

Breaking the Social Wall of Barrenness: The Nigerian Question

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Abstract:

Globalization, also called diffusion in social sciences, is the ability of what happens in one society to also recur in another society. It is for the wonder of science and medicine that a journey begun by Lesley and John Brown in 1978 on test tube baby has today gone global. In vitro fertilization offers childless couples the opportunity of having their own baby. This occurs when the egg of a woman is externally fertilized by the sperm of a man before inserting same back into the womb of the woman, sometimes hired or rented. Further, advances in medical science have today made it possible to know the sex of the baby in the womb before delivery. This feat is achieved through ultrasound or amniocentesis. Advances in medical technology have also made it possible for certain persons to have a desire for a particular sex and go for it. Other methods used in arresting the psychological trauma that surrounds childlessness in man include frozen embryo, surrogate mothers, sperm and egg donation as well as cloning of human cells. We also owe it to the advantage of new discoveries in medical science that puzzles surrounding unwanted pregnancies are today resolved through deoxybonucleic acid, also known as DNA. We may also weigh it in on the treasure-strove that incidences of sickle cell anemia are today minimized in society through genotype. Genotype is the sum total of the genetic instructions that an organism receives from its parents. Among the objectives of this research include; to identify the major causes of barrenness; to ascertain how new discoveries in medicine provide soccours to couples desperately in need of their own children, to find out if there are challenges that come with the new scientific discoveries and to make recommendations on how the discoveries can be taken to the zone of comfort and confidence. All the data generated in this research endeavour are via secondary sources, while functionalist perspective represents the platform on which findings are discussed.

1. Introduction

New technology does not change society or societies by itself. Rather, it is the response to the technology etymologically called "fordism" that causes change. For instance, the Romans fully understood how to use water wheels to replace muscle power for various kinds of work, but they made no use of the technology. Similarly, the Chinese had gun powder centuries before the Europeans did, but did not explore its military potential. And the Aztecs put wheels on many children's toys, but did not use the wheel for transportation. Rather, they chose to carry their goods on their backs or pull them in wagons. Not until the fourth century did science emerge as a recognizable system. Originally founded in the art of philosophy, propagated by the Church with the Romans at the head, the Romans themselves did not produce any notable scientist. In Greece, great thinkers such as Plato and Aristotle explored the fields of Mathematics, astronomy, the biological sciences, physics and medicine. It took almost a thousand years before science experienced a rebirth in Europe (Hott, Rinechart & Winston, 1995).

In 1953, when James W. Watson and Francis Crick discovered the structure of deoxyribonucleic acid, now popularly known as DNA, they provided the key to unlock the secrets of human genetics. Before this development, no one dreamed their work would have implications for the social sciences. In the past, studies of the distribution of DNA characteristics in human populations around the world have yielded many insights into cultural patterns, some of them extending far back into pre-history. For example, we now have good evidence that women are by far geographically more mobile than men. This goes to show that in all parts of the world, their DNA is far more diverse than that of men, including that while men have tended to stay put, women have often migrated from their places of birth (Wade, 1999 in Stark, 2004).

In vitro fertilization is genetic engineering which deals with people's genes. This reproductive technology, also known as "test tube baby" was perceived more as a science fiction just a century ago. In an effort to break the socio-cultural wall of barrenness, many childless couples now turn to in vitro fertilization (IVF). In this technology, an egg and a sperm are combined in a laboratory dish. And when the egg is fertilized, the resulting embryo otherwise known as "test tube baby" is transferred into the woman's uterus. This procedure sometimes results in multiple births. According to Martin and Park (1999) in Schaefer (2001), other techniques deployed towards overcoming infertility include frozen embryo, surrogate mothers, sperm and egg donation and cloning of human cells.

We are full aware that cats never give birth to pups, and that the children of humans will always be human. This is explained by the fact that tiny parts of the male's sperm and female's ovum contain an amazing amount of information that determines the kind of organism which results from the mating.

Since offspring are determined by their parents' cells, an individual biological organism inherits its particular makeup. That is to say that the physical aspects of an organism are inherited. According to Stark (2004), a male sperm contains twenty-three chromosomes as does the female ovum. These combine to form twenty-three pairs. The institutions embedded in complex chemical chains called DNA combine to determine the various traits such as eye colour. Each chromosome is made of many genes, and humans are believed to have more than 1,000 genes. No two sperm and ova irrespective of whether they are of the same male or female, are likely to have the same array of genes. This explains why the same parents can have one child with red hair and another with brown. A person's hair colour is determined by the particular genes he or she has received.

In Stark (2004), genotype is presented as the sum total of the genetic instructions that an organism receives from its parents. However, the physical development of organisms does not often exactly kow-tow to the line of genetic blueprints or genotypes. This is because enormous forces sometimes deflect or prevent the fulfillment of genotype. On this account, we tend to refer to any specific organism as a phenotype, taking into consideration the interplay between the genotype and the environment in physical development. Put another way, the phenotype is what we see when we look at any organism. It then follows that genotype in part is genetic potential, while the phenotype is the function of the interplay between the genotype and the environment. A second distinction is that much of a person's genetic inheritance does not manifest in his or her phenotype, but may manifest in the genotype of the person's children. For instance, brown-eyed parents can have blue-eyed children, indicating that both parents had a blue-eyed gene in their genotypes. Blue-eyed parents can also produce brown-eyed children the same way brown-eyed parents can produce blue-eyed children.

Childlessness, sometimes described as "child free" (Schaefer, 2001), occurs for varied reasons, sometimes resulting from natural causation, when either of the couple or both are infertile or barren as a result of occurrence of diseases. Sometimes, couples or partners choose not to have children. Sometimes, for biological handicap, they settle for the services of others. To this end, surrogacy occurs, when

a fertile woman agrees to bear a child for a childless couple or union for a fee or cost-free. Sometimes, mothers or sisters are used for this purpose. In North America, the cost of this exercise is about \$50,000. In other circumstances, the womb of a fertile woman is hired or rented. In renting the womb of a fertile woman, a fertility expert mixes your egg and your husband's sperm in a little dish, and inserts the fertilized egg inside a woman, who will bear the child for you (Schaefer, 2001; Latterby, 2002; Karopeckyj-Cox, 2007 in Henslin, 2010).

In Kenya, what obtains is commercial surrogacy. According to Njeru (2012), this practice is popular among the Kamba in Sekia community. In making this a reality, women who are unable to bear children or have male children usually go for the services of surrogate women, who fill in this gap. Once contracted, such women are allowed to live with the person who has paid for their services. Pursuant to this objective, the woman is not allowed to have sex with any member of the family, but outside. The contract is considered over once the objective is realized. The chargeable fee is \$10,000. Even though the couple are not legally married, they live together in pursuit and execution of this objective.

However, before a couple are pronounced infertile or barren, they may have co-habited for a period not less than one year. The main objective of this research is to find out the role played by in vitro fertilization in making couples who can have natural conception have their own children. Other objectives include; to identify the major causes of barrenness; to ascertain how discoveries in medicine provide succour to couples desperately in need of their own children; to find out if there are challenges that come with the new scientific discoveries and, to make recommendations on how these discoveries can be taken to the zone comfort and confidence. The paper is divided into four stages namely the "introduction"; "theoretical framework"; "themes and perspectives" defined by "the origin of test tube baby", "the Nigerian experience"; "the challenge" and "conclusion".

2. Theoretical Framework

Structural functionalism is the platform on which this work is explained. This theory was propounded by the likes of Radcliffe-Brown, Emile Durkheim and Robert K. Merton. Developed from the 19th century anthropology, functionalism according to Lawson, Jones and Moores (2000) is a macro approach, which sees society as a system of interdependent parts or sub-systems which function for the benefit of the whole. The theory is predicated on the analogy of biological organism in which society is likened to a living organism with component parts all of which function for the survival of the organism the same way sub-systems contribute to the survival of society. According to Moores et al. (2000), every society is instituted within its needs, which are served by four major sub-systems namely economic, political, kinship and cultural systems. Teleologically these sub-systems must bond for society to survive.

Pathologically when some parts become diseased, this can go a long way to contaminate the rest the same way too much of crime in society can disable society, especially when it affects the active working population. In essence, functionalism believes in the harmonious existence of society through consensus of values. This approach accords nominal recognition to the existence of conflicts in society. It also believes that social change can occur in society through gradual rather than violent means (Lawson, Jones & Moores, 2000).

In their own contribution, Willmott (1985) and Igun (1994) appear to operate from the same page by looking at functionalism from the spatio-temporal-situation of function. This polemic believes that no situation exists in a vacuum. Put another way, the spatio-temporal-situation of every society is determined by the teleology of its parts. For instance, the heart performs a circulatory function when it takes oxygen to the blood and removes carbon dioxide as waste product. Correspondingly, the digestive system breaks food into smaller particles. It is therefore natural that the functions of the parts and the whole are interdependent. For instance, the heart pumps blood to the brain. Any loss of blood to the brain is likely to lead to unconsciousness, fainting and sometimes even death. Inversely any damage to the brain may lead to malfunctioning of the heart or even death. Willmott however, went a step further by likening society to a mechanical system with component parts all of which function to the benefit of the whole (automobile). Relatively the IVF technology is a necessary requirement for the healthy functioning of society as couples are faced with the crisis of barrenness. Absence

ofit could affect fecundity. Fecundity is the potential number of children if every woman reproduced at maximum biological capacity. Fecundity is systematically reinforced by the emergence of a new reproductive technology called IVF, which today has wide acceptance in society (Schaefer, 2001; Kendall, 2003; Stark, 2004).

3. Themes and Perspectives

The Origin of test tube baby: In history, the first successful artificial insemination pointsinfact took place in Philadelphia in 1884. However, the ability to preserve sperm dating back to 1970s,made the process much easier, eliminating with it the inconvenience of matching ovulation cycles with sperm donations. Without doubt, the modern technology affords childless couples the opportunity of fulfilling their personal or social goals much as it affords them the privilege of accessing opportunities not previously considered. The technology also provides some sex partners with the opportunity of having their own children (Refkin, 1998 in Schaefer, 2001;Bruni, 1998 in Schaefer, 2001).

On July 25, 1978, Luise Joy Brown became the first celebrated case of test tube baby, when her coming broke the jinx of an eight-year barrenness for her parents, Lesley and John Brown. This was made possible through the deployment of a test tube technology by Dr. PatrickSteptoe, a gynecologist at Old Harm University and Dr. Robert Edwards, a physiologist at Cambridge University. Luise Joy Brown was the compliment of an alternative solution to conception by the two physicians, which began in 1976. An opportunity had presented itself when Lesley and John Brown, a young couple from Bristol, were referred to Dr. Steptoe, having gone from place to place without solution. Lesley Brown had blocked fallopian tubes. However, luck had smiled her way, when on November 10, 1977 Lesley Brown underwent the very experimental in vitro fertilization procedure. Using a long slender, self-lit probe called a "laparoscope", Dr. Steptoe took an egg from one of Lesley Brown's ovaries, and handed it to Dr.Edwards, who then mixed Lesley's egg with John's sperm before placing the fertilized egg into aspecial solution that had been created to nurture the egg as it began to divide. Although in previous attempts, they had waited until the fertilized egg had divided into 64 cells four or five days later, this time around, they decided to place the fertilized egg back into Lesley's uterus after just two and a half days. Unlike all the other experimental in vitro fertilization pregnancies that were not successful, weeks passed into months without any apparent problem being noticed in Lesley's pregnancy. The fertilized egg had successfully embedded into her uterus wall. At birth, Lesley Brown had blue eyes and blond hair and looked healthy (Kendall, 2003;Stark, 2004).

The Nigerian experience: History was made in Nigeria, when on February 11, 1998, a baby girl named Hannatu Kupchi, was born to Mr. and Mrs. Hosea Kupchi through in vitro fertilization popularly called IVF at Nisa Premier Hospital in Abuja. Mr. and Mrs. Hosea Kupchi were a childless couple, who before now had made countless efforts to have a child through natural means. Their predicament took them to Premier Hospital, Abuja, where Dr. Ibrahim Wada became helpful with IVF, thus breaking thirteen years barrenness. Seventeen years after, another history was made, when Hannatu gained admission to study medicine at a University inHungary, breaking with it the misconceptions about in vitro fertilization. Hannatu said; "I am very grateful to be sent off like this. It's not everybody that gets this opportunity. God has a big hand in this. God was behind me". Earlier experiments on test tube baby had taken place at Lagos University Teaching Hospital (LUTH) and Calvary Foundation, Coal-Camp, Enugu. At Calvary Foundation, one Dr. Sylvester Ugoh had produced a set of twin girls through in vitro fertilization. That was in 1988. However, this outcome attracted a heavy controversy from the Federal Government, who went ahead to shut the hospital, because Dr. Ugoh according to the then Minister of Health, Dr. Olukoye Ransome-Kuti, did not subject his case to clinical trials. Undeterred, he went to court. After many years, the case was in 2014 decided in his favour bythe Supreme Court. Interestingly at the time the case was decided, the two girls had already gained admission to the University of Nigeria, Nsukka (<http://www.vanguard.com>).

The challenge: Since the fordism of IVF, there have been growing misconceptions about this wonder of science. Some people were skeptical about the functional ability of the thinking faculty of test tube babies. Others were doubtful whether test tube babies could go on to live normal lives and function like their contemporaries, who

were born through natural process. This announced the first ethical problem, which bordered on future implications for the product of this biological experiment. The second challenge is that if life truly begins at conception, are doctors killing potential humans, when they discard fertilized eggs? In making IVF achievable, doctors may remove several eggs from the woman, and may discard some that have been fertilized, thus throwing the baby away with the bath water. In fact, in Luise Joy Brown's case, about 80 of such fertilized eggs were destroyed (<http://www.telegraph.com/116041.2/jsp/foreign/story/79645>).

Another ethical problem is that this process is often attended by difficulties in establishing kinship ties. This challenge is defined more by surrogacy in which a fertile womb is rented for pregnancy. Apart from the high cost of doing this, sometimes, the whole thing ends in legal tussle, especially, when the surrogate mother turns around to claim the baby (Weiss, 1998 in Schaefer, 2001).

It is only the wealthy that can finance in vitro fertilization. Even where the money is readily available, there is no guarantee that the procedure will be successful. In vitro fertilization costs about \$10,000 for each procedure (E. Stephen, 1999 in Schaefer, 2001).

Further, some scholars such as Leslie King and Madonna Harrington Mayer (1967) in Schaefer (2001) have argued that while it is possible for lower class childless couples to have access to contraceptives, they are crowded out of reproductive services, leading to dual fertility policy in the United States. In Nigeria, the situation is even more precarious for the poor as no such policy exists. With the advent of ultrasound or amniocentesis, couples are now able to know in advance the sex of a foetus. This reduces the chances of having an unwanted sex as such sexes are aborted. Since 1998, it costs couples about \$2,500 to purchase the expertise that would sort the sperm that is more likely to produce a baby of a desired sex. Feminist theorists are piqued against this practice, as it runs against the female gender, especially in patrilineal societies like Nigeria. Knowing the sex of the foetus in advance may compel the parents to terminate the pregnancy, especially if it is the type harbouring the unwanted sex (L. Balkin, 1999 in Schaefer, 2001; MOST, 1999 in Schaefer, 2001).

In Japan, the idea of having eggs or sperm donated is generating ripples. Though without legal connotation, this method leans towards "extramarital fertilization". In many societies such as England and Australia, payments to egg donors are banned. But in the United States and Nigeria, there are no restrictions (Efron, 1998; Kolata, 1998 in Schaefer, 2001).

Conclusion: After examining the issues raised in literature, this paper believes that in vitro fertilization (IVF), is a timely intervention to the crisis of child bearing, which today has thrown many marriages apart. The paper also believes that with these revelations, the mystery which hitherto had surrounded this scientific sensation is today broken as IVF is widely accepted in all societies. More importantly the new technology has gone a long way in strengthening the

biblical injunction of "going into the world to multiply" even as couples today have the opportunity of foretelling the sex of their baby.

4. References

1. Henslin, J.M. (2010). *Sociology: A down-to-earth approach*. United States: Allyn and Bacon <http://telegraph.com/116041.2/jsp/foreign/story/79645>. Accessed September 20, 2015 <http://www.vanguardngr.com/Nigeria-first-wf-baby-secures-admission-into-european-varsity>. Retrieved on August 15, 2015.
2. Igun, U.A. (1994). *Models in social science analysis*. Lagos: The Modern Printers Ltd Kendall, D. (2003). *Sociology in our times*. USA: Thomson Learning, Inc.
3. Kornblum, W. (2005). *Sociology in a changing world*. New York: Wadsworth.
4. Lawson, M; Jones, M. & Moores, R. (2000). *Advanced Sociology through diagrams*. Oxford: Oxford University Press.
5. Njeru, G. (2012, January-March). The business birth. *BBC Focus on Africa*, pp. 50 Schaefer, R.T. (2001). *Sociology*. United States: McGraw Hill Companies, Inc.

6. Stark, R. (2004). *Sociology*. USA. Wadsworth/Thomas Learning Thomas, W.L.V. (1995). United States: Holt Rinehart and Winston Inc.
7. Tyohemba, H. (2019). (November, 27). Good diet, key to overcoming fertility challenges. *Leadership*, Pp.10.
8. Willmott, F.P. (1985). *Sociology*. London: Collins International Textbooks.

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