A qualitative investigation of surrogacy as a panacea for infertility in Nigeria [version 1; peer review: 2 approved with reservations]

Oluwatobi Joseph Alabi
Department of Sociology, University of Johannesburg, Johannesburg, Gauteng, 2006, South Africa

Abstract
Background: Up until recently, adoption is the most common alternative to recommended to couples struggling to procreate. However, with the advancement in medical technology, it is now possible to procreate through assisted reproductive technology (ART). Debates continue to ensue on the contentious issues emanating from various ART procedures, for instance regarding surrogacy there are concerns that this fragments womanhood, motherhood and parenthood, and there is a dereliction of the sacredness and cultural sanctity of the family system, most especially in an African context. However, as infertility becomes more prevalent among couples trying to have children in Nigeria, it has become important that alternate mediums of reproduction be examined within the socio-cultural milieu of the country. This study set out to examine surrogacy as a panacea to infertility in Nigeria through a qualitative lens.
Methods: 15 stakeholders (traditional birth attendants, medical gynaecologists and legal professionals within the social, medico-legal framework of reproductive health) in Nigeria were engaged in an in-depth interview to unravel the challenges surrogacy might or is encountering as an ART in Nigeria.
Results: There are various social, traditional, cultural and religious beliefs that police the reproductive sphere of Nigeria, which has grave implications on fertility treatment. These socio-cultural and religious factors do not provide a fertile ground for surrogacy to thrive in Nigeria. Hence, it is important that the socio-cultural framing of reproducing in Nigeria become receptive to modern medical reproductive alternatives and innovations.
Conclusions: For surrogacy to permeate the reproductive terrain of the country there is a need to jettison several socio-cultural and religious sentimental beliefs policing reproduction in Nigeria.
Keywords
Surrogacy, reproduction, infertility, culture, religion.

Corresponding author: Oluwatobi Joseph Alabi (damilarealabi40@yahoo.com)

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Introduction
Infertility in most parts of Africa is usually not well researched as a vital part of sexual reproductive health, yet its impact can be highly consequential. Having biological children is highly desirable and inability to conceive is often demonized, socially stigmatized, and often leads to divorce or results in adverse psychological and health effects on the partners involved. It is also important to understand the gender narratives around infertility in most of sub-Saharan Africa; while men and women can both be potentially infertile, women are often blamed and punished for childlessness. Within this very complex socio-cultural milieu that prioritizes fertility and links procreation to the completeness of a man or woman, couples are put under pressure to bear children and failing to do so is regarded as an existential failure. Studies show that the pressure to have children has increased risky sexual behaviour in sub-Saharan Africa among couples. However, it is important to note that infertility treatment has not been holistic as a result of the limited access to various ART alternatives and stigmatizing attitudes towards medical reproductive alternatives.

Infertility is described as a global public health challenge affecting between 13–17% of couples trying to conceive in sub-Saharan Africa, with a high rate of about 32% in most of the countries sampled in the survey; this is according to the infertility survey conducted in 27 sub-Saharan countries including Nigeria. As the percentage of infertility remains high in most countries in sub-Saharan Africa (32%), the pressure on couples to procreate and find solutions to their stigmatized status becomes very complex. The search for infertility treatment is a complex terrain to navigate because infertility possesses socio-cultural attributes and challenges at both foundational and experimental levels. Explanations of the aetiology of infertility differ to an extent between health care providers, patients and the society in Nigeria. Western medicine will diagnose infertility biologically and administer clinical recommendations; however, indigenous medicine believes factors causing infertility could be biological and even supernatural. This dichotomy in the aetiology of sickness in general and infertility, in particular across Africa, is foundational for the various socio-cultural narratives surrounding reproduction in Nigeria. There are various socio-cultural beliefs policing fertility in Nigeria and these beliefs are of grave concern for the perception of and attitude towards infertility. The cultural environment is paternalistic and as such, children are highly desired, and parenthood is culturally mandatory. Any standard below this paternalistic cultural expectation is regarded as cultural deviation and often stigmatized.

The challenge of infertility in sub-Saharan Africa is debated among researchers, especially because of the complex socio-cultural narratives surrounding reproduction in the region. As such, various treatment alternatives have been debated and discussed in the literature, showing that adoption has been the most popular route for definite cases of infertility among couples in Nigeria. Notwithstanding the popularity of this alternative, it is a very challenging and complex process to embrace in Nigeria. A previous study among the Yoruba people of Western Nigeria revealed that the acceptability of child adoption has several socio-cultural factors that influence the success of adoption, including lack of adequate information about the adoption process. These limitations have also been discussed as eminent in Eastern Nigeria. These socio-cultural challenges are not particular to the South-West or Eastern parts of Nigeria as it is important to note that despite the heterogeneous nature of the Nigerian society, a common narrative across these cultures is the premium placed on children, emphasis on parenthood and the norm that every woman should conceive and carry children to term. Fertility is highly valued across genders and it often seen as a validation of womanhood or manhood.

The medical technological advancement that led to the birth of baby Louise Brown in 1978 (the first baby born by in vitro fertilization in England) rekindled the hope of many childless couples across the world on the possibility of having children that are genetically connected to them and many have used this platform since then. However, in Africa, there are limited reproductive centers because they are driven mostly by private sectors and quite expensive to patronize. In addition, the cost of access, low success rate, and financial commitment are barriers to utilizing assisted reproductive technologies in Nigeria. Even though there are many options for infertility treatment across the globe, the success of such processes depends on etiological factors, availability of medically advanced diagnostic tools, skills of the attending physician and financial status of the couples involved. This study recognises and expands on the various challenges already narrated in the literature influencing the success and use of ARTs in Nigeria, and furthers the conversations around other fertility treatments in Nigeria, particularly surrogacy. Surrogacy is a process where a third party (woman) of childbearing age carries a pregnancy for a commissioning parent with the intention of relinquishing the baby after birth. This study discusses the socio-cultural factors influencing the practice/acceptance of surrogacy in Nigeria. By engaging informed stakeholders within healthcare and legal systems, it is able to assess the possibilities of having surrogacy as a panacea to infertility in Nigeria.

Methods
Study design
This research is qualitative, and its strategy of inquiry is explorative. In utilizing this exploratory approach, the researcher harvested the perception of society by presenting informed opinions of gynaecologists, traditional birth attendants (TBA) and legal professionals on the practice of surrogacy in Nigeria. Exploratory qualitative research allows the researcher to collect data from persons who are experts about a phenomenon and helps develop a composite description of the essence of their experience for all individuals.

Ethical considerations
This study was approved by the University of KwaZulu-Natal ethical clearance Committee (Protocol number: HSS/0705/017M) after due consultation and gatekeepers’ consent was provided by Ekiti State Teaching Hospital, Ado-Ekiti, Ekiti- State and Oyedeji Ayodele & Co, Abuja Nigeria.
Participants
The study population consisted of three categories of participants above the penal code age (18 years) in Nigeria. These included ten gynaecologists, five TBAs and five legal professionals. This study was conducted in two cities in Nigeria: gynaecologists and TBAs were recruited and interviewed at Ekiti State Teaching Hospital, Ado-Ekiti, Ekiti-State Nigeria; legal professionals were recruited and interviewed at Oyedele Ayodele & Co, Abuja, Nigeria.

Considering that surrogacy is not a popular practice in Nigeria, purposive sampling was used to select participants who have expertise regarding surrogacy in Nigeria. Both institutions served as host to the researcher and provided access and to participants and premises. The Ekiti State Teaching Hospital in Ado-Ekiti is one of the foremost fertility clinics in the South-western part of the country and thus a suitable location for the study; while, Oyedele Ayodele legal chamber is one that has handled some legal disputes about children paternity and reproductive contract over the years. Both locations had the criteria to provide the required information this study needed.

Informed consent detailing the purpose of the study and the strategies to ensure participants’ anonymity and confidentiality were explained to the participants before the study began, after which they signed the consent voluntarily participated. The informed consent included that the participants could withdraw from the study at any point if they no longer feel comfortable.

Sampling
Purposive sampling was adopted to recruit participants in the study. The institutions used as a host for the research provided access to legal professionals, gynaecologist and TBA’s. Upon receiving ethical clearance from the University of KwaZulu-Natal, the gynaecological centre of Ado Ekiti Teaching Hospital was visited and appointments were made to interview gynaecologists at their convenience, the department also served as a link to the association of TBAs in Ekiti State. Oyedele Ayodele & Co. was also visited in Abuja where interested legal professionals within the chamber were approached and interviewed. In total, 10 gynaecologists, 5 TBAs and 5 legal professionals were interviewed in the study.

Data collection
Face-to-face in-depth interviews were conducted with each participant using a semi-structured interview schedule that contained three sets of questions. An audio recorder and field notes were used to collect the data. The participants consented to tape the interview with the audio recorder expressly on the informed consent. The first set of questions examined surrogacy within a cultural perspective, the second questioned medical opinions on surrogacy arrangements, and the third examined the legal trepidations in the practice of surrogacy. The interview schedule was translated into Yoruba, the local language of this Western region of Nigeria for the benefit of the TBAs who might not be English speakers. Interviews lasted on average of 30 minutes.

Not all participants approached participated in the study. Considering the nature of the medical and legal profession, the timing was a major constraint; several of the legal practitioners and gynaecologists cancelled appointments more than twice and some were finally not interviewed. However, data saturation was a major guide during the process of the fieldwork. The narratives from participants were constantly accessed to see that new information was derived and when there were very frequent repetitions data saturation had been reached and the fieldwork came to an end.

Audiotapes were transcribed by the researcher and interview transcripts and summaries were checked with participants to ensure that their narratives were well captured and not distorted in any way. The interview lasted an average of 30 minutes.

Data analysis
Thematic content analysis was employed to analyse the field notes and transcripts. Thematic content analysis is an approach to the analysis of documents and texts (which may be printed or visual) that seeks to quantify content in terms of predetermined categories (in this research emerging categories from participants’ narratives) in a systematic and replicable manner⁶⁳. Transcripts from the interviews were organized into a logically readable format, after which recurrent patterns and conceptual issues were identified and developed into themes that formed the basis for the analysis. Participant numbers and characteristics (age, gender, and job; Table 1) were used in reporting the

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findings of this study to ensure the anonymity of participants as noted in the informed consent.

Results
The dynamic nature of human societies coupled with varying regulatory normative codes across cultural boundaries creates the need to examine the perception of surrogacy within various cultural settings to appreciate the differences and similarities that are obtainable in the growth of the practice as a core ART process. The imperative questions that steered this study included a need to understand how surrogacy is conceptualized in Nigeria; and a concern to understand the socio-cultural imperatives influencing the practice in Nigeria. The themes discussed include the social perception of surrogacy; the socio-cultural intricacies of surrogacy and its implication for the normative understanding of a ‘woman’; the gendered nature of infertility; and, the effect of surrogacy on the structure of parenthood.

Social perception of surrogacy in Nigeria
The participants provided varying thoughts on the popularity of surrogacy as an Assisted Reproductive Technology (ART) in Nigeria. Some of these seemed to be influenced by access to global information and medical practices. A careful examination of the responses revealed complex narratives that were probably influenced by access to information relative to the individual’s job. Gynaecologists and legal professionals expressed more informed opinions on the practice of surrogacy while TBAs discussed surrogacy essentially from cultural and religious points of view:

Surrogacy in Nigeria is not a popular practice, it is not that popular because when viewed from a socio-cultural lens, there are lots of beliefs, controversies that surround surrogacy. In most quarters in Nigeria, surrogacy is not popular at all and I will say the popularity and acceptance of the practice are hugely influenced by socio-cultural, legal and spiritual factors. The legal space has not created platforms that support or regulate the process and the socio-cultural and religious aspects of our society are not in favour of such acts that distort natural order. (Gynaecologist, M, 48 years.)

All the gynaecologists interviewed believed surrogacy will gain prominence with time and as the country continues to transform; however, they also believe that it is still in its infancy, backward and grossly rudimentary. From these narratives these gynaecologists believe surrogacy is not yet very popular in Nigeria from their expert point of view. They also emphasized that the popularity of the process is hampered by socio-cultural beliefs and values regulating reproduction. However, surrogacy is becoming a thriving venture in major urban settlements like Abuja, Lagos, and Port-Harcourt.

While the majority of legal professionals interviewed (n=3) believed surrogacy to be a controversial issue in Nigeria with very little patronage, the others believed the practice is practically non-existent within the country since patronage is very low.

The opinions shared by TBAs were grounded in religious and cultural beliefs, leading to opposition to its practice:

Our prayer is that this act won’t gain prevalence and acceptance in Nigeria. Because it is anti-cultural and anti-religion. God has established a process for that and no one or advancement should change it. It is a devilish act championed by the western world and it won’t succeed in our land. How do you expect a woman that did not gestate a child to know the real worth and value of that child? Or how does the child become a true member of the kin when another woman gestated him/her. God forbid, it won’t work here. I have heard people are doing it already but God will destroy their plans. (TBA, F, 58 years.)

All the TBAs shared the same opinion that surrogacy is becoming a social discussion in Nigeria; however, they hoped it would not thrive within the country because it goes against cultural and religious normativity for procreation. The enterprise of surrogacy is indeed a very debatable area with very little social knowledge in the general Nigerian population, and currently does not constitute an important aspect of public discussion\[19,20].

What surrogacy means and the social reception it enjoys differ across cultural and social boundaries. Surrogacy may create numerous ethical concerns that are derivatives of social, cultural and religious fundamentals of the community\[21]. Hence, it is important to understand how this practice is perceived and engaged within Nigeria to properly examine its possibility as an alternative to infertility.

Surrogacy and its practice are borne out of a desire to have a child\[22], and contemporary practice is highly hinged on a desire to have a child with a biological connection\[23,24]. Perceptions of surrogacy may also be grounded in descriptions that suggest commercialization\[25,26]. A surrogate could be referred to a woman who rents her womb. TBAs in this research described surrogacy as an act that distorts the cultural normative process for procreation. Surrogacy in Yoruba language is translated as “agbabi odi omo eni”, meaning ‘contracted pregnancy does not become yours’. The meaning and definition of the process in this local language suggests a difference between the surrogate and child, as well as between the commissioning parent and the child, and may lead to the creation of stigmas. The TBAs stated that surrogacy is perceived as a way of expressing how one woman was unsuccessful in conceiving a child; this role, however, has been taken up by another woman who has the physiological capability to conceive and carry a child to term. Moreover, socio-cultural normativity about procreation views surrogates as deviants and even in cases of altruism, her altruism is regarded as ranging beyond normative boundaries\[27]. In conclusion, the perception of surrogacy in Nigeria is influenced by cultural, social, traditional and religious values.
Fragmenting womanhood: socio-cultural intricacies in surrogacy and the understanding of a ‘woman’

The significance of women in African society cannot be overstated. They play a significant role in the continuity of the community and the operation of social life, and are considered the fabricators of life and the mothers of humankind. As a major player in the personal rituals associated with birth, puberty, and death, the symbolism of these rituals shows the important cultural meanings of womanhood. There is a link between fertility, culture, and religion in most African cultures. While the ability to conceive and carry a child to term is regarded as a gift and part of the doings of a supernatural being, the cultural definition of a woman is her ability to perform the gestational role of carrying a child to term. In Africa, “high fertility was not only a divine reward but evidence of the right behaviour. Among the Chaga of Tanzania, the wife in complying with the divine order has been described in these words: she corporates with her husband, the ancestors, even God, in creating the child.” Hence, it can be inferred that fertility is a product of complete obedience to God, the ancestors, and the maintenance of good societally approved behaviour. Children are highly desirable and women are regarded on their ability to conceive, carry to term and nurture the child. The birth of a child is celebrated and seen as a sign of divine approval by both living and dead/ancestors. However, infertility is regarded most times as a woman’s problem and evidence of sin and disapproval by both God and ancestors. These are very strong gendered assumptions that continue to domesticate women, sexualise their bodies, and reproduces female subjects and oppression within the study location.

The perceptions shared by the participants are diverse but enforces the notion that fertility and children are important parts of the African community. A woman’s ability to conceive and carry a child to term defines her and serves as a rite of passage to womanhood. In addition, religion is fundamental to the conception of fertility, while infertility is an aberration that results from sin. When most of the participants were asked about how they think the practice of surrogacy will influence the conceptualization of womanhood, various issues emerged, including:

- Personally, it is against the definition of womanhood and even the surrogate is not thoughtful enough, what will the surrogate tell her own husband after she must have done something like this? Will she say she has not given birth before or what? What if she cannot put to bed again? Even if she marries and now have a child through the cultural medium with her husband, would she now refer to this present child as her first seed or the surrogate child? This is disturbing and against our culture. (TBA, F, 53.)

The idea is that surrogacy encroaches on what defines a woman and it is not a practice any of the parties involved will be proud to identify with. In addition, surrogacy was seen as a negation of religious procedure for reproduction:

- God created the man and woman. There is a plan and process designed by the creator for procreation. God endowed women for reproduction and he did not sanction in vitro processes or surrogate practice. The Bible says there shall be non-barren in the land. That there will be children in your loins, so it does affect the definition of womanhood. (TBA, F, 40 years.)

The responses captured above further reiterate the intersection between religion and culture in the perception of fertility and procreation within this context and across most African communities. It is an intersection that continues to hinder the possibilities of ARTs in Nigeria and further produces assumptions that seek to police women’s sexuality and reproductive abilities.

Gendering infertility: women’s infertility as a consequence of promiscuity and recklessness

The perception that infertility is regarded as evidence of sin or recklessness was discussed by participants. For example, it was noted that infertility may be the result of the reckless lifestyle the woman must have lived as a youth:

- We cannot change the gender of the woman because she can’t carry a child but it must be that the woman that requires the service of a surrogate must have lived a reckless life as a youth, maybe she must have aborted 3 to 4 times before marriage. So, she will later have problems with giving birth but the husband won’t know. So, she’s still a woman that has no experience or knowledge of what it means to be pregnant and carry the baby to full term. Most times these couples struggling to give birth especially the women have been promiscuous and reckless, so she’s reaping the fruit of her labour. Instead of going through this ungodly medium, she must cry unto God and ask for forgiveness. It is only God that can give children. (TBA, F, 65 years.)

The perception that infertility is punishment assumed that women are solely responsible for infertility; therefore, reiterating that infertility is highly gendered and usually regarded as a woman’s problem:

- Childlessness is a taboo, a curse and seen as the woman’s fault mostly. Even our doctors stereotypical and superstitious perception of the causes infertility is absolutely amazing, I was surprised when a doctor said, childlessness is 30% the woman’s fault, 30% the man’s fault and 40% unknown causes. But up until now the way it is treated is as if when you are childless it is the woman’s fault. (Legal professional, F, adult.)

It is deducible from the response above that the perception of infertility because of a supernatural/unknown force is shared by educated individuals, such as medical professionals. The connection between a woman’s ability to birth a child
and her attainment of womanhood in the society was expanded upon by other participants:

Womanhood in this environment is seen in terms of a woman’s ability to have delivery. So, a woman that adopt the option of surrogacy will not have an opportunity of giving birth by herself and that will question her womanhood, a lot of people will see her as not being woman enough because she has not been seen to be pregnant or heard of her delivery of a child. People attach being able to deliver as a mark of womanhood, so surrogacy will affect womanhood negatively especially where people place a lot of emphasis on a woman’s ability to get pregnant, gestate effectively and carry the child to term. (Gynaecologist, M, 45 years.)

From this it can be suggested that without gestating and carrying a foetus to term, it is culturally believed that the woman is incomplete and has failed in her role, and as such transferred this responsibility to another. ‘Renting’ a womb for surrogacy, as discussed in the literature, is seen in this context as a cultural anomaly and misnomer:

It really doesn’t influence it except to prove that one woman failed and another woman is doing her work for her. In the sense that we have linked womanhood especially in Africa to motherhood, the ability to conceive and birth a child. That’s what we call a complete woman, the average woman to wants to be a mother so when there’s a woman that can’t give birth we might want to re-evaluate what womanhood means. It also means that society is evolving and when things are not the way they should be 100% we have found ways of filling the lacunae and bridging the gap. (Legal professional, M, adult.)

The failure of a woman to fulfil her cultural role as a woman has essentially created a gap that other women will fill, either for altruistic reasons, e.g. helping women fulfil their social expectations of becoming mothers, or for financial gain inherent in the practice of commercial surrogacy. One participant stated that while the practice negates the normative ways of procreation, it also fulfils a cultural goal of helping other infertile couples build a family:

In my own view, how it affects the definition of womanhood is; it depends on how you look at it, especially in an Africa setting where it is believed that if a woman does not bear a child then the woman is not fulfilled or a marriage that does not have a child. However, now we have women coming out to help women in the actualization of their desire to have a baby, so I think this has really gone a long way and as put smile on the faces of lots of females around the world and it as really make the womanhood more appreciated than what you can ever think of. (Gynaecologist, M, 39 years.)

Embracing this positive aspect of surrogacy to help individuals fulfil the normative social expectation of raising a family where children are regarded as a premium. In addition, individuals should have the agency to take whatever reproductive routes they desire within the acceptable legal frames of their society. These need to be identified as a fundamental part of human rights within the Nigerian society.

Surrogacy reorganizing the essence of parenthood in Nigeria
Another insightful perspective shared by the participants was that even though surrogacy negates cultural norms, it has redefined the essence of the family institution and parenthood. It brings the fundamental reasons why parenthood should go beyond genetics to the fulfilment of being actively responsible in the care of children:

Surrogacy redefines the whole essence of the family and parenthood. It makes us think of a woman beyond just bearing children. It reminds us there is more to a woman than just bearing children because at the end of the day even if there is a problem with the man, everybody stigmatizes the woman in a childless union. It means a woman can be a woman without necessarily bearing a child. (Legal professional, M, 34 years.)

Hmm… Well the definition of womanhood generally around here is complex because in the real sense being a mother is not about giving birth like we also say being a father is not about fathering a child but the roles and responsibilities assumed. However, we find out that being a woman has been defined with being able to conceive in the African sense, so surrogacy thus affects this definition of womanhood. Not being able to conceive is more unless like you are less than a woman, in fact, I have seen where people have written that if you give birth through caesarean operation (CS) then you are not a true woman. So, I can imagine that in that circle giving birth through a surrogate tamper with the traditional definition of womanhood, however, the world is evolving and people are defining motherhood and fatherhood by roles and responsibilities assumed in the life of a child. (Legal professional, F, adult.)

Discussion
This study has showcased various perceptions regarding surrogacy in Nigeria. The medical possibility of the process is not denied or questioned, but the views captured in this study are fundamental socio-cultural and religious musings questioning the morality of the process and thus affecting its popularity and social acceptance in Nigeria. The study revealed that even though surrogacy appears to be practiced in Nigeria, it is hidden and unpopular. While surrogacy might be glorious news for couples struggling to have children where natural conception is impossible, opinions of the current participants were very divergent on the ethical, religious and socio-cultural morality of the process. Another study supports that surrogacy in Nigeria is very complex and controversial because of the legal, ethical, socio-cultural, psychological and religious concerns surrounding the process overshadows whatever benefits it provides33.
Some of the socio-cultural factors influencing the growth of surrogacy in Nigeria are the gendered nature of infertility; women are often seen as problematic partners when couples are struggling to conceive and this perception is accompanied by various stigmas that labels, diminishes and reduces woman to reproductive entities. For example, in the presents study, the ability of a woman to gestate is attached to her completeness or her attainment of womanhood, when she fails to fulfil this social expectation, she becomes stigmatized as a failure and incomplete as a woman. This attitude will discourage women from seeking fertility treatment and may lead to couples with fertility challenges becoming secretive about their medical concern. It was also noted by the present study that women having challenges conceiving are stigmatized as promiscuous and reckless, and it was noticeable that when issues of infertility are discussed, women often occupy the centre of the discussion and very little is discussed regarding male infertility.

Hence, the practice of surrogacy is seen to be distorting the original socio-cultural definition of a woman. ‘Renting a womb’ as it is popularly described is perceived to be anti-religion and anti-culture. Aside from these various limiting debates around surrogacy, the practice is one of the most progressive ways of addressing infertility and it has stirred up conversations around the social-reorganization of parenthood. While it is a desirable fertility alternative, it is meted with several socio-cultural and religious complications in Nigeria.

The findings of this study were limited by time and resources. The focus was on one of the fertility clinics at the Ekiti-State Teaching Hospital, and as such do not provide sufficient data for generalising findings. However, it provides a detailed empirical framework for examining surrogacy within the Nigerian context.

**Conclusions**

This study has unpacked the various socio-cultural and religious trepidations in the practice of surrogacy in Nigeria. Through engagement with medical professionals, legal practitioners and traditional birth attendants, the study unravelled that there are several socio-cultural and religious factors policing the reproductive sphere in Nigeria. The overarching influence of cultural beliefs on medical concerns such as infertility may have limited the extent to which people seek help. In the study location, it was revealed that infertility is highly gendered and women often occupy the centre of discussions around infertility. It became evident from the findings that there are many cultural rights that define a woman within the context of this study. It ranges from the importance attached to the gestational process as sacrosanct for defining a woman and her ability to value a child; the connection between kinship and the process of birth. The prevalence of these cultural beliefs in the perception of fertility, infertility, and treatments are daunting challenges to the growth of surrogacy in Nigeria. The social space does not create a fertile environment for alternatives processes for assisted reproduction to thrive and as such, there is a need to properly educate the population about the medical advantages of ARTs. It also became evident that the socio-cultural factors discussed above are limiting the growth of surrogacy as an ART in Nigeria.

**Data availability**

**Underlying data**


Data are available under the terms of the Creative Commons Attribution 4.0 International license (CC-BY 4.0).

**Extended data**

Figshare: Interview schedule. https://doi.org/10.6084/m9.figshare.10264904.v1

Data are available under the terms of the Creative Commons Zero “No rights reserved” data waiver (CC0 1.0 Public domain dedication).

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The article presents surrogacy as an aspect of assisted reproductive technology (ART) and explores the challenges inhibiting the acceptance of the practice among Nigerians. The study collected its data from a particular region of the country (South West) and thus, makes generalisations on the findings. Most of the respondents were collected from one ethnic group (the Yorubas) and mostly professional gynaecologists. The findings of the study were erroneously generalised as representing the entire country.

Nigeria is not a homogeneous country as presented in the title of this investigation. The country has over two hundred and fifty (250) ethnic nationalities domiciled within its borders. This diversity transcends religion, culture and socio-political inclinations. Years before the 15th century, most of the ethnic groups that make up present-day Nigeria can all trace their origins to different states. Among the early states were the Benin Kingdom, the Yoruba Kingdoms, Hausa States, Nupe, and the Igbo-ukwu. Countless small states existed around the Lake Chad region which was later swallowed or dispersed during the expansion of Kanem to the North East of Lake Chad (Mbara, 2018:12). Historically, these groups were differentiated based on their socio-political organization. The Yorubas, Hausas and the Binis had a centralized administrative system while the Igbos of the East have variously been described as a “stateless” society because unlike the Hausa, Yoruba and Benin Kingdoms, they did not have a central political institution. Further, the indigenous people that inhabited the country today were profoundly divided by their historical experiences, culture, political development, and religion.

Thus, a topic like this should look at surrogacy based on the teachings and practices of a particular culture or religion. Investigating surrogacy in ‘Nigeria’ as a whole makes the study problematic given the fact that the three major tribes (Igbo, Yoruba and Hausa), for instance, have very diversified cultural and even religious beliefs/inclinations which deeply impact their social existence. The author alludes to this when he declared, “What surrogacy means and the social reception it enjoys differ across cultural and social boundaries” (p.5). For this reason, this study will best suit a particular ethnic nationality or religion in Nigeria. Just as their ethnicity and religion differ, so to their belief systems are very divergent. The influence of Western education on these
ethnic nationalities intensified this division among the people leaving some very conservative (the North) and others more progressive (the South) at varying degrees. This makes surrogacy a very contentious and subjective issue.

Consequently, the best title for this work should be “A qualitative investigation of surrogacy as a panacea for infertility among the Yoruba people of Nigeria” given the setting of the interviews coupled with the fact that “The interview schedule was translated into Yoruba, the local language of this Western region of Nigeria for the benefit of the TBAs who might not be English speakers” (p.4). With the vast size of Nigeria and the heterogeneous nature of the country, getting most of your sample population from Ekiti State will surely not give you enough grounds to caption the findings as Nigeria. Buttressing this view, Alabi (2020:5) in his results submits, “The dynamic nature of human societies coupled with varying regulatory normative codes across cultural boundaries creates the need to examine the perception of surrogacy within various cultural settings to appreciate the differences and similarities that are obtainable in the growth of the practice as a core ART process”. Thus, he cannot lump over 250 ethnic nationalities in Nigeria and discuss them as a single culture. A little search will reveal that surrogacy has been in practice in many Nigerian societies and in different forms.

Furthermore, for a more holistic view of the subject matter of this investigation, the stakeholders for the interview should have included a Christian, a Muslim and an adherent of the African Traditional Religion (ATR). This is because Nigerians are a deeply religious people and their religion impacts their culture, lifestyles and value systems. Likewise, some custodians of culture like traditional rulers from the major ethnic groups should also constitute the stakeholders. However, the problem of ethnic minorities and the fear of domination will make it more difficult to select the cultural groups that will participate in the investigation. Thereby justifying the need to narrow down the investigation to an ethnic/religious group in the country. If the investigation is done based on the above recommendation, the author will find very diversified views on the subject matter in Nigeria.

Surrogacy, as presented in this text (ART or fertility treatment), is quite alien to most Nigerian cultures and so, the scholar presents it as a taboo in the country as evidenced in his findings. In the first place, ART is the medical procedures used in treating the problem of infertility. Such procedures include, in vitro fertilization, cryopreservation of gametes or embryos, intracytoplasmic sperm injection, among others. I align my thoughts with the first reviewer who declared, “Surrogacy is not an ART nor a ‘fertility treatment’ (p. 3), as the insemination in some countries is also achieved with coitus (there are documented cases in Mexico and China)” (Danna, 2020:10). The relationship between surrogacy as an ART as presented in the text is shrouded in ambiguities thus leaving room for multiple interpretations. Surrogacy (renting a womb, see pages 7 & 8) has been in practice in different forms in many Nigerian cultures. In some cases, the problem of infertility is solved by the man consenting to a family member impregnating his wife on his behalf. The “sperm donor” lays no claim to the child. The impotent man plays the father figure to the child who bears his name. In other cases, it was the barren wife in a marriage that took a younger wife for herself. Correspondingly, when a man dies childless, a family member can sleep with the woman (his wife) to produce an heir for the deceased (See the Igbos of Eastern Nigeria, the Ibibios of South-south Nigeria). In these cultures, these practices are often altruistic in nature.

In particular, among the Igbos of Eastern Nigeria, surrogacy has been in practice in various forms
like the woman-woman marriage. Commenting on this practice, Aliyu (2018: para 3) maintains: In these various societies, the wives other women married were ladies-in-waiting, surrogate mothers, and daughters-in-law... Woman-to-woman marriage allowed for greater freedom of sexuality for the wives, they could have boyfriends, anonymous men whose only duty was to supply sperm, Achebe calls them “male sperm donors”, and this was socially accepted. Any child the wives had was taken care of by their female husband and carried her name, and this was legitimate in the eyes of society.

Woman-to-woman marriage practice did not include any sexual contact between the female husband and her wife. This was not "lesbianism," since none of the women who married other women was drawn to other women either romantically or sexually. Children were the prime attraction, every woman who turned into a female husband only wanted a child considered legitimate in the eyes of society. In the same vein, Nwoko (2012) gives other examples of surrogacy among the Mbaise Igbo where a family's female children jointly paid the pride price of a younger lady after the death of their father in the name of their eldest sister, so that the new bride could procreate and raise male children to maintain the lineage of the family. Essentially, a well-behaved young man was chosen by the young bride from the kindred, but in most cases, the bedmate was chosen from the female husband’s blood relationship. This had significant implications as it was aimed at maintaining the blood tie of that particular family and to prevent the young bride from polluting the family by raising children fathered by persons with strange ailments, thieves or miscreants.

To actualize the essence of the marriage, Nwoko (2012:76) adds: The female husband remained the sociological father of any resulting offspring. The children belonged to the lineage of her father, not to their biological father. Consequently, she played the role of the father, provider, protector and indeed all the functions and responsibilities enshrined in the patriarchal concept which included physical protection of the family and its territory, the male economic sphere, the spiritual sphere, the social sphere, etc.

Surrogacy in the context of ‘renting’ a womb is still a cultural anomaly in most Nigerian cultures, but as an altruistic act, it has been around over the years. Moreover, how can surrogacy be a panacea for infertility in Nigeria? The simple meaning of panacea is “cure-all”. Surrogacy can be an option, not a panacea since there are multiple factors responsible for infertility, some are more complex than others. Various traditional treatments are available to infertile couples in Nigeria. Thus, surrogacy cannot be a panacea as the author implies.

Additionally, in the abstract, 15 stakeholders were stated by the author as respondents, but in the methodology, 10 gynaecologists, 5 TBAs and 5 Legal professionals making a total of 20 respondents. Please reconcile the numbers and justify the sample size especially the 10 gynaecologists. This investigation is more of a social phenomenon than medical and should have covered custodians of some traditions/cultures. Gynaecologists can provide us with some scientific aspects of fertility treatment but not surrogacy as a cultural practice. Why were social workers not interviewed?

Besides, in the data collection under methodology, the scholar declares, “The first set of questions examined surrogacy within a cultural perspective” (p.4). Who provided this information? In my opinion, the traditional rulers or elders of various cultural groups should be in the best position to provide the necessary information here. They are the custodians of the various cultures, not the TBAs. If due diligence was carried out here, the findings would have been remarkably different from what we have here.
‘Interviews lasted on average of 30 minutes.’ Unnecessary repetitions.

Moreover, in p.5, the author states, ‘The opinions shared by TBAs were grounded in religious and cultural beliefs, leading to opposition to its practice’. This response was perhaps predicated on the false assumption that surrogacy is an “alternative to infertility”. Besides, one can ask, what religion and what culture in Nigeria? This gives room for ambiguities and subjective interpretations. Even when it comes to religions like Christianity in Nigeria, some sects/denominations hold more radical or conservative approach to issues surrounding modern-day surrogacy (Renting a womb with pecuniary incentives). For example, the Catholics and Jehovah Witnesses will surely diverge in their views. The same applies to the Deeper lifers (radicals) and say a Baptist Christian (conservatives). Even in ATRs, the various cultures will have varying degrees of acceptance or abhorrence for surrogacy. There are also individuals in Nigeria who, as a result of Westernisation, have accepted this practice. So many young couples in Nigeria now see surrogacy as a viable option for procreation.

In p.6, the scholar declares, “However, infertility is regarded most times as a woman's problem and evidence of sin and disapproval by both God and ancestors”. The influence of Christianity (Catholicism in particular) is fast changing this view among some Nigerian Catholics as Canon 1084.3 clearly states that sterility does not forbid nor invalidate a marriage (when there has been no form of deceit). A childless marriage is valid, and companionship is equally very important in marriages. In preparatory classes, intending couples are exposed to this reality. While a childless couple keeps seeking a remedy to their condition, they are made to understand that it does not invalidate/nullify their union. For this reason, a marriage contracted under the church cannot be dissolved for the reason of childlessness. This explains why you find pockets of couples who have been in the union for decades despite been childless. This does not, however, negate the fact that fertility is still a very integral part of the people/lay faithful. This investigation should look at surrogacy as a “viable” option in the case of infertility instead of a ‘panacea’ since it is an exploratory study which discovered that the practice is still very alien to the people and unacceptable. The title as it is gives the impression that surrogacy was discovered to be the ‘solution’ instead of an ‘alternative’. If I am right, the author seeks to sell the idea of surrogacy as a viable option in the case of infertility, not a total solution. The word ‘panacea’ denies other viable options available like IVF, adoption, polygamy or cases where a relative impregnating the wife of an impotent brother to preserve the bloodline, or where a woman marries another woman with the sole purpose of procreation.

The study pointed out the factors militating against the adoption of surrogacy as a panacea to infertility in Nigeria but failed to establish the need for surrogacy in the country thereby making the title a misnomer. To declare surrogacy a panacea requires that other alternatives were investigated and found wanting, thus necessitating the adoption of surrogacy as a “cure-all” remedy.

Consider women who give birth through a caesarean section? Some Africans (Nigerians) still do not see them as complete women since they have not felt the pangs of birth.

Lastly, some typographical/grammatical errors were observed in the work – articles were either omitted or wrongly used. For example, subheading (p. 7): “Surrogacy reorganizing the essence of parenthood in Nigeria” (Add colon or dash after ‘Surrogacy’), “While surrogacy might be glorious
“news...” (p.7. rework), “and it often seen” (p.3. Rework).

References

Is the work clearly and accurately presented and does it cite the current literature?
No

Is the study design appropriate and is the work technically sound?
Yes

Are sufficient details of methods and analysis provided to allow replication by others?
Yes

If applicable, is the statistical analysis and its interpretation appropriate?
Not applicable

Are all the source data underlying the results available to ensure full reproducibility?
Yes

Are the conclusions drawn adequately supported by the results?
No

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Political Science, International relations, cyber security, security studies, African philosophy and ethics, public governance and climate change.

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.

Author Response 17 Sep 2020

Oluwatobi Alabi, University of Johannesburg, Johannesburg, South Africa

Hi George,

Thank you for your very insightful comments on this article. I find them very useful for the review and the recommendations in most of the case helped in the production of the new version.
However, unlike you implied in some instances, the article never assumed to generalize its findings to the entire Nigeria and in no instance was Nigeria as a country presented as the study location. While the topic might have Nigeria named which was a mix up during the editorial process with the journal, the methodology gives the reader a detailed description of the specific study location in Nigeria. Likewise, as a qualitative study, it aim was not to generalize findings but provide a more detailed understanding of surrogacy within the study location.

Also, the article does not intend or aim to make a case for/against the practice of surrogacy in Nigeria. Rather, it seeks to investigate how various socio-cultural and religious factors influencing reproduction in Nigeria and south-west Nigeria in particular shape the perception of surrogacy within the studied population.

Thank you again for your insightful comments.

**Competing Interests:** No competing interests were disclosed.

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**Reviewer Report 20 February 2020**

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Daniela Danna
Department of Social and Political Science, University of Milan, Milan, Italy

The proposed article is based on personal interviews with professionals in health and law on the subject of surrogacy. The author takes a clear stand for “modernization”, where he considers surrogacy an ART. He presents in a favorable light the positive attitudes towards surrogacy by legal experts and gynecologists (mostly male) and in a negative light the objections expressed by traditional birth attendants (all female).

The objective of the article is to identify cultural obstacles to the normalization of this practice, as the author considers it a panacea for infertility, therefore positive, progressive, good. There are multiple problems with his view, the principal one is the blurring of what happens in surrogacy and the imprecision in its description, that is missing its concrete aspects. (This blurring is surprising, considering that my own contribution Contract children, a book exactly describing at the global level the phenomenon and its legal and ethical requisites, is listed in the bibliography. I have since published another article that might be of help to the author: “The subrogation of motherhood: a juridical institution putting kinship on the market”, in Salute e società, n. 2, 2019, pp. 44-59). Instead of providing a description, the author defines surrogacy as an ART or an “alternative to infertility” (p. 5), and the whole paper rests on this faulty premise.
Surrogacy is not an ART nor a “fertility treatment” (p. 3), as the insemination in some countries is also achieved with coitus (there are documented cases in Mexico and China). It is instead the motherhood of a woman that will not be considered the legal mother – by deception of the authorities or by changes in the filiation laws. It is essentially a third way to become legal parents besides birthing (with or without recognition by the natural father, a recognition that happens automatically when the mother is married) and adoption. Therefore juridical language should be employed, as it is a juridical institution: the subrogation of motherhood. But out of simplicity I will also call this practice “surrogacy”.

The mother, that is – in objective language – the woman who has given birth, renounces by contract to her right to the baby (called in law the principle of mater semper certa) in exchange for money, often called “reimbursement”. Where are those “cases of altruism” that the author claims to stand on a par with the commercial version (p. 5)?

Illegal surrogacy happens, and it is just a practice where the delivery of the baby to third persons is achieved by payment or by illegal force, but when it is regulated by law – despite usually taking place in clinics – is not at all a medical practice, but a pregnancy not essentially different from other pregnancies. The IVF can or cannot take place, and the insemination can happen outside clinics. The fact that surrogacy is clinically managed does not pertain to the core of the practice, which is the legal possibility to sell filiation by the mother to the prospective, and paying, parent(s).

It is therefore wrong to state in the abstract that, before surrogacy, adoption was “the most common alternative” to legally become a mother, as adoption was the only alternative to birthing a child.

The major problem with the aseptic definition of surrogacy as an ART – that is, as if it were technology – is that this definition takes for granted that the woman who gives birth will renounce her baby, will renounce her right to legally recognize her baby. But this is not inherent in the practice, which is merely based on a promise. The certainty will only come with legally binding documents: a contract that is currently invalid in most countries. She will surely give up the baby only if she is bound by a contract that is deemed legally valid – for this reason is surrogacy a juridical institution. This use of a woman’s body to obtain a son or daughter – I repeat – is in nearly all cases paid for, and the Rapporteur for the U.N. on child trafficking has already declared commercial surrogacy to be trafficking in babies, and – in her last contribution on the subject that I have read – awaited for supporters of “altruistic” surrogacy to demonstrate that such a thing really exist and is not merely a label for the same selling of commissioned newborns. The author apparently ignores the Rapporteur’s conclusion that commercial surrogacy is a violation of the human rights of the newborn, it is an indignity suffered by a mother, and becomes a violation of her human rights, too, when she changes her mind having developed a motherly relationship with her baby but cannot keep him or her because she signed a contract more than nine months before.

But how can the author ask others about “how surrogacy is conceptualized in Nigeria” while he has a superficial concept of surrogacy as (just) an ART? Why does he cancel out the legal debate, and does not give the reader the fundamental information of how surrogacy is legally defined in Nigeria? And if it does not appear in law (as far as I know this is the case), what are the consequences for people who may have done informal agreements? Have there ever been real cases? There are sources on forcing pregnancy on women already trafficked for the purpose of prostitution – should this not be discussed?
How can he claim that gynecologists have a “more informed opinion” on surrogacy (p. 5) when his own description of it is blurry and essentially wrong? Other questions that come to my mind pertain to the framing of the interviews that he conducted: Do not gynecologist talk from their own cultural point of view, like the TBAs? What is “scientific” about their opinions on surrogacy? It seems to me that the TBAs are closer to target (see end of the review).

In general, the interview material could be analysed in more depth and with more quotations. The author’s denomination of “modern” for surrogacy is hardly accurate, as it is well know that there are descriptions in the Bible. The author is worried about stigma creation, but what if surrogacy in itself is violence? Violence against the newborn, who is not a tabula rasa but needs his or her mother, and actively looks for her for the nourishment from her breasts? Violence against the numerous women who do not want to give up their babies after birth but are forced to do it by monetary penalties or even by the force of the State (see the cases of Baby M and Melissa Cook, among many others)? Should acts of violence be free from “stigma”? Should not surrogacy be correctly nominated for what it is: an unnecessary separation of the dyad mother-newborn because intermediaries (and doctors and legal experts, as we see in other countries) profit from the plight of infertile couples, suggesting and organizing this trafficking for their own profit? It seems to me that the explanation for the favorable opinions of doctors and legal experts that the author has found, could be grounded in their own prospect of becoming part of these agreements, organize them and profit from them.

There is a class dimension and an inequality basis in surrogacy that are totally foregone in the proposed article: there is no altruistic surrogacy but women in need that accept to become pregnant and give up their babies to richer couples/singles because they are paid. (Of course there is the question of consciousness, of subjectivity: many women who get paid say that this is not their primary goal, but without money they most certainly would not undergo a pregnancy for others.) Therefore there is no “purely altruistic” commitment (very few exceptions apart) as ALL the legislations canceling mater semper certa allow for “reimbursements” that can be conspicuous. Without money, there would be no surrogacy of relevance, just a few cases now and then. But the aim of the author – whether he realizes it or not – is to set up a market for newborns by obscuring what is really taking place in the countries that have introduced surrogacy.

Another problem with the general framework of the paper is that, even though the author laments the identification of “woman” with “mother”, he basically suggests a method for a woman to become (by means of paying another woman) a mother even if the couple is infertile. Then we are back to square one with the identification woman=mother. A true alternative would be a change in culture that, instead of working for the social acceptance and normalization of rich couples paying poor women for their babies, would work for the social acceptance of women who cannot, or do not want, to become mothers.

I am no native English speaker, so I cannot judge the overall quality of the language, but I noted that there is sometimes a lack of grammatical concordances between verb and subject, and there might be other errors (as in my own text). I do not understand for example “data saturation”. Other minor points: at p. 3 what is “holistic” in ART procedures, that is the artificialization of reproduction, that result in babies being born with more health problems than naturally conceived babies? What is a “foundational and an experimental level” (same page)? Why is
infertility considered a particular case of “sickness” (same page), when the organism that is infertile is in fact generally healthy? What is a “visual text” (p. 4)? Should “corporate” at p. 6 not be “cooperate” (interesting slip of the tongue, as the article advocates for a new market in newborns)?

Finally: at p. 8: surrogacy is not “one of the most progressive ways of addressing infertility”, nor “a desirable fertility alternative”, but buying and selling newborns exploiting the poor women that are forced by need to take up pregnancy as a job (even in the US they sign surrogacy contracts for such goals as paying for the tuitions of their other children). The TBAs might express this and the refusal of such a market in the language of religion, but they are closer to reality than the various experts who stand to gain from the introduction of this juridical institution.

References
1. Danna D: The subrogation of motherhood: A judicial institution that puts kinship on the market. SALUTE E SOCIETÀ. 2019. 44-59 Publisher Full Text

Is the work clearly and accurately presented and does it cite the current literature?
No

Is the study design appropriate and is the work technically sound?
Yes

Are sufficient details of methods and analysis provided to allow replication by others?
Yes

If applicable, is the statistical analysis and its interpretation appropriate?
Not applicable

Are all the source data underlying the results available to ensure full reproducibility?
Yes

Are the conclusions drawn adequately supported by the results?
No

Competing Interests: No competing interests were disclosed.

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.

Author Response 17 Sep 2020

Oluwatobi Alabi, University of Johannesburg, Johannesburg, South Africa

Hi Daniela,

Thank you for your very insightful comments on this article. I find them very useful for the review and the recommendations in most of the case helped in production of the new
version. However, I will like to state emphatically that I stand to benefit nothing from the commercialization of surrogacy in Nigeria like you implied in some instance.

In fact, the article does not intend or aim to make a case for/against the practice of surrogacy in Nigeria. Rather, it seeks to investigate how various socio-cultural and religious factors influencing reproduction in Nigeria and south-west Nigeria in particular shape the perception of surrogacy within the studied population.

Thank you again for your insightful comments.

**Competing Interests:** No competing interests were disclosed.