

Gender Issues in the Management of Infertility in Developing Countries

Infertility and subfertility are a spectrum of diseases encountered globally. It has been estimated that up to 15% of couples experience difficulty in conceiving after 12 months of regular unprotected healthy sexual intercourse.^[1] Regular healthy sexual intercourse has no precise definition but is considered when intercourse occurs at least two to three times a week, associated with a conventional erection, penetration, and ejaculation, and devoid of dyspareunia. It is of immense concern that the scourge of infertility is ravaging individuals in resource-poor settings. Poverty, ignorance, decadence, and distinctive sociocultural background play prominent roles, in this circumstance. Culture as a system of beliefs and values critically affects overall behaviors, including also sexual activity, perceptions, and attitudes towards infertility.^[2] The sociocultural diversities have almost always been detrimental to women in developing countries. For instance, despite all efforts to prevent gender discrimination, including constitutional amendments, the issue of male heritage has become morbidly adherent in the mind of even the highly educated citizens in Nigeria.^[3] Gender critically affects perceptions of infertility and requires urgent and adequate consideration, especially in developing countries.

Most of what is to be discussed here is based on observational evidence, which will require evidence-based collaboration. This editorial will commence with some evolutionary, historical, and biological traits that tend to make the female sex vulnerable to the unwanted discrimination. Then followed by a discourse on male involvement and attitude towards reproductive health matters, including infertility in the developing world and, finally end by introducing a new concept of “male sex infertility”.

In the biblical beginning, the woman evolved from the rib of a deeply sedated man called “Adam.” Biologically, maleness is determined by the presence of the XY chromosomes and femaleness, the presence of double X chromosomes. Before the 7th week of intrauterine life, the gonads are undifferentiated. Subsequently, sex determination and development become a function of the presence or absence of the male chromosome. Indeed, the presence of the male chromosome means development of male sexual characteristics while absence leads to the development of female sexual characteristics. In other words, the female reproductive situation is a “neutral” state. Recently a controversy has trailed this assumption,^[4] however until evidence-based counter phenomenon emerges, one is constrained to continue in this belief.

In addition, it is widely understood that the journey to female reproductive annihilation begins *in utero*, with the greatest number of eggs present at about 20 weeks gestation (7 million). From then on, the downward trend in ovarian follicular numerical strength continues, with a reduction of the eggs to about 1.5-2 million at birth and 300-500 thousand at puberty.^[5] After that, the monthly follicular recruitment ensures a monthly loss of 15-20 eggs, which continues until complete cessation, that leads to menopause. In the male, there is a gradual decline in gonadal function but the ability, to produce spermatozoa still persist and may never stop entirely. The implication, for this reason, is that the reproductive life expectancy of the male is longer than that of the female.

Physiologically, differences exist between both sexes with the males exhibiting greater cardiorespiratory parameters, including, heart size, blood volume, blood pressure, and vital capacity among others, than their female counterparts.^[6] Various societies, in attempting to establish male dominance in everyday life in general, and infertility management, in particular, have copiously exploited these perceived biological and physiological inequalities to advance gender discrimination.

This dominance is also apparent in some aspects of reproductive health. There is no doubt that the mere absence of disease and affliction is not enough to declare an optimal reproductive health status. Rather, there must be a perfect sense of physical, social, and mental well-being in issues concerning the reproductive systems, its structures, and processes. To be able to achieve this, a woman should among other things have the right to decide who, when, and where to marry, and the number of children to have. She should be entitled to a responsible, healthy, and satisfying sex life, with the availability of cheap, safe, and efficient methods of fertility regulation. In Nigeria, and indeed other developing countries, parental and family influences significantly affect marital relationships, with the woman usually playing the second fiddle. In addition, despite the clamor for partner involvement, husbands hardly ever accompany their wives to the antenatal clinic (ANC).^[7] Although recent studies in Nigeria recorded improved male partner attendance to ANC and delivery, many of the women do not believe that their husbands should be present.^[8] This same behavior is similar to what is obtained in the other aspects of reproductive health, including infertility management. In a study conducted in Mid-Western Nigeria, a whopping 89.5% of

the respondents preferred male to female children, and this was attributed to sociocultural peculiarities.^[9] Indeed in the exact words of the authors; “most disturbing is that women don’t seem to see anything wrong with the situation”.^[9]

The case scenario below further throws more light on the domineering and discriminative tendencies against the female gender in developing countries. Mrs. AO was a 45-year-old housewife, married to a 50-year-old business partner. They had been married for 20 years without any living child. They have also been investigated and treated for infertility in many hospitals without success. She was referred to us by her pastor whose wife had archived spontaneous pregnancy, after ten years of unsuccessful attempts, including *in vitro* fertilization (IVF). Detailed history, physical examination, and basic infertility evaluation showed that Mrs. AO had a 26 week’s size uterine fibroids, bilateral tubal disease, and low 21-day progesterone. On further inquiries, we discovered that the husband and his relatives have concluded plans to marry another woman since they believed that the problem was from the present wife. Meanwhile, the man persistently refused to grant permission for semen analysis, despite all pleas, insisting that he was normal and had impregnated his girlfriend during his youth.

We became curious and decided to evaluate previous reports, and interestingly, we observed that Mrs. AO had her first sexual experience at marriage, and all her previous results were reasonable, excellent tubal patency, and optimal ovulation. The family eventually succeeded in getting another wife for the husband who quickly became pregnant and registered for ANC. The circumstances surrounding that pregnancy are still controversial as the gestational age at delivery was at variance with the time of the first sexual encounter.

There are so many women like Mrs. AO who married when they were reproductively viable, but aged to infertility as a result of the husband’s refusal to perform a simple semen analysis. Males usually spend so much money for investigation for their spouse’s infertility but find it difficult spending a dime for their investigation. Even, when they do, and recognize that the problem is male factor, they find it extremely difficult to accept until the woman succumbs to follicular atresia, develops fibroids, and endometriosis, with associated tubal disease and oligo/ovulation. The table then turns, and the woman begins to bear the brunt and anger of her husband and relatives. Sometimes, the practitioner is not spared as he becomes the victim of these egoistic male partners, and may even be accused of incompetence in an attempt to persuade the man to understand the consequences of nondisclosure of his male factor inadequacies. The male ego is so apparent

in infertility matters that most men with azoospermia or severe oligospermia will rather prefer an adoption than allow artificial insemination with donor semen. Indeed males hardly ever discuss their fertility problems, rather, they prefer to keep it to themselves or discuss it with few friends.

The male dominance in our society has also led to the concept of “male sex infertility”. This may represent a misnomer, but it is a real threat, especially in the Igbo speaking areas of Southeast Nigeria. Male sex infertility may be defined as the inability to have a male child, after some years of regular, unprotected, normal sexual intercourse. This definition is as controversial as the concept, but, this should not be a deterrent to addressing the issues raised. The cultural provisions for inheritance, which exclusively gives the male children the absolute right to inherit their parents property, and the ego need of preventing the family name from migrating into extinction, has made this phenomenon a real issue in infertility management in developing countries. Every day, many multiparous women attend infertility clinics, seeking assistance for the conception of a male child. Attempts to convince them to reconsider their approach always led to the question; “Doctor do you a male child?” If the answer is affirmative, then your guess is as good as mine. Many women have been subjected to all sorts of humiliation, including ejection from the family home due to the inability to produce a male child. Sometimes couples seek for termination of pregnancy if they were not precisely sure of sex of the fetus. The interesting aspect of this situation is that education and social status do not seem to affect this culture imposed “male sex infertility syndrome”. This trend is disturbing but has received little or no attention. Consequently, limited information on the prevalence, perception, and factors associated with the process exists. Attempts to initiate discussion, usually meets stiff resistance from women right activist, who likens it to the promotion of gender discrimination.

In conclusion, sex is a permanent physical attribute while gender is a versatile sociocultural behavior attributed to the sex. Infertility is a disease of the couple, and most developing countries exhibit some sociocultural characteristics that are detrimental to the female. Biologically and physiologically, both sexes are not equal and can never be equal. However, the variations should not be exploited and translated into gender dominance and discrimination. There must be equity in dealing with all matters concerning reproductive health in general and infertility care, in particular. Male Sex Infertility Syndrome is a real problem in the Igbo speaking tribe of Southeast Nigeria. We must talk about it, determine the prevalence, and find out factors associated with or related to its conception and practices. Efforts to curb discriminatory property inheritance^[10] may reduce the scourge of male sex infertility syndrome. It is only then that a solution to the

cankerworm, which is implicitly burrowing into societal norms and militating against efforts to address infertility issues in Nigeria and other developing countries, will be proffered.

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