
KNOWLEDGE, ATTITUDE AND PRACTICE TOWARD'S CHILD ADOPTION AMONGST WOMEN IN CALABAR, CROSS RIVER STATE

Effiom, Bassey Ekeng (Ph.D), Mercy, Lawrence Ekwok, Prof. Elizabeth, G. Akpama

Department of Guidance and Counseling University of Calabar,
Calabar, Nigeria.

ABSTRACT: *Having a child is important among married women in Calabar. Among married women, infertility is the main factor causing childlessness. Child adoption provides an alternative for married women to have children. Thus, the purpose of the study was to explore the perceived barriers of child adoption among women with infertility. The objective is to assess the knowledge, attitude and practice of women of reproductive age towards child adoption in Calabar, Cross River State, Nigeria. The study used an exploratory qualitative and quantitative approach to understand the knowledge, attitude and practices towards possible child adoption in the study area. The study was conducted among 200 women attending fertility clinic in General hospital, Calabar in Cross River state. Semi structured interview questionnaire was administered to 200 consecutive infertile female patients (between February and September, 2018) at the General Hospital Calabar who agreed to participate in the study after counseling. Participants were purposively recruited and data collected by individual face-to-face in-depth interviews. The data generated was analyzed by simple percentages, descriptive statistics and simple correlation analysis at 5% probability level. Knowledge of child adoption was relatively very high (92.6%) but out of which only 2.0% of the respondents had adopted a child while 34.5% were willing to adopt in the near future if their condition of childlessness persist. The correlation coefficient for child adoption was significantly higher, positive and strong in patients are childless and who had suffered infertility for more than 6 years ($r=0.92$, $P<0.001$), those with secondary/ tertiary education ($r=0.90$, $P<0.001$) and in those with no living child ($r=0.89$, $P<0.001$) compared to the non-significant correlation coefficient of those whose aim of adoption was to satisfy their need for domestic chores ($r = 0.21$; $P>0.001$) and those whose need a child for errand ($r -0.32$; $P>0.001$). Majority of the respondents (77.3%) were not willing to adopt a child and their main reason was that child adoption would not allow them fulfill their conception role as women in addition to the long procedures involve in child adoption. Knowledge of child adoption was high among the respondents but the willingness to adopt a child was low due to the fact that it would not allow them fulfill their conception role as women. There is need to educate and encourage infertile patients to utilize this cheaper and available option of managing infertility. There is also the need for public education and special counselling session for husbands and other family members on child adoption as an alternative solution for infertility and childlessness. The success of marriages has largely been premeditated on child bearing in most African society and oftentimes women are at the receiving end of childlessness with possible psychological and physical trauma.*

KEYWORDS: knowledge, attitude, practice, child adoption, women , Calabar, Cross River State

INTRODUCTION

Infertility is a reproductive disorder and a global public health problem that can affect both men and women and has no predilection for national, ethnic, racial, and religious background [1]. Infertility is the inability to attain a successful pregnancy after at least 12 months of unprotected or more of appropriate timed unprotected intercourse or therapeutic donor insemination [2]. Infertility is a global problem affecting between 50 million and 80 million people translating into 8% to 12% of couples worldwide [3]. In Africa, studies suggest that the burden of infertility is about 30–40% [3]. The WHO has classified infertility into two categories: primary and secondary. Primary infertility is the inability to bear a child in a couple who have never had a child after more than one year of unprotected intercourse, while secondary infertility is the failure to bear a child which can be a result of being unable to become pregnant or carry a pregnancy to live birth after having a child [4].

In a typical African society, people normally start a family by getting married and giving birth to their own children. Childbirth is an expectation of marriage; hence couple who are unable to achieve this come under intense pressure to conceive and this increases their anxiety significantly regardless of their educational or economic status [5, 6]. For women with infertility who are of rural background and lower income status, finding medical help could be challenging. Child adoption could therefore be an alternative for women with infertility who desire children [7, 8].

Child adoption started as a way to preserve family lineage, secure inheritance, and forge alliances but has progressively evolved into a process for meeting the needs of adults who need children of their own [9]. In Calabar, there are two forms of child adoption which include customary adoption and formal adoption. Customary adoption is an informal transfer of the care of a child to another relative. In the formal adoption process, legal requirements must be met and a formal procedure followed. The requirements and process of formal adoption are contained in the 1998 Children's Act [10]. In some situations health personal department encourages people to adopt children that are abandoned in hospitals. Children adopted this way are not captured in the government statistics making it quite difficult report accurately on the rates of child in Calabar [11].

One key benefit that comes with child adoption is the provision of an alternative for having children by couples suffering from infertility [12–14]. Child adoption could bring joy and fulfillment to couples with infertility [15]. In other African societies, most issues that will lead to child adoption include infertility and desire for heir for a lineage [14].

In Africa, child adoption is gradually becoming known in most countries but culture is posing a seeming setback to its acceptability and practice among various ethnic groups [16–18]. Aside from

cultural implications, studies have also pointed to other militating factors against child adoption such as misconceptions, stigmatization, financial burden, and procedural bottlenecks [12, 19].

Certain deeply ingrained traditional beliefs tend to influence societal attitude towards child adoption [16]. For instance, in the Yoruba land of South-Western Nigeria the belief that “ori omo lo npe omo wa’ye” which means an adopted child usually attracts yet to be born children to come to the physical realm could positively influence the practice of child adoption [8]. In some communities, both the adopted child and the adoptive parents are stigmatized because the cultural belief considers the child as a second best and the parents as being unrelated to the child genetically [15, 20, 21].

Cost of child adoption and the waiting period are some of the notable challenges of formal child adoption in Calabar. In some cases prospective adoptive parents will have to wait for up to 6years [11]. Though child adoption can help meet the need of couples for a child, there is dearth of studies on the associated factors such as knowledge, attitude and practice on the uptake of child adoption in Calabar. The purpose of this study was therefore to explore the barriers of child adoption among women of child bearing age suffering from infertility.

METHODOLOGY

Study design

A qualitative and quantitative approach helps in revealing subjective realities and truths from the respondent women [22]. The study used an exploratory qualitative approach to explore the perceived barriers of child adoption. This allowed the researchers to follow up on emerging views on the knowledge, attitude and perceived barriers (limiting practices) to child adoption in the study area.

Study site

The study was carried out in a General Hospital, Calabar, Cross River State. The hospital has a permanent obstetrician/gynaecologist and operates a fertility clinic which enabled the researchers to have access to women with infertility. Ethical clearance for a broader study from which this paper is drawn was obtained from Ethics Review Board of Noguchi Memorial Institute for Medical Research, University of Calabar

Sample population and techniques of sampling respondents

Selection of participants in qualitative research is normally based on unique knowledge, experiences, or views of the participants on the subject under investigation and consideration [23]. The study targeted women of child bearing age who have been married for at least a year, engaged in unprotected sexual intercourse, and without using contraceptives are unable to become pregnant. They were also women who could speak Efik, Ibibio and English language. Purposive sampling

technique was used to select participants who met the inclusion criteria. Data saturation (a point at which no new information emerges from the interviews) was reached by the time 200 women were interviewed.

Instrument for data Collection

Data were collected using a semi structured interview questionnaire which was developed by the researchers based on the objective of the study. The participants were asked questions such as

1. What do you know about child adoption?
2. How long have you been childless after marriage and having unprotected sex?
3. Would you be willing to adopt a child if your are given the opportunity?
4. What is you regards for a woman who adopts a child?
5. Is child adoption an accepted norm in your husband's family in the case of childlessness?

Data collection

The researchers obtained formal ethical clearance permit from the authorities of the State Ministry of Health under which the General Hospital operates. Two nurses working in the consulting room of the obstetrician/gynaecologist were first contacted who explained the study to participants and before referring them to the researchers for further interview in a separate room in the hospital. The participants were then further screened to ensure that they met the inclusion criteria and once they voluntarily accept to participate, the time and date was scheduled for data collection. Depending on participants' preference, some interviews were done on the same day of contacting the participants while others were on subsequent visits. Data were collected between February and September, 2018, in an office in the hospital. Oral was also used to inteprete Each interview lasted 35-45 minutes and with participants' permission the interviews were audio-recorded and field notes taken. The interviews were conducted face to face in Efik,, Ibibio, or English Language. The interviews that were done in Efik and Ibibio were transcribed in English based on the meaning of the statements to enable the non-literate patients understand. The transcripts were discussed with an expert in Efik and Ibibio languages and confidentiality was ensured in the process. The data generated was analyzed by simple percentages, descriptive statistics and simple correlation analysis at 5% probability level.

RESULTS

Two hundred infertile women were interviewed within the period of study. The general characteristics of the respondents are shown in table i. one hundred and ten respondents (55%) were of Ibibio, 50 (25%) were efiks ethnic group and the remaining 20 were other ethnicity. All of the respondents (100%) were christians. Forty respondents (20%) had no formal education while 50 (25%), 50 (25.0%) and 60 (30%) had primary, secondary and tertiary education respectively. Majority of them 190 (95%) had no living child. Their mean age was 38.9 ± 0.47 years

while their average duration of infertility was 6.5 ± 0.6 . The results of correlation analysis for child adoption was significantly higher, positive and strong in patients are childless and who had suffered infertility for more than 6 years ($r=0.92$, $P<0.001$), those with secondary/ tertiary education ($r=0.90$, $P<0.001$) and in those with no living child ($r=0.89$, $P<0.001$) compared to the non-significant correlation coefficient of those whose aim of adoption was to satisfy their need for domestic chores ($r = 0.21$; $P>0.001$) and those whose need a child for errand ($r -0.32$; $P>0.001$). Majority of the respondents (77.3%) were not willing to adopt a child and their main reason was that child adoption would not allow them fulfill their conception role as women in addition to the long procedures involve in child adoption.

DISCUSSION

The study explored the knowledge, attitude and perceived barriers of child adoption as an alternative solution for infertility. The study found that women considered a decision to adopt a child as a very important one that centres on the approval of the husband. In Calabar ethnic society, the man is considered the head of his nuclear family and takes all the important decisions on behalf of the family.

Considering the high prevalence of infertility in Nigeria and other developing countries, its psychosocial consequences and lack of affordable and effective treatment, the need for an alternative treatment option like child adoption cannot be over-emphasized.

The study finding suggests that polygamy is used by husbands in an attempt to get biological children rather than seeking treatment together with the first wife. This concurs with the study findings that women with infertility are most likely to find themselves in polygamous marriages because their husbands are encouraged by relatives to marry second wives so as to produce children for continuity of the family [24]. Perceived negative reaction of husbands towards child adoption was based on the desire or presence of a second wife and this can be connected to the religious background of the couple.

Delivering a child in every marriage is often seen as an important achievement and a sign that the marital relationship is full of blessings and thus psychologically satisfying to the couples. The women indicated that there was a psychological dichotomy between having a biological child and getting a child by adoption.

In Europe and northern America, high rates of contraceptive usage and liberalized abortion laws have reduced markedly the number of babies available for adoption hence the resort to international adoption [25, 26,]. In contrast, the low contraceptive usage and restrictive abortion laws in Africa and Asia make many babies available for adoption [27, 28, 29]. A study in River state in southern Nigeria showed high patterns of marital adjustment in communication, cohesion, consensus and affectionate expression among couples practicing child adoption [30]. However, previous studies in the south-east and south-west Nigeria revealed low willingness to child adoption [31, 32].

In the present study the willingness to child adoption was very low (34.5%) despite high knowledge of it (74.8%). The main reasons for this were that child adoption would not allow them fulfill their conception role as women, their husbands would not support it and their mother and father-in-laws would oppose it. In south-west Nigeria the main barriers to child adoption were that it was uncommon in their culture and it did not remove the stigma of being barren while in south-east the major reasons were that it was not considered a solution to their infertility and was psychologically unacceptable [33, 34]. It is therefore evident that psycho-social factors were responsible for negative attitude towards child adoption in north-west Nigeria as in southern Nigeria. In addition, self-esteem (in the form of 'I want to have my own child') which is the commonest psychological factor in this study that is responsible for negative attitude towards child adoption has been observed by previous authors. [35, 36] Religion seemed not to play an important role in influencing attitude towards child adoption as the negative attitude observed in a Moslem dominated society of the current study was also noticed in predominantly Christian community of the previous studies. This study also showed that willingness to child adoption was significantly commoner among respondents whose duration of infertility was more than 5 years, those who had at least secondary education and those with no living child. Ezeugwu et al in Enugu had similar experience. In Pakistan, the main factor favouring positive attitude to child adoption was 'Tokta' i.e. the belief that when one adopts a child she stands a better chance of having her own baby. Challenges in child adoption include controversial ethical issues such as physical health, mental health, racial/ethnic identity issues, openness versus secrecy in the adoption process and parenting problems. Some of these issues can be resolved through clearly spelt out legislation guiding child adoption processes.

This finding concurs with that of a study in Iran which cited psychological dissatisfaction as a militating factor against child adoption [37]. Another important psychological dissatisfaction reported in our study was that some women thought that adopting a child will create an impression that you have lost the struggle to get your own child. This stance seems to agree with the Christian maxim that "with God all things are possible" which inspire followers that they should never give up in any situation in life because God will answer them in due course. This urges them on to continue struggling for their own children rather than going in for child adoption.

The study findings show that there is high premium on biological parenting. In the Calabar ethnic society a family is defined by how the members are related by blood or through marriage. A person who is not connected to a family by blood or marriage is there not considered a member of the family. The participants were generally aware of this stand and thought that one will have problems if you try to bring adopted child into family. They further indicated that the child will not enjoy any sense of belonging in the family and will be treated as an alien. Similarly, a study in South-Eastern Nigeria established that child adoption was not accepted there because the culture does not create room for the adopted child to step into the shoes of adoptive parents as if he is a biological child [38].

The study findings suggest that women are blamed for the childlessness situation in the marriage putting them under pressure to make efforts to ensure that they get pregnant. This position of the family could result in the family urging the man to marry another wife if the woman fails to get pregnant. The assumption that the woman is responsible for childlessness shows that there is little literacy on the causes of infertility and the fact that it could affect men as well. Another evidence of the blame of childlessness being put on the woman was by the fact that the fertility clinic was attended by only women. This is in consonance with the study finding that women are those who mostly report at fertility centres and undergo most of the invasive procedures making them bear greater part of the psychological distress associated with infertility [39].

The participants indicated that adopting a child was a major decision that could receive unpredictable family influence. They pointed out that the decision to adopt a child will not rest entirely on their husbands but the family as well. In the Calabar context, the coming of a child into a family is often regarded as an important event; hence child adoption which makes the child a permanent member of the family will demand consent from the family members. The husband and wife are thus not considered independent to take the decision to adopt a child. Sami and Ali [34] reported that the decision to consider child adoption does not only depend on husbands but depends on other family members as well. In typical Calabar tradition, child upbringing is considered a responsibility of the entire family and hence the need to consult and agree with family before child adoption.

The findings indicated that an adopted child will not be treated well but will rather suffer discrimination. Participants of the Efik tribe stated that the child will suffer a lot of insults and may even be referred to as “idet” (a person without known biological parents) or “osu” (bastard). Similarly, the unacceptability of child adoption in Eastern Nigeria is influenced by the indigenous ideology of “onyebiaraabia” which means “the stranger” [16]. In an attempt to protect the child from being insulted, the participants viewed that the adoptive parents will constantly have problems with other family or community members.

In Eastern Nigeria society, the property of a man is traditionally inherited by the first born male who then shares with his male siblings. The study findings indicate that the adopted child will not be allowed to inherit or share the property of the adoptive parents. The participants find this denial of inheritance so humiliating that they will rather stay away from adopting a child who will obviously suffer in the future.

CONCLUSION

This study suggested a number of barriers to child adoption but central among them is the high premium placed on biological parenting. The preference for a biological child is influenced by cultural and religious background of the people. Though women suffering infertility go through a lot in an attempt to find a solution, the decision to adopt a child largely depends on the husband

and his family. Awareness creation on the viability of child adoption as an alternative solution for infertility should therefore involve husbands, key family members, and religious leaders in the community.

Thus, the study has shown that willingness of women with infertility to child adoption is low in Calabar Cross River state, Nigeria and is mostly due to social regards and psychological impact on the adoptive parent with is also centers around stigmatization. Reason. It also emphasizes the need to counsel, educate couples and encourage them to utilize this window in the cases of intractable infertility.

Also, the study findings indicate that women in childless marriages are blamed for the situation. Women are under pressure to find a solution to the childless situation while their husbands are encouraged to marry again to increase their chances of getting a child. This shows lack of knowledge on causes of infertility. There is the need to educate the public on the causes of infertility and to let people understand that infertility could occur in any of the genders.

Limitations to the study

The study is the first to explore the barriers of child adoption as an alternative solution for infertility in Calabar. Hence, other studies can be done to gain a holistic picture of the barriers and what can be done to facilitate the utilisation of child adoption. (ii) The study did not include husbands of the women so that the ideas on barriers could represent both husbands and wives as an entity. (iii) The small size of the study participants does not make the study findings generalizable to other settings in Calabar.

References

1. Aghanwa H. S., Dare F. O. and Ogunniyi S. O (1999). Socio- demographic factors in mental disorders associated with infertility in Nigeria. *Journal of Psychosomatic Research* 46(2): 117-123.
2. Ali T. S. and Sami N (2007). Adoption practices among couples with secondary infertility in Karachi: a triangulation study design. *J. Pak. Med. Ass.* 57: 55-60.
3. Anderson, R (2007) Thematic Content Analysis (TCA) 1 Descriptive Presentation of Qualitative Data.
4. Araoye M. O (2003). Epidemiology of infertility social problems of infertile couples. *West Afr. J. Med.*; 22(2): 190-6.
5. Avidime, S N. Ameh, A. Adesiyun (2013) Knowledge and attitude towards child adoption among women in Zaria, northern Nigeria," *Nigerian Medical Journal* 54(4): 261–264
6. Bokaie, M T. Farajkhoda, B. Enjezab, P. Heidari, and M. K. Zarchi (2012) Barriers of child adoption in infertile couples: Iranian's views. *Iranian Journal of Reproductive Medicine*, 10 (5): 429–434.
7. Cederblad M., Hook B., Irhammr M. and Mercke A. M (1999). Mental health in international adoptees as teenagers and young adults : an epidemiological study. *Journal of Child Psychology and Psychiatry and Allied Discipline* 40: 1239-48.

8. Chandra A., Abma J., Maza P. and Bachrach M (1999). Adoption, adoption seeking and relinquishment for adoption in United States. *Advances in Data* 306: 1-16.
9. Dimkpa D. I (2010). Marital adjustment roles of couples practicing child adoption. *European Journal of Social Sciences* 13(2): 194-200.
10. Eke, C.B, H. A. Obu, J. M. Chinawa, G. N. Adimora, and I. E. Obi, (2014) Perception of child adoption among parents/care-givers of children attending pediatric outpatients' clinics in Enugu, South East, Nigeria, *Nigerian Journal of Clinical Practice*, 17(2)188–195,
11. Emuvayen E. E. Infertility. In: Ikpeze O. C (2009). (ed.) *Fundamentals of Obstetrics and Gynaecology*, AfricanaFirst Publishers PLC 271-8.
12. Ezeugwu F. O., Obi, S. N. and Onah H. E (2002). Knowledge, attitude and practice of child adoption among infertile Nigerian women. *J. Obstet. Gynaecol.* 22(2): 211-6.
13. Ezeilo J. Legal constraints to adolescent's sexual and reproductive rights in Nigeria. *Women's Health and Action Research Centre*, Benin City, Nigeria 1999: 9-10.
14. Friendlander M. L (1999). Ethnic identity development of internationally adopted children and adolescents :implication for family therapists. *Journal of Marital Family Therapy*; 25: 43-60.
15. Foluso, O and U. Chinomso (2014) A phenomenological study to assess the opinions of infertile women regarding child adoption in south-western Nigeria, *IOSR Journal of Nursing and Health Science* 3(3): 26–34.
16. Calabar: Act No. 560 of 1998 Children's Act, National Legislative, 1998.
17. Giwa-Osagie O.F (2004). The need for infertility services in the developing world: WHO point of view. *Gynaecol. Obstet. Invest.* 57(1): 58.
18. Grove, S.K; N. Burns, and J. R. Gray (2013) *The Practice of Nursing Research: Appraisal, Synthesis and Generation of Evidence*, Elsevier Saunders, St. Louis, MO, USA, 7th edition.
19. Guba, G.U (1981) Criteria for assessing truthworthiness of naturalistic inquiries,” *Educational Communication and Technology Journal*, 29(2):75–91,
20. Gurunath, S, Z. Pandian, R. A. Anderson, and S. Bhattacharya (2011) Defining infertility-a systematic review of prevalence studies, *Human Reproduction Update*, 17(5), 575–588:
21. Howard, J.A, S. L. Smith, and S. D. Ryan (2014) A comparative study of child welfare adoptions with other types of adopted children and birth children, *Adoption Quarterly*, 37–41.
22. Inhorn, M.C and P. Patrizio (2016) Infertility around the globe: new thinking on gender, reproductive technologies and global movements in the 21st century, *Human Reproduction Update* 21(4): 411–426.
23. Ishizawa, H and K. Kubo, Factors affecting adoption decisions: child and parental characteristics, *Journal of Family Issues* 35(5): 627–653, 2013.
24. Jajoo, S. S and N. U. Chandak (2013) Evaluation and Management of Cases of Infertility in a Limited Resource Rural Setup Aims.
25. Lee J. S., and Twaite J. A (1997). Open adoption and adoptive mothers: attitude towards birth mothers, adopted children and parenting. *American Journal of Ortho-Psychiatry* 67: 576-84.
26. Mayan, M.J (2009) An introduction to qualitative methods: a training module for students and professionals, *International Institute for Qualitative Research*.
27. Miller L. C. and Henrie N. W. Health of Children adopted from China. *Paediatrics* 2000; 105: 76.

28. Munhall, P.L (2012) *Nursing Research: A Qualitative Perspective*, Jones & Barlett, Sudbury, MA, USA, 5th edition, Nursing research: A qualitative perspective, Jones Barlett.
29. Morse, J.M; M. Barrett, M. Mayan, K. Olson, and J. Spiers (2002) Verification strategies for establishing reliability and validity in qualitative research, *International Journal of Qualitative Methods*,1(2) 1–19.
30. Murphy, F. J and J. Yelder(2010) Establishing rigour in qualitative radiography research, *Radiography*, 16(1):62–67.
31. Nachinab, G.T; S. E. Donkor, and F. Naab (2016), Understanding the threats of infertility in rural Northern Calabar, *Numid Horizon: International Journal of Nursing and Midwifery* 1: 1–10
32. Nguefack, C.T; C. Ourtching, H. E. Gregory, and E. B. Priso (2014) Knowledge, Attitudes and Practices of Infertile Women on Child Adoption in Douala (Cameroon).
33. Nwaoga, C.T (2013) Socio - religious implications of child adoption in Igboland South Eastern Nigeria, *Mediterranean Journal of Social Sciences*,4(13):705–710.
34. Obisesan K. A., Adeyemo A. A. and Fakokunde B. O (1998) Awareness and use of family planning methods among married women in Ibadan, Nigeria. *East African Medical Journal* 75: 135-8
35. Ojelabi, P. E. Osamor, and B. E. Owumi (2015) Policies and practices of child adoption in nigeria?: a review paper, *Mediterranean Journal of Social Sciences*, 6(1):75–81.
36. Okonofua F. Infertility in sub-Saharan Africa. In: Okonofua F. and Odunsi K .(ed.s) *Contemporary Obstetrics and Gynaecology for Developing Countries*, Women Health and Action Research Centre, Benin Nigeria 2003:128-56.
37. Okonofua F.E., Harris D., Odebiyi A (1997). The social meaning of infertility in south-west Nigeria. *Health Transition Review* 7: 205-20.
38. Okunlola M. A., Adebayo O. J., Odukogbe A. A., Morhason-Bello I. O. and Owonikoko K.M (2005). Assessment of tubal factor contribution to female infertility in a low resource setting (south-west Nigeria): hysterosal-pingography vs laparoscopy. *J. Obstet. Gynaecol.* 25(8): 803-4.
39. Okonofua F.E (1996). The case against new reproductive technologies in developing countries. *Br. J. Obstet. Gynaecol.* 103(10): 957-62.
40. Oladokun A., Arulogun O., Oladokun R., Morhason-Bello I. O. and Bamgboye E. A (2009). Acceptability of child adoption as a management option for infertility in Nigeria: evidence from focus group discussions. *Afr. J. Rep. Health* 13(1): 79-91.
41. Omosun, A.O O. Kofoworola, H. Idi-araba, and A. Omosun (2011) Knowledge , attitude and practice towards child adoption amongst women attending infertility clinics in Lagos State , Nigeria, *African Journal of Primary Health Care & Family Medicine*,18(2): 1–8.
42. Omoaregba, J.O; B. O. James, A. O. Lawani, O. Morakinyo, and O. S. Olotu (2011) Psychosocial characteristics of female infertility in a tertiary health institution in Nigeria, *Annals of African Medicine*, 10(1),19–24.
43. Oladokun, A, O. Arulogun, and R. Oladokun (2010) Attitude of infertile women to child adoption in Nigeria,” *Nigerian Journal of Physiological Sciences* 25(1):47–49.
44. Petty, N,J; O. P. Thomson, and G. Stew (2012) Ready for a paradigm shift? Part 2: Introducing qualitative research methodologies and methods,” *Manual Therapy*, 17(5): 378–384.

45. Polit, D and B. Hungler, Nursing Research: Principle and Method, Lippincott Company, Philadelphia, USA, 6th edition, 1999.
46. Practice Committee of American Society for Reproductive Medicine (2013), Definitions of infertility and recurrent pregnancy loss: a committee opinion, Fertility and Sterility, 99(10): 63-69.
47. Review Tribunal, Migration Review Tribunal Research Response on Calabar. Australia, 2009, <https://www.justice.gov/sites/default/files/eoir/legacy/2014/09/25/formaladoption-legalrequirements.pdf>.
48. Sami, N and T. S. Ali (2012) Perceptions and experiences of women in karachi , pakistan regarding secondary infertility: results from a community-based qualitative study, Obstetrics and Gynecology International, 3(2): 20-27.
49. Shannon, L.C (2010) National adoption month: 10 common misconceptions about adoption.
50. Steptoe P. C. and Edwards R. G (1978). Birth after re-implantation of a human embryo. Lancet2: 366 - 369.
51. Tabong,T A and P. B. Adongo (2013) Infertility and childlessness: a qualitative study of the experiences of infertile couples in Northern Calabar, BMC Pregnancy and Childbirth 13(1) 72-77.
52. Taiwo A. O. and Adejuwon G. A (2005). Impact of self-esteem, locus control and gender on attitude towards child adoption and adoptive parents among some adults in Ibadan metropolis. IFE Psychologia 13(2): 1-4.
53. Usineau, T.M and A. D. Domar (2007) Psychological impact of infertility,” Best Practice & Research Clinical Obstetrics & Gynaecology, 21(2): 293–308.
54. World Health Organisation, (2014), Gender and genetics, WHO, Infertility definitions and terminology, World Health Organisation, Geneva, 2016.
55. Zaki M (2000). Parental competency assessment: approaches and issues. Medicine and Law 19: 1-5.