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Experiencing Male Infertility: A Review of the Qualitative Research Literature

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Abstract

This article examines the qualitative research literature that exists in relation to men's experiences of male infertility. Since men have often been marginalized in the realm of reproduction, including academic research on infertility, it is important to focus on any qualitative research that gives voices to male perspectives and concerns. Given the distress documented by studies of infertile women, we focus in particular on the emotive responses and lived experiences of men in relation to infertility. In this article then, we present an analysis of the core themes across 19 qualitative articles, which include "infertility as crisis"; "emoting infertility- men as "being strong" "infertility as a source of stigma"; and the "desire for fatherhood." In light of these insights, we identify key areas for future research and development including men's emotional responses to infertility, how men seek support for infertility, the intersection between masculinity and infertility, the relationship between the desire to father and infertility, and the outcomes of infertility for men in terms of other aspects of their lives. We suggest that such research would facilitate making the experiences of men more central within our understandings of infertility within a field that has primarily been female focused.

Keywords

male infertility, fatherhood, emotions, masculinity, qualitative

Introduction

In this article, we report on an examination of the qualitative social science literature relating to male infertility. The article takes qualitative research as the focus, shifting away from the quantitative or clinically focused work that has dominated this field historically. Quantitative and clinical work does not offer us a way in to understanding the "lived experience" of male infertility; rather, emotional aspects tend to be quantified via measures of well-being or distress, with a focus on how men score in relation to women (Kowalcek, Wihstutz, Buhrow, & Diedrich, 2001). For example, work by Schmidt, Holstein, Christensen, and Boivin (2005), Peterson, Newton, Rosen, and Skaggs (2006), Kowalcek et al. (2001), and Mikkelsen, Madsen, and Humaidan (2013) adds quantified evidence to the body of literature concerning gender and coping, as well as stigma in relation to male infertility and the impact that infertility has on masculinity. Although such quantifications are useful in terms of assessing levels of distress or even a broad brush gendered picture, they do not allow access to the type of distress men experience, how this may be manifest, the personal implications of such emotive responses, preferred support, and what this means in terms of understanding the nuances of how men (or women) experience infertility. Qualitative research on this topic is underdeveloped: We know little of the views and experiences of men themselves. Although there are some qualitative studies on this topic—the focus of the current article—we note that the field remains limited, with much more scope for further work in this area using qualitative methods.

A decade ago, Throsby and Gill (2004) noted the paucity of literature on what they referred to as "men's experiences of infertility/subfertility, involuntary childlessness, and interventions into reproductive health" (p. 331). The engagement and perspectives of men in research relating to the "procreative realm" remains an underdeveloped aspect pertaining to fatherhood (Hinton & Miller, 2013; Malik & Coulson, 2008; Marsiglio, Lohan, & Culley, 2013; Throsby & Gill, 2004). The maternal focus of reproduction has in many ways been responsible for the side-lining of men's experiences in relation to reproduction and infertility, despite the fact that malefactor infertility accounts for half of fertility issues (Carmeli & Birenbaum-Carmeli, 1994; Culley, Hudson, & Hohan, 2013; Herrera, 2013; Hinton & Miller, 2013; Mikkelsen

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et al., 2013). We therefore know less about men's inability to reproduce, and there is then a need for men's experiences in terms of reproduction to be considered (Carmeli & Birenbaum-Carmeli, 1994; Inhorn et al., 2009, cited in Marsiglio et al., 2013; Webb & Daniluk, 1999).

Infertility research has also traditionally been situated within the sphere of medicine or biology, and studies around how infertility is experienced have predominantly been clinic-based. There has been some progress away from this medicalized context, but as Greil, Slauson-Blevins, and McQuillan (2010) note, "Researchers are moving toward situating infertility in social contexts although the clinical focus of much earlier work persists" (p. 142), highlighting the importance of qualitative research that moves away from medicalized frameworks. By assessing the depth and coverage of existing qualitative work, this article then seeks to explore what in-depth work has occurred beyond the remit of the clinical focus to which Greil et al. (2010) refer to. Furthermore, qualitative research can offer "broader and deeper understandings of how men as well as women experience and live with infertility over both the short- and longterm" (Culley et al., 2013, p. 225). This is particularly pertinent given the suggestion that "infertility is a fundamentally different experience for women than for men" (Greil, 1997, cited in Greil et al., 2010, p. 141). In the subsequent sections of this article, exploration of the current (limited) knowledge about what we do know about men's experiences of infertility will be discerned, and limitations with the present corpus of work will then be examined. We then proceed to identify gaps in current knowledge and suggest possible research directions for future work.

Method

Scrutiny of the social science literature shows that there is still a dearth of information around men's emotional experiences to infertility. For example, searches in databases including CINAHL, MEDLINE, and PsychINFO reveal only 54 results between them when searching for "male infertility" plus "emotions." Only one article was found via database searches, whereas the rest were generated via Google Scholar (using searches for male infertility + emotions and masculinity + infertility) and through identification of suitable studies via following up citations and reference lists of included articles. In total, 13 qualitative studies were included in this review and 6 literature reviews (some of which referred to the studies included within this review, but none that solely explore the emotional aspects of infertility; rather, emotions were a sub facet of the wider nature of those reviews or the reviews were about the male and female experience; thus, this review is distinct in that its focus is on unpacking the qualitative emotive meaning of infertility for men), meaning a total of 19 articles were analyzed (see Table 1). Articles were selected for inclusion based on the topic (male infertilityexperiences and emotions) and method (qualitative) as well as

being English language articles. The initial search was for articles from the last 20 years, but one article from 1994 which was found via following up citations, was included due to its subject relevance, and the included studies were all conducted in Western countries. Some (n = 3) of the studies used couple interviews, some (n = 7) interviewed men alone, and the others included studies involving analysis of online content, media reporting, or policy analysis (n = 3). The sample size of the studies included ranged from n = 6 to n = 65, with a mean sample size of 25, so the samples can be described as being small scale (see Table 1 for study characteristics). Phenomenological approaches were utilized in three of the studies, narrative analysis was adopted by a further three studies, two studies used discourse analysis, and thematic analysis of content, for both online and policy materials, appeared in two of the studies; a further study used a qualitative interpretive thematic analysis within a modified grounded theory framework. Two of the studies provided limited methodological details and as a result did not offer information as to the analytical methods used within their work.

The included studies and reviews were then closely reviewed with a view to identifying core themes. The thematic approach was focused on drawing out what the articles reported about men's experiences, rather than what women say about men's experiences or what men feel about their partners experiences. Inductive codes were developed, and these codes fed into the development of themes within the review. Inductive coding is seen as useful where evidence on the subject of enquiry is limited (Elo & Kyngas, 2008), such as in this instance surrounding emotion and infertility. Our core themes then were (initially) informed by the available data and theme labels used in the various articles; the first author generated the initial set of themes which were then checked by the second author-following discussion the authors agreed on the final themes to be presented. This form of thematic analysis is then a useful way for analyzing qualitative literature and has precedence for use in reports of men's health (cf. Emslie & Hunt, 2009; Galdas, Cheater, & Marshall, 2004). The themes that were generated during the review of the literature include male infertility as a crisis (of masculinity), men as "being strong" in their emotive responses, the stigma of infertility, and the desire for fatherhood.

Male Infertility as a Crisis

Fertility problems have the potential to change temporal horizons, and although a dearth of knowledge still appears to exist about men's desire to be fathers, many young to middle-aged adults do attempt to have children; thus, becoming a father can be seen as a key life course event for many men (Daniluk, 2001; Hinton & Miller, 2013; Johansson, Hellstrom, & Berg, 2011; Peterson et al., 2006; Shirani & Henwood, 2011; Webb & Daniluk, 1999). The failure of this event (procreation) to materialize at the desired life juncture can then be perceived as a major "crisis" to prospective

Table I. Study Characteristics.

Reference (incl. title and journal title)	Main discipline	Method, sample size, and country of research
Johansson, M., Hellstrom, A., & Berg, M. (2011). Severe male infertility after failed ICSI treatment—A phenomenological study of men's experiences. <i>Reproductive Health, 8</i> , Article 4.	Obstetrics and gynecology	A descriptive phenomenological interview method, $n = 8$, research was conducted in Sweden
Hinton, L., & Miller, T. (2013). Mapping men's anticipations and experiences in the reproductive realm: (In)fertility journeys. <i>Reproductive BioMedicine Online</i> , 27, 244-252.	Health	Two qualitative studies (an infertility study, $n = 38$ and a fatherhood study, $n = 17$). Both studies were U.Kbased
Shirani, F., & Henwood, K. (2011). Taking I day at a time: Temporal experiences in the context of unexpected life course transitions. <i>Time & Society, 20</i> , 49-68.	Sociology	Qualitative longitudinal study (interviews), n = 53. U.Kbased study
Throsby, K., & Gill, R. (2004). "It's different for men" Masculinity and IVF. <i>Men and Masculinities</i> , 6, 330-348.	Sociology	In-depth interviews with <i>n</i> = 13 couples and <i>n</i> = 15 women. U.Kbased
Carmeli, Y., & Birenbaum-Carmeli, D. (1994). The predicament of masculinity: Towards understanding the male's experience of infertility treatments. <i>Sex Roles, 30</i> , 663-676.	Obstetrics and gynecology	Observations of patients behavior, unstructured interviews, <i>n</i> = 32. Interviews conducted in Israel and Canada
Daniluk, J. (2001) "If we had it to do over again ": Couples' reflections on their experiences of infertility treatments. <i>The Family Journal</i> , <i>9</i> , 122-133.	Psychology/counseling	In-depth narrative interviews conducted with <i>n</i> = 65 couples who were recruited from 4 regions of Canada
Fahami, F., Quchani, S., Ehsanpour, S., & Boroujeni, Z. (2010). Lived experience of infertile men with male infertility cause. <i>Iranian Journal of Nursing and Midwifery</i> <i>Research, 15</i> , 265-271.	Nursing and midwifery	Descriptive phenomenological study with <i>n</i> = 10 infertile men. Interviews conducted with Iranian men
Gannon, K., Glover, L., & Abel, P. (2004). Masculinity, infertility, stigma and media reports. Social Science & Medicine, 59, 1169-1175.	Sociology	Discourse analysis of broadsheet news media reporting on the decline of sperm counts. N = 26 articles were included in the analysis. U.K. newspapers were used
Marsiglio, W., Lohan, M., & Culley, L. (2013). Framing men's experience in the procreative realm. <i>Journal of</i> <i>Family Issues, 34</i> , 1011-1036.	Sociology	Using critical men's studies perspectives and symbolic interactionism, they explore men and the procreative realm through academic work and public policy debates. Sample size unknown
Cudmore, L. (2005). Becoming Parents in the context of loss. Sexual and Relationship therapy, 20, 299-308.	Psychotherapy	Qualitative interviews with couples in the United Kingdom who were beginning IVF. The number of interviews conducted is not stated
Webb, R., & Daniluk, J. (1999). The end of the line: Infertile men's experiences of being unable to produce a child. <i>Men and Masculinities</i> , 2, 6-25.	Psychology	Qualitative phenomenological approach, n = 6. Participants all lived in Canada
Herrera, F. (2013). "Men always adopt": Infertility and reproduction from a male perspective. <i>Journal of Family Issues, 34</i> , 1059-1080.	Sociology	49 in-depth qualitative interviews in wider study, but this article focuses on subset of $n = 16$. The participants were all from Chile
Malik, S., & Coulson, N. (2008). The Male experience of infertility: A thematic analysis of an online infertility support group bulletin board. <i>Journal of Reproductive and</i> <i>Infant Psychology</i> , 26, 18-30.	Health studies	Inductive thematic analysis of 53 threads and <i>n</i> = 728 messages on the "Men's room" forum. Online

parents. Studies reviewed here suggest that "paternity is a fundamental step in the path of an adult man, since procreation proves his heterosexuality and masculinity" (Herrera, 2013, p. 1063); the inability to biologically father a child is viewed as a "difficult and painful non-event transition" (Webb & Daniluk, 1999, p. 7). There is then argued to be a crisis that emerges from infertility, for example, Greil et al. (2010) claim that infertility creates "the absence of a desired state" (p. 141), that is, parenthood, which can be seen to "disrupt" the imagined futures. As a result, there is potential to compromise a number of aspects of men's lives, but particularly men's sense of self, and identity as a man: Each of the men in the study recognized that his infertility threatened the very essence of all that he had held as secure—his future family, his marriage, and his personal identity. The men had mapped out their lives, and now everything had changed. (Webb & Daniluk, 1999, p. 17)

The stress created by male-factor infertility has been equated by some to the same levels of trauma experienced by the death of a child or spouse (Fahami, Quchani, Ehsanpour & Boroujeni, 2010); thus, the inability to produce children "constitutes a major life crisis" (Mikkelsen et al., 2013; Throsby & Gill, 2004, p. 335). Therefore, although we know from the available literature that a sense of "crisis" may exist in relation to infertility, we need to know more about how this crisis is felt, such as how men plan for having children, and their desire to be fathers, which would facilitate in trying to understand the extent of any subsequent "disruption" that may be experienced by men if procreation is not as smooth as anticipated. A greater depth of knowledge about this "crisis" would assist us in being able to understand how best to support men in ways that they perceive to be useful and appropriate when they are navigating this type of "trauma." Men often state they would like more support directed to them in other areas of fatherhood (for example, see recent work by Machin, 2015, around first-time fathers needing support), and more focused evidence-based support around becoming a father in the context of fertility problems appears an area that needs further development.

The diagnosis of male-factor infertility as a "life crisis" is in much of the available literature viewed as being connected to, or resulting in, a crisis of masculinity. It is suggested that "in finding themselves unable to make their partner pregnant (for whatever reason), men felt that their sense of themselves as men was called into question" (Throsby & Gill, 2004, p. 336). Being able to procreate is then viewed as a signifier of manhood and subsequently not being able to father is then perceived as a "failure" of masculinity (Mason, 1993; Owens, 1982). Work by Mikkelsen et al. (2013) found that a third of their study participants felt "a diminished sense of masculinity" in relation to their infertility (p. 1982). However, we need further research to substantiate how wide the masculinity impact is, as findings such as Mikkelsen's report that two thirds of men do not feel that their masculinity is overstated. Other studies may overstate the "masculinity impact," or there may not be enough qualitative evidence existing to draw conclusions. Male-factor infertility therefore appears to generate feelings of inadequacy about "manliness" for many men (Johansson et al., 2011). A number of available studies make this masculinity-infertility connection, highlighting strongly the link that is seen to exist between fertility and virility. The "fertility-virility linkage" (Lloyd, 1996) is viewed as a key component of hegemonic masculinity, which refers to the dominant conception of masculinity in which being a "breadwinner" and being "tough" are seen as key components of masculinity, and some argue fatherhood is part of confirming hegemonic masculinity (Connell, 1995;

Cousineau & Domar, 2007; Culley et al., 2013; Donaldson, 1993; Fahami, Quchani, Ehsanpour, & Boroujeni, 2010; Herrera, 2013; Hinton & Miller, 2013; Webb & Daniluk, 1999; Wischmann & Thorn, 2013). Although the desire for fatherhood for contemporary men in the context of contemporary masculinities remains an area in which we have limited knowledge, recent evidence from a very small scale (n =9) Scandinavian study found that 90% of Nordic men want to be a father in the future (Sylvest, Christensen, Hammarberg, & Schmidt, 2014).

A research participant in Webb and Daniluk's (1999) study stated that "a man should be able to have children to give his wife children. So because I couldn't I wasn't a real man. Simple, straight forward . . . that's why I felt an attack on my maleness" (Webb & Daniluk, 1999, p. 15). The idea of being a "real man" is therefore present within the available literature, perhaps telling us something of how the norms of "hegemonic masculinity" (Connell, 1995) are being used to narrate the experiences of fertility and infertility for men. This perceived masculine ideal of virility is further highlighted by a participant in Webb and Daniluk's (1999) study who attributed his having an extramarital affair as being part of a desire to

"build up [his] maleness" in light of his diagnosis of infertility, which can be viewed as an example of "compensatory masculinity." This attempt to "prove" manliness is part of what Thompson (2005 cited in Herrera, 2013) refers to as "resorting to a parodic representation of exaggerated heteronormativity or hypermasculinity." (p. 1061)

Therefore, for some men, even the reassurance and support of their partners are not enough to readdress "their feelings that their identity as men had been undermined" (Cudmore, 2005, p. 303).

The literature shows a number of reasons connected to the fertility/virility narrative being posited in relation to the emasculating effect of infertility. First, this perceived "failure" of masculinity in being unable to procreate is seen as part of the conflation of infertility with impotence (Gannon, Glover, & Abel, 2004). Men may feel that they will be perceived as sexually dysfunctional if male-factor infertility is diagnosed, and the idea of sexual dysfunction threatens the male identity as being masculine equals being virile. Second, infertility (and medical responses to it) is often seen to be a female issue (Carmeli & Birenbaum-Carmeli, 1994). "Most investigations and treatments were directed towards the women and the men were assigned a role as companions rather than equal partners" (Johansson et al., 2011, p. 5). It is not only the medical approach to infertility that enforces ideas of infertility as feminized, but some men are said to think of infertility as a "women's problem" (Webb & Daniluk, 1999). Ideas around the social construction of infertility as feminized are therefore present, and such a linkage of infertility with females again reiterates the underlying social belief that being infertile means being "less of a man." This remains an area that needs further exploration within infertility research in order that a greater understanding of the accounts men present around fertility and virility can be achieved. It is suggested that after a diagnosis of male-factor infertility, "the men needed to learn to separate their sense of masculinity from their fertility status" (Webb & Daniluk, 1999, p. 18). How men "reconstruct" their masculinity in the context of infertility remains an underdeveloped area and the part that becoming a father via reproductive assistance, or adoption plays within such reconstructions would potentially offer further illuminations into constructions of masculinity in relation to fatherhood.

Emoting Infertility—Men as "Being Strong"

Within the literature reviewed here, men's emotions and emotional responses to infertility are conceptualized via the notion of "emotional distress." For example, some authors suggest that women suffer more emotional distress when diagnosed infertile than men do, encapsulated by the idea that "while women were often devastated by infertility, men were merely disappointed" (Lloyd, 1996, p. 434). Others (for example, Peronace, Bovin, & Schmidt, 2007), however, suggest that men experience similar levels of distress as women in relation to infertility. Research has then perhaps focused more on the gendered understanding of "who is more distressed" (Greil et al., 2010) rather than the specific nature of the distress that men may feel in terms of a diagnosis of infertility. It is also argued that the nature of women's distress is perhaps overstated by the focus of infertility research on women and the framing of questions toward female experiences (Jordan & Revenson, 1999). The suggestion that "since men will speak less about personal things, the men with disturbed fertility mostly kept their emotional distress to themselves" (Kowalcek et al., 2001, p. 1136) then creates perceived challenges for research around male infertility, particularly in relation to how men feel and capturing the nature of any distress they feel. The idea that men do not speak about emotional distress is however generalized at best, and could be argued to be perhaps grounded in assumptions rather than evidence. Work such as Malik and Coulson's (2008) exploration of online forum postings by men perhaps offers an interesting approach to gain access to men's "insider" accounts and raises questions about how men may talk about infertility and in what settings. This is, however, quite an isolated piece of work, and the use of the Internet to explore infertility has much potential here. An article in the Telegraph (Cooper, 2014) interviewed a male blogger, who uses his blog to discuss his infertility journey; blogs may therefore be another route through which Internet-mediated research could be conducted around the experience of men and infertility. Other recent work shows the value of online sources for research, with work examining men's accounts around diverse topics, from wearing make-up to being depressed (Gough, 2015; Hall, Gough, & Seymour-Smith, 2013).

The literature does portray a clear narrative about men's emotional response to infertility (whether male- or femalefactor infertility), in that men are seen to perceive that an "acceptable" response is that the man should "be strong" for the female partner, even to the extent of suppressing their own emotions (Cousineau & Domar, 2007; Culley et al., 2013; Malik & Coulson, 2008; Shirani & Henwood, 2011; Throsby & Gill, 2004). Men then assume the role of "the 'sturdy oak' or emotional rock" (Throsby & Gill, 2004, pp. 342-343), which a number of authors depict as being part of a traditional or prescribed masculine role or norm, which again reinforces notions of "hegemonic masculinity" (Connell, 1995; Throsby & Gill, 2004; Webb & Daniluk, 1999; Wischmann & Thorn, 2013). Thus, when faced with infertility, men perceive that "they needed to be 'the strong ones' in their relationships, not sharing their pain and loss with others and not allowing others to reach out or comfort them in response to their pain" (Webb & Daniluk, 1999, p. 21). Although this "emotional script of masculinity" may be seen as a role that men assume within this context, it is not necessarily a role that is emotionally "easy" for men when facing infertility; some men suggest that they had a "sense of helplessness in their ability to support their partner" (Malik & Coulson, 2008, p. 22). Men may subsume their own emotions for the sake of supporting their partner; concern for their partner's well-being often takes precedence with men giving themselves a lower priority (Johansson et al., 2011). Therefore, although men play the role of the "rock," this does not mean that men do not have other emotive responses to infertility, or that being "strong" is an emotionally easy role for men to play.

Although the narrative of "being strong" is pervasive within the literature, other emotions have emerged in the limited studies that exist around male infertility. References to grief, loss, anger, frustration, guilt, and depression are also noted in relation to men's diagnosis of infertility (Herrera, 2013; Johansson, Hellstrom & Berg, 2011; Throsby & Gill, 2004; Webb & Daniluk, 1999). A perception of a loss of control when diagnosed with infertility also appears to be present for some and can result in men feeling disempowerment or a sense of anomie (Carmeli & Birenbaum-Carmeli, 1994; Shirani & Henwood, 2011; Webb & Daniluk, 1999). However, we need to know in greater qualitative depth about the experiences of men, from men themselves, about their emotions in relation to infertility.

The literature does then begin to touch upon some of the emotions men may feel around infertility and its consequences, but it is argued that often men do not narrate their emotions in relation to infertility, in part because "the processing and sharing of emotions may be more socially acceptable for women than men" (Jordan & Revenson, 1999, p. 353). Although it may be more "acceptable" and perhaps accepted that women will share their emotions, some studies have suggested that men do seek social support as a means for coping with infertility (Peterson et al., 2006). However, we know little about the social support men seek, and about how they share, or who they share their feelings with. Questions also perhaps need to be raised around how often or able men feel able to share their emotions within research around infertility, that is, whether we are asking men about their feelings and experiences in relation to diagnoses of infertility. Also, in terms of accessing men's experiences, greater consideration of the settings of research, such as whether couple-based interviews or clinic-based work is conducive to men expressing their feelings about infertility, and again web settings may offer men useful means of help seeking, and thus can be useful, "non-invasive" environments for researchers to begin to build a stronger qualitative picture of men's experiences and emotions.

There also appears in some of the literature a blurring of the boundaries about the feelings men have about infertility itself, and the treatment journeys they may find themselves on as a result. For example, in Malik and Coulson's (2008) work, they stated that "frequent references were made on the message board to men's feelings of neglect, unimportance, loneliness and disassociation to the fertility treatment process" (p. 23). Other work suggests that the investigations for infertility can leave men with more questions than answers, and this can contribute to frustration about the experience of infertility diagnosis and treatment (Johansson, Hellstrom & Berg, 2011). Research may then need to unpack the feelings that men have about infertility itself, and the feelings that are produced by the medical interactions they have, including those subsequent routes they and their partners pursue in attempting to become parents. Although these feelings may well be interconnected, the responses and feelings men feel around the various aspects of infertility, that is, diagnosis, acceptance, routes for parenting, and desire to be a parent remain areas in which a greater evidence base would be useful to further our understanding of men's experiences of negotiating infertility.

Infertility as a Source of Stigma

Infertility, specifically male-factor infertility, is identified in the literature as being viewed as shameful for men and still heavily stigmatized within society. Such stigma often links to notions about masculinity (or masculinity being compromised); for example, Bainbridge (2007) discusses the use of phrases such as "shooting blanks" as a descriptor of male infertility, which is seen as "emasculating language," which can add to the stigma that is associated with male-factor infertility Men themselves may use this language to discuss infertility and may well articulate the correlation of infertility with compromised masculinity; "[I am] less than 100% man, I'm shooting blanks" (Cudmore, 2005, p. 303).

As previously discussed, male-factor infertility is often correlated with the ideas of sexual dysfunction, and this is thus seen as a deficiency in relation to the masculine ideal: "One reason that infertile men are stigmatised is because they are perceived as being deficient in a defining component of masculinity" (Gannon et al., 2004, p. 1173). This infertility–masculinity linkage is then suggested to create greater stigma for men than women in relation to infertility (Cudmore, 2005; Malik & Coulson, 2008; Wischmann & Thorn, 2013). Given the stigma that is attached to male infertility, women often shoulder the "blame" for fertility problems even when male-factor infertility has been diagnosed (Kowalcek et al., 2001; Marsiglio et al., 2013; Webb & Daniluk, 1999; Wischmann & Thorn, 2013).

A further reason why women "cover" for their partners to others may relate to the "humor" that is used in relation to male infertility, which can be seen to form a further part of the stigma around infertility. It is suggested that "while wives are pitied, husbands are teased" (Greil et al., 2010, p. 146) and the literature notes that "teasing" or "public ridicule" forms part of responses to male-factor infertility, and may contribute to the persistent stigma (Becker, 2000, cited in Marsiglio et al., 2013; Shirani & Henwood, 2011). "Even the suspicion of male-factor infertility could lead to the man being singled out by friends and work colleagues as the target of thoughtless or hurtful comments and jokes" (Throsby & Gill, 2004, p. 336).

We can then see in various formats that stigma is presented within the literature as being correlated with malefactor infertility. However, some argue that the "direct evidence for such stigma is lacking" (Gannon et al., 2004, p. 1170). The perception and experience of stigma in relation to infertility are therefore a further area that usefully needs more qualitative evidence to aid our understanding of how infertility affects men's lived experiences.

The Desire for Fatherhood

Although infertility is shown in the literature as being an overwhelmingly negative life course event for couples (Jordan & Revenson, 1999), there can be unexpected positive outcomes. For example, relationships can be seen to have been strengthened by the experience of infertility and that it has in fact brought greater "closeness" or "marital benefit" for the couple (for example, see Greil, 1991, 1997; Johansson et al., 2011; Schmidt et al., 2005; Webb & Daniluk, 1999). Although greater relationship strength may ultimately be achieved for some men, the challenges faced by couples trying to conceive can create pressure for men. Delayed conception is suggested to hold the possibility of making men "increasingly invested in achieving parenthood" (Shirani & Henwood, 2011, p. 55). However, little is known about men's emotive responses in relation to their desire to parent (cf. Hadley & Hanley, 2011), and how they may feel about parenting in light of an infertility diagnosis, and/or any subsequent medical reproductive assistance they and their partner may receive.

A participant in Cudmore's (2005) research suggested that "I desperately want children too, but I don't show it" (Cudmore, 2005, p. 303). **Similarly**, and others argue that "men are in fact equally affected by the unfulfilled desire for a child but are less open about their feelings" (Collins et al., 1992, cited in Malik & Coulson, 2008, p. 18). Although it can be seen that men are not always equally invested in pursing fertility treatment (Daniluk, 2001; Greil et al., 2010; Jordan & Revenson, 1999; Throsby & Gill, 2004), research suggests this is not necessarily due to lack of desire to parent, but rather due to the focus of interventions for fertility primarily being on the female, which men may feel less comfortable about championing given that the pain and invasion of treatment will occur to their female partners rather than themselves; the choice for treatment is then seen more weighted to the woman (Daniluk, 2001; Herrera, 2013). However, more recent work suggests that men are now becoming more open about their desire to be fathers and about the choice to pursue fertility treatment (Mikkelsen et al., 2013). Evidence, however, remains small-scale and thus limited in terms of what we know about how men feel about the desire to father in light of (in) fertility issues; however, the limited data available appear to correlate with the above notion that men may be invested in becoming parents.

There are a small number of studies available related to couples adopting in light of either male- or female-factor infertility (see Cudmore, 2005; Herrera, 2013) and of couples opting for assisted reproductive treatment options. However, the work around fertility treatment is often female focused, or couple based, which inevitably creates a different lens through which men's experiences are viewed; "there are relatively few sociological studies of men's attitudes about using ART's (Assistive Reproductive Technologies)" (Marsiglio et al., 2013, p. 1023). There is then relatively little known about the decision-making processes and desires of men within both fertility treatment (including surrogacy where female-factor infertility exists) and adoption scenarios, despite the fact that "for large numbers of adoptive parents, infertility and adoption are closely linked" (Cudmore, 2005, p. 299). Infertility can also open up a scenario in which "being able to demonstrate a commitment to fatherhood is challenged" (Hinton & Miller, 2013, p. 250) via the demands and requirements of fertility treatment or the bureaucratic processes of adoption. Therefore, the fathering/fatherhood desires of men are likely to involve complex emotive responses in relation to infertility and its consequences, and although some work exists (see Hadley & Hanley, 2011), the notion of involuntarily childless men remains broadly an area about which we know relatively little.

Discussion

The relative paucity of information around male infertility, and of men's experiences of infertility more broadly (whether male- or female-factor), demonstrates a need to gain further insights in this area. Although there has been a growth in small-scale qualitative research around infertility, there still remains the issue that "men need to be a part of research on gender and health" (Greil et al., 2010, p. 154). Research into men's health is a burgeoning area (Gough & Robertson, 2009), and greater engagement with men's reproductive health would be a positive addition to this field. As previous work shows, the lens of infertility has often been focused on women, both by virtue of the fact that women have been (rightly or wrongly) narrated as being "more distressed" by infertility than men and that medical responses to infertility often focus around the female reproductive system (Johansson et al., 2011; Jordan & Revenson, 1999). This has then created a situation in which "there is insufficient knowledge of how men with a severe male-factor infertility diagnosis experience the infertility because there are few studies addressing that issue" (Johansson et al., 2011, p. 2). It is therefore recognized that research about infertility needs to focus more on what men themselves feel, and there is increasing awareness that "researchers cannot rely on women's accounts of men's motivations, feelings and experiences" (Culley et al., 2013, p. 231).

Even when the feelings and experiences of men are drawn into focus within infertility research, they are sometimes mediated through the female lens via couples' interviews, which may place constraints on men in relation to how much of their feelings they want to share, particularly in light of suggestions that men are seemingly trying to "be strong" for their partners in the context of infertility (Daniluk, 2001; Throsby & Gill, 2004). Interviewing couples together may limit men's accounts, who may assume their alleged de facto role in relation to infertility of "being strong" and of trying to spare their partners further anguish by protecting their partners by not sharing the full extent of their feelings (Johansson et al., 2011; Malik & Coulson, 2008). There is therefore a need for the lens to be more firmly on the male experience and for the experiences of men to be sought independently of the constraints that may exist in men discussing their experience of infertility in front of their spouses or partners.

The number of qualitative studies that are engaged with men's experiences therefore appears to be small, and all make suggestions of further work being needed. For example, Webb and Daniluk (1999) noted at the time of publication 15 years ago of their qualitative phenomenological study of male infertility that

only a few studies have been conducted with the specific intent of exploring men's responses to infertility . . . as yet no research has been published examining in-depth the experiences of men in couples who have been identified with an exclusively male factor fertility impairment. (p. 9)

Although their work contributed to this underexplored area, the sample size (n = 6) was relatively small, and geographically situated within Western Canada, and as this review demonstrates, the extent of qualitative work in this area has not grown dramatically in the intervening years since their work was published, or in line with the men's health field more broadly. Similarly, Malik and Coulson's (2008) work exploring men's posting on an infertility forum offers us interesting insights into how men experience infertility, but it is only one such study, and they note that "future research should seek to consider a range of online support groups as the dynamics of each group may vary" (p. 29). There is therefore small-scale research that is offering promise in understanding infertility, and which shows how research with men could be conducted in relation to infertility. It is therefore suggested that we need "a more thoughtful

inclusion of men into reproductive realms" (Hinton & Miller, 2013, p. 250), and this also includes within research where men's right to be studied has not always been assured (Carmeli & Carmeli-Birenbaum, 1994). Research needs to be "male sensitive" in this regard, so that men feel comfortable being involved in research about infertility. Thinking through issues of how to access the population in question, and the best means for engaging with them in a research setting is paramount, and can usefully draw on evidence about accessing men via online means (Malik & Coulson, 2008) or learning from previous response rates (Lloyd, 1996).

The literature then presents some ideas around what we know about men in relation to infertility, specifically ideas around men experiencing infertility as a crisis of masculinity, of men assuming a "stoic" emotional role in the context of infertility, and of male infertility being stigmatized. These aspects then offer us a "way in" to understanding male infertility, but do not necessarily offer a comprehensive picture of how men experience infertility and whether men's responses differ from the "masculine script" responses the available literature portrays. There are therefore a number of areas that this literature review has noted, and which appear to potentially offer fruitful avenues for further social science investigation on this topic. These include the following:

- 1. Emotions—How are men emotionally affected by infertility? What emotional "work" do men perform in relation to infertility, that is, if they take the "supporting" role in what is a stressful time for a couple, then how does this affect their well-being, particularly their emotional well-being?
- Support—How do men navigate disclosure of infertility to others, and what support do men seek in relation to infertility? How does online support via aspects such as blogging or Internet forums fit within the support men seek?
- 3. Masculinity—To what extent is masculinity and infertility connected within men's experiences of infertility? If masculinity is felt to be compromised, how do men then reconstruct their sense of self in relation to the identity disruption that infertility may bring about? Do men feel stigmatized by infertility diagnoses, and how does such stigma affect the lived experiences of men as they navigate infertility?
- 4. Desire to parent—How do men feel about fatherhood and parenting in light of infertility? Does their desire to father influence how they feel about pursuing fertility treatment? How do men view the process of choosing treatment or adoption, and how does this intersect with other aspects such as masculinity and stigma?
- 5. Outcomes of infertility—How does infertility affect men's relationships with their partners/spouses, do they experience a strengthening of those relationships? What is the impact on men over the longer term if they are unable to have children, that is, how does this affect their quality of life and well-being?

Male infertility is therefore an area that has great potential in terms of research, and which can offer us illuminating insights into how men experience and navigate their desire to be fathers within a complex context. Overwhelmingly, research around infertility has been a field dominated by quantitative research, and qualitative research has predominantly taken women, or couple-based interviewing, as the central focus, and our contention is that we need to redress this imbalance to gain the useful insights and perspectives of men to learn more about the male perspective, and infertility more generally. By researchers engaging more with men in relation to infertility and its impacts, the tide can begin to turn in terms of reproductive health continuing to be seen as "a women's problem" (Hinton & Miller, 2013, p. 245) so that men are given a more equal position, and thus, they are no longer viewed as "the second sex in reproduction research" (Culley et al., 2013, p. 226). By including men more centrally within reproductive research, how men and mixed-sex couples can be supported in relation to infertility may be better understood, which may have practical implications for support and service provision. The need for greater qualitative explorations of male infertility is therefore evident within the literature, and specifically, we need to know more about how men feel about infertility and fatherhood. We need to give men a voice within research about infertility to further our understanding of how men respond to infertility and the impact it has on their lives.

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