'At the hospital I learnt the truth': diagnosing male infertility in rural Malawi

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This paper examines how men's reproductive bodies are problematised in rural northern Malawi as access to biomedically defined diagnoses of the health of men's sperm contribute to the visibility of male infertility. Ethnographic research with infertile and fertile men explored pathways into the sexual health and fertility services offered in district hospitals, men's clinical engagements and masculine imaginaries. The research suggested that men's willingness to be referred for semen analysis is an extension of intensive and persistent help-seeking for childlessness instigated by couples and encouraged by families. Within the laboratory, acceptable social arrangements for semen sample collection are negotiated between male clients and laboratory staff, which emphasise heterosexual and marital virility. Following diagnosis, counselling by clinical officers, without any significant therapeutic interventions, focuses on compassion in marriage. This paper considers: what is the role of semen analysis within public health facilities and why do men participate? How do men experience an infertility diagnosis and what do they and their partners do with this knowledge? In addition, how do these practices shape gendered relationships in families and communities? The analysis builds on Inhorn's (2012) concept of 'emergent masculinities' to better understand the connections between male subjectivities, medical technologies and the globalisation of male reproductive health, as they relate to men's lives in rural Malawi.

Keywords: Gender; Masculinities; Malawi; male infertility

Introduction

Infertility studies in the social sciences have generally drawn attention to the way women are stigmatised for being infertile in resource-poor settings, and to the ways in which their bodies are subject to examination and intervention (Gerrits 1997; Boerma and Mgalla 2001; Kimani and Olenja 2001; Dyer, Abrahams et al. 2002; van Balen and Inhorn 2002; Hollos 2003; Inhorn 2003a; Dyer, Abrahams et al. 2004; Schuster and Hörbst 2006; Hemmings 2007; Hollos and Larsen 2008; Hörbst 2010; van Balen and Bos 2010). This work has highlighted the social and physical cost of infertility, prioritising it as a significant public health problem and human rights issue (Bergstrom 1992; Boerma and Mgalla 2001; van Balen and Gerrits 2001; Ombelet, Cooke et al. 2008; Inhorn 2009; Ombelet 2009; Ombelet and Balen 2010). Yet the relative exclusion of men limits understanding of perceptions of infertility, treatment-seeking and support needs (Inhorn and Balen 2002; Hörbst 2010; Inhorn 2012; Culley, Hudson et al. 2013).

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The World Health Organisation (WHO) provides standardised guidance for the investigation, diagnosis and management of male infertility (history taking, clinical assessment and criteria for diagnosis) and laboratory examination of semen (WHO 1999; WHO 2000), which healthcare providers in Malawi utilise. Public facilities are free at the point of access in Malawi. Infertility care includes seminal analysis among other preliminary investigations – appearing in Ministry of Health National guidelines in 2003 and becoming an established part of practice in District hospitals. The four main categories of sperm defects leading to a diagnosis of male infertility are low sperm count (oligozoospermia), poor sperm motility (athenozoospermia), defects of sperm morphology (teratozoospermia) and absence of sperm in the ejaculate (azoospermia), which may be due to lack of production or obstruction (Inhorn 2012: 67; Irvine 1998). A recent study from Malawi found low sperm count and defects of sperm morphology to be the most prevalent in men seeking testing (Lampiao and Kutengule 2013).

Malawi's National Policy on infertility is that 'infertility counselling and services shall be made available at all levels', a policy that is operationalised through Sexually Transmitted Infection (STI) management, on the basis that STIs are a preventable cause of infertility, among other causes including complications of other infections and reproductive abnormalities (MoH 2003, 2007).¹ Service guidelines in the first instance state that 'the causes of infertility affect both men and women equally' (MoH 2003, 2007).

This paper shows how access to laboratory-based semen analysis in northern Malawi is contributing to the visibility of male-factor infertility in this rural sub-Saharan African setting. It argues that semen analysis has the capacity to confirm men's reproductive problems, complicating their marital and social lives in their communities with life shattering consequences. In Malawi there is no recourse to biomedical assisted reproductive technologies designed to overcome male infertility problems, the causes of which are often idiopathic or difficult to treat (Irvine 1998; Lampiao 2013; Lampiao and Kutengule 2013). Indigenous healers in Malawi, as in other parts of sub-Saharan Africa, tend to treat childless men for problems of sexual virility, which further humiliates men by conflating infertility with impotence (Morris 2000; Moyo 2013). Children may enter men's households by way of informal child fostering arrangements. However, this solution is only partial as it positions men as recipients of children who remain connected to their birth father's home rather than progenitors (see also Savage 1992; Sundby 1997; Gerrits 1997).

Male infertility in sub-Saharan Africa

Strategies of providing for surrogate fatherhood, whether secret boyfriends or arrangement to bear children with a brother-in-law, have historically been considered protective of men who are infertile in southern Africa, in comparison with infertile women who fail to show signs of pregnancy (Ominde 1987; Kimani and Olenja 2001; Gerrits 2002; Moyo and Muhwati 2013). These practices have been reported in both patrilineal and matrilineal settings (Gerrits 1997; 2002; Moyo 2013). Odinga's (2011) historical analysis of midtwentieth-century court records from South Nyanza, Kenya provide some evidence that women who were forced to bear the burden of their husband's infertility sought to demand the rights and respect that were withheld from them, or they filed for divorce by calling upon evidence of men's prior childless marriages or revealing pregnancies with lovers. Alternative narratives, incorporating contemporary Christianised and HIV/AIDSinflected perceptions of sexual propriety, prioritise love and marital fidelity over the problem of infertility (Oduyoye 1999). Until recently, there has been little account of men's subjective experiences of infertility, either by design or opportunity, across southern African communities socialised by the requirement to hide 'the brother's shame' (Oduyoye 1999:114; (Dyer, Abrahams et al. 2004; Hörbst 2008; Gerrits and Shaw 2010; Hörbst 2010). Laboratory-based semen analysis, and in some places the spread of assisted reproductive techniques to overcome male infertility problems, are playing a key role in the recognition of male infertility problems in sub-Saharan Africa (Upton 2002; Dyer, Abrahams et al. 2004; Folkvord, Odegaard et al. 2005; Hörbst 2008; Dhont, Luchters et al. 2010; Hörbst 2010; Dhont, van de Wijgert et al. 2011; Lampiao and Kutengule 2013). The impact on men's sense of identity and relationships has drawn new attention to the enactment of masculinity among the many gender effects of the globalisation of diagnostic and assisted reproductive technologies (Webb and Daniluk 1999; Inhorn 2003b; 2006; Goldberg 2009; Tjornhoj-Thomsen 2009; Inhorn 2012).

Specifically, social science research in urban South Africa and Mali suggests that diagnosis with male-factor infertility threatens men's sense of self-worth, and that secrecy and shame prevails (Dyer, Abrahams et al. 2004; Hörbst 2008; Hörbst 2010). Men's involvement in care-seeking was reported to be high in response to couple infertility in Cape Town, nevertheless many men did not wish to admit they had the problem (Dyer, Abrahams et al. 2004). Men faced degrading talk in communities and once diagnosed, feelings of worthlessness in relationships could rebound in intimate partner violence (Dyer, Abrahams et al. 2004, 964). In Bamako, Mali, diagnosis had the potential to complicate men's lives and 'diminish' men in their own view of themselves in the context of patrilineal descent and widespread pressure to become polygynous (Hörbst 2010, 26–27). Hörbst found some male gynaecologists orchestrated private appointments with the male partner, if he suffered from male-factor infertility, or implied that both partners required treatment, perpetuating uncertainty (Hörbst 2008, 131–132). As a contrast, Inhorn's long-term research in pronatalist countries in the Middle East charting the spread of semen analysis followed by assisted reproductive technologies, has shown that discourses of weakness and emasculation coexist with new narratives that situate infertility as a medical issue and a God-given disease category, not a problem of manhood (Inhorn 2012, 84–90). Men engage in a critique of the inequities that blame women for childlessness and may seek to spare their wives from stigmatisation (Inhorn 2012, 84–90).

This paper considers: what is the role of semen analysis within public health facilities and why do men participate? How do men experience an infertility diagnosis and what do they and their partners do with this knowledge? In addition, how do these practices shape gendered relationships in families and communities? The analysis builds on Inhorn's (2012) concept of 'emergent masculinities' to better understand the connections between male subjectivities, medical technologies and the globalisation of male reproductive health, as they relate to men's lives in rural Malawi.

Theorising masculinity and the gender effects of semen analysis

Inhorn has questioned the adequacy of applying Connell's hegemonic masculinity theory to the ethnographic realities of men's experiences of infertility and their changing local moral and medical worlds. This is because hegemonic masculinity theory risks essentialising dominant and ideal male attributes (for example, of virility and fertility), and reifying social orders (whether hierarchies between men or between men and women) as those that, for example, sustain male privilege and wife blame as a response to reproductive failure (Inhorn 2012, 39–62). Similar critiques can be levelled at feminist analyses of intimate realities as socio-political (hegemonic) processes, such as Collier's (1988) comparative analysis of marriage validation practices as foundational to the relational and contingent construction of gendered selfhood and seniority. On the one hand, such an analysis helps articulate how the project of having children relates to the organisation of power and privilege along gender and generational lines in north Malawi, where bridewealth (*chuma*) remains an important and respectable means of validating marriage and husband's rights to children.² And why, as earlier research in Malawi has implied, child-

husband's rights to children.² And why, as earlier research in Malawi has implied, childlessness in marriage is perceived to be one of the more severe forms of gendered and social disempowerment accompanied by intensive and enduring treatment seeking, infidelity, divorce or polygyny (Barden-O'Fallon 2005; de Kok and Widdicombe 2008; de Kok 2009). On the other hand, such a framework does little to orientate attention to the transformative practices, shaping the way in which male reproductive impairment is recognised and embodied, or to the diversity of contemporary and historical influences on the experience of marriage and fertility. For example, while virilocal residence is a key reference, couples may establish households far from their families. Church ceremonies play a role in validating unions, expressing ideals of marital fidelity and companionship. And HIV/AIDS inflects perceptions of appropriate behaviour, potentially prioritising these over childlessness.

Inhorn argues that what is needed is a theoretical approach that accounts for processes of change and transformation within 'dominant' or normative culture. Therefore, Inhorn's revised conceptualisation combines insights into the dynamics of health identities and their embodiment with Raymond William's focus on the emergent rather than what is alternative or oppositional (Inhorn 2012, 58–62; Inhorn and Wentzell 2011). This frames 'manhood' and the experience of infertility as dynamic, deeply embodied, and necessarily plural. As a counterpart, semen analysis as a diagnostic practice may be conceived as multiply constituted by different practices and policies in specific contexts. 'Health technologies' and discourses on 'men's reproductive health' are not static global influences but dynamic practices with which men selectively engage (Inhorn 2012; Wentzell 2013; see also Mol 2002).

Method

Data analysed in this paper were collected as part of a larger community-based study² into men's reproductive and sexual health and treatment seeking, between 2011 and 2013, in which 55 men, of different ages and marital statuses from villages in the southern part of Karonga District, participated in reproductive and life history interviews in *Chitumbuka*. The lakeside population are predominantly Tumbuka-speaking, Christian and rural. Fewer than a fifth of households rely on salaried employment as their main source of income, and few homes are supplied with electricity. Divorce rates are fairly high and remarriage common among men (Marston, Slaymaker et al. 2009); polygyny increases with age, although many churches are vocal in their disapproval.

The topic of male infertility and rural men's participation in semen analysis emerged from the larger study, and was progressively defined, analysed and explored in depth (Hammersley and Atkinson 2007). A total of 14 men known to have experienced childless marriages were included³ and all agreed to participate in three in-depth interviews at their homes. Men's current partners also consented to individual interview. They spoke, with members of the small team of ethnographically-trained Malawian men and woman interviewers, increasingly openly about the issues they faced. Men's help-seeking practices were analysed and the author carried out relevant interviews with laboratory and clinical staff at three hospitals, local traditional healers and church leaders (11 Christian denominations). Three-quarters of the men who had experienced childless marriages had participated in semen analysis at public health facilities (after, on average, 3 years of childless marriage) or were saving money to travel to a district or regional hospital for further investigations with their partner.

Semen analysis: does it challenge thinking on infertility?

Clinicians at the rural hospital and health posts in the study area describe the practice of semen analysis to men and their wives, 'If they have seen your sperm they will see whether they have life (*moyo*) or not. Clinicians connect semen screening to existing cosmology, as fertility (*mphapo*) is closely associated with life or life force (*moyo*), blood and semen (see Morris 2000). Analysis of semen also diverges from local understanding of fertility problems. Considering the influence of the practice, a clinician from the rural hospital concluded, 'Before men could say to the woman "it's you, it's you". Now they can say "see if the problem lies with me" (Clinical officer, female).

Women's bodies have certainly been the focus of more extensive reproductive imagery that indicates fertility problems (see also Hemmings 2007), such as a closed, blocked or narrow path (*nthowa*) treated by herbs inserted vaginally, menstrual irregularities or excessive menstrual pain (*tcheka*) treated by drinking herbs, both of which may cause sperm not to enter or fail to stay inside. Spirit possession (*vimbuza*) or improper behaviour such as abortion or misuse of contraceptives can cause the binding or disruption of fertility. Both members of the couple may be thought of as having 'Incompatible blood'. And if witchcraft or ill thoughts of others are thought to be the cause, both may be encouraged to seek reparation or medicine together. The imagery of the male body has conflated virility with fertility, as it defines male problems as a lack of sexual strength (*nkhongono*). Many herbs are taken for potency (Morris 2000). One childless man described, 'after I started drinking that medicine I did it almost four times before morning', but he found this did nothing to alleviate his trouble conceiving.

In families and the wider community, speculation and judgement concerning who may be the cause of childlessness in marriage is fuelled by either partners' unproven fertility or changes in partner, drawing attention to men's potential contribution to infertility. Although childless wives may bear the brunt of complaints from her husbands' family if they live patrilocally, both sides' relatives may blame the others' child as the source of the problem when defending obligations to bear children. There is strong pressure to take another partner, although the openness and design of this suggestion is asymmetric. As one employed man explained, his relatives would call him to group meetings to pressure him to divorce his wife and remarry, while his wife's relatives and even his female cousin would tell her 'if you want to remain married meet another man and get yourself pregnant'. He acknowledged the strain on his relationship, saying 'living with someone who doesn't trust that you won't divorce them is the hardest thing to bear'. Many men acknowledged the possibility that they could be implicated in the cause of couple infertility, for example saying 'I had no proof I was ok', even when they had been told they were responsible for a pre-marital pregnancy.³

Various descriptions of semen as 'lacking in strength' or the 'problem of sperm count' are filtering into local knowledge. So too are fears towards risk of infertility caused by STIs and the parasitic infection, schistosomiasis⁴ which appear in young unmarried men's interviews in the larger study of men's reproductive health. These attest to the increasing visibility of male reproductive problems and the range of possible causes, in line with National sexual and reproductive health policy. Semen analysis may not represent a complete shift in ways of thinking about infertility, but it constitutes a different mode of understanding and attribution of physical impairment.

Therapeutic itineraries: why and when do men seek infertility care?

Childless men and women are regularly called to affirm their normative desire for children to others by taking advice to seek help. Many couples began visiting herbalists (*Sing'anga*) just a few months into their marriages. Seeking understanding and help from hospitals, while less popular, is part of the same practice as seeking the help of herbalists. One young married man described, 'our parents complain their child doesn't have a child, they told us we should concentrate on more than one way to get help'. However, men and their wives often turn to biomedical health care (on average 3 years into marriage) after concluding that the efforts of different herbalists had failed, or worse that they caused harm. One man recounted, 'we vomited so frequently we just slept by the pit latrine ... I did not care if I died but I felt sorry for my wife'.

Encouragement to attend the hospitals directly came from different quarters. This focused on the capacity of the hospital to provide a superior physical examination of the body, for instance, 'using machines' to 'see inside' (for parallels of the power accredited to biomedical ways of seeing, see Sijpt 2013). One man complained that not one herbalist he had visited had examined him, focusing on his wife. Relatives or friends who worked at hospitals were influential and several churches counselled couples who came to them with fertility problems and supported access to medical services. In one case, Catholic elders provided a male congregant with the bus fare to the District Hospital for semen analysis.

Some heard of the effectiveness of available 'treatment'. At lower levels, rural hospitals provide syndromic treatment of symptomatic STIs⁵ and 'fertility awareness' (education on the menstrual cycle) which was sometimes successful. As a participant explained, 'my uncle experienced the same problem two years after he'd married and when he went there he was given tablets and his wife became pregnant the very same month'.

Refusal to seek biomedical care is an equally significant practice. This draws on perceptions of the appropriateness of available medical treatment to solve, for instance, the problem of being bewitched: one older polygamist who had children with his first wife and none with any subsequent partner, knew his first wife had cursed him. This refusal to seek help stemmed from the perceived downsides of the investigation of infertility. Exemplifying one possibility, the man's wife participated in an examination while he did not. He asked his wife to put their faith in God and agree to concentrate on prayer. He showed his wife's health record to his relatives 'to dispel rumours she was barren'. Taking a more radical position, neither member of one childless couple participated in biomedical investigation or divination of the cause of their infertility. They responded that blame was the real problem in marriage, not childlessness, and drawing on their faith (born-again Bible believers) they sought to distance themselves from the demands of their elders, saying to them, 'children are the will of God'.

Semen analysis in practice: how do men navigate sample collection and diagnosis?

Clinical officers at all levels of health care noted that couples commonly visit together, especially if they are in their first marriage: 'They come because they are very desperate. They need a child; Because of that despair they come' (Clinical Officer, male). Women and on rare occasions men who attend alone are usually told to return with their partner. As one man confirmed, 'they require a man and his wife to go that is why we decided both should go'. Men usually accepted the advice of clinicians to participate in semen analysis, alongside other investigations including STI testing: 'even if they are uncomfortable, what they want is assistance' (laboratory technician).

At the District Hospitals, Clinical Officers send their male clients to the all-purpose laboratory to submit their sperm for analysis. Masturbation is a standardised, non-invasive method for providing a sample, yet the strong, positive emphasis on enjoying heterosexual relations in Malawi (Morris 2000) and relative disapproval of masturbation (including a ban on pornography) means the idea of providing a sample may be met with concern. A male clinical officer described how some men responded, 'One man was resistant. He was like "what am I going to do?" "You submit your sperm for they have to check". "Ah! How am I going to do that?". Laboratory staff played a key role in these interactions. They usually responded by encouraging men to provide a sample with their partner - '90% of them come with their partners' - and giving them as much privacy as possible within the confines of the facilities:

We just brief them – we ask them to bring their wives. And we give them this [sample collection] room. We close it. There is a window inside [shutter onto lab] and we tell them 'if you are done just knock'. Some say – we cannot do it here. [men or women?] Both can say. We are just open; we tell them to be comfortable. Tell them when you know you're ready just withdraw. Most are successful. If they say we have failed we tell them to go away, and come back ... We tell them to abstain. Some only stay three days – they say they cannot wait! [Smiles]. (Laboratory technician, male)

The same concerns regarding male heterosexuality and semen could rebound negatively on men who attended alone. For example, one man explained that 'the real truth' concerning the volume of ejaculate could only be established if he did not 'force himself' but 'was supported by a woman in giving a sample'. In these respects participating men and health providers navigate semen sample submission as a sexualised, masculine practice (see also Goldberg 2009).

Men's results are explained by clinicians who compare the patient's results with 'normal' expectations concerning motility, morphology and volume. Both members of an anxious couple are usually in attendance. Aware of the problems wrought by blame and exposure of intractable fertility problems in marriage, clinicians discuss the consequences of a negative diagnosis on their relationship: "Suppose it is the husband – how are you going to live?" And we say "suppose it is the woman – what will be your reaction?" to the husband. And we listen to what they tell us'. Clinicians describe men's discomfort at receiving negative results, 'you can see they are not at ease. They're afraid their wife now will run away'. Nevertheless, clinical practice encourages the sharing of knowledge. Clinicians counsel compassion in marriage. Although treatment for underlying infections

and in some cases drug therapy that is believed to increase sperm count may be offered, for the most part clinicians with no access to assisted reproductive technologies admit, 'it's really challenging [long pause], I explain to them they may not have children' (Clinical officer, male).

Hope of deliverance from a severe prognosis or from unexplained fertility was usually placed in the hands of God. This was often a time that men or couples became 'serious about prayer' or sought to be prayed for by charismatic Pentacostal pastors and travelling prophets who regularly advertise in the trading centre and in towns. The Assemblies of God pastor who held local healing and deliverance services emphasised, 'you can be told at the hospital, "you will not give birth" but God goes beyond what the hospital can do because they can be prayed for ... God heals but that requires faith'. Participation leads to the visualisation of men's reproductive bodies through globally standardised definitions of normality or impairment, but semen analysis is also mediated by localised schema that inflect how it is practised and understood.

What are the gendered consequences of male infertility diagnoses?

Despite many men's willingness to undergo semen analysis, most men seemed unprepared for the possibility of a male-factor diagnosis. The consequences appear catastrophic. The following two case studies illustrate new forms of vulnerability faced by diagnosed men through the condensed in-depth narratives of men who discovered they had severe forms of male-factor infertility. In the first case a young man – James – describes diagnosis as 'a big and sorrowful event' in his life. He is single after the breakdown of his first marriage. In the second case, Promise, who is in his second marriage after being briefly polygynous, is described by his wife as 'a man ashamed'. Even affirmation of a suspected condition affects his sense of manhood.

James

James is in his late 20s; He completed secondary school and built a house, close to his relatives, of burnt bricks and glass windows roofed with iron sheets with income from skilled piece work and farming. He was married for four years. He endured taunts about their childlessness: "aahh you – barren (*chumba*), give us your wife and we'll give her a child!"... others were telling my wife she was just wasting me without bearing a child'. People told each of them to 'try outside' to which he responded, 'I didn't take their advice, I was just staying with my wife because I knew that it is God who gives gifts and there was no problem if we did not have a child provided we loved each other'.

Together they visited many herbalists. Looking back, 'that was the time both of us were taking medicine and there was no one to blame since I thought maybe I was the one who had the problem, and she was thinking maybe she was the one'. His wife encouraged him, saying 'some people die without having children but they still love each other'. He assured her their marriage was blessed in church and 'leaving the church aside the two of us also signed in a diary that we would be together'.

After three years without a sign of a pregnancy they decided to go to the hospital encouraged by relatives of both sides. There, 'I learnt the truth', James explained. Their blood and urine tests returned negative for 'diseases that could affect us having children', however analysis of James' semen showed,

They had a low count, instead of finding one million, they saw under the microscope just one hundred. They suspected the man's low count could be the reason we are not bearing children. Sperm do not meet with the egg and some die on the way because they are very few.

He received drug therapy - 'boosting' medicine (*ma pills ya boosting*) - and was told to return for a check-up after taking the medicine for several months. He tested again, reporting his count had not increased to normal levels. By then his wife had returned to her natal home and James heard she had become pregnant, 'I accept my wife is indeed pregnant, as I never heard she had a problem, rather I was the one found with low sperm count'.

James describes his thoughts as unstable. He blames himself for his childlessness. He has no current plans to remarry, which makes him unusual among divorced men. He explains he must first try to solve his problem. James also cannot forget about his wife, seeing every other woman as 'below her standard'. He dwells on her departure and the man he believes to be her boyfriend: 'This thing pains me because it has happened when I still have great love for her and up till now I still love her'. When he apologised for any ill words at her natal home, her refusal to have sex with him convinced him she could not love him anymore. He told her and her parents that marriages blessed by the church should not end in this way. He fears another woman will do the same and wonders if he should take another HIV test. Out of loneliness he spends little time at his house. He is focusing on his brothers who depend on him for school fees and he 'cannot think about children' at present though. 'In my life, I had the expectation that I will become *mulala* (elder, an adult person). I was happy that I'd be called father by the child, and I'd planned to help that child in many ways'.

Promise and Eliza

Promise is in his late 30s, completed primary education and runs a small business with his second wife, Eliza to whom he has been married for a few years. Their home of burnt bricks annually thatched with grass is relatively far from his parents but close to hers and they live with her youngest child. Promise was diagnosed with severe male factor infertility the preceding year, after encouragement from Eliza, his aunt and elder brother,

They found out my sperm – the *percentage* with just a head is many. Without tails they do not have strength to open the egg of the woman \ldots From there I knew there was no way I can have children – this is the problem.

His diagnosis confirmed that the problem was his as he suspected: 'I think I was created that way - I don't blame someone for bewitching me'. But there was no treatment available.

His first marriage of almost a decade deteriorated when both sought their chances of conception with other partners. Promise began his relationship with Eliza. His first wife became pregnant but a local man began claiming responsibility. Promise responded, 'I was very disappointed in my heart I didn't have peace'. Promise said his first wife told him, 'I am pregnant, go make your own', in anger at his second marriage. In the face of public humiliation and his parents' refusal to name the baby, and lastly learning of his diagnosis, Promise never felt free towards the child: 'what I wanted remained unfulfilled'.

In contrast, Promise cares for Eliza's children. In Eliza's words, he buys food, shoes and clothes, never shouts at them, and stays with her youngest as his own child. Promise explained their father is poor, and it brings his wife peace of mind. He also fostered his brother's children. But he explained he has to be careful of his feelings, as their father may always call them back. His childlessness is like 'an open wound' that pains him all the time. 'A child is the most precious thing in marriage, a thing you can't buy with money. A child comes to your aid when you are old and inherits whatever you have after your death'.

Although Eliza understands his situation and Promise has paid bridewealth, he states she remains 'free to go'. 'It is up to her if she decides to leave me because I am not able to have children'. 'Sexually I am still strong' he adds emphasising that his infertility does not stem from impotence. His siblings are worried 'because they know a child cares for you in your old age'. He is uncomfortable when he goes to sit and chat with groups of men who 'talk a lot about me not my wife', mocking him by asking him questions about the children he doesn't have. Eliza says he is a man who is 'ashamed'. He has turned to work and a Christian life – because 'I can find peace only in God'.⁶

Like several other infertile men and couples, he takes inspiration from the testimonies of healing of long-term infertility problems shown on popular Nigerian station, Emmanuel TV.⁴ He is planning to go to a pastor hosting healing prayers in Mzuzu although he perceived the outcome to be highly uncertain as 'not everyone is helped'. Their neighbours tell Eliza to go to his younger brother but she says 'these are terrible times, I can have a child but if he is infected [with HIV] I have put my life on termites [at risk] and also harmed my friend [husband]. I want a child but if God has refused, it is the will of God'.

The case studies illustrate some of the potential negative implications of 'learning the truth' about infertility, for men's experiences of self, their marital relations and in their wider social lives. These point to the lived reality of changing forms of masculinity and social strategies, enacted over time and in response to diagnosis (Inhorn 2012).

With respect to relationships in the community, childless men who privately knew they had a specific, reproductive impairment seemed to feel the pain of mockery from other men more deeply than men who receive a normal diagnosis. Of the latter situation, a man described: 'at the beginning it was indeed difficult for me but later on people who said things about which they knew nothing about - I could just leave them'. Men's approach to marriage changed dramatically when they were diagnosed. Promise's assessment was that Eliza, his second wife, 'is free to go anytime'. James fears that any woman he marries will leave him and feels he must remain single unless he can increase his low sperm count. This is a significant decision intended to spare him further humiliation and pain but one that equally marks him out where men's adult identities depend on their married status, and remarriage is swift (Parrott, Mwafulirwa et al. 2011).

Perceiving a reproductive problem as shared or potentially their wife's, could support men's sense of themselves as loyal husbands, either choosing to distance themselves from husband-initiated divorce or polygyny or not over time. This security is threatened by diagnosis. For women in a first marriage, the prospect of permanent childlessness indicated by a husbands' diagnosis is a harsh reality to face. Even if the burden of domestic work and loneliness is partially lifted by fostered children, they will be unable to cement their position in their husbands' family or in their communities by becoming a (birth) mother to adult children (see Collier 1988; Hemmings 2007). If pregnancy occurs, it may be complicated by the suspicion of infidelity, provoking anguish for either partner. Women such as Eliza who had existing children, whose interests her infertile husband would advance, were more easily able to accept they would have no children in the marriage and could live untroubled by a husband's relatives or public gossip. Such gendered-relationship options helped alleviate the loneliness that James experienced, and supported men to fulfil fostering commitments as 'fathers' within their wider families. Yet men's emotional investment and security as future fathers and senior men remained damaged. Men, like many of those affected by childlessness whether diagnosed or unexplained, drew comfort from religious commitments and the possibility of prophetic healing.

Conclusion

Prior research in rural southern Malawi implied few men self-identified as the infertile partner (Barden-O'Fallon 2005; Hemmings 2007). This community-based study in a predominantly rural area of Karonga District evidenced the spread of biomedical knowledge about male reproductive health, specifically male infertility, and explored the local impact of semen analysis implemented as part of a package of infertility services in Malawi. It is unlikely to have accounted for the full range of responses of men who are diagnosed with male-factor infertility. However, the findings suggested that a serious diagnosis appears able to disrupt men's marriages, men's relationships with community members and a man's very sense of personhood as a future father. The practice of semen analysis not only threatens men's self-worth at diagnosis but men's participation in the process provokes an emotional engagement on the part of men. Yet there are sufficient reasons for men to involve themselves in seeking biomedical infertility care.

Inhorn (2012, 62) argues that 'men's experiences of infertility represent a quintessential example of emergent masculinities that are deeply embodied'. This focus on social change framed the analysis of the semen screening in rural northern Malawi in terms of the comparative ethnographic portrayal of the ways in which new forms of masculinity are experienced through interactions with new forms of medical technology (Inhorn and Wentzell 2011). Relations with this diagnostic technique are conflicted in Malawi. Health providers implementing policies on infertility and men's involvement in reproductive health emphasise the sharing of knowledge by partners and compassion in marriage. However, despite lifting some of the burden of infertility from women, the negative impacts of semen analysis on masculinity and gender relationships can leave men, just as they can leave women, in a vulnerable position, when there is no obvious treatment for their condition. Alternatively, men who did not participate in examination themselves could also seek to lift blame from their wives, or - religiously inspired - took the shared decision to live with childlessness and so avoid confirmation of either partner's 'blame'. Men's refusal of medicalisation of infertility may therefore also be framed in terms of the plural and shifting enactment of masculinities.

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Conflict of Interest:

None

Notes

- 1. Malawi's national service delivery guidelines for the Management of Sexually Transmitted Infections using Syndromic Management Approach issued by the Ministry of Health (MoH 2003, 2007) implements the national policy on infertility. This notes that the main causes of infertility include STIs resulting in Pelvic Inflammatory Disease in women and epididymoorchiditis in men, complications of advanced syphilis or HIV infection. Other causes affecting men are given as: abnormal sperm motility (e.g. antibody formation); abnormal spermatogenesis (e.g. chromosomal abnormalities, radiation or chemical exposure, varicocele); sexual dysfunction (e.g. retrograde ejaculation, impotence); anatomic disorders (e.g. undescended testis); mumps or TB orchitis; and Schitosomiasis. Preliminary investigations with respect to infertile couples should include: (1) stool and urine microscopy and treat accordingly; (2) syphilis screening and treatment; (3) pelvic/abdominal ultrasound; (4) seminal analysis; (5) treat women and their partner(s) for PID. The guidelines states that all individuals or couples should undergo counselling for HIV testing.
- 2. The practice of bridewealth and virilocal residence is attributed to the influence of patrilineal Ngoni invaders at the end of the nineteenth-century; the southern and central regions of Malawi remain matrilineal (Morris 1998; Morris 2000).
- 3. The study is based at a demographic surveillance site in the southern part of Karonga District, and incorporates narrative interviews, ethnography and population-based survey data. The majority of male participants were recruited through the demographic surveillance system, except for eight supplemental men who had experienced childless marriages who were sensitively recruited by word of mouth from the same area. Participants gave written informed consent. All names used in the text are pseudonyms.
- Schistosomiasis (or bilharzias) is a parasitic infection (http://www.who.int/topics/schistosomiasis/ en/). A history of urinary schistosomiasis causes some young men great concern regarding infertility.
- 5. The syndromic management approach does not rely on laboratory testing and is used to manage symptomatic STIs and provide same-day treatment using flow charts (Vuylsteke 2004).
- 6. Christian Pentecostal/charismatic movements in Nigeria have made enormous use of electronic media, namely television (Hackett 1998). In Malawi, van Dijk (2006) has described the growing success of an array of Pentacostal orientated organisations with regional transnational elements since the 1970s as significant to personal healing (2006).

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