

ORIGINAL RESEARCH ARTICLE

Ethical Issues in the Practice of Assisted Reproductive Technologies in Nigeria: Empirical Data from Fertility Practitioners

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Abstract

The need to formulate practice guidelines and ethical framework to guide the practice of assisted conception in Nigeria has been highlighted severally. The Association for Fertility and Reproductive Health (AFRH) ethics committee is charged with the objective of producing ethical guidelines that would govern the practice of assisted conception in Nigeria. This study was a survey of attendees at the AFRH international conference that held in Abuja in September 2017. The aim of the study was to generate empirical data that would form the drafting of ethical practice guidelines in Nigeria. Ninety-seven (50%) of the respondents were of the view that performing IVF for unmarried couples was ethical while about 70 (36%) were of the contrary opinion. Respondents were equally divided (45.26% versus 44.21%) on the ethical standing of performing IVF for single ladies. About 128 (70.33%) of respondents agree that egg donors should be paid more in compensation besides reimbursement for personal expenditure incurred during the process of egg donation and that they should be an upper age limit for clients requesting ART with donor eggs. Several unethical practices ongoing in Nigeria were highlighted including inadequate provision of information and counselling and exploitation of egg donors. Majority agreed on the need for a regulatory framework to govern the practice of ART in Nigeria. The diverse range of views and ethical issues concerning ART practice in Nigeria obtained from this study demonstrates the need to recognise the local context in Nigeria when applying universal principles of ethics. (*Afr J Reprod Health* 2018; 22[3]: 51-58).

Keywords: Ethics, Assisted Reproductive Technology, Nigeria

Résumé

La nécessité de formuler des directives de pratique et un cadre éthique pour guider la pratique de la conception assistée au Nigéria a été soulignée de manière distincte. Le comité d'éthique de l'Association pour la fécondité et la santé de la Reproduction (AFSR) a pour objectif de produire des directives éthiques régissant la pratique de la procréation assistée au Nigéria. Cette étude était une enquête auprès des participants à la conférence internationale de l'AFSR qui s'est tenue à Abuja en septembre 2017. L'objectif de l'étude était de générer des données empiriques qui constitueront la rédaction de lignes directrices sur les pratiques éthiques au Nigéria. Quatre-vingt-dix-sept pour cent (50%) des personnes interrogées étaient d'avis que l'exécution d'une FIV pour les couples non mariés était éthique, tandis qu'environ 70 (36%) étaient d'avis contraire. Les personnes interrogées étaient également divisées (45,26% contre 44,21%) sur le plan éthique de la FIV pour les femmes célibataires. Environ 128 (70,33%) des personnes interrogées s'accordent à dire que les donneurs d'œufs devraient recevoir une compensation plus importante que le remboursement des dépenses personnelles encourues pendant le processus de don d'ovules et qu'ils devraient avoir un âge limite pour ceux qui recherchent de la TRA. Plusieurs pratiques contraires à l'éthique en cours au Nigéria ont été soulignées, notamment la fourniture insuffisante d'informations et de conseils et l'exploitation des donneurs d'œufs. La majorité a reconnu la nécessité d'un cadre réglementaire régissant la pratique du traitement antirétroviral au Nigéria. La diversité des points de vue et des questions éthiques concernant la pratique du traitement antirétroviral au Nigéria, obtenue à partir de cette étude, démontre la nécessité de reconnaître le contexte local au Nigéria lors de l'application des principes universels d'éthique. (*Afr J Reprod Health* 2018; 22[3]: 51-58).

Mots-clés: Éthique, techniques de procréation assistée, Nigéria

Introduction

Since the first *in vitro* fertilisation was successfully carried out in human resulting in the birth of Louis Brown in 1978¹, assisted reproductive technologies has resulted in the birth of over 6 million babies world-wide as at 2017². In tandem with the wide use of assisted conception and the development of newer techniques of assisted conception, ethical issues associated with the use of these technologies have arisen. This has led to the formulation of regulatory frameworks and ethical guidelines by most developed countries to address these emerging ethical issues^{3,4}.

Unfortunately, most developing countries including Nigeria are lagging in this regard. The need to formulate practice guidelines and ethical framework to guide the practice of assisted conception in Nigeria has been highlighted severally^{5,6}. The Association for Fertility and Reproductive Health (AFRH) of Nigeria formerly called Nigerian Fertility Society was inaugurated in 1992. The name was later changed to AFRH in 2010.

The Association is a non-partisan, non-governmental association of assisted reproductive technology providers and interested persons geared towards the enhancement of services in reproductive health, with emphasis on fertility services. AFRH seeks to create an awareness among all persons within Nigeria, Africa and abroad, on the importance of reproductive health. The association also provides education and training and acts as a research institute of professionals for the dissemination of fertility and reproductive health information. AFRH also aims to establish good working and co-operative relationships with government, non-government organizations and agencies at national, regional and international levels⁷.

In the pursuit of its objectives, the formation of the ethics committee was a major landmark development in the process of regulating and ensuring best practices of assisted conception in Nigeria. The ethics committee is charged with the objective of producing ethical guidelines that

would govern the practice of assisted conception in Nigeria.

There are standards of common morality shared universally and there are also particular moralities unique to certain communities or cultures⁸. Beauchamp and Childress in their book –Principles of Biomedical ethics described common morality as the set of norms shared by all persons committed to morality which is applicable to all persons in all places and therefore human conduct is judged by its standards⁸. On the other hand, particular morality is not shared by all cultures, groups and individuals but rather particular morality takes into consideration the context in which it is applied⁸. For example, in advanced countries single-embryo transfer has been recommended in IVF, this is to reduce the incidence of multiple gestation and its associated complications which has increased significantly due to the use of assisted reproductive technologies for conception^{9,10}. However, in Nigeria, experts in assisted reproductive technologies have made a case against the practice of single-embryo transfer and favour multiple embryo transfer. They argue, that the lower success rate of the procedure in Africa, the high cost of the procedure and the love for multiple births in Africa especially Nigeria negates advocating for single-embryo transfer in Africa¹¹. Thus, transfer of more than one embryo in IVF may be considered a questionable ethical practice in developed countries but that may not be so in Africa.

The ethics committee of AFRH in proceeding with their objective of producing an ethical guide for the practice of assisted conception in Nigeria recognised the need to contextualise ethical principles as it may apply to the Nigerian situation and to collate the views of key stakeholders. This article documents the findings of a survey of health workers involved in assisted conception and some non-health workers with interest in assisted conception. The survey was administered to attendees at the AFRH international conference that held in Abuja in September 2017. The aim of the study was to

generate empirical data that would inform the drafting of ethical practice guidelines in Nigeria.

Methods

A self-administered questionnaire was distributed to all conference attendees during the plenary session of the conference. The questionnaire was constructed based on literature review of the subject and the objectives of the committee which was to elicit information from stakeholders about ethical issues associated with the practice of assisted conception in Nigeria. The questionnaire also sought the views of participants on certain ethical dilemma. The questionnaire was pretested at an earlier workshop organised by the ethics committee in Lagos in August 2017.

Completed questionnaires were retrieved from attendees and analysed using EPI INFO™ statistical software version 7.2.2.1. Results are presented in proportions, percentages, tables and figures.

Results

A total of 194 questionnaires were correctly filled and subsequently analysed. The result is as follows:

Characteristics of respondents

The mean age of respondents was 42.96 ± 10.65 yrs (range 20-70yrs). There were 102 (52.58%) male respondents while the female respondents were 92 (47.42%). About 161 (82.99%) worked in a fertility centre while 33 (17.01%) did not work in a fertility centre. Table 1 shows their various occupations and their religious affiliations.

Views on the ethical status of ART

ART as a medical procedure was considered ethical by 170 (87.63%), while 22 (11.34%) believed it was unethical, two respondents (1.03%) were unsure of the ethical status of IVF. On the other hand, with regards to how ART is practiced in Nigeria, 165 (85.05%) respondents believed that

the practice of ART in Nigeria is ethical, while 16 (8.25%) respondents believed that it was unethical. Thirteen (6.70%) did not know if the practice of ART in Nigeria was unethical or not.

Specific aspects of ART practice were considered, and views of respondents sought as regard the ethical standing of such practices. The responses are shown in Table 2. About 50% of the respondents were of the view that performing IVF for unmarried couples was ethical while about 36% were of the contrary opinion that performing IVF for unmarried couples was unethical. Respondents were equally divided (45.36% versus 44.33%) on the ethical standing of performing IVF for single ladies (Table 2).

Views on ethical issues associated with egg donation for ART

About 128 (65.98%) of respondents agreed that egg donors should be paid more money besides reimbursement for personal expenditure incurred during the process of egg donation, while 54 (27.84%) disagreed and 12 (6.18%) were unsure. Figure 1 shows the suggested amounts deemed appropriate for payment to egg donors – ₦100, 000 and ₦150, 000 were the most frequently suggested amount. The lowest amount suggested was ₦50, 000 and the largest amount was ₦500, 000. The average of the amounts suggested was ₦151, 317 \pm 76,748.

Majority of respondents 123 (63.40%) agreed that there should be an upper limit of age for infertile women seeking IVF with egg donation, however 71 (36.6%) did not want an upper limit of age for IVF. When asked to suggest upper age limits for ART the following age limits were suggested (Figure 2). Fifty and fifty-five years were the most frequently suggested age limit. The oldest suggested age limit was 66 years which was suggested by only one respondent.

Use of excess embryo for research

Almost half of the respondents 96 (49.48%) agreed that excess embryo can be used for research, while 54(27.84%) objected to the use of excess embryo for research. 44 (22.68%) were

Table 1: Occupation and religious affiliation of ART practitioners in Nigeria

		Number	Percentage
Occupation in fertility centre	Gynaecologist	91	46.91
	Embryologist	39	20.10
	Fertility councillor	10	5.15
	Fertility nurse	46	23.72
	Others	8	4.12
	Catholic	48	24.74
Religious Affiliation	Protestants	28	14.43
	Pentecostal	93	47.94
	Islam	20	10.31
	African Traditional Religion	1	0.52
	Others	4	2.06

undecided on whether excess embryo should be used for research or not.

Identified unethical practices perpetuated by ART practitioners in Nigeria

Respondents were asked to list certain unethical ART practices they had noticed being perpetuated by ART practitioners or they felt strongly was being practiced in Nigeria. The following acts were listed by many respondents:

1. Inadequate counselling of IVF patients on the procedure especially the success and failure rates. Respondents said the counselling was often geared towards giving patients an exaggerated hope of success.
2. Use of donor/third party gametes without informing the couples
3. Use of donor gametes and concealing that fact from a partner.
4. Exploitation of gamete donors
5. Repetitive and overuse of each egg donor
6. Use of ART for sex selection for non-medical reason
7. Transfer of 4 or more embryos
8. Use of surrogates
9. Conducting IVF for unmarried women
10. Discarding excess embryos
11. Fetal reduction

Less frequently listed unethical practices said to be practiced by ART practitioners in Nigeria included:

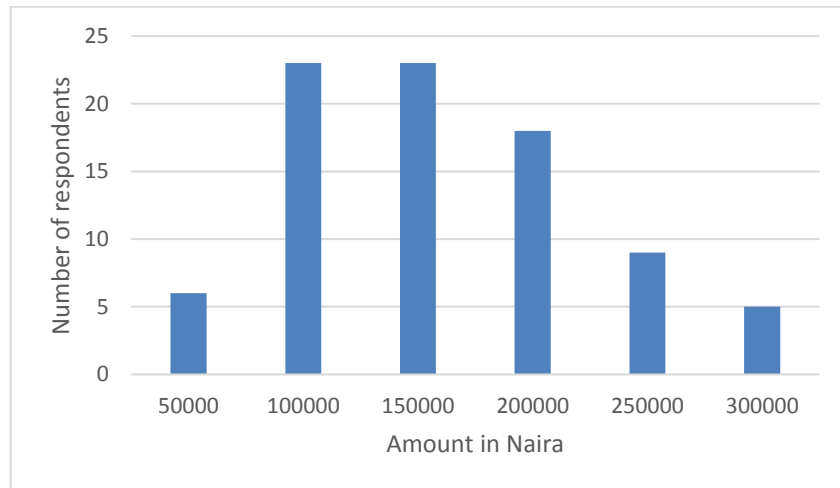
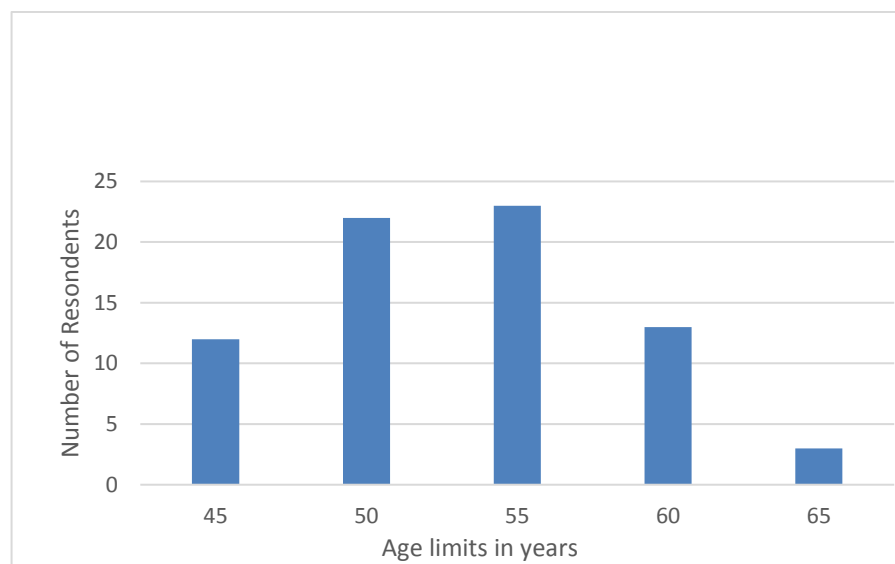
1. Maintaining patient confidentiality
2. Fake pregnancy (fake positive pregnancy test)
3. Overstimulation of patients to obtain high yield of eggs.
4. Use of embryos without owners or recipient awareness
5. Transfer with an empty catheter
6. Psychological "Phantom" oocyte retrieval from non-responders or older women who insists on using the own eggs
7. Transfer of mixed embryos (donor and patient)
8. IVF for same sex couples
9. Use of underage egg donors
10. Gamete donor donating without spouse consent
11. Egg sharing among several recipients
12. Using family members as gamete donor
13. Father donating sperm for son
14. Freezing more than 3 embryos in one straw
15. Not terminating IVF cycle with poor follicular growth
16. Sale of embryos
17. Inadequate evaluation of clients before proceeding to IVF
18. Promo advertisement
19. Unhealthy rivalry among ART practitioners
20. Embryo transfer being done on client and surrogate

Legislation on ART

Majority 159 (81.96%) of respondents agreed that the absence of a law regulating ART in Nigeria contributes to unethical practice in Nigeria. However, 15 (7.73%) felt otherwise and 20 (10.31%) were not sure of the contribution of the absence of a law on ART to unethical ART practices. Respondents believed a law regulating ART in Nigeria would improve standard of practice by instituting punitive measures against

Table 2: Views of respondents on certain aspects of ART practice in Nigeria

	Yes	No	Don't know
Is performing IVF for unmarried couples unethical?	70 (36.08%)	97 (50.00%)	27 (13.92%)
Is performing IVF for single women unethical?	88 (45.36%)	86 (44.33%)	20 (10.31%)
Do you agree that doing IVF using surrogates (having another women carry the baby in her womb) is ethical?	137 (70.62%)	35 (18.04%)	22 (11.34%)
Do you agree that Pre Genetic Diagnosis PGD use for the purposes of sex selection is ethical?	84 (43.30%)	72 (37.11%)	38 (19.59%)

**Figure 1:** Amounts to be paid to egg donors as suggested by ART practitioners in Nigeria**Figure 2:** Age limit for recipients having IVF with egg donors as suggested by ART practitioners in Nigeria

defaulters and protect patients and donors. Furthermore, they opined that a law regulating ART in Nigeria would limit and control the number of ART centres and solve certain ethical issues like number of embryos transferred and limit the number cycles of egg donations by a singular donor. A law would also prevent quackery and enforcement would make ART practitioners to abide by the law.

Discussion

This study captured the views of a wide range of fertility practitioners in Nigeria and some non-practitioners who are interested in the subject matter and attended the conference of the Association for Fertility and Reproductive Health (AFRH). The value of empirical research in the process of formulation of ethical norms cannot be over-emphasized¹². This is indeed the essence of empirical bioethics. Empirical bioethics emphasises that the study of peoples' moral beliefs, intuitions, behaviour and reasoning yields information that is meaningful for ethics and should be the starting point for ethics¹³.

It is interesting to note that in many of the issues raised, there were very few overwhelming consensuses. This is not surprising as persons are likely to hold moral opinion based on diverse influences such as 'gut feeling', religion, tradition, and professional viewpoints. This emphasises the relevance of this study to the objective of the ethics committee.

About 36% and 45% of respondents held the view that it is unethical to perform IVF for unmarried couples and single ladies respectively. This view may be considered contrary to the human rights perspective that guarantees every person a right to enjoy a healthy reproductive health including the right to procreate. This quantitative study did not explore reasons for participant's stance, however from a focus group study of stakeholders conducted by the ethics committee these issues were explored deeper and the findings will be reported in another article. It is possible that religious and cultural values may be the overriding factor^{14, 15}. Globally, access to ART for unmarried couples and single ladies vary from

country to country. In the International Federation of Fertility Societies (IFFS) Surveillance 2016 report, of the 68 countries that provided data, 31 reported that being in a recognised stable heterosexual relationship is a requirement for access to ART¹⁶. Furthermore, in 17 of these 31 countries, this requirement is codified in law, in another 10 countries it is part of their professional guidelines and in another six countries (mainly Islamic countries) it reflects their religious laws¹⁶.

A key finding of our study applies to respondent views about third party ART using donor eggs. Majority agreed that egg donors should be compensated beyond the amount for personal expenses incurred during the process of egg donation. A wide range from ₦50, 000 (fifty thousand naira) to ₦500, 000 (five hundred thousand naira) was offered. However, the sum of ₦100, 000 and ₦150, 000 were the most frequently suggested amount. There has been some considerable argument about whether gamete donors should be given money for donating, and what should constitute a reasonable amount. The ethical challenge in this regard is how to avoid undue inducement on one hand and exploitation of egg donors on the other hand. Also, the possibility of commercialisation of gamete donation is a grave cause for concern. Most international guidelines and ethicists agree that egg donors should be reimbursed or compensated, however the value varies considerably across countries^{3, 4, 17}. In determining what would be an appropriate compensation for egg donors, it is insufficient to consider the views of practitioners alone, the views of egg donors must be considered.

Furthermore, well formulated research should be conducted to define the amount that constitutes the critical point at which the delicate balance between undue inducement and exploitation is achieved.

Our study elicited from fertility practitioners several unethical practices which they perceived is practiced by fertility experts in Nigeria. The information provided by respondents can be considered a true description of the state of practice of ART in Nigeria as this was an anonymous survey and practitioners did not give any identifier information. While some of the

practices listed as unethical may not be universally accepted as being unethical and may just represent the personal view of the respondent, it however, does give valuable information on the state of practice of ART in Nigeria and aspects of the practice that AFRH should be worried about. Prominent areas of ethical concern in the practice of ART in Nigeria identified include: adequacy of information and counselling given to clients requesting for assisted conception; ART using donor gametes; transfer of more than four embryos; use of surrogates and maintaining patient confidentiality. These are areas that should be given early attention in the formulation of ethics practice guidelines by AFRH.

It is heart-warming to note that most practitioners agreed to the urgent need to have a regulatory framework that would govern the practice of ART in Nigeria. This would greatly improve the conduct of ART in Nigeria. Several developed countries have regulating authorities for ART. The United Kingdom has the Human Fertilisation and Embryology Authority backed by the Human Fertilisation and Embryology Act¹⁸. In South Africa, ART is regulated by the National Health Act of 2003, Regulations Regarding Artificial Fertilisation and Related Matters¹⁹. Currently in Nigeria, there is a bill to regulate the practice of ART in Nigeria before the National assembly. The bill initially proposed separately by Senators Lanre Tejuoso and Barau Jibrin has been consolidated into one and passed the second reading in senate on the 25th of October, 2017²⁰. It is hoped that when eventually passed, it will be a major milestone in the process of regulating the practice of ART and improving the ethical aspects of ART in Nigeria.

Conclusion

This study has provided useful information which would be utilised in the formulation of ethical guidelines for the practice of ART in Nigeria. We recognise that these views represent majorly that of the providers of ART in Nigeria and there is need to obtain information from the users of the services- clients with infertility. Some of the issues

raised in this survey were explored in a focus group discussion which included a wide range of stakeholders and this would all be considered in producing the practice guidelines. Emerging from this study is the appreciation that there are diverse ranges of views and of ethical issues concerning ART practice in Nigeria. The local context in Nigeria should be taken into consideration when applying universal principles of ethics.

Contribution of Authors

PIO designed the survey, analysed and prepared the manuscript

RA conceived the study, made intellectual revision to the manuscript

KB collected, analysed and made intellectual revision to the manuscript

RO collected, analysed and made intellectual revision to the manuscript

CI collected and made intellectual revision to the manuscript

KO collected, analysed and made intellectual revision to the manuscript

All authors read, revised and approved the final manuscript.

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