Contents lists available at www.innovativejournal.in

INTERNATIONAL JOURNAL OF NURSING DIDACTICS

homepage: http://innovativejournal.in/ijnd/index.php/ijnd

IJND
ISSN: 2231-5454

The Burden of Infertility in Nigeria; the way forward.

[*1]Ujaddughe M. O., Ujaddughe M. E. and [3]Ehisuoria M. L. O.

[*1]Department of Anatomy, College of Medicine, Ambrose Alli University, Ekpoma, Nigeria
[2]Department of Nursing Services, Irrua Specialist Teaching Hospital, Irrua, Nigeria
[*1]Department of Nursing Sciences, College of Medicine, Ambrose Alli University, Ekpoma, Nigeria
E-Mail: docsotie@yahoo.com

DOI: http://dx.doi.org/10.15520/ijnd.2015.vol5.iss11.113.07-09

Abstract: Having a population of more than 150 million and with over 370 ethnics groups, Nigeria is considered the most populated country in the African continent. However in Nigeria, there seems to be an increase in the burden of Infertility as reported from demographic surveys, epidemiological surveys and through clinical observations. A survey by the Department of Health Services for the period 1994-2000 put the prevalence rate of primary infertility at 22.7% in 15-49-year old women and 7.1% in 25-49-year-olds thus constituting the major burden on clinical service delivery in the country. The World Health Organization estimates that up to 60 percent of infertility cases in Nigeria are attributive to genital tract infections and advance maternal age. The way forward in ameliorating the increasing burden of infertility depends on proper management of the infertile couple through clinical counseling, and taking advantage of current available technological trends for infertility control such as Artificial Insemination and *In Vitro* Fertilization.

INTRODUCTION

Infertility is a global problem particularly in developing countries and a common gynecological consultation in most Nigerian clinics (Makar *et al*., 2011). According to a report it is estimated that one in three couples is affected by Infertility in countries within Central and West Africa (Maheshwari, 2008). The burden of Infertility has increased by 4% since the 1980s, mostly from problems with fecundity (the rate and ability to produce an offspring) due to an increase in age (Gurunath *et al*., 2011). The World Health Organization (2010), estimates that up to 60 percent of infertility cases in Africa are attributive to genital tract infections in males and females as compared to other regions of the world with about 30% of the issues involved with infertility due to the man, 30% to the woman, and 5% resulting from complications with both partners, leaving 25% causes unexplained (Cooper, 2010). Women who are fertile experience a natural period of fertility before and during ovulation, and they are naturally infertile during the rest of the menstrual cycle (Lis *et al*., 2015). Infertility may have profound psychological effects as partners may become more anxious to conceive thus increasing sexual dysfunction (Ljubin *et al*., 2014).

Famous for her huge population of more than 150 million, Nigeria has the highest population in the African continent with diverse cultures and three major ethnic groups namely: the Hausa-Fulani, the Yorubas and the Igbos with several other minority ethnic groups (Obono, 2003). Also known for its huge land mass, Nigeria is located in West Africa and bordered by Benin to the west, Chad and Cameroon to the east, and Niger in the north. Its coast in the south lies on the Gulf of Guinea in the Atlantic Ocean (Ake, 1996). It comprises 36 states and a Federal Capital Territory (Williams, 2008). Nigeria became a formally independent federation in 1960 after an initial merging of the Southern Nigeria Protectorate and Northern Nigeria Protectorate in 1914 by the British colonial rule (Ake, 1996).

However, there exist controversies on the definition cum diagnosis of infertility, The World Health Organization (2013) sees infertility as a disease of the reproductive system while the United States National reproductive endocrinologists society view infertility as the inability to conceive within reproductive age in the absence of contraceptives. This seminar is therefore aimed at accessing the burden of infertility in Nigeria.

THE BURDEN OF INFERTILITY

Infertility constitutes a major burden on Clinical service delivery in the Nigeria, being more than 50% of gynecological caseloads and constituting over 80% of laparoscopic investigations (Isawumi, 2012).

Although there are scarcity of data as regards the burden of infertility in Nigeria, Institutional-based studies by Abiodun *et al* (2007) puts Institutional-based incidence of infertility reported in some parts of Nigeria are 4.0%, 15.4%, and 48.1% from Ilorin (North central), Abakaliki (South east), and Oshogbo (South west), respectively. However survey by the Department of Health Services (DHS) for the period 1994-2000 reported a prevalence rate of primary infertility of 22.7% in 15-49-year old women and 7.1% in 25-49-year-olds (Okonofua, 2005).

In many cultures in Nigeria the inability to conceive bears a stigma (Okonofua, 2005). In closed social groups, a degree of rejection (or a sense of being rejected by the couple) may cause considerable anxiety and disappointment. Some respond by actively avoiding the issue altogether; middle-class men are the most likely to respond in this way (Gharagozloo and Aitken, 2011).

The African society places passionate premium on procreation in any family setting (Okonofua, 2005). The woman's place in marriage remains precarious till confirmed through child bearing. In the society, a woman has to prove her womanhood through motherhood (Seino *et al*., 2002). The man also has to confirm his manhood in same fashion. Children are held as sources of pride, strength and economic fortune for the family, a man's wealth and strength being equated to his progeny. Infertility therefore entails a loss of something even though previously inexistent is thought to be tangible and therefore impacts negatively on a couple's mental and social wellbeing (Nili *et al*., 2011).

Infertility constitutes a crisis in the affected African family. The attendant emotional, psychological, cultural and social burdens drain the couple of self belief and esteem (Ljubin-Sternak and Mestrovic, 2014). The unsolicited and often inpatient societal demands and expectations place on such couples unimaginable pressure and tension. They may become isolated and neglected consequent upon the attendant social stigmatization (Ljubin-Sternak and Mestrovic, 2014).

Taken generally, the female is held responsible for virtually all cases of infertility (Okonofua, 2005). The men folk are held as above board. Consequent upon this, the woman is humiliated isolated, derided, abused and rebuffed. Undergoing such life crisis has been the stories of most infertile women in Africa. They go to varying lengths visiting orthodox medical practitioners, herbalists, traditionalists and spiritualists in search of needed reprieve and solution (Isawumi, 2012). While others visit clinics for regular counseling thus compounding more burden in fertility clinics (Isawumi, 2012).

CAUSES OF INFERTILITY

From diagnosis, the causes of male and female infertility are different. Ovulation problems, tubal blockage, advanced maternal age, and uterine problems are most implicated in the cause of female infertility (Makar and Toth, 2002) while Low sperm count, abnormal sperms, obstruction of reproductive duct, trauma, mumps, and long term abuse of alcohol and illicit drug use are the major known causes of male infertility (Obono, 2003). Furthermore, cultural practices such as the female Genital mutilation, polygamy where mating dates are rotated between wives in a polygamous marriage and Child marriages has also has contributed to the problems of infertility in Nigeria (Okonofua, 2005). These practices are carried out ignorantly and as such remain rampant in most Nigerian society, but when infertility problems arises, the psychological trauma is burdened on the woman who ignorantly blamed in most cases (Okonofua, 2005).

MANAGEMENT OF THE INFERTILE COUPLE

Management of the infertile couple encompasses clinical gynecological counseling of couples and taking record of medical histories of the affected individuals. Counseling include Personal hygiene, use of proper techniques for sexual intercourse. Couples are also advised on dietary supplements and management of ovulation to aid conception. In some cases however child adoption is recommended to avoid anxiety related sexual dysfunction.

Currents trends are however available for infertility control these include *In Vitro* Fertilization, Artificial Insemination, Gamete Intra-Fallopian Transfer (GIFT), Zygote Intra-Fallopian Transfer (ZIFT), Intra-Cytoplasmic Sperm Injection (ICSI), and surrogacy.

CONCLUSION

Infertility burden has increased in Nigeria and around the world in recent times and makes-up major cases of gynecological consultations in hospitals. In many cultures in Nigeria the inability to conceive bears a stigma especially on the woman even though infertility can be a problem with either couple. Infertility could be as a result of advance maternal age, tubal blockage and low sperm count while in some cultures infertility can be caused by unhealthy practices such as genital mutilation and Child marriages resulting in underage pregnancies.

Management of infertile couple goes beyond drug and surgical treatment as counseling remains key in alleviating the burden of infertility. However, all hope is not lost for the infertile couple as recent researches such as *In Vitro* Fertilization, Artificial Insemination amongst others are paving the way in reducing the burden of infertility with most of these technologies available in Nigeria.

RECOMMENDATIONS

Infertility is a problem that brings unhappiness to most marriages especially in Africa, therefore to reduce the burden of infertility in our society, the following is thus recommended:

1. Women of reproductive age are advice to marry before the age of 40 so as to avoid infertility due to advance maternal age
2. Unhealthy habits such as smoking and excessive alcohol intake should be avoided by couples who intend to bear a child
3. Proper and regular gynecological examination and counseling is therefore recommended for couples who intend to bear a child
4. Cultural practices such as genital mutilation should be discouraged while also conducting seminars to educate the rural populace of the implications of these practices.
5. Couples who have passed gynecological examinations and certified healthy should take advantage of recent technologies in conception.

REFERENCES

[1]. Abiodun, O.M., Balogun, O.R. and Fawole, A.A. (2007): Aetiology, clinical features and treatment outcome of intrauterine adhesion in Ilorin, Central Nigeria. *West Afr J Med*;26:298-301.

[2]. Ake, C. (1996): Democracy and Development in Africa. *Brookings Institution Press*. p. 48

[3]. Cooper, T.G. (2013): Bulletin: Mother or nothing: The agony of infertility. *Who.int Pub*; 16 (3): 231–45.

[4]. Gharagozloo, P., and Aitken, R.J. (2011): The role of sperm oxidative stress in male infertility and the significance of oral antioxidant therapy. *Hum. Reprod.* 26 (7): 1628–40.

[5]. Gurunath, S., Pandian, Z., Anderson, R.A. and Bhattacharya, S. (2011): Defining infertility--a systematic review of prevalence studies. *Human Reproduction Update* 17 (5): 575–88.

[6]. Isawumi, A.I. (2012) Management of Infertility: A Broad Overview. *IFEMED*, p. Abiodun, O.M., Balogun, O.R. and Fawole, A.A. (2007): Aetiology, clinical features and treatment outcome of intrauterine adhesion in Ilorin, Central Nigeria. *West Afr J Med*; 26:298-301.

[7]. Lis, R., Rowhani-Rahbar, A. and Manhart, L.E. (2015): Mycoplasma genitalium Infection and Female Reproductive Tract Disease: A Meta-Analysis. *J. Clinical Infectious Diseases*; 7 (33): 65–89.

[8]. Ljubin-Sternak, S. and Mestrovic, T. (2014): Review: Clamydia trachonmatis and Genital Mycoplasmias: Pathogens with an Impact on Human Reproductive Health. *Journal of Pathogens*; 18(31):6-70.

[9]. Maheshwari, A. (2008): Human Reproduction text. pp. 538–542.

[10]. Makar, R.S and Toth, T.L (2002): The evaluation of infertility. *Am J Clin Pathol*; 117 (1): 95–103.

[11]. Mark-Kappeler, C.J., Hoyer, P.B. and Devine, P.J. (2011): Xenobiotic effects on ovarian preantral follicles. *Biol. Reprod*; 85 (5): 871–83.

[12]. Nili, H.A., Mozdarani, H. and Pellestor, F. (2011): Impact of DNA damage on the frequency of sperm chromosomal aneuploidy in normal and subfertile men. *Iran. Biomed. J*; 15 (4): 122–9.

[13]. Obono, O. (2003): Life histories of infertile women in Ugep, southern Nigeria. *African Population Studies*; 19(2):63-87.

[14]. Okonofua, F.E. (2005): Female and Male Infertility in Nigeria, (Stockholm, Sweden: Karolinka University Press, p. 9.

[15]. Seino, T., Saito, H., Kaneko, T., Takahashi, T., Kawachiya, S. and Kurachi, H. (2002): Eight-hydroxy-2'-deoxyguanosine in granulosa cells is correlated with the quality of oocytes and embryos in an in vitro fertilization-embryo transfer program. *Fertil. Steril*; 77 (6): 1184–90

[16]. Williams, L. (2008): Nigeria: The Bradt Travel Guide. *Bradt Travel Guides*. p. 26.

[17]. World Health Organization (2010): Bulletin. Mother or nothing: The agony of infertility. WHO; vol 1, pages, 77-953.