

# INVOLUNTARY CHILDLESSNESS AND ASSISTED CONCEPTION: PERCEPTION AMONGST NURSES AT THE UNIVERSITY COLLEGE HOSPITAL, IBADAN.

O.O. Saanu<sup>1,2</sup>, G.O. Obajimi<sup>1,2</sup>.

1. Department of Obstetrics and Gynaecology, College of Medicine, University of Ibadan.
2. Department of Obstetrics and Gynaecology, University College Hospital, Ibadan.

Correspondence:

**Dr. G. Obajimi**

Dept of Obstetrics and Gynaecology,  
College of Medicine,  
University of Ibadan.  
Oyo State, Nigeria.  
Email: gbolahanobajimi@gmail.com

Submission Date: 17th Feb., 2024

Date of Acceptance: 25th Dec., 2024

Publication Date: 31st Dec., 2024

## ABSTRACT

**Introduction:** Involuntary childlessness, *a pas de deux* is perceived as a stigma in many developing countries and often leads to marital disharmony due to the high premium placed on childbearing emanating from deep rooted socio-cultural beliefs. Nurses play a pivotal role in patient management due to their close contact and association with patients and their relatives. A nexus therefore exists in the uptake of clinical services by patients because of the disposition of nurses towards certain services. Efforts at improving perception about assisted conception services through education and information for both patients and health workers cannot be over-emphasized.

**Methodology:** A cross-sectional study of consecutive clinical nurses from the general-outpatient, surgical, medical, paediatric, and gynaecology clinics of the University College Hospital, Ibadan. One hundred and ninety-six nurses were recruited into the study using a self-administered questionnaire. Data collected was analyzed using the Statistical Package for Social Sciences version 23. Descriptive analysis generated was presented with the aid of a pie chart and frequency tables. Chi-square statistic was used in testing for associations between categorical variables and P value was set at 0.05.

**Result:** The mean age of the respondents was  $41.47 \pm 9.24$  years with a mean duration of clinical nursing service of  $15.18 \pm 8.70$  years. Majority (86.7%) of the nurses were married and were predominantly of the Christian faith. One hundred and sixty nurses (81.6%) were of Yoruba extraction. Majority (94.8%) demonstrated good knowledge about assisted conception services and therefore had a positive attitude towards advanced fertility management ( $P < 0.05$ ). Age, marital status, religion, and years of service were not significantly associated with a positive attitude.

**Conclusion:** The recent establishment of an in vitro fertilization centre at the University College Hospital, Ibadan, has resulted in a paradigm shift in the management of infertility. Continuous education and enlightenment of clinical nurses will not only enlist their support but promote better patient engagement through constructive and informative interactions, thus eliminating barriers to the uptake of assisted conception services in a country strongly influenced by socio-cultural beliefs and taboos.

**Keywords:** Infertility, Assisted conception, Perception, Nurses.

## INTRODUCTION

Involuntary childlessness, also known as infertility, is defined as the inability of a couple to achieve conception after twelve months of regular and unprotected sexual intercourse<sup>1</sup>. It is a stigmatized health issue with significant public health implication especially in poor resource nations like Nigeria, where a high premium is placed on childbearing<sup>2</sup>. Prejudice, stigma, and discrimination against those affected in low-income nations can result from pervasive ignorance, myths, and misconceptions regarding the aetiology and

perception of the health challenge.<sup>2</sup> Infertile couples require the services of health workers who possess not only the right knowledge but exhibit supportive and compassionate care towards the actualization of the objectives of infertility management<sup>3,4</sup>.

Marriage in the African context is heavily influenced by the desire to achieve conception. Infertility on the other hand is associated with a variety of detrimental psychosocial manifestations including stigma, neglect,

aggression, marital disharmony, poverty, and mental health challenges<sup>4,5</sup>. In resource poor countries, the aetiology of involuntary childlessness has been primarily linked to infectious morbidities following sexually transmitted diseases, unsafe abortion and puerperal sepsis<sup>4,5</sup>. The delay in the commencement of parenting responsibilities past the optimal fertile age, between 20-24 years, has been noted as concerning in developed countries where studies have revealed that women give birth at an average age greater than thirty years<sup>5</sup>. This may not be unconnected with the pursuit of greater educational achievements and career advancement at the expense of early marriage and childbearing.

An increasing number of people around the globe who were unable to have biological children have been able to do so because of the deployment of assisted reproductive technologies (ART). In the past three decades, ART has resulted in almost three million births around the world, allowing infertile individuals create genetically linked families, including single persons, lesbian, gay, and transgender couples<sup>6</sup>. The societal perspectives about reproductive health have been greatly altered due to ground-breaking innovations and possibilities through assisted conception particularly in developed nations<sup>7</sup>. Intrauterine insemination and in-vitro-fertilization are two examples of ART that have been widely deployed across the globe. Several studies have demonstrated that infertility and its management has been associated with profound psychological stressors<sup>8,9,10</sup>.

In Nigeria, assisted conception services commenced over two decades ago with the private sector taking the lead. However, in the last couple of years, the Nigerian public sector has embraced this very important reproductive health service and the IVF centre of the University College Hospital, Ibadan, commenced operation on the 14<sup>th</sup> of February 2019. Public fertility centres were set up to bridge the gap in access to advanced fertility management through the provision of affordable and subsidized care.

Nurses play a pivotal role in the education and demystification of sociocultural concerns related to IVF. They are usually the first health contact with infertile couples and often provide the much-needed counseling and encouragement to this highly vulnerable group. Fertility nurses play a crucial role in the coordination of various stages of treatment, and they ensure compliance and adherence to management protocols during advanced fertility management.<sup>11</sup> Therefore, the perception of nurses about assisted conception can significantly affect the standard of patient care during ART cycles<sup>11,12,13</sup>. Ignorance and

poor understanding of the processes involved in assisted conception by health care providers can lead to prejudice which may adversely affect the outcome of care<sup>14</sup>. This study, therefore, sought to evaluate the perception of nurses at the University College Hospital, Ibadan, a public health facility, which recently introduced ART as part of its infertility management.

## METHODOLOGY

A descriptive cross-sectional study of one hundred and ninety-six consecutive clinical nurses working at the out-patient clinics of the University College Hospital, Ibadan, Nigeria. Participants were drawn from the general-outpatient, surgical, medical, paediatric, and gynaecology clinics. Consenting participants completed a self-administered questionnaire, and each questionnaire consisted of information on the sociodemographic characteristics of respondents, knowledge, and attitude towards assisted conception. Anonymity and confidentiality of information obtained was maintained. Six questions were used to assess knowledge while eighteen questions were used to assess attitude. The total score for each respondent was then converted into percentage and categorized appropriately. A score below the mean was regarded as poor while a score above the mean was regarded as good. Data was analyzed using the Statistical Package for Social Sciences version 23. Descriptive analysis was generated and presented with the aid of a pie chart and frequency tables. Chi-square statistic was used in testing for associations between categorical variables and P value was set at 0.05.

## RESULTS

### Sociodemographic Characteristics

Table 1 depicts the sociodemographic characteristics of the respondents. The mean age was  $41.47 \pm 9.24$  years with a range of 22 – 60 years. The mean duration of clinical nursing service was  $15.18 \pm 8.70$  years. Majority (86.7%) of the nurses were married and were predominantly of the Christian faith. One hundred and sixty nurses (81.6%) were of Yoruba extraction and 136 (69.3%) were multiparous. A significant



**Fig 1:** Knowledge about in-vitro fertilization

number of nurses had a bachelor's degree (71.4%) and only 2 respondents had a doctoral degree.

### Knowledge about Assisted Conception

One hundred and eighty-six nurses (94.9%) had good knowledge about assisted conception services,

especially those offered at the University College Hospital, Ibadan (Figure 1). One hundred and eighty nurses (91.8%) understood the indications for the procedure and the processes involved in ART. They also had very good knowledge about cost implications,

**Table 1:** Sociodemographic characteristics of respondents

Variable	Frequency (n=196)	Percent
<b>Age group</b>		
20-29	18	9.2
30-39	57	29.1
40-49	68	34.7
≥50	53	27.0
Mean ± SD	41.47±9.24	
<b>Marital Status</b>		
Single	23	11.7
Married	170	86.7
Widowed	3	1.5
<b>Religion</b>		
Christian	170	86.7
Islam	26	13.3
<b>Educational Status</b>		
Diploma	28	14.3
BSc	140	71.4
MSc	26	13.3
PhD	2	1.0
<b>Years of service</b>		
≤10	69	35.2
11-20	72	36.7
21-30	41	20.9
>30	14	7.1
Mean ± SD	15.18±8.70	
<b>Tribe</b>		
Yoruba	160	81.6
Ibo	26	13.3
Others	10	5.1
<b>Number of children</b>		
0	40	20.4
1	20	10.2
2	62	31.6
3	49	25.0
4	24	12.2
5	1	0.5

**Table 2:** Association between selected variables and attitude towards assisted conception.

Variable	Attitude		Chi square	P value
	Poor (%) (n=51)	Good (%) (n=145)		
<b>Age (years)</b>				
≤ 47	24 (47.1)	70 (48.3)	0.02	0.88
> 47	27(52.9)	75(51.7)		
<b>Marital Status</b>				
Single	4(7.8)	19(13.1)	3.48	0.18
Married	45(88.2)	125(86.2)		
Widowed	2(3.9)	1(0.7)		
<b>Knowledge</b>				
Poor	6 (11.8)	4(2.8)	6.32	<0.001
Good	45(88.2)	141(97.2)		
<b>Religion</b>				
Christian	39 (76.5)	131(90.3)	1.76	0.84
Islam	12(23.5)	14(9.7)		
<b>Years of experience</b>				
≤10	19 (37.3)	50(34.5)	1.46	0.69
11-20	16(31.4)	56(38.6)		
21-20	13(25.5)	28 (19.3)		
>30	3(5.9)	11(7.6)		

especially in a low-income country where health care delivery is financed out-of-pocket.

### Attitude towards Assisted Conception

One hundred and forty-five nurses (74%) had a positive attitude towards assisted conception and were willing to recommend it to infertile couples. In this study, a significant association was found between knowledge and attitude towards assisted conception ( $P < 0.05$ ). Age, marital status, religion, and years of service were not significantly associated with a positive attitude. (Table 2)

## DISCUSSION

The introduction of ART at the University College Hospital, Ibadan, as part of the management of involuntary childlessness has led to a paradigm shift in the care of infertile patients through the availability of in-vitro-fertilization at a highly subsidized rate. The utilization of these services is dependent on multiple factors such as affordability, availability and attitude of both providers and patients. The closest patient providers across the globe are nurses whose perception and attitude largely influence the uptake of new health care services. This is particularly relevant in a developing country with several socio-cultural taboos and restrictions. In this study, the proportion of nurses who were knowledgeable and aware about assisted conception was very high (94.9%), and almost three-quarters of them (74%) had a positive attitude towards the procedure. The attitude of these nurses was significantly associated with their knowledge about the procedures involved in assisted conception. ( $p < 0.05$ ) This underscores the value of education and familiarity with emerging trends especially in reproductive health which constitutes an important aspect of family life. Various programs are available in many teaching hospitals including the University College Hospital, Ibadan, where continuous medical education, training the trainers and skill upgrade courses are provided to keep health workers updated about global best practices. Age, marital status, religion, and years of service were not significantly associated with a positive attitude.

The mean age of respondents in this study was  $41.47 \pm 9.24$  years and was significantly higher than the mean age of  $35.6 \pm 9.51$  years from a similar study in Nigeria.<sup>14</sup> This finding may not be unrelated to the continuous exodus of younger nurses for greener pastures leaving behind the older and more socially stable senior colleagues. The impact of brain-drain if unchecked may begin to reverse the gains of years of investment in health and training. Several studies have appraised the impact of brain drain in Nigeria and opined that brain drain is a consequence of multiple

factors such as political leadership, career opportunities, remuneration and adverse environmental factors<sup>15,16</sup>. Suggestions to mitigate this current reality include the provision of quality education and training, competitive remuneration and job opportunities that promote skills development and innovation<sup>16</sup>. It is therefore imperative that measures aimed at retaining health workers particularly nurses are instituted in Nigeria, particularly in tertiary health institutions to reverse this trend. This study, though hospital based and limited in size, provides some insight into the perception of nurses across various medical disciplines about ART.

## CONCLUSION

The attitude of health workers towards ART, especially in a culturally restrictive society, influences the role they play in encouraging infertile couples seeking advanced fertility care. With the establishment of the in-vitro-fertilization centre at the University College Hospital, Ibadan, there has been an upsurge in its uptake, shifting the paradigm of care towards advanced fertility management. Nurses at the University College Hospital, Ibadan, play a pivotal role in ensuring that the right information is disseminated to the infertile couple and in this study, their understanding of the subject matter was good, and manifested in their supportive attitude towards assisted conception.

### Conflict of Interest Statement

The authors affirm that they have no conflict of interests to declare.

## REFERENCES

1. World Health Organization (2024). Infertility: Available at: <https://www.who.int/news-room/fact-sheets/detail/infertility>
2. **Adesiyun AG**, Ameh N, Avidime S, Muazu A. Awareness and perception of assisted reproductive technology practice amongst women with infertility in Northern Nigeria. *Open J Obstet Gynecol* 2011; 1:148-4.
3. **Dönmez ÇÇ**, Emül TG. The knowledge and attitudes of nursing students' infertility and determination of factors affecting these variables. *Ordu Üniversitesi Hemşirelik Çalışmaları Dergisi*. 4(3), 375-381.
4. **Araoye MO**. Epidemiology of infertility: social problems of the infertile couples. *West Afr J Med*. 2003 Jun; 22(2):190-6.
5. **van Balen F**, Bos HM. The social and cultural consequences of being childless in poor-resource areas. *Facts Views Vis Obgyn*. 2009;1(2):106-121.
6. **Malina A**, Pooley JA. Psychological consequences of IVF fertilization – Review of research. *Ann Agric Environ Med*. 2017; 24(4): 554–558.

7. **Mamo L.** Queering the fertility clinic. *J Med Humanit.* 2013 Jun;34(2):227-239.
8. **Mishra K,** Dubey A. Indian women's perspectives on reproduction and childlessness: Narrative analysis. *Int J Hum Soc Sci* 2014;4:464-452
9. **Obajimi G.O,** Esan O, Ogunkinle B, N. Depression and anxiety disorders amongst a cohort of infertile women attending an in-vitro-fertilization clinic in southwestern Nigeria. *Med J Zambia* 2019, 46 (3): 192 – 196.
10. **Podolska M,** Bidzan M. Infertility as a psychological problem. *Ginek Pol* 2011; 82: 44–49.
11. **Karaca Aysel,** and Gul Unsal. “The effects of infertility on women's mental health and role of psychiatric nursing” *Journal of Psychiatric Nursing*, vol. 3, no. 2, Dec. 2012, 80-85
12. **Macer DR.** Perception of risks and benefits of in vitro fertilization, genetic engineering and biotechnology. *Soc Sci Med.* 1994 Jan;38(1):23-33.
13. **Ockhuijsen HD,** Gamel CJ, van den Hoogen A, Macklon NS. Integrating preconceptional care into an IVF programme. *J Adv Nurs.* 2012 May; 68(5):1156-1165.
14. **Obioha JA,** Ikechebelu JI, Eleje Gu, *et al.* Knowledge, and attitude of Nurses towards *in-vitro* fertilization: A prospective cohort study. *Gynecol Cases Rev.* 2014;1(1):005
15. **Anetoh BC,** Onwudinjo VG. Emigration and the problem of brain drain in Nigeria: a philosophical evaluation. *Journal of African Studies and Sustainable Development.* 2020 Apr 12;3(1).
16. **Okafor C,** Chimereze C. Brain drain among Nigerian nurses: Implications to the migrating nurse and the home country. *International Journal of Research and Scientific Innovation.* 2020;7(1): 15-21.

#### Copyright Statement

The copyright of this manuscript is vested in this journal and in its publisher, the Association of Resident Doctors, University College Hospital, Ibadan.

This article is licensed under the Creative Commons Attribution-Non Commercial License 3.0 (CC BY-NC 3.0).