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## **In Vitro Fertilization (IVF-Test Tube Baby), The Need for A Legal Frame Work in Nigeria**

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### **ABSTRACT**

*In vitro fertilization (IVF) a form of artificial insemination is one of several techniques of assisted reproduction technology (ART) available to help people with fertility problems have a baby. IVF practice has gained prominence in Nigeria but there exist no law regulating it as obtained in other jurisdictions. Therefore, there is the urgent need for a legal framework regulating this practice in Nigeria with a view to emulating same in the United Kingdom which is articulated in this paper.*

**KEY WORDS:** In Vitro Fertilization (IVF), Assisted Reproduction Technology (ART), Legal Frame Work, Nigeria, United Kingdom.

### **1.0 INTRODUCTION**

The first successful birth of a “test tube baby”<sup>1</sup>, occurred in 1978, He was born as a result of natural cycle IVF where no stimulation was made.<sup>2</sup>

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<sup>1</sup> Wikipedia “In Vitro Fertilization” available at [https://en.wikipedia.org/wiki/In\\_vitro\\_fertilization](https://en.wikipedia.org/wiki/In_vitro_fertilization) (accessed 1 December 2017). Louise Brown was born on 25 July 1978, in Oldham General Hospital, Greater Manchester, United Kingdom. Robert G. Edwards was awarded the Nobel Prize in Physiology or Medicine in 2010, the Physiologist who co-developed the treatment together with Patrick Steptoe. Steptoe was not eligible for consideration as the Nobel Prize is not awarded posthumously. After the IVF treatment many couples are able to get pregnant without any fertility treatments. In 2012, it was estimated that five million children had been born worldwide using IVF and other assisted reproduction techniques.

<sup>2</sup> *ibid.*

The term *in vitro*, from the latin meaning “in glass” is used<sup>3</sup>, because early biological experiments involving cultivation of tissues outside the living organism from which they came, were carried out in glass containers such as beakers, test tubes, or petri dishes. In other words, a colloquial term for babies conceived as the result of IVF, “test tube babies”, refers to the tube-shaped containers of glass or plastic resin, called *test tubes*, that are commonly used in chemistry labs and biology labs. However, IVF is usually performed in the shallower containers called Petri dishes<sup>4</sup>.

Today, the scientific term *in vitro* is used to refer to any biological procedure that is performed outside the organism in which it would normally have occurred, to distinguish it from an *in vivo* procedure, where the tissue remains inside the living organism within which it is normally found. IVF<sup>5</sup> is a process by which an egg is fertilized by sperm outside the body that is *in vitro* (“in glass”). The process involves monitoring and stimulating a woman's ovulatory process, removing an ovum or ova (egg or eggs) from the woman's ovaries and letting sperm fertilize them in a liquid in a laboratory. The fertilized egg (zygote) is cultured for 2–6 days in a growth medium and is then transferred to the same or another woman's uterus, with the intention of establishing a successful pregnancy.

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<sup>3</sup> *ibid.*

<sup>4</sup> R Hart, RJ Norman “The Longer-Term Health Outcomes for Children Born as a Result of IVF Treatment. Part II-Mental Health and Development Outcomes”. *Human Reproduction Update Vol. 19 Iss.3: (2013) p.244–250.* available at <https://doi.org/10.1093/humupd/dmt002> (accessed November 23 2017). Even though this procedure is adopted, children born through this means are healthy. IVF does not seem to confer any risks regarding cognitive development, school performance, social functioning and behaviour. See also Berk Laura. *Infants, Children, and Adolescents* 7th ed. (Pearson Learning Solutions, VitalBook file 12/2010) 67. IVF infants are known to be as securely attached to their parents as those who were naturally conceived and IVF adolescents are as well-adjusted as those who have been naturally conceived.

<sup>5</sup> *ibid.*

## 1.0 STAGES IN IVF ET AL

IVF techniques can be used in different types of situations. It is a technique of assisted reproductive technology<sup>6</sup> for treatment of infertility. IVF techniques are also employed in gestational surrogacy, in which case the fertilized egg is implanted into a surrogate's uterus, and the resulting child is genetically unrelated to the surrogate. In some situations, donated eggs or sperms may be used<sup>7</sup>.

IVF involves six main stages:<sup>8</sup>

1. Suppressing your natural cycle – the menstrual cycle is suppressed with medication.
2. Boosting your egg supply – medication is used to encourage the ovaries to produce more eggs than usual.
3. Monitoring your progress and maturing your eggs – an ultrasound scan is carried out to check the development of the eggs, and medication is used to help them mature.
4. Collecting the eggs – a needle is inserted into the ovaries, via the vagina, to remove the eggs.
5. Fertilizing the eggs – the eggs are mixed with the sperm for a few days to allow them to be fertilized.
6. Transferring the embryo(s) – one or two fertilized eggs (embryos) are placed into the womb.

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<sup>6</sup> IVF may be used to overcome [female infertility](#) where it is due to problems with the fallopian tubes, making Fertilization *in vivo* difficult. It can also assist in [male infertility](#), in those cases where there is a defect in sperm quality; IVF treatment is appropriate in cases of unexplained infertility for women that have not conceived after 2 years of regular unprotected sexual intercourse.

<sup>7</sup> Restrictions on availability of IVF include costs and age to carry a healthy pregnancy to term. Due to the costs of the procedure, IVF is mostly attempted only after less expensive options have failed.

<sup>8</sup> NHS Choices available at [www.nhs.uk/conditions/IVF/pages/introduction.aspx](http://www.nhs.uk/conditions/IVF/pages/introduction.aspx) (accessed 12 November 2017). Once the embryo(s) has been transferred into your womb, you'll need to wait two weeks before having a pregnancy test, to see if the treatment has worked.

In addition, there are several methods termed *natural cycle IVF*<sup>9</sup>. IVF using no drugs for ovarian hyperstimulation,<sup>10</sup> while drugs for ovulation suppression may still be used. IVF using ovarian hyperstimulation, so that the cycle initiates from natural mechanisms. Frozen embryo transfer; IVF using ovarian hyperstimulation, followed by embryo cryopreservation, followed by embryo transfer in a later, natural, cycle.<sup>11</sup> IVF using no drugs for ovarian hyperstimulation was the method for the conception of Louise Brown. This method can be successfully used when women want to avoid taking ovarian stimulating<sup>12</sup> drugs with its associated side-effects.

In Nigeria, Ashiru<sup>13</sup> and Abisogun<sup>14</sup>, started the research in 1983 and this led to the successful *in-vitro fertilization* and pregnancy of rats on 17th march 1989. Human ingenuity came into play at the Lagos State Teaching Hospital, Idiaraba, Lagos when a team of experts from the hospital, and the college of Medicine University of Lagos, became the

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<sup>9</sup> F Allersma, AE Cantineau “Natural Cycle In Vitro Fertilization (IVF) for Subfertile Couples”. *Cochrane Database Syst Rev*. Vol. 8 CD 010550 (2013). available at <https://www.ncbi.nlm.nih.gov/pubmed/23990351> (accessed 19 December 2017).

<sup>10</sup> Above note 1. The additional techniques that are routinely used in IVF include hyperstimulation to generate multiple eggs or ultrasound-guided transvaginal oocyte retrieval directly from the ovaries; after which the ova and sperm are prepared, as well as culture and selection of resultant embryos before embryo transfer into a uterus.

<sup>11</sup> J Evans, NJ Hannan, TA Edgell et al “Fresh Versus Frozen Embryo Transfer: Backing Clinical Decisions with Scientific and Clinical Evidence” *Human Reproduction Update*. Vol. 20 (6): (2014) p.808–821 available at <https://doi.org/10.1093/humupd/dmu027> (accessed 2 November 2017).

<sup>12</sup> A La Marca, SK Sunkara “Individualization of Controlled Ovarian Stimulation in IVF Using Ovarian Reserve Markers: from Theory to Practice” *Hum. Reprod. Update*. Vol 20 iss 1, (2014) p.124–40. available at <https://doi.org/10.1093/humupd/dmt037> (accessed 2 December 2017)

<sup>13</sup> Professor Ashiru, a Professor of Medicine Lagos University Teaching Hospital (LUTH) Idiaraba, Lagos

<sup>14</sup> Dr. Akin Abisogun his postgraduate student.

first Researchers<sup>15</sup> ever, to produce the test tube baby in Black Africa, comprising East, West, and Central Africa conceived through the delicate *In-Vitro Fertilization* and Embryo Transfer (IVF-ET) method was born<sup>16</sup> after the crowning glory of five years of painstaking research endeavours. The couple had been married in 1980 and had had several unsuccessful attempts at achieving pregnancy through normal biological process.<sup>17</sup> This became possible through assisted

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<sup>15</sup> Professors Osato Giwa-Osagie, an Obstetrician and Gynecologist and Oladapo Ashiru, an Endocrinologist, both of the Lagos University Teaching Hospital, LUTH Idiaraba, Surulere, Lagos.

<sup>16</sup> How IVF Developed in Nigeria at [ivfhistorynigeria.blogspot.com.ng](http://ivfhistorynigeria.blogspot.com.ng) (accessed 7 November 2017). The bouncing baby boy named, Olushina, Eghosa, Oluwaremilekun, is nature's gift to the family of Mr & Mrs Pius Oni. The epoch-making event had begun in 1986 when the young couple, Stella and Pius Oni, first made contact with Prof. Osato Giwa-Osagie, the Director of Human In-Vitro Fertilisation Programme LUTH. The couple had been married in 1980 and had had several unsuccessful attempts at achieving pregnancy through normal biological process. Mrs. Stella Oni, aged 34 then, was admitted to the IVF-ET in LUTH on March 9, 1988. She had lost her two fallopian tubes due to bilateral ectopic pregnancies in Liverpool, England in 1981. She had had tubal surgery in 1982. A hysterosalpingogram done on her in 1982 showed bilateral blocked tubes. Mrs. Oni had attempted IVF-ET-twice, the first in Bourn Hall clinic the pioneer centre for IVF-ET made popular by Dr. Patrick Steptoe and Dr Richard Edwards following the birth of the world's first Test Tube Baby. Louisa Brown. Her second attempt was at St. Mary's Hospital in Manchester. Both attempts were unsuccessful. Mrs. Oni was a textile designer married to a Nigerian Marine Engineer. The nature of her husband's duty necessitated the course which she had lived in Nigeria, Ghana, Togo, England and Canada. After baseline pre-IVR evaluation, Mrs. Oni was accepted for IVF in LUTH and registered in the Gynecology I.V.F. Clinic of March 30, 1988. In the In-Vitro Fertilisation treatment in May/June 1988, her Last Menstrual Period (L.M.P.) was May 25th 1988. She was started on Clomiphene Pergonal injection to stimulate her ovaries and then HCG. Follicular development was monitored using serial hormone assays and serial cervical mucus assessment. Semen samples from the husband, Mr. Oni were evaluated.

<sup>17</sup> She had lost her two fallopian tubes due to bilateral ectopic pregnancies in Liverpool, England in 1981. She had had tubal surgery in 1982. A hysterosalpingogram done on her in 1982 showed bilateral blocked tubes. Mrs. Oni was a textile designer married to a Nigerian Marine Engineer. The nature of her husband's duty necessitated the course which she had lived in Nigeria, Ghana, Togo, England and Canada. Mrs. Oni delivered abroad on March 17, 1989, a baby boy weighing 2.5kg at birth. Mrs. Oni came to show her baby in LUTH for the first time on March 26, 1989. Her husband who is now based in Amsterdam, Netherlands, arrived in Lagos and came to LUTH with his wife

reproductive technology<sup>18</sup> in Nigeria for the pioneering work in 1984 (first human IVF) and in 1989 (first livebaby from IVF). The birth of Olushina was a medical feat that brought with it a ray of hope.

## 2.0 LAW ON IVF IN THE UNITED KINGDOM

The United Kingdom is probably one of the most progressive countries in the world regarding donor conception and surrogacy rights.

Donor conception is regulated by the Human Fertilization and Embryology Act (HFEA)<sup>19</sup> which grants equal access rights to artificial reproduction methods to everyone, regardless of their marital status or sexual orientation. Under the HFEA<sup>20</sup>, the category of people who can apply for a parental order was extended so that civil partners, and mixed-sex or same-sex couples living as partners in an enduring family relationship, as well as married couples, can apply for parental orders. Before a parental order can be made, various conditions require to be fulfilled.<sup>21</sup>The

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and baby to show their appreciation to the Hospital and Professor Ashiru and Giwa-Osagie.

<sup>18</sup> *ibid.* Presently, most of the IVF centres have reported a success rate. Some known centres Advanced Fertility Clinic, Lagos, Bridge Clinic, Lagos, Hope Valley Fertility Centre, Lagos, Kingscare Hospital, Abuja, Medical Art Centre (MART), Lagos, National Hospital, Abuja, Nisa Premier/Nordica, Abuja, University of Benin Teaching Hospital (UBTH), Benin and Nordica Fertility Centre, Lagos and Asaba.

<sup>19</sup> HFEA of 2008. The United Kingdom is also quite permissive regarding surrogacy compared to most other European countries, as altruistic surrogacy has been legally allowed since 1985. However, the Surrogacy Act 1985 has not been reviewed since then and many argue that it is time for an update.

<sup>20</sup> Since 6 April 2010.

<sup>21</sup> The application is made by a married couple, civil partners, or two persons who are living as partners in an enduring family relationship and are not within prohibited degrees of relationship in relation to each other (that means, not closely related, e.g. brother or sister, parent and child, etc.); The child has been carried by a woman other than one of the applicants as a result of the placing in her of an embryo or sperm and eggs, or through artificial insemination. The egg or sperm of at least one of the applicants was used to bring about the creation of the embryo. An application for a parental order is made within six months of the birth of the child. The child's home is with the applicants at the

Surrogacy Arrangements Act<sup>22</sup> prohibits the entering into or negotiating of a surrogacy arrangement on a commercial basis. In other words, the surrogate mother<sup>23</sup> cannot be paid a fee for being a surrogate, although all her expenses related to the pregnancy can be paid by the commissioning couple.

It is criminal offence to negotiate a surrogacy arrangement on a commercial basis. It is not an offence for somebody to enter into an arrangement, but it is an offence for a third party brokering a surrogacy arrangement and to profit by helping someone else make a surrogacy arrangement. Commercial surrogacy is totally banned in the UK, as well as advertising for the search of a surrogate mother.

No international agreement exists at the time and, even if the surrogation happens in a country where it is legal, bringing back the child to the UK may result in a complicated, unsure process. Parenthood will not automatically be granted to the intended parents<sup>24</sup>.

A woman who gives birth to a child in the UK is recognized as the legal parent. So if you become pregnant and give birth following IVF

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time of the application and at the time the order is made either or both of the applicants are domiciled in the United Kingdom, Channel Islands or Isle of Man at the time of application and at the time the order is made; Both the applicants have attained the age of 18 by the time the order is made; and The woman who carried the child and any other person who is a parent of the child have freely, and with full understanding of what is involved agreed unconditionally to the making of the order. A mother cannot give agreement to a parental order less than six weeks after the birth of the child.

<sup>22</sup> 1985. See “Equality Network Parenthood in Assisted Reproduction” available at [www.equality-network.org/parenthood-in-assisted-reproduction](http://www.equality-network.org/parenthood-in-assisted-reproduction) (accessed 2 November 2017).

<sup>23</sup> In this instance, the woman who carries the pregnancy after the donor’s [ovum](#) or ova (egg or eggs) is taken with her consent and letting sperm fertilise it. She is carrier of the pregnancy and becomes the mother of the child under the law.

<sup>24</sup> “Donor Conception, Surrogacy, Adoption and Co-Parenting laws in the UK” available at <https://www.coparents.co.uk/sperm-donors-laws-on-uk.php> (accessed 20 November 2017).



treatment, you will be the legal mother of the child. Under UK law, a semen donor is not considered to be the legal father of any child born following the use of his sperm. Semen donors do not have any legal, financial or parental responsibilities towards these children. The situation may be different if you use a semen donor you know<sup>25</sup>. If you are a couple, whether married, unmarried or in a civil partnership, you will both be asked to consent to IVF treatment. If you are a single woman you will also need to consent to treatment.<sup>26</sup> If you are married or in a civil partnership, the husband or partner may choose not to consent to treatment or may withdraw consent. In this case they will not be recognised as the parent of a child resulting from treatment.<sup>27</sup> The husband is usually automatically the legal father of any child born as a result of IVF treatment whether a Donor uses his own sperm and eggs or donor gamete(s).

However, in cases where the husband does not consent to the treatment, or where couples are separated at the time when treatment takes place. In these cases, the husband is not automatically the legal father<sup>28</sup>.

At the age of 18, your child will be able to apply to HFEA for information identifying the sperm donor. This could include the donor's name, date of birth and last known address. If your child wishes to contact the donor, they are then entitled to do so, It is important to know that the donor will never be allowed to initiate contact with your child. The decision to make contact rests solely with the child<sup>29</sup>. If your child is conceived in the UK, the details will

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<sup>25</sup> *ibid.*

<sup>26</sup> Above note 23.

<sup>27</sup> *ibid.*

<sup>28</sup> "Legal Parenthood" available at <http://www.cambridge-ivf.org.uk/about-us/regulation/legal-parenthood> (accessed 1 December 2017).

<sup>29</sup> *ibid.*

be recorded on the Human Fertilization and Embryology Authority Register of Information<sup>30</sup>.

Nothing will be recorded on your child's birth certificate to show they were donor conceived. However, all the research available shows that it is in children's best interests to be told, and to be told as a process which starts from a very young age<sup>31</sup>.

The law gives egg donors a right to ask the HFEA whether their donation resulted in a birth and, if so, whether the child was a boy or a girl and the year they were born. The donor has no right to find out your, or your child's, identity.<sup>32</sup> Clinics must be licensed<sup>33</sup> by the HFEA, the HFEA regulates IVF in the UK as there is no anonymity for donors.<sup>34</sup>

If donation of sperm is through a<sup>35</sup> HFEA licensed clinic, the donor will not be the legal parent of any child born, have any legal obligation to any child born, have any rights over how the child will be brought up, be asked to support the child financially and be named on the birth certificate.

But if you use an unlicensed clinic to donate sperm, you will be the legal father of any child born from your donation under UK law.<sup>36</sup>

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<sup>30</sup> "What 3-Parent Babies Mean for The Future of Reproductive Medicine" at available <http://www.popsoci.com/uk-one-step-closer-using-dna-3-people-make-babies> (accessed 3 December 2017).

<sup>31</sup> *ibid.*

<sup>32</sup> *ibid.*

<sup>33</sup> "IVF Regulation in UK" available at <http://www.pollentree.com/ivf/information/ivf-around-the-world/ivfregulation-in-uk-2016-02-26> (accessed 17 December 2017).

<sup>34</sup> *ibid.*

<sup>35</sup> "Legal Rights for Egg and Sperm Donors" available at <https://www.gov.uk/legal-rights-for-egg-and-sperm-donors> (accessed 12 December 2017).

<sup>36</sup> *ibid.*

#### 4.0 THE NEED FOR REGULATION IN NIGERIA

In the African culture, every woman wants to be a mother by delivering her baby through the natural means (*per vaginam*). This feeling has led to non-acceptance of cesarean section by some women as it makes them less than a mother<sup>37</sup>. From this perspective, the practice of surrogacy may not be widely acceptable to many in developing countries such as Nigeria<sup>38</sup> In view of this, ethical dilemmas resulting from the practice of surrogacy such as the rights of the surrogate mother, psychological, and emotional effects on the offspring<sup>39</sup> may not be very important at the moment.

However, since IVF is gaining ground in Nigeria, the need for strict regulation of the practice of ART. Presently, there is no law governing the practice of ART in Nigeria despite the relatively long duration of practice. Most ART centers in Nigeria operate based on HFEA guidelines; this practice, however, is not optimal as there are several contextual differences among different countries<sup>40</sup> A bill for the establishment of the “Nigerian Assisted Reproduction Authority” will be a good starting point for regulation of ART practice in Nigeria.

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<sup>37</sup> FA Bello, OR Akinajo et al “*In-Vitro* Fertilization, Gamete Donation and Surrogacy: Perceptions of Women Attending an Infertility Clinic in Ibadan, Nigeria” *African Journal of Reproductive Health* (2014) Vol. 18: (2015) p.127 available at <https://www.ajrh.info/index.php/ajrh/article/view/181/133> (accessed 22 December 2017).

<sup>38</sup> M Aziken L Omo-Aghoja et al “Perceptions and Attitudes of Pregnant Women Towards Caesarean Section in Urban Nigeria”. (2007) *Acta ObstetGynecol Scand* Vol. 86 at 427, available at <https://doi.org/10.1080/00016340600994950> (accessed 2 December 2017).

<sup>39</sup> EJ Enabudoso, MC Ezeanochie et al “Perception and Attitude of Women with Previous Caesarean Section towards Repeat Caesarean Delivery” (2011) *The Journal of Maternal-Fetal & Neonatal Medicine* Vol. 24, 2011 – Iss. 10 available at <https://doi.org/10.3109/14767058.2011.565833> (accessed 19 December 2017).

<sup>40</sup> KL Armour “An Overview of Surrogacy Around the World: Trends, Questions and Ethical Issues” *Nurse Womens Health* Vol. 16: (2012) 231-6. In Africa, only South Africa has legislated concerning ART to regulate the practice of assisted reproduction.

With the number of Nigerians who need fertility services rising, some doctors engaging in sharp practices now sell Intrauterine Insemination (IUI) service as IVF to unsuspecting public<sup>41</sup>.

Ajayi, stated that care personnel now offer the IUI service for some of their patients while claiming that they had provided an IVF service. IVF is the process of fertilization by manually combining an egg and sperm in a laboratory dish, and then transferring the embryo to the uterus. Similarly, the IUI is a fertility treatment that involves placing sperm inside a woman's uterus to facilitate fertilization. The goal of IUI is to increase the number of sperms that reach the fallopian tubes and subsequently increase the chance of fertilization<sup>42</sup>.

While these victims would claim that they had procured IVF treatment, Ajayi said what was done for them was IUI. This can never give them the result they want. While regulation may be slow

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<sup>41</sup> When Doctors Interchange IUI for IVF *New Telegraph* available at [https://issuu.com/newtelegraphonline/docs/thursday\\_july\\_7\\_2016\\_binder1](https://issuu.com/newtelegraphonline/docs/thursday_july_7_2016_binder1) (accessed 21 December 2017). Going by the huge cost of procuring IVF, Some unscrupulous doctors claiming to be fertility' experts now take advantage of the low knowledge of the public to sell to them the far cheaper Intrauterine insemination (IUI) as IVF. A top fertility expert, Dr. Abayomi Ajayi, who is a Consultant Obstetrics and Gynaecologist Managing Director of Nordica Fertility Centre in Victoria Island, Lagos raised the alarm in Lagos recently, while calling on people with fertility challenge to upgrade their knowledge on the value of available fertility services so as to avoid falling victims to dubious care personnel.

<sup>42</sup> *ibid.* With most couples in Nigeria seeking IVF service paying between N800, 000 and over N1 million for this procedure, it is a far more expensive fertility treatment than IUI. According to Ajayi, the IVF and IUI are cousins but not interchangeable. They all belong to the group we call Assisted Reproductive Technique (ART) or technology, but the most basic form of that family or the least developed is the IUI which any doctor could do. "You do not need any particular equipment to do that except to prepare sperm because we know that when semen comes, there is sperm and there is seminal fluid. What you just need to do is to be able to separate the two and concentrate on the sperm and that's all you need for IUI and you are able to introduce it back into the woman." According to Ajayi, "For a woman to be able to do IUI, her fallopian tubes must be open and the sperm count of her male partner must be good." However, the Consultant Obstetric and Gynaecologist lamented that the most common problems facing infertile couples in the country were those two problems – blocked fallopian tubes and poor sperm quality.

presently in tracking these impostors involved in these shady deals, he urged those seeking these services to beware and educate themselves.<sup>43</sup>

## **5.0 CONCLUSION**

There is the need for a legal framework in IVF practice in Nigeria as it has gained prominence and therefore the practice should accord with what is obtainable in United Kingdom and South Africa jurisdictions. This will go a long way in regulating IVF practice and its attendant issues<sup>44</sup> in Nigeria.

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<sup>43</sup> *ibid.*

<sup>44</sup> Such as regulations to regulate the setting up of fertility clinics, its registration, referral procedures, qualified personnel to man such fertility clinics leading to the avoidance of quacks.

