was no support network or anything	Isolation
Lack of support / Comfort from others	64 65	like that around. No-one that I could lean on or anything. I literally had to just snap out of it myself. I didn't know where to get help. I	Isolation
Lack of information around support	66 67	didn't know where to start looking. I didn't even know that you could go to your GP about it. So luckily I kind of forced myself back	
	68	to the gym and that kind of had taken my mind off it and I started	
Painful (impact)	69 70	putting all my focus on the gym instead of the pain and anguish I'd kind of muscled through a little bit. Kind of looking back now it	Post-event growth
Resilience / growth	71	made me a stronger person but at the time it was horrific.	
	72	ME Yeah. How long ago was this then?	
	73	JOHN This was 2015.	
	74	ME Right OK, so 2014 and then 2015?	

Appendix K: Examples of topic mind maps





"protective mode" -
 automatically takes over
 control??

In control of emotions in order to...

Giving wife space to
 give her/had emotions
 no space for his

in control of emotions

Taking on their
 emotions - attempt
 to see them in to much
 pain

helplessness

Extra burden -
 her own
 great - wives

space for wife
 unmeshed wife
 consumed by wife

protected for all
 family

Bothered up
 Avoidance of
 own emotional response /
 unable to acknowledge
 or process own emotions

distraction
 wife corner first

- ①
- ②
- ③
- ④
- ⑤
- ⑥
- ⑦