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"This is what we call delayed humiliation": Negotiating socio-cultural challenges in the use of Assisted Reproductive Technology (ART) by couples with infertility problems in urban Ghana

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Abstract

Childbearing is an important component of marriage, and childless couples often face a myriad of informal sanctions from family and community members. Whilst many infertile couples may resort to Assisted Reproductive Technologies (ARTs) in an effort to mitigate the socio-cultural effects of childlessness, it is a copious concern to also ensure that the very 'solution' being used does not turn out to become a 'curse' and a source of further ridicule and stigma. They must make choices that are acceptable to their society and in consonance with their own beliefs and values. This study explored the considerations that goes into the decision to use or not to use a particular type and form of ART. The study employed a qualitative approach involving 15 semi-structured in-depth interviews with purposively selected persons seeking fertility treatment via ARTs in Accra. Thematic analysis was used in analysing interview transcripts. We found out that users of ARTs tended to be concerned about the health status of children born using these techniques. Couples, especially male partners, desired a resemblance to the children born out of such procedures and sought to ensure that their use of ARTs remain a secret forever given the implications of disclosure for their status and masculinity, parenthood and indeed kinship in the Ghanaian cultural context. Thus, to a large extent, ART decisions are also gendered in nature. We therefore conclude that though ART usage is on the increase in Ghana, there is considerable apprehension with its use because of the implications of disclosure. There is therefore the need to educate people about ARTs, to address misconceptions to increase the social and cultural acceptability for their use as a viable means of achieving procreation.

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Introduction

In many African cultures, childbirth is perceived as a societal duty rather than a discretionary choice. In the context of Ghana and Africa as a whole, the act of childbirth holds significant importance, as societal perceptions of femininity and masculinity are closely associated with the roles of both parents. The act of giving birth to a child result in a significant shift in social standing, as parents thereafter assume the title associated with their child's name, such as Adjoa Maame/Papa (Adjoa's mother/father). The primary objective of marriage and the sexual act, therefore, continues to be procreation. Infertility is a multifaceted issue that affects both individuals and families. Couples, particularly women residing in pro-natalist communities such as Ghana, experience challenges (Hiadzi, 2022). The sentiment expressed in the Akan proverb 'wo nni ba a due' conveys the unfortunate circumstances faced by individuals who are unable to bear children. The ramifications of childlessness for couples, namely women residing in Africa, encompass several negative outcomes such as stigmatization, discrimination, a decline in social standing, and economic disadvantage (Daibes et al., 2018; McCutcheon, 2020).

Studies on the effects of infertility in the developing world point out the gendered experiences of infertility based on the meanings and interpretations that society gives to infertility. In many societies, women in particular bear the brunt of infertility and undergo high levels of stigmatization from other members of society. The stigmatization outcomes vary and include divorce, abuse, loss of social status, gossip, lack of participation in community activities amongst others (Ofosu-Budu & Hanninen, 2021; Dierickx et al., 2021; Van Rooij et al., 2020). Despite these reported effects of infertility on women, some studies have also revealed the negative effects that infertility has on the lives of men albeit less severe and less common (Brauner et al.,2020; Hanna & Gough, 2020). Stigma thus, propels childless couples to consider several alternatives as solutions to their infertility depending on what they believe is the reason for their childlessness (Hiadzi & Boafo, 2020).

Extensive scholarly literature has been dedicated to examining the multifaceted aspects of Assisted Reproductive Technology (ART) in the Western world, specifically focusing on its gender dynamics, legal considerations, and religious ramifications (Nordberg et al., 2020; Ghaly, 2019). In the developing world, Hiadzi et al. (2021) assert that Assisted Reproductive Technology (ART) is progressively emerging as a feasible alternative for couples experiencing infertility in Ghana. Therefore, it is imperative to conduct further research into the additional socio-cultural components. In contrast to certain research (Casolo et al., 2019; Harzif et al., 2019) that proposes religion as a hindrance to the utilization of Assisted Reproductive Technology (ART), their paper argues that religion does not operate as a deterrent to the adoption of ART. Contrarily, it serves as a facilitating element, fostering the proactive mindset of individuals to seek a resolution to their infertility through Assisted Reproductive Technology (ART). Additionally, it imparts the resilience necessary to withstand the physical and mental distress linked to the scientific procedures involved in conception and childbirth.

Within this particular context, it can be observed that religion serves as a framework for individuals to effectively navigate the various aspects involved in decision-making, treatment processes, and outcomes.

Assisted Reproductive Technology (ART) is commonly regarded as a highly sought-after solution for individuals with infertility, as portrayed in popular discourse. Previous research has effectively illustrated the influence of external societal factors on the utilization of assisted reproductive technologies (Rodriguez-Wallberg et al., 2019; De Geyter, 2019). However, these studies have neglected to consider the perspectives of the receivers of these technologies, particularly the experiences of women. Saniei and Kargar (2021) also acknowledge that infertility has been the subject of extensive discourse as both a socio-cultural and medical quandary in recent decades. Couples with infertility challenges find ways to address this issue by employing Assisted Reproductive Technologies (ARTs). Muslims, like other social groups, encounter challenges related to infertility and its treatments. They face the task of reconciling the utilization of Assisted Reproductive Technologies (ARTs) with the restrictions that pertain to the sociocultural, legal, ethical, economic, and political dimensions of their society. The governance of medically assisted reproduction is often influenced by the presence of religion.

While faith-based organizations have been acknowledged as a potential source of assistance for those who are unable to have children, Gezinski et al. (2021) contend that the impact of religious teachings, particularly those that emphasize traditional gender roles and biological parenthood, on the psychological suffering experienced by these individuals remains uncertain. Thus, further study is required to gain a comprehensive understanding of the impact of the socio-cultural milieu on individuals experiencing infertility and relying on assisted reproductive technologies. Allison et al. (2019) claim that those who were unable to conceive confronted reflection and self-criticism as they started the difficult journey toward parenthood. The etymology of this phenomenon may be attributed to the socio-cultural context of the individuals involved, establishing a correlation between culture and the stigmatization experienced by women concerning their infertility. Consequently, this stigmatization engenders a feeling of social exclusion from their female counterparts. According to Segers et al. (2019), the notion of genetic parenthood was previously held in high regard, but over time, there has been a decline in this aspiration. This finding reinforces the assertions provided by prior scholarly investigations, which indicate the occurrence of infertility might impose significant stress on interpersonal relationships (Lin & Shorey, 2023). Nevertheless, recent research shows a divergent outcome, indicating that the difficulties linked to infertility and assisted reproductive techniques might bolster the caliber and durability of intimate partnerships (Carone et al., 2022; Rausch & Wikoff, 2023).

The literature primarily focuses on religion when discussing the socio-cultural issues related to infertility. However, Jafari et al. (2021) contend that other factors, such as methods of childbearing (such as spouse selection and traditional methods), social acceptance (including isolation, stigma, and family acceptance), social identity (such

as maternal or paternal roles, generation survival, and prejudice), and social support (including legal, financial, social worker, job, and media support), also play a significant role. Therefore, future studies should investigate sociocultural factors concerning infertility, including these components. This is particularly important as infertile individuals encounter various cultural and social challenges when utilizing assisted reproductive donation techniques.

Therefore, the present study seeks to explore the factors that are considered when making decisions regarding the utilization or non-utilization of a specific type and form of Assisted Reproductive Technology (ART). This study is distinctive in three ways. Firstly, it explains how users of ARTs adapt the technologies to fit sociocultural beliefs and practices. Secondly, this is done in the context of a West-African country, specifically Ghana, as it is one of the countries that is currently embracing the use of ARTs in supporting couples who are infertile in full swing. Finally, one of the most important considerations for ART usage which has not received the needed attention in the discourse is users need for privacy, to protect themselves and the child so born from societal humiliation.

We therefore situate the discussion in this paper within the two theoretical paradigms of labelling/stigmatization and rational choice. The concepts of labelling and stigmatisation, derived from the interactionist perspective in sociology, assert that the social identities we possess are influenced by the reactions of others. Labelling as often used in medical sociology, seeks to draw attention to the interpretation of the experience of 'being sick' as resulting not only in physical, but social consequences as well (Cockerham & Scambler, 2021). The social consequences may often, lead to stigmatization. When a label is attached to a person, the very label itself has the power to spoil the sufferer's personal and social identity (Goffman, 2009; Kaushik, Kostaki & Kyriakopoulos, 2016). Thus, to avoid the label of being infertile, many couples make the rational choice to have children via ART. However, they need to ensure that no labelling, ridicule, and humiliation further emerges should others get to know about their use of these methods.

Couples accessing ART treatment carefully pick which ART variance to utilize according to their needs. They are also mindful of the need to use ARTs in a way that does not further stigmatize their infertility by ensuring that no one else gets to know about their "little secret" of receiving help to reproduce. If such information is mismanaged, infertile couples may be stigmatized and labelled during and after ART use. The need for secrecy and non-disclosure is driven by the need to maintain the childless couple's position in the eyes of others and to safeguard any children born through the process. This rational analysis guides ART selection. In addition, couples prioritize the physical resemblance to their children born through donor-assisted ART treatment, the chance of achieving conception, and the subsequent visibility of pregnancy in their ART choice and usage. In sum, the choice of ART and the conditions for their usage are all influenced by symbolic meanings attached to infertility and childbirth. Couples thus choose the option with the most rewards and the least stigma.

Methods

Research design and setting

The study was conducted in the leading fertility hospital in Accra that provides ART treatment such as IVF and ICSI services to infertile couples. The study is based on the social constructionist paradigm characteristic of qualitative research. Although the hospital was selected to help identify the experiences of clients using the various ART treatment options, the extended periods of observations and interactions at the clinic brought an ethnographic discernment to the clinical setting and the experiences of these clients.

Participants

The study comprised a sample of 15 participants who were married and in a heterosexual union. Overall, interviews were conducted with 13 females and 2 males. The ages of the respondents ranged from 20 to 59. It is important to acknowledge that a significant proportion of the participants were within the age range of 30-39 years (7 participants) and 40-49 years (5 participants). The study recorded a total of two participants within the age range of 50–59, while just one person fell within the age range of 20–29. Moreover, a significant proportion of the respondents have reported being in marital unions for durations of 5–9 years (5 participants), 10–14 years (4 participants), and 0–4 years (3 participants). The years of marriage ranged from 15–19 years, 20–24 years, and 30-34 years, with only one participant each. Nevertheless, it is worth noting that none of the participants involved in the study had been married for a duration spanning 25 to 29 years. The overall sample consisted of 10 participants experiencing primary infertility and 5 participants experiencing secondary infertility.

Procedures

Semi-structured in-depth interviews were the main mode of data collection. Respondents were asked questions relating to the decision-making process towards seeking a particular variant of ART treatment and the several factors, tangible or otherwise, that informed their decision. One-to-one interviews were conducted in English, Twi and Ewe based on the interviewee's preference, with all interviews transcribed directly into English. The interviews and transcriptions were done by the second author who is fluent in the named languages. During the interview process, 13 interviews were digitally recorded; 2 participants declined being recorded. Notes were also taken during the interviews and read back to the respondents to confirm that they were consistent with the views of the respondents to ensure respondent validation. Interviews lasted from 40 to 140 minutes (i.e., average time of 90 minutes). Interviews were held in the facility, while the clients were admitted after either an IVF or ICSI procedure.

Ethical considerations

Ethical clearance was received from the Institutional Review Board of the Noguchi Memorial Institute for Medical Research, University of Ghana (Protocol number: CPN 037/12-13). Respondents who took part in the study signed and/or thumbed printed a consent form to show that they willingly took part in the study. To ensure confidentiality and anonymity, respondent names have been changed and identifying details removed.

Data analysis

Thematic analysis of data was employed following the guidelines provided by Braun and Clarke (2019) and used in some Ghanaian studies (e.g., Boafo, 2016; Hiadzi, 2022). We began the analysis by transcribing all the audio recorded interviews. Interviews were transcribed verbatim in English. To ensure reliability and authenticity of the data, transcripts were emailed to participants for cross-checking and validation. Eleven of the participants responded to our emails confirming the content of the transcripts. The transcripts were read several times by all the authors to deepen our familiarity with the data. The data was then organized by developing codes. A number of similar codes were put together to form themes. The development of the codes and themes were done separately by the first and third authors, after which they were compared for congruence. Selected themes were agreed upon, and where necessary they were modified or changed to reflect the codes they contain and to minimize overlaps. In the end, the themes that remained are those that tell a story about the data in relation to the discussion herein. The last stage of the analysis involved the writing up of the research report based on the themes. In sum, the analyses primarily involved examining the data to identify repeated patterns of meaning.

Findings

The study showed that respondents had several misconceptions, fears, and anxieties about ART usage. Two main themes emerged from the data: (1) misconceptions about the physical and mental well-being of children born through ART methods and (2) Concerns with ensuring secrecy and non-disclosure of ART use. These themes are further discussed below.

Misconceptions about the physical and mental wellbeing of children born through ARTs

Respondents' fears on this were rooted in the socio-cultural context in which they lived. Participants in this study were found to have misconceptions about the health of children born through ARTs. Such children are believed to be unhealthy and requiring more regular medical care as compared to children conceived naturally. Forty-six-year-old Abena who is a baker, shared some of the misconceptions she had about babies who were conceived through ART means.

I heard that such children do not grow up as normal children...; you have to keep taking them to the hospital for regular check-ups since they require special medical attention. Some people even say that some of them have mental problems; they sometimes behave like mad people or something like that. Others also say such children will be drooling all through childhood and even up till adulthood. As if that is not enough, I also heard that, they will not be able to have any children of their own in future.

For these reasons, she was sceptical about accessing infertility treatment using ARTs. At the fertility clinic, the doctor and embryologists allayed her fears by explaining the procedures of ARTs to her. This helped put her mind at ease and enabled her to make the decision of going ahead with the procedure.

Some participants were particularly concerned with the use of frozen genetic material-they were of the view that frozen genetic material will have a reduced quality as compared to freshly produced genetic material. Such respondents therefore preferred to produce fresh samples whenever needed in order to rid the process of any 'artificialness'. This is because of fears that, any further manipulations of the procedure through freezing will result in the production of baby(ies) who will not possess similar qualities as babies conceived naturally, and thus, depriving the couple of having a child who would have the same biological traits and genetic composition as them. As 44-year-old Alberta puts it:

Freezing can never be the same as having it fresh. Just look at all the things that we buy and store in the freezer..., tomatoes for instance, or even bread, once you defrost it, the quality is diminished, and it can never be compared to the one that is fresh. It loses some of its quality through the process of freezing and de-frosting.

The reluctance to use frozen samples is also borne out of the optimism of couples that their first attempts at conception would be successful. To 'freeze excess genetic material' seems to compromise this optimism and faith in the process-insinuating the possibility of failure and the need to repeat the process.

Concerns with ensuring secrecy and non-disclosure of ART usage

Non-disclosure was ensured through four main means namely, proving virility, the visibility of pregnancy, the use of anonymous donor gametes and ensuring the resemblance of offspring to parents. Both females and males had a strong desire for secrecy regarding their use of ARTs. It was important to infertile couples that no other persons apart from the couple and the doctor that assisted them know about their use of the artificial process. This emphasis on secrecy is because of the cultural context that primes kinship and parenthood as emanating mainly by blood; and on the expectations that children would be conceived naturally via sexual intercourse between parents. Such sentiments were expressed by 35-year-old Afi below:

I don't want anybody to know that I am here at the hospital, so no one knows. Not even my siblings. It is not necessary. These same people will pretend they care and be talking behind your back and laughing at you that you could not have a child on your own.

The desire for non-disclosure and secrecy is undergirded by the need to mitigate the inadequacy felt by couples because they were not able to have children 'naturally'.

Proving virility

The data showed that for men, the need for secrecy and non-disclosure emanates from their need to hide their inadequacies, which stems from their notions of phallic incompetence since they were not able to impregnate their wives naturally through sex. Masculinity is linked to a man's ability to impregnate a woman through penetrative sex, not being able to do that, thus, dents a man's identity. For example, according to Kweku, aged 35:

You know...it is not easy as a man to deal with some of these things. Someone out there will think that because you cannot have a child, it also means that you cannot perform in bed. But that is not so...you can ask my wife and previous girlfriends (smiles). Hmm...I don't want to boast but I do very well when it comes to that. People don't understand and I don't want them to think I am incompetent in bed so it's better no one knows about this treatment.

Visibility of pregnancy

One way by which couples ensured non-disclosure is through the visibility of pregnancy. For female respondents, their femininity is tied to the ability to conceive a child through whatever means, and the visibility of pregnancy helps to cement that ability. As expressed by Martha, aged 39:

All I want is to be able to carry my child in my womb and for everyone to see that I am also capable. That is what is important to me. The rest does not matter.

This view is also supported by the few male respondents in this study, albeit highlighting it inures more to the advantage of the woman. According to Francis (aged 37 years):

Artificial insemination puts the woman at an advantage because she has her blood in that process whereas the man does not. Apart from that, she carries the baby and also gets to breast feed the baby, so she feels more connected to the baby. When everyone sees the pregnancy, there will be no doubt that the baby is hers and that helps to clear any doubt about her ability to have a child.

These sentiments expressed by both males and females point to the fact that couples in Ghana searching for childbirth via artificial insemination are not oblivious of the fact that

they live in a socio-cultural context where natural conception is stressed and preferred. In using ARTs therefore, couples want to ensure that the information is not disclosed, lest they are viewed as having received assistance to have a child and thus, viewed as less man/woman and inadequate.

The use of anonymous donor gametes

Another means through which couples ensured secrecy and non-disclosure was through the use of anonymous donor gametes. However, the acceptability and concerns about the use of donor gametes were gendered in a way. Women's acceptance of anonymous donor sperm in cases of male factor infertility was explained by the fact that, women want to avoid any contestations regarding the fatherhood of their child. Thus, to be married, and have another man (a known/familiar donor) lay claim to a child is considered taboo. The basis is that it is culturally unacceptable for a Ghanaian married woman to engage in extra-marital affairs. Such an act is frowned upon and is considered grounds for divorce (Nukunya, 2016). Thus, to conceive with a man known to either or both of the couple, smacks of infidelity and engenders anxieties of a future claim to the child. Hence, the emphasis and desire of most is non-disclosure to forestall some of these likely complications captured in the quote below:

If I had gone and had an extra marital affair, yes, I may get pregnant. But imagine the consequences of that. First of all, I love my husband and will never think of doing that (laughing....at least not anytime in the near future). This is less complicated, no emotions, no guilty feelings of having cheated, no sin of adultery, nobody is going to come and fight with me later that he wants his child back. (38-year-old Tina).

It is however curious to note that men were hesitant to use donor sperm even where the child so born, would at least have the genes of the wife. In instances where donor sperm was the only option, one respondent mentioned that he would prefer the use of a close relative as a donor. This was because this would make the child more a part of the family as compared to an outsider. Francis, aged 37 whose wife had undergone donor sperm IVF said:

Left to me alone, I would probably have considered adopting. This is because ... God forbid, but if my wife should disclose this to anyone, it will be more humiliating for me as compared to adoption. As for adoption, even if people get to know it involves both of us, and so, right from the onset, you find a way of dealing with it there and then. But this one, imagine after so many years of taking care of the child, then, one day, your wife decides to rub it in your face all because she is annoyed. What can you do at that time? This is what we call delayed humiliation (laughs). So, under the circumstances, I just pray that day never comes.

The reservations that males had towards donor sperm IVF were thus based on futuristic considerations and potential embarrassment that could emanate from accidental or deliberate disclosure of the actual paternity of a child. Thus, for men, issues of legitimacy of their parentage and the need to enjoy the continued respect as men and fathers is paramount. This position clearly demonstrates the link between a man's ability to impregnate a woman through penetrative sex and his masculinity and identity. The desire for secrecy was thus found to be paramount for both men and women.

Ensuring resemblance

Participants were also very concerned about the physical looks of children conceived via ARTs. Often, couples seeking ART treatment preferred to use their own genetic material. Where it is impossible to use one's own sperms or eggs due to its non-availability or its poor quality, such couples preferred to use donors who had similar physical characteristics such as height, skin color and ethnic background as the intended parents.

We further found that participants had fears that sperm, egg and/or embryo samples will get mixed up in the laboratory leading to the creation of babies that do not have the same genetic configuration as the parents. Should this happen, the purpose of achieving biological parenthood and resemblance could be defeated. This will be made more obvious when the physical characteristics of the baby come in sharp contrast with those of the parents. In order to guarantee that such accidental mix-ups do not occur, respondents preferred ICSI to IVF. For example, 42-year-old Belinda and her husband terminated treatment at a previous fertility clinic because the doctor did not provide them the option of using their own genetic material. However, at this current fertility clinic, they were informed they could use their own genetic material through the ICSI process. According to Belinda:

I asked the doctor of my chances, and he suggested I used a donor's egg since as you grow old, your eggs become weak ... so I came back home and discussed it with my husband but we both did not like the idea. I mean, we don't know who that person is or what kind of person s/he is. You can never tell with these things. I don't want to have a child who will be very different from me. Then we remembered one of my husband's friends whose wife was above 45 but has a child now so we called him and asked him about it, and he told us that this is what they did (referring to ICSI) and that we should come here. So, we came, and the doctor ... recommended this method (ICSI) and we decided to go ahead with it because we can use my egg and his sperm and that is what is important to us.

Discussion

This study explored the various considerations that go into the decision to use or not to use a particular type of ART from a socio-cultural point of view. The results show that

the majority of the participants were facing primary infertility, whereas only a minority reported having secondary infertility. Also, a significant number of respondents have been married for more than five years, therefore highlighting the importance of seeking medically assisted reproduction. Those who are above the age of 30 must consider seeking solutions since the literature indicates fertility potential tends to decrease after this period (Delbaere, Verbiest, & Tydén, 2020). Following the gender distributions highlighted by the study's findings, women are frequently more eager than men to pursue treatment for their health conditions. In the context of infertility, women often experience the most societal burden when a couple is unable to conceive children. The findings presented in this study align with the conclusions reached by Donkor, Naab & Kussiwaah (2017) indicating a higher representation of women compared to men at these medical establishments.

Concerning the views about children conceived through Assisted Reproductive Technologies (ARTs), the results of the study indicate that the participants harbored numerous misconceptions and anxieties that influenced their decision-making process in selecting ART treatment. This outcome arose from the contention among certain participants that children conceived by artificial insemination exhibit poorer health and necessitate more frequent medical attention in comparison to children conceived naturally. This is similar to the findings of Olorunfemi et al., (2020) where there was a low acceptability of babies conceived through ARTs.

The results of the study further showed the belief that frozen genetic material will have a lower quality than freshly produced genetic material when it comes to its use. This is consistent with the study of Bosch, De Vos, and Humaidan (2020), which explained that to obtain effective reproductive outcomes, "freeze-all" techniques must now be optimized and personalized. The results of the present study additionally highlight that the participants who were involved in the study expressed a preference for providing freshly obtained egg or sperm samples wherever necessary, to eliminate any perceived artificiality in the process. This apprehension arises from concerns that any additional alterations to the freezing process may lead to the birth of offspring lacking comparable characteristics to those conceived naturally. Consequently, this would prevent the couple from having a child with identical biological traits and genetic makeup as themselves.

This phenomenon gave rise to the question of the significance of similarity, as the participants expressed a notable preoccupation with the physical appearance of infants conceived through Assisted Reproductive Technologies (ARTs). Female participants who utilized donated gametes expressed apprehension regarding the physical resemblance between themselves and their offspring, as well as the potential inquiries and remarks that may be raised by their family members, friends, and acquaintances regarding this resemblance.

Participants in this study had fears that sperm, egg and/or embryo samples will get mixed up in the laboratory leading to the creation of babies that do not have the same genetic configuration as the parents. Should this happen, the purpose of achieving

biological parenthood and resemblance could be defeated. This will be made more obvious when the physical characteristics of the baby come in sharp contrast with that of the parents. This fear of "accidental donation" was also reported by Awwad, Khalife, and Mansour (2019). However, whereas Egyptians harboured these fears based on Islamic restrictions to third party donations, that were regarded as synonymous with committing adultery, the Ghanaian participants in this study's concern was with ensuring that no doubt is created about the parenthood of the child.

This concern is usually not only for the protection of the parents' reputation, but also that of the child; to save him/her from stigmatization and doubts likely to be cast on their parentage by the extended family and others because of non-resemblance. These insinuations potentially make children develop a sense of non-belonging, especially when they get to know that either one of his/her parents is not their biological parent.

Besides the desire for genetic and physical similarities between parents and children born via ARTs, there is an emerging preference for ethnic similarities with the use of donor material. This can be explained by the desire to have children who can be considered as belonging to couples' in-group as opposed to their out-group. According to Nukunya (2016), the presence of ethnocentrism in Ghana has resulted in the formation and attribution of stereotypes to various ethnic groups. The presence of these stereotypes always results in prejudice or the formation of adverse emotions and convictions regarding the characteristics attributed to individuals belonging to specific ethnic groups, solely based on their membership in said ethnic group (Nukunya, 2016). Hence, these stereotypes can impact the decisions on using donor gametes, particularly when parents aspire for their offspring to exhibit particular attributes. Hence, the increasing inclination towards selecting donors from the same ethnic background as couples might be attributed to the possibility that these couples may be manifesting whatever biases they hold towards specific ethnic groups, assuming that perceived characteristics can be inherited through genetic material.

Regarding the distinctions and parallels between males and females in their attitudes towards the adoption or rejection of various forms of Assisted Reproductive Technology (ART), it was found that both male and female participants had a significant inclination towards maintaining confidentiality. Maintaining strict confidentiality regarding the utilization of artificial insemination is of utmost significance for couples encountering challenges in conception and childbirth since only the couple and the attending physician must possess knowledge of this technique. The reason for this emphasis on secrecy stems from the cultural background that prioritizes kinship and motherhood primarily based on biological relationships, as well as the societal assumptions that children are typically created through natural sexual intercourse between parents. According to the evidence, how men feel about penile incompetence derives from the fact that they were unable to naturally impregnate their spouses through intercourse. In the case of women, the motivation for maintaining a secret arises from the need to evade social mockery and facilitate the societal acceptance of the offspring resulting from this unnatural procedure.

The visibility of pregnancy was also a significant worry for women, as it is closely associated with their womanhood/motherhood potential and the ability to conceive a child, thereby reinforcing this potential. However, it must be noted that a few males also held the same opinion. The aforementioned sentiments, voiced by participants of both genders, indicate that couples in Ghana who seek artificial insemination for childbirth are cognizant of the socio-cultural milieu in which they reside, wherein the presence of a protruding belly gives credence to a woman's fertility potential. This is similar to studies conducted in India which report that the prospect of a visible pregnancy serves as a huge attraction to women seeking infertility treatment (Majumdar, 2021; 2023).

The findings of the study also indicate that couples who are seeking assisted reproductive technology (ART) treatment tend to prefer utilizing their own genetic material. However, in cases where the use of one's own sperm or eggs is not feasible owing to unavailability or low quality, these couples are often compelled to depend on donors. The acceptability of donor gametes exhibited a gendered dimension. Men in infertile unions who require the assistance of egg donors perceive no ethical concerns, as this approach effectively addresses infertility within the context of their marriage while upholding Christian values. Consequently, it eliminates the need for marital dissolution or engaging in extramarital affairs as a means of conceiving a child. The inclination to utilize a relative's sperm seems to align with the cultural tradition of fosterage, wherein individuals within a family assume the responsibility of raising the children of typically less advantaged family members. The underlying principle behind this concept is rooted in the idea of collective responsibility, which is prevalent in numerous African cultural contexts. It is commonly expressed as the belief that while an individual may physically give birth to a child, it is the community that assumes the role of raising and nurturing the child (Nukunya, 2016). Thus, using a relative's sperm or adopting a child is similar to the idea of a lineage comprised of blood and goes hand in hand with the practice of foster care. The newborn will carry the ancestor's blood, which is a key characteristic of the family.

Furthermore, the findings of this study show that men expressed reservations about utilizing another man's sperm to fertilize their female partner's egg. This aligns with previous research conducted by Kalampalikis, Doumergue & Zadeh (2018). This particular arrangement engenders uncertainty in the prospective father, as he grapples with questions regarding his identity as both a man and a parent. The reservations of the men in the current study had to do more with maintaining their self-esteem and ego in a context where masculinity is correlated with fertility and virility (Sylvest et al., 2018). However, in Western contexts such as Sweden, revealing information regarding the use of donor sperm to achieve conception by fathers to their offspring is a common practice among parents who have utilized sperm donation (Isaksson et al., 2019). Again, in contrast to certain parts of Sub-Saharan Africa such as Mali, where anthropological studies have shown that male partners do not readily accept the use of donor material for their wives, the position of the male participants in the current study is contrary to the

preference of male partners there (Gerrits & Shaw, 2010). This is because male partners perceived the large expenses associated with IVF operations as a financial inefficiency, particularly in cases where there were no absolute assurances of success with each endeavor. Hence, their more cost-effective option was in entering into a polygamous marriage. In the context of male factor infertility however, it was observed that Malian males showed a willingness to utilize donor sperm to mitigate their own infertility and circumvent the associated social stigma.

Limitations and recommendations for future studies

The qualitative nature of the study and the sample size involved makes it impossible to generalize the study's findings to all couples seeking Assisted Reproductive Technologies (ARTs) in Ghana. The translation process from Twi and Ewe to the English language may have impacted the emotions embedded in participants' narrations, as certain words may not have direct equivalents in English. Nevertheless, the researchers opted to employ English terms that most closely captured the intended meaning underlying the participants' statements. Despite these limitations, this study provides significant insights into the factors considered in decision-making processes related to the adoption or rejection of particular types and forms of Assisted Reproductive Technology (ART).

Implications for policy and practice

The findings of this study hold significant implications for both patients and practitioners within the context of fertility clinics. In order to demystify the technology and persuade couples who require such therapy to obtain it, it highlights the necessity for additional education on ARTs. It is imperative to broaden the dissemination of this educational initiative to encompass the wider populace, with the aim of mitigating the propensity for labelling and social marginalization of offspring conceived using Assisted Reproductive Technologies (ARTs). It is vital that ART hospital clients are guaranteed secrecy when utilizing the diverse range of services offered, including donor insemination. The concerns expressed regarding cryopreservation and the importance of similarity to intended parents necessitate the implementation of legislative initiatives aimed at establishing policies that can serve as a framework.

Conclusion

This paper sought to discuss the misconceptions, fears, and gendered preferences for ART usage among couples with infertility challenges in Ghana. We discuss the often-less-talked about but pervasive concern of ART users for secrecy and non-disclosure. We explored the gendered nature of these preferences and conclude that constructions of masculinity, linked to having children through penetrative natural sex is the reason men especially are apprehensive about ART usage and disclosure of its use. Having

to use these alternative options in the event of intractable infertility challenges men's hegemonic masculinity. It threatens the norms, authority, and respect and/or reverence surrounding fatherhood in a socio-cultural context that is patriarchal. Nonetheless, it is not only a man's concern, because women also express similar sentiments for secrecy albeit for different reasons. Couples' motivations, however, converge regarding the need for both biological and social resemblance hence, the effort for careful selection of genetic material. Also, couples desire to let ART usage remain a secret is to ensure the legitimacy of parenthood and kinship, disguise the 'inadequacy' of the man and woman and its associated dissonance and ultimately to protect the child. To prevent a possible rejection and othering of their children born via ART use as tends to happen to children adopted in the Ghanaian context, couples using ARTs seek to ensure that the source and process used to get these babies remain undisclosed.

We conclude that to mitigate the burden on infertile persons to ensure that the source and process employed to have children remain a secret, there is a need to demystify ARTs and their usage, as well as re-construct masculinity and femininity. The pressures to not disclose the use of these procedures do not inure to the benefit of actual and/or potential users. Should there be any mistakes or negligence on the part of service providers, users may not be able to seek redress because they do not want people to know of their patronage of these ARTs in the first place. This is a potential recipe for exploitation of infertile couples. Again, the secrecy surrounding the use of ARTs, undermine efforts to make other infertile couples aware of these safe viable options, which are critical to mitigating the incidence of couples visiting quack herbalists and fake prophets for solutions which are non-existent. Ultimately, it will prevent couples from enduring the needless shame and stigmatisation that emanates from being infertile; and the burden of ensuring that the solutions sought through ART remain undisclosed.

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