

ORIGINAL RESEARCH ARTICLE

Opinion of Obstetricians and Gynaecologists on Ethical Issues in the Practice of In-Vitro Fertilisation and Embryo Transfer in Nigeria

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Abstract

The objective of this study was to bring ethical issues in the practice of *in-vitro* fertilisation (IVF) in Nigeria to the fore, to determine and articulate the views of Obstetricians and Gynaecologists on treatment modalities and to drive regulation of this specialised field. A plenary session was organised by The Bridge Clinic at the 2010 Society of Gynaecology and Obstetrics of Nigeria (SOGON) annual general meeting. Participants self-administered a 33-point questionnaire on their views on ethical issues in IVF. The results buttress the conclusions of an earlier publication, clearly indicating that even amongst specialised medical professionals; there are varying views which really cannot be challenged as being either right or wrong as they represent the individuals' position and his culture. Within the context of our society, ethics and morality especially as they affect patient care can and must be hinged on a code or framework which should be developed, implemented and its implementation monitored by a legally bound regulatory body for the protection of the rights and safety of our patients, their unborn children and for the integrity of our health care systems. (*Afr J Reprod Health* 2013; 17[1]: 130-136).

Résumé

L'objectif de cette étude était de mettre en évidence les questions éthiques dans la pratique de la fécondation in vitro (FIV) au Nigéria afin de déterminer et d'exprimer les avis des gynécologues sur les modalités du traitement et de conduire la réglementation de ce domaine spécialisé. Une séance plénière a été coordonnée par Bridge Clinique au cours de l'assemblée générale annuelle de SOGON 2012 et les participants ont rempli un questionnaire auto-administré contenant 33 points sur leurs points de vue sur les questions éthiques concernant la FIV. Les résultats ont soutenu les conclusions d'une publication antérieure, prouvant clairement que, même parmi les professionnels médicaux spécialisés, il existe de différents points de vue qui ne peuvent vraiment pas être contestés comme étant soit corrects ou faux, car ils représentent la position de l'individu et sa culture. Dans le contexte de notre société, l'éthique et la moralité, surtout quand cela touchent aux soins des patients, peuvent et doivent être articulées sur un code ou un cadre qui devrait être élaboré, mis en application et son application doit être contrôlée par un organisme légalement réglementaire pour la protection des droits et la sécurité de nos patientes, de leurs enfants à naître et pour l'intégrité de nos systèmes de soins de santé (*Afr J Reprod Health* 2013; 17[1]: 130-136).

Keywords: IVF, ethical considerations, IVF controversies, healthcare regulation

Introduction

Conservative estimates suggest that the prevalence of infertility in Nigeria is about 25% with 1 in 4 women in their reproductive ages experiencing delays in achieving conception.¹ These figures are markedly different from international figures with prevalence rates for infertility being about 17% with 1 in 6 women experiencing delays with conception.^{2,3} Numerous hospital-based studies have been carried out across Nigeria and the unanimous conclusions are that infertility remains

the major indicator for gynaecological consultations with figures ranging from 14.8% to 59.4%^{4,5,6,7} with the growing trend being infertility due to largely preventable causes^{8,9}. With a teeming population in excess of 160 million with about 22% being women within their reproductive ages, infertility is of epidemic proportions in Nigeria, with its management still largely conventional. However in response to these statistics, within the background of the psycho-social impacts of infertility and the high premium placed on child bearing in Nigeria¹⁰, there has

been a proliferation of in-vitro fertilisation and embryo transfer (IVF - ET) clinics providing various bouquets of fertility services of equally varying standards.

The IVF industry in Nigeria is predominantly private sector driven and financed with a handful of centres being within the infrastructure of the public sector. This private sector driven industry is further characterised by a dominance of gynaecologists and very few non-gynaecologists as owners of the different clinics working independently in a health system that is not under any form of regulation. Needless to say, the disadvantages of a lack of regulation and very low barriers to entry have hampered the IVF industry in Nigeria more so than our international counterparts with a lot of questions and concerns raised about the practice.

IVF has over the last 33 years become the cornerstone of fertility treatment.¹¹ The development of this technology has been accompanied by uncertainty and concerns on a treatment that is thought to interfere with a system as sacrosanct as human reproduction.^{12,13} In response to these doubts and issues which fostered them regulatory bodies, such as the Human Fertilisation and Embryology Authority (HFEA) in the United Kingdom¹⁴ were set up as far back as 1990 to advocate for the public and ensure that fertility clinics worked within the mandates of regulation. The HFEA was birthed on the recommendations of the Warnock committee¹⁵, a think-tank which was established in 1982 and chaired by then Dame Mary Warnock with the following terms of reference: “to consider recent and potential developments in medicine and science related to human fertilisation and embryology; to consider policies and safeguards should be applied, including consideration of the social, ethical, and legal implications of these developments; and to make recommendations.” Its first recommendation in its 1984 report was: “a new licensing authority be established to regulate both research and those infertility services which we have recommended should be subject to control.”¹⁶ Other recommendations of the committee were with respect to the management of infertility, gamete donation, artificial insemination, IVF, sex selection, research and storage of human

gametes and embryos.¹⁷ The HFEA Act has been reviewed recently with expansion in its scope to include the rights of single parents, unmarried partners, same-sex couples; it focused on the scope of legitimate embryo research, banned sex-selection for purely social reasons and made a clarion call for the welfare of the child.

The globally accepted position of regulation of the IVF industry has fostered the establishment of regulatory bodies that developed and enforced standards by which IVF practices and practitioners work such as the Advisory Committee on Assisted Reproductive Technology (ACART) in New Zealand, the National Committee on Assisted Human Reproduction in Spain and the National Health and Medical Research Council (NHMRC) in Australia.^{18,19} These were all influenced to a large extent by parent advisory committees such as the U.S. Ethics Advisory board; the Ontario Law Reform Commission, the Dutch Health Council, the National Ethics Committee of France and the Demack committee in Queensland, Australia to name a few.^{20,21}

This global responsiveness to regulation has not imparted on the IVF industry in Sub-Saharan Africa especially in Nigeria where, with the exception of centres like The Bridge Clinic (a private IVF health facility in Nigeria) which have worked according to the codes of HFEA in spite of not being licensed by them, there are no regulatory authorities and patients are at the mercy of practitioners. The Bridge Clinic has championed the call for regulation of the IVF industry and has convened different forums, sampling the positions of key stakeholders in the IVF debate, to examine ethical issues in the practice of IVF in Nigeria. This is the second in a series of papers we have published which examined the views of stakeholders in the IVF debate. The preceding paper²² examined the views of a small but mixed group of stakeholders from clerics to professionals to lay persons while this paper is focused on the views of obstetricians and gynaecologists.

Methodology

The Bridge Clinic, the first focused assisted conception unit in Nigeria, commenced full operations 13 years ago providing quality fertility

services in Nigeria and has successfully delivered 1,400 babies from her clinics at the time of writing this paper. It implemented a quality management system in 2004 according to the International Organisation for Standardisation (ISO) 9001:2000 standards following its successful certification by the accrediting body TÜV Austria. Furthermore the clinic's ethics committee was established in 2000 to ensure that decisions on patient management fall within the ethical, moral and social frameworks of the society.

The Bridge Clinic sponsored a plenary session at the Society for Gynaecologists and Obstetricians of Nigeria (SOGON) conference in 2010 which held in Abuja, titled "IVF in Nigeria: the way forward" with its message being a call for regulation of the industry and the establishment of a regulatory body under the auspices of SOGON to guide the practice of IVF in Nigeria. The discussions focused on the standards of IVF practice internationally; the controversies that have dominated the industry internationally as well as locally, and the steps which have been taken globally to curb this tide while assuring patient safety. The benefits which have evolved from the implementation of these strategies were discussed vis-à-vis the welfare of the child, mother and the reputation of the industry at large and proposals were made for their deployment in Nigeria.

A survey was conducted following the presentation with 102 obstetricians and gynaecologists who completed a self-administered questionnaire. There were 33 close-ended social and ethical questions in the questionnaire ranging from the appropriateness of IVF in our population to the necessity of embryo reduction when risks are identified (see Appendix I). The participants were male and female gynaecologists working in public and/or private hospitals. The data was analysed using SPSS for Windows (version 11.0; SPSS Inc. Chicago, IL) statistical software package. Measures of central tendency were generated for continuous variables and frequency tables generated for categorical variables. The chi-squared and ANOVA tests were used for further analyses and associations and variances were considered significant when the p-values were less than 0.05.

Results

102 gynaecologists participated in the study, with the modal age of the participants being 40 years. 73(71.6%) of them were male, 23(22.5%) of them were female and 6 (5.9%) did not state their genders. The distribution of their religious preferences was 82(80.4%) Christians, 16 (15.7%) Muslims and 8(0.07%) belonged to neither category. The mean number of years of practice as a doctor was 16.9 years and as a gynaecologist was 8.3 years.

The overwhelming majority (99%) concluded that IVF was necessary even in an economy like ours with 1% having a contrary opinion. In response to the religious arguments against IVF, 79(77.4%) did not support these positions and 23(22.5%) agreed that some aspects of IVF were unethical on religious grounds and there was an association between the latter category and the Islamic participants. There was an apparent although weak association between the same category and the Christian participants.

82(80.4%) of the participants supported semen donation and 19(18.6%) did not and there was a strong association between religious preferences and the position on semen donation. However the idea of paying semen donors received mixed reviews with 38(37.3%) agreeing that donors should be paid; 58(56.9%) disagreeing on payment of semen donors, 3 (3%) of the participants were non-committal and 3(3%) did not have a position. 23 (60.5%) of 38 participants in support of paying semen donors felt that they should be paid a stipend of between N5,000.00 and N10,000.00 while 15(39.5%) felt otherwise. 86(84.3%) of the participants supported egg donation, 15(14.7%) were against egg donation and 1(1%) was non-committal. There was also an association between the support of egg donation and religious positions. Significantly different from the position on paying semen donors, more participants 47(46.1%) felt that egg donors should be paid, 50(49%) felt otherwise and 3(3%) were non-committal. 29(61.7%) of 47 participants in support of paying egg donors felt they should receive between N100,000.00 and N200,000.00 and 18(38.3%) felt otherwise. 79(78.1%) participants felt that egg donors should remain anonymous.

Table 1: Participants positions on gamete donation

Variable	Y	%	N	%	Relationships
On semen donation					
In support of semen donation	82	80.4	19	18.6	In relation to religion p = 0.389**
Paying semen donors	38	37.3	58	56.9	
Paying semen donors between N5,000 – N10,000	23(38)	60.5	15(38)	39.5	In relation to age p = -0.077
Anonymity of sperm donors to the couple	91	89.2	10	9.8	
Sperm donors should be disclosed to the child in future	29	28.4	64	62.7	
On egg donation					
In support of egg donation	86	84.3	15	14.7	In relation to religion p = 0.388**
Paying egg donors	47	46.1	50	49.0	
Paying egg donors between N100,000 – N200,000	29(47)	61.7	18	38.3	In relation to age p = - 0.41
Anonymity of egg donors to the couple	79	78.1	23	22.5	
Egg donors should be disclosed to the child in future	30	29.4			
On embryo donation					
In support of embryo donation	67	65.7	34	33.3	In relation to gender p = 0.106
Donor compensation	47 (67)	70.1	20	29.9	

Association is significant at the 0.01 level (2-tailed)

91(89.2%) participants felt that sperm donors should remain anonymous to the couple and 64(62.7%) felt that the clinic should not inform the offspring of the donors identities on any account. 30(29.4%) and 29(28.4%) participants felt that information on egg donors and sperm donors should be made available to the couple and children at a later date. 67 (65.7%) participants supported embryo donation and 34 (33.3%) of them did not. 47(70.1%) of those in support of embryo donation felt that the donors should be compensated.

84(82.4%) of the participants supported gestational surrogacy, 15(14.7%) of them did not and 1(1%) of them was non-committal. Gestational surrogacy is an arrangement where a couple commissions or contracts a woman, the gestational carrier, to carry and deliver a child for them. The surrogate may be genetically related to the child or not depending on the arrangement made. There was a strong association between religious preferences and the support of gestational surrogacy with the Islamic participants holding the

predominant position against gestational surrogacy. On the ethical issue of providing IVF treatment for single mothers; 43(42.2%) of the participants approved of it and 55(53.9%) discouraged this with 4(3.9%) refraining from taking a position. The other emerging ethical issue of treatment of same sex couples was predominantly discouraged by 89(87.3%) and 84 (82.4%) of the participants against treatment of male and female same sex couples respectively. 11(10.8%) and 14(13.7%) of the participants encouraged treatment of male and female same sex couples respectively. There was no association between religion and age with tolerance of treatment of same sex couples. Increasingly same sex couples, who may be either two males or two females in a sexual relationship, are exploring IVF as a means of becoming biological parents. Each partner donates his or her gametes to the process with the hope that fertilisation will occur and embryos develop for transfer who will be genetically related to at least one partner. In male same sex partnerships, the service of a surrogate is

Table 2: Participants positions on ethical issues

Variable	Y	%	N	%	Relationships
Societal issues	84	82.4	15	14.7	Surrogacy vs. religion
• In support of gestational surrogacy	43	42.2	55	53.9	p = 0.465**
• IVF treatment for single mothers	11	10.8	89	87.3	Same sex vs. religion
• IVF treatment for same-sex couples (male)	14	13.7	84	82.4	p = 0.166 (females)
• IVF treatment for same sex couples (female)					p = 0.100 (males)
Centre-guided treatment issues					Use of embryos for research vs. religion
• Transfer of more than 3 embryos	80	78.4	20	19.6	p = 0.398**
• Single embryo transfer	26	25.5	73	71.6	
• Cryopreservation of spare embryos	77	75.5	20	19.6	
• Donation of spare embryos for research	44	43.1	52	51.0	
• Sex selection	57	55.9	41	40.2	
• Embryo reduction due to risks of the pregnancy to the mother	89	87.3	9	8.8	
• Embryo reduction due to risks of the pregnancy to the fetus	83	81.4	19	18.6	

Association is significant at the 0.01 level (2-tailed)

contracted while in female same sex unions, one of the partners carries the pregnancy and delivers the baby. The majority, 80(78.4%) supported the transfer of more than 3 embryos and 26 (25.5%) advocated for single embryo transfer (sET). 77(75.5%) of the participants agreed with the option of cryopreserving spare embryos while 20 (19.6%) did not. 44 (43.1%) participants advocated for the use of embryos for research and 52(51%) disagreed with position with a strong association between their views and religion. 57(55.9%) participants felt that couples had the right to select the sexes of their offspring with IVF and 41(40.2%) were of a contrary opinion. The majority, 89(87.3%) and 83(81.4%), concluded that embryo reduction was necessary if the risks of the pregnancy to the mother and the other embryos respectively outweighed the benefits and there was a strong association between this and religion.

Discussion

The results of this study capture the views of a sample of obstetricians and gynaecologists

currently practicing in Nigeria today, who by default as medical professionals have the requisite knowledge of medical ethics, infertility and its management. This study is not without its limitations and it could be argued that bias was introduced by the population sampled but this is an important first study looking at this field of medicine. The sampling method used was not random as is preferable for its objectivity. Instead a convenient sampling method was used as a consequence of the fact that all attendees of the plenary session were administered the questionnaire. Furthermore the number of obstetricians and gynaecologists who participated in the survey was limited by the fraction of attendees of the plenary session and may not necessarily provide an accurate representation of all obstetricians and gynaecologists in Nigeria. Thirty-one key questions were deliberated upon, following the presentation on the practice of IVF today, and with the exception of the unanimous position which was reached on the necessity for IVF in Nigeria, there was enough variation in the

responses along the ethical lines raised to warrant further deliberation.

Furthermore it was apparent that even amongst medical professionals ethical considerations are challenging, indeed as identified in a previous paper we submitted, “there are no absolute answers only points of view” which are still informed by personal choices, experience and individualism. For these reasons it is absolutely critical that formal regulatory structures are implemented to guide the practice of IVF in Nigeria for the protection of patient’s rights, their safety and the safety of their unborn children.

IVF as the mainstay of infertility management is rapidly creeping into the Nigerian market. With the rapid proliferation of IVF centres in Nigeria and media campaigns whose motives predominantly appear to drive the volumes into the clinics rather than to educate the undiscerning public, there is room for exploitation of patients. These potentials for exploitation are worsened by the fact that patients are seeking treatment from professionals who themselves have varying positions on ethical practices and operate within a totally unregulated industry resulting in practices such as the “provision of sub-standard services; publication of false and misleading results, deceptive advertising practices, human gamete trafficking, research carried out on gametes without consent”. The strengths of this report are that this was the first study to date and to our knowledge to measure the views of medical professionals, who directly or indirectly manage couples with infertility, with the objectives of furthering the advocacy for patient’s rights. Our desire is that the results of this study, taken in conjunction with the previous study of the wider group of stakeholders earlier published, would contribute to the formulation of guidelines and policies to protect the rights of patients who require IVF which should be managed within the auspices of a formal regulatory authority. These guidelines and policies as well as the establishment of the formal regulatory authority should be driven by SOGON; the foremost authority in Obstetrics and Gynaecology in Nigeria.

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APPENDIX 1: IVF IN NIGERIA “THE WAY FORWARD” QUESTIONNAIRE

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|-----|---|-----|--------------------------|----|--------------------------|
| 1. | With the current population statistics of over 150 million people and the resource constraints, is IVF a good idea in Nigeria? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 2. | There is a religious argument against IVF. Do you agree with this? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 3. | Do you think there needs to be a benchmark pregnancy rate below which IVF clinics should not be licensed to provide service? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 4. | Do you think sperm donation should be allowed? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 5. | Should sperm donors be paid? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 6. | Is it okay to pay sperm donors between =N=5,000 and =N=10,000? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 7. | Do you think egg donation should be allowed? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 8. | Should egg donors be paid? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 9. | Is it okay to pay egg donors between =N=100,000 and =N=200,000? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 10. | Do you think embryo donation should be allowed? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 11. | Should embryo donors be compensated? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 12. | Do you think surrogacy should be allowed? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 13. | Should surrogates be paid? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 14. | Should IVF be extended to single women looking to have children? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 15. | Should there be an age limit for intending recipients who require ovum donation? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 16. | Should 55 years old be the maximum age limit for intending recipients who require ovum donation? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 17. | Should IVF be extended to same sex (female) couples? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 18. | Should IVF be extended to same sex (male) couples? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 19. | Should there be a restriction on the maximum number of embryos that are transferred at a time? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 20. | Should a maximum of three embryos be transferred at a time? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 21. | Should a single embryo be transferred? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 22. | Should all spare embryos be discarded? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 23. | Should all spare embryos be cryopreserved? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 24. | Should spare embryos be donated for research? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 25. | Do we have a right to select the sex of a child? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 26. | Should the anonymity of sperm donors be preserved? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 27. | Should an IVF clinic be at liberty to provide information on the details of the sperm donor to the child? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 28. | Should the anonymity of egg donors be preserved? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 29. | Should an IVF clinic be at liberty to provide information on the details of the egg donor to the child? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 30. | Is it right to reduce the number of embryos if the embryos pose a risk to the mother? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 31. | Is it right to reduce the number of embryos if the embryos pose a risk to the other embryos as in the case of multiple pregnancies? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |