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Factors Affecting the Use of In-Vitro Fertilization (IVF) among Married Couples in Anambra State, Nigeria

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Abstract:
There is a high rate of infertility in Nigeria; but solution to the problem is adversely affected by socio-cultural factors. Although there are many treatment options for infertility, recently global focus is on In Vitro Fertilization (IVF). However, the use of In-Vitro Fertilization (IVF) tend to be affected by socio-economic and cultural factors in Anambra state giving rise to unmet need for bio technology in the treatment of infertility in the area. This study thus investigated the factors affecting the use of IVF in the treatment of infertility among married couples in Anambra State, Nigeria. The study is a cross-sectional survey and used both quantitative and qualitative methods .The sample size was 589 married couples aged 18 years and above who were selected using the multi-stage sampling technique made up of cluster, simple random sampling and systematic, sampling techniques. Data were collected using the questionnaire schedule and the Key Informant Interview (KII) Guide. The quantitative data were analysed with descriptive statistics, while thematic content analysis was used in analysing the qualitative data. The findings show that religious beliefs (27.1%), cultural belief/practices (25.4%), and cost of IVF treatment (20.5%) are some of the strong factors affecting the use of IVF in treatment of infertility in Anambra state. Efforts should therefore be made by the government to reduce the cost and as well intensify the creation of awareness to dispel the cultural beliefs inhibiting IVF and promote its use amongst infertile couples in Anambra State.

Keywords: *IVF, Married Couples, Socio-Economic and Cultural factors, Infertility*

1. Introduction

The prevalence of infertility cases tend to be on the increase worldwide, particularly in Africa as reported from several African societies. In fact, an infertility belt has been described in Africa (Okonofua, 2003). Infertility is defined as a disease of the reproductive system that affects individuals and groups (Infertility: Facts, Disease prevention & Treatment strategies, 2006). It is medically perceived as the inability to achieve a pregnancy after a year or more of regular unprotected sexual intercourse (WHO, 2002; ASRM, 2008). It accounts for over 50% of cases reported in gynecology clinics in the developing countries. In fact, "Infertility belt" has been described in sub-Saharan African countries (SSA) where about 20-35 million couples are affected by the inability to give birth to a child (Vayena et al., 2002; Okonofua, 2005).

Medical advances have shown that most cases of infertility are treatable. All kinds of Assisted Reproductive Technologies (ARTs) have been introduced to eliminate infertility problems. High technology options that aid conception are *In vitro Fertilization* (IVF), *Gamete Intra Fallopian Transfer* (GIFvT), *Intracytoplasmic Sperm Injection* (ISCSI) (Ikechebulu, 2003). IVF pertains to advanced medical techniques that aid fertilization in women in order to fulfill the personal and societal ideal of having children (Inhorn, 2002). IVF has been used safely and effectively for more than two decades for successful treatment of infertility (Smith, *et al*. 2012). It is perceived as an increasingly popular choice for infertile couples worldwide, particularly in the developed countries. The first IVF baby Louise Brown was born in 1978 in England, some 35 years ago, since then the number of cycles performed in many developed countries has grown by 5–10% per annum over the past decade (CDC & ASRM/ SART, 2008; ESHRE, 2009a; ICMART, 2009a; Wang et al., 2009; Ajayi, 2013). It is estimated that approximately about 3.5 to 5 million children have been born worldwide following ART treatment (ESHRE, 2008). There are no accurate figures and proper documentation of success rates in many African countries, *(*Ajayi, 2012*)* but in Nigeria, this innovation has changed the prospect of thousands of married couples that were unable to have children.

Success rate varies from centre to centre, most importantly according to the patient's age. For women under 30 years of age, the success rate is over 60% while for those between 30 to 35 years, the success is about 50% and for those between 35 to 40 years, it is about 40%. If the infertile woman is over 40 years, it is about 33% (Okewale, 2013; Wada, 2013). According to available statistics based on the performance indicator from various centres across the country, it is estimated that over 40,000 babies have been born through IVF in Nigeria since 1989 till date (Ajayi 2013; Ashiru 2013; Giwa-Osagie 2013). The first IVF birth in black Africa was led by the Dapo Ashiru-Giwa-Osagie team on March 17, 1989, at the Lagos University Teaching Hospital (LUTH), Idi-Araba (Ashiru 2012; Giwa-Osagie 2013; Ajayi, 2013). According to Ashiru (2012) Nigeria has recorded 40% increase in IVF pregnancy success rate from 10% in the 70s to 50% in the 2010s. Recently, a 60 year-old woman was delivered of a baby girl by Dr. Tunde Okewale's led team on Monday June 19, 2014 at St Ives Hospital, Lagos (Nigerian Tribune, 2014).

The first IVF birth in Anambra state was led by the Prof. Joseph Ikechebelu team on August 16, 2011, at Life Specialist Hospital, Nnewi. Since the birth of baby Joseph, Anambra state's first IVF embryo transfer birth in 2011 some three years ago, the use of ART, such as IVF, have transformed the treatment of infertility and sub fertility in the state. More than 20 babies have been born through IVF in Anambra state till date through IVF (Fides, 2011; Outlook, 2011; Pilot, 2011). However, there are a lot of misconceptions about IVF in Nigeria and in Igbo land particularly. IVF is perceived as a new phenomenon shrouded in secrecy and stigma due to misconception, social & cultural factors, ignorance and religious sentiments. It is perceived as abnormal, not natural, and worsened by the fact that IVF is perceived as a costly treatment which is still beyond the reach of teeming poor masses that are affected by the condition. Some couples view IVF as a good option to follow, many others are hesitant about it because IVF is fraught with social and cultural challenges, norms and values about natural process of reproduction. High cost of IVF, misconception of what IVF is all about, religious belief/convictions cultural/traditional belief and failure of IVF treatment after paying so much money play prominent roles in Nigeria, and these are potential factors that may influence the utilization of IVF in Anambra state. Therefore, the aim of this study was to investigate the socio-cultural factors affecting the use of IVF in the treatment of infertility among married couples in Anambra state, Nigeria. The following research questions guided the study:

i. What is the perception of In vitro fertilization (IVF) in the treatment of infertility among married couples in Anambra state?
ii. What are the socio-economic factors affecting the use of IVF in them treatment of infertility among married couples in Anambra state?
iii. What are the socio-cultural factors affecting the use of IVF in the treatment of infertility among married couples in Anambra state?
iv. How can the use of IVF in the treatment of infertility be enhanced in Anambra state?

2. Theoretical Framework

Talcott Parsons' Voluntary Social Action theory which is a variant of the functionalist perspective with emphasis on the constraint of individuals within particular custom and values, is adopted for the study in an attempt to explain human behaviour as it relates to socio-cultural factors and their influence on the use of In-Vitro Fertilization (IVF) in the treatment of infertility amongst married couples in Anambra state. Voluntary Social Action is very much like Weber's social action theory, which asserts the primacy of society over the individual person (Giddens, 2000 in Isiugo-Abanihe & Nwokocha, 2008). The theory argues that societies exert social constraint over the actions of individuals. In other words, one's social-economic and cultural environments are dictated by norms which in turn define his/her actions in a given social context. The theory thus, sees behaviours related to the use of In-Vitro Fertilization in the treatment of infertility within the context of social and cultural norms and values of people. This is in line with the observation of Oke (1996) cited in (Isiugo-Abanihe & Nwokocha, 2008) that there is an inextricable association between socio-cultural factors and the use of health services such as In-Vitro Fertilization(IVF).

This theory focuses on the course of action as determined by the conditions of the socio-cultural environment; society influences the end, which the actor seeks and the mean she or she will use in attaining them. One's environment and the structures inherent in it shape as well as dictate individual actor's perception and attitude towards a particular action. With respect to In-Vitro Fertilization, while there is a strong desire by the people to seek treatment for infertility through various means such as In-Vitro Fertilization (IVF), but the high cost and the associated norms and beliefs affect its use as treatment option for infertility in Anambra state.

3. Methods

This was a cross-sectional study carried out in Anambra state, South-East Nigeria and based on quantitative and qualitative methods. The sample size for the quantitative component was 589 married couples aged 18 years and above who were resident in Anambra state at the time of this study and were selected using the multi-stage sampling technique made up of cluster, simple random sampling and systematic sampling techniques. First, Anambra State was clustered into three (3) Senatorial Districts made up of seven (7) LGAs each, then using the balloting variant of simple random sampling technique, two clusters were selected namely Anambra North and Anambra South. The LGAs in the selected two clusters were numbered and then with the application of the simple random sampling technique, two LGAs were selected namely Awka South and Nnewi North. Furthermore, the communities in Awka South and Nnewi North, were numbered and through the aid of the simple random sampling technique, one community was selected from each namely Awka town in Awka South LGA and Umudim in Nnewi North LGA. The households in the selected communities were numbered and a couple was selected randomly from each household. For the qualitative component, 4 respondents were purposively selected made up of 2 medical practitioners and 2 women receiving IVF treatment who were not part of the quantitative component. Data were collected using the questionnaire and the Key Informant Interview (KII) Guide. Quantitative data obtained were analyzed using the

Statistical Package for Social Sciences (SPSS), presented and interpreted using descriptive statistics such as simple percentages, frequency distribution tables, graphs and charts. The KII interviews were transcribed and analyzed using thematic content analysis.

4. Results

4.1. Demographic Characteristics

The socio-demographic characteristics of the respondents are summarized in Table 1

Group	Demographic	Frequency (n=589)	Percentage %
Sex	Male	199	33.8
	Female	390	66.2
Age	18-22	5	0.8
	23-27	64	10.9
	28-32	142	24.1
	33-37	129	21.9
	38-42	83	14.1
	43-47	79	13.4
	48-52	41	7.0
	53-57	20	3.4
	58+	26	4.4
Age Recoded	Younger (18-34)	260	44.1
	Advanced (35+)	329	55.9
Age at first marriage	18-22	97	16.5
	23-27	166	28.2
	28-32	202	34.3
	33-37	98	16.6
	38-42	16	2.7
	43-47	10	1.7
Marital Status	Married/Living together	533	90.5
	Married not living together	34	5.8
	Separated	6	1.7
	Divorced	10	1.7
	Widowed	6	1.0
Marriage Type	Monogamous	545	92.5
	Polygamous	44	7.5
Marriage Duration	0-5 years	257	43.6
	6-10 years	149	25.3
	11-15 years	92	15.6
	16-50 years	41	7.0
	21-25 years	12	2.0
	25+ years	38	6.5
Frequency of marriage	Once	564	95.8
	Twice	22	3.7
	Thrice+	3	0.5
Educational Qualification	None	2	0.3
	Completed Primary	22	3.7
	Completed Secondary	166	28.2
	Tertiary	399	67.7
Educational Qualification Recoded	Lower education	190	32.3
	Higher education	399	67.7
Occupational Status	Professional	18	3.1
	Civil Service	237	40.2
	Business/Trading	165	28.0
	Apprentice	13	2.2
	Artisan	16	2.7
	Farming	6	1.0

	Clergy	15m	2.5
	Self Employed	65	11.0
	Unemployed	52	8.8
	Retired	2	0.3
Occupation Recoded	Employed	255	43.3
	Unemployed	54	9.2
	Self employed	280	47.5
Annual Income	₦ 0 - ₦ 200,000	181	30.7
	₦200,001- ₦ 400,000	129	21.9
	₦400,001- ₦ 600,000	89	15.1
	₦600,001- ₦ 800,000	62	10.5
	₦800,001- ₦ 1,000,000	82	13.9
	₦ 1,000,001+	46	7.8
Annual Income Recoded	1,000,000 and below	543	92.2
	1,000, 001+	46	7.8
Rel. Affiliation/Denomination	Christianity-Catholic	297	50.4
	Christianity-Protestant	266	45.2
	Islam	11	1.9
	African Traditional Rel.	15	2.5
Religious Affiliation Recoded	Christian	563	95.6
	Non Christian	26	4.4
	Total	**589**	**100.0**

Table 1: Distribution of respondents by socio-demographic characteristics
Source: Field survey, 2014

A total of six hundred (600) households and hospital respondents in Awka South and Nnewi North LGAs were selected out of which five hundred and eighty-nine (589) respondents validly completed the questionnaire. The socio-demographic characteristics of the respondents are shown in Table 1. The table shows that majority respondents in the study 390(66.2%) were females between 28-47 age brackets and well matured. Their minimum and maximum ages were 20 and 65 year respectively. The mean age of respondents was 37.59 years with a standard deviation of 9.196 and a median age of 36.00 years. Majority of the respondents 545(92.5%) were engaged in monogamous marriages and living together with their spouse. The duration of infertility ranged from less than a year to 25 years. Furthermore, 399(67.7%) of the respondents had attained higher education. Majority of the respondents 255(43.3%) were employed, 280(47.5%) were self employed while 54(9.2%) were unemployed. Respondents with annual income of ₦1, 000, 000 and above stood at 46(7.8%) however those with ₦1, 000, 000 and below stood at 543(92.2%). An over-whelming majority of the respondents were Christians 563(95.6%) and Christian respondents were further divided along the line of denomination; Catholic 297(50.4%), and Protestant 266(45.2%). This finding is indicative of the predominance of Christianity in southeast Nigeria.

4.2. Perceptions about in Vitro Fertilization (IVF) in Anambra State

Respondents' views about In vitro fertilization (IVF) are summarized in Figure 1, 2, 3 and Table 2.

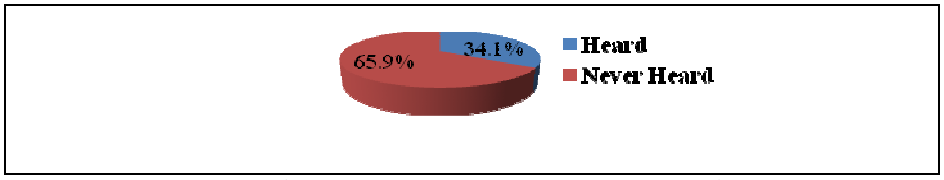

Figure 1: Respondents views on awareness of In vitro fertilization (IVF)

First, the respondents were asked if they were aware of IVF. To this end, 201 (34.1%) of the respondents stated that they have heard about IVF before the survey, while more than half of the respondents 388(65.9%) have never heard about IVF. Views of the respondent on the source of information about IVF was summarized in Figure 2.

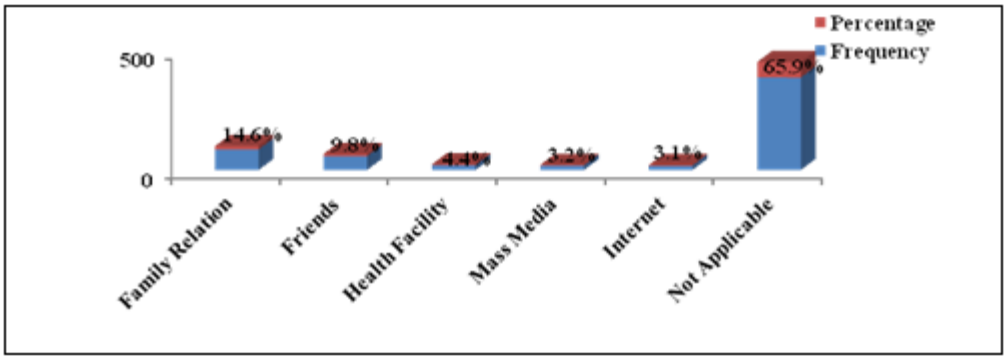

Figure 2: Respondents views on source of In vitro fertilization (IVF) information

In figure 1, majority of the respondents 86(14.6%) indicated that the commonest source of IVF information was through family/ relations while only very few respondents 18(3.1%), heard about it through the internet.The resopondents were also asked how they percieve IVF treatment. Their responses are summarized in the Table 2.

Response	Male	Female	Frequency	Percentage %
IVF offers hope	7	23	30	5.1
IVF is too costly	30	61	91	15.4
IVF is affordable/accessible	0	5	5	0.8
IVF is not natural	23	22	45	7.6
IVF is too elitist	1	6	7	1.2
Children through IVF are not accepted	5	5	10	1.7
Don't truly know what IVF is all about	8	5	13	2.2
Not Applicable	125	263	388	65.9
Total	**199**	**390**	**589**	**100.0**

Table 2: Distribution of respondents by perception of In vitro fertilization (IVF)
Source: Field survey, 2014

Table 2 shows that majority of the respondents 91(15.1%) perceive IVF as too costly and 45(7.6%) perceive IVF as unnatural while, 30(5.1%) indicated that IVF offers hope for infertile couples. However, 13(2.2%) of the respondents did not know what IVF is all about. This result shows that some individuals in Anambra state that have heard about IVF treatment, do not really know what IVF is all about or they may likely have lots of misconceptions about it. In other words, while awareness of IVF is high, knowledge of it is low in Anambra state. This finding was supported by a KII respondent who said that:

IVF offers hope however, there is an erroneous opinion in this part of the world that test tube babies are abnormal or unnatural. Definitely not, they are as normal and natural as naturally conceived babies. A look at all our test tube babies' pictures does not show that these babies are abnormal. In fact, it is even better to have your own baby through IVF than to 'play away march' (Male medical practitioner, aged 50 years).

Views of the respondents about utilization of IVF treatment was summarized in Figure 3.

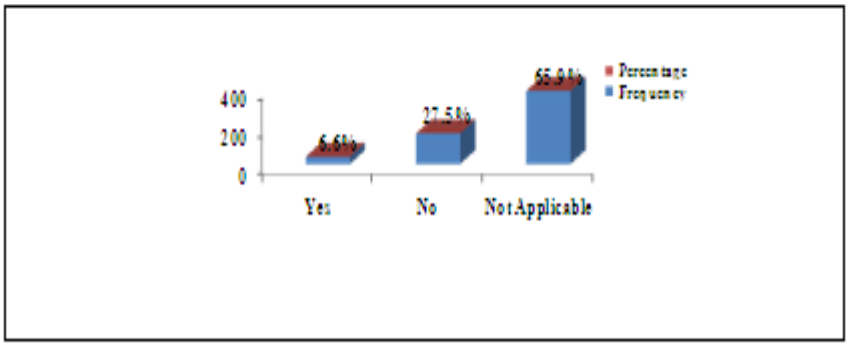

Figure 3: Respondents' views on the use of In vitro fertilization (IVF)

Figure 3 shows that among the respondents who were aware of IVF, majority of them 162(27.5%) have never used IVF while only 39(6.6%) have used IVF.

4.3. Views of the respondents about Socio-economic factors influencing the use in-vitro fertilization are shown in Table 3.

Socio-Economic Factors		Used IVF treatment or not?		Total	P
		Yes	No		
High cost of IVF	Yes	38(20.5)	147(79.5)	185(100.0)	< 0.000
	No	1(6.2)	15(93.8)	16(100.0)	
IVF is not accessible	Yes	12(20.3)	47(79.7)	59(100.0)	< 0.000
	No	27(19.0)	115(81.0)	142(100.0)	
IVF is not available	Yes	0(0.0)	31(100.0)	31(100.0)	< 0.000
	No	39(22.9)	131(77.1)	170(100.0)	
IVF may fail after paying so much money for the treatment	Yes	33(32.7)	68(67.3)	101(100.0)	< 0.000
	No	6(6.0)	94(94.0)	100(100.0)	

Table 3:Socio-Economic Factors Affecting the Use of IVF in Anambra State
Source: Field survey 2014

The 3 shows that most respondents 147(79.5%) who are aware of IVF but would decline IVF procedure would do so because of high cost of IVF treatment ; followed by 68(67.3%) who said that IVF may fail after paying so much money for the treatment; IVF is not accessible 47(79.7%) and IVF is not available 31(100.0%). The table further shows a statistical significant association between use of IVF and some socio-economic factors at P< 0.000. To further depict respondents' views on cost of IVF, their responses were graphically summarized in Figure 4.

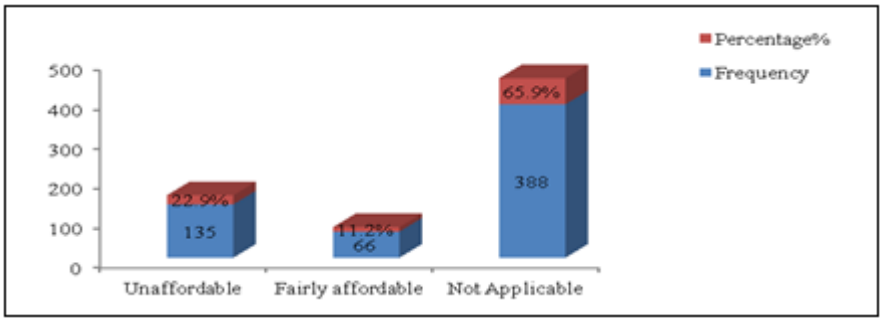

Figure 4: Respondents' views on cost of In vitro fertilization (IVF)

The bar chart clearly shows that 135(22.9%), said that the cost of accessing IVF treatment is unaffordable while only 66(11.2%) of the respondents felt that IVF treatment procedure is fairly affordable. However, none of the respondent is of the view that IVF services is affordable. This implies that the procedure is too expensive and infertile persons with low income level may not likely use IVF treatment to solve their fertility problem. This result was corroborated by an IVF client who said that:
IVF is not affordable; if the money is not there you cannot use it. It is only those that live in the bracket of above average income that can afford it and that is why it is not a popular option for many infertile couples in the society (Male Engineer, aged 59 years).

4.4. Socio-Cultural Factors Affecting the Use of IVF in Anambra State
Respondents' views about socio-cultural factors influencing the use in-vitro fertilization are shown in Table 4.

		Used IVF treatment or not?		Total	P
		Yes	No		
Religious belief/dogma	Yes	35(27.1)	94(72.9)	129(100.0)	< 0.000
	No	4(5.6)	68(94.4)	72(100.0)	
Traditional beliefs	Yes	29(25.4)	85(74.6)	114(100.0)	< 0.000
	No	10(11.5)	77(88.5)	87(100.0)	
Misconception of what IVF is all about	Yes	37(23.4)	121(76.6)	158(100.0)	< 0.000
	No	2(4.7)	41(95.3)	43(100.0)	
Lack of awareness about IVF	Yes	36(22.1)	127(77.9)	163(100.0)	< 0.000
	No	3(7.9)	35(92.1)	38(100.0)	
Lack of co-operation from husband	Yes	22(27.5)	58(72.5)	80(100.0)	< 0.000
	No	17(14.0)	104(86.0)	121(100.0)	
IVF is not allowed by relatives/friends	Yes	2(28.6)	5(71.4)	7(100.0)	< 0.000
	No	37(19.1)	157(80.9)	119(100.0)	

Table 4: Distribution of respondents by the use of IVF and cultural factors influencing the use of IVF treatment
Source: Field survey 2014

Data in table 4 show that most respondents 94(72.9%) who would decline IVF would do so because of religious belief/dogma; followed by traditional belief 85(74.6%), misconception of what IVF is all about 121(76.6%), lack of awareness about IVF 127(77.9), Lack of co-operation from husband while IVF is not allowed by relatives/friends is the least. The association of user vs. non-users shows that these factors and use of IVF is statistically significant at P< 0.000 for all the factors. To further elucidate respondents' views on the cultural factor affecting the use of IVF their responses were graphically summarized in Figure 5.

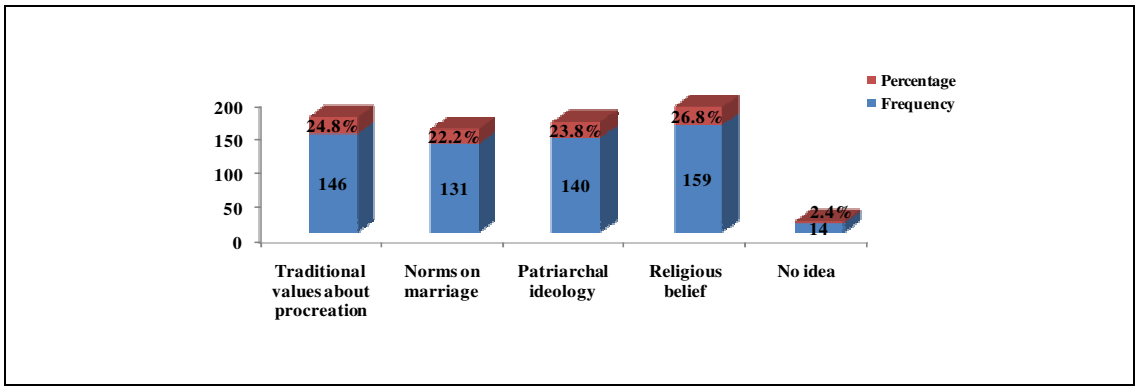

Figure 5: Respondents views on the cultural factor affecting the use of IVF

Figure 5 clearly shows that the views of the respondents are almost evenly distributed with majority of the respondents 159(26.8%) indicating that religious belief is the major factor that affects their use of IVF treatment, while only 14(2.4%) had no idea. This implies that since views about infertility are social culturally constructed, infertility treatment also have socio-cultural implications and challenges. While some couples view this technology as a good option to follow, many people are apprehensive about it due to socio- cultural norms and values about natural process of reproduction. A KII respondent opined that:

Well, I cannot really say much but I think naturally it is only God who provides children for couples and not through the use of technologies. Culturally I disagree with the use of any form of assisted reproductive technology because as a cultured person, this idea about acting God counteract the totality of what we stand for (Male Civil servant aged 52 years).

A medical practitioner, among the KII respondent said that:

Procreation is important and deeply rooted in Igbo land. Anybody without a child is viewed with contempt. More so, when the general society gets to know about the inability of a couple to have children and resulting to unnatural method (IVF) they may be stigmatized, call their children abnormal or not natural and therefore may not be accepted by members of the kinsmen as part of their family members. This is why IVF technology is still masked in secrecy, stigma, misconceptions, and religious sentiments in Nigeria. (Male medical practitioner, aged 55 years).

4.5. Measures to Enhance the Use of IVF in the Treatment of Infertility in Anambra State

Respondents' views on how to enhance the treatment of infertility through the use of IVF in Anambra state are shown in Table 5.

		What is your sex?		Total	χ^2
Responses		**Male**	**Female**		
Spousal co-operation and support	Yes	100(50.3)	249(63.8)	349(59.3)	χ^2=10.087, N=589,df=1, P=.001
	No	99(49.7)	141(36.2)	240(40.7)	
	Total	199(100.0)	390(100.0)	589(100.0)	
Reduction of cost of IVF treatment	Yes	160(80.4)	347(89.0)	507(86.1)	χ^2=8.080,N=589, df=1, P=.004
	No	39(19.6)	43(11.0)	82(13.9)	
	Total	199(100.0)	390(100.0)	589(100.0)	
Creation of awareness about of IVF treatment using the mass and print media	Yes	168(84.4)	368(94.4)	536(91.0)	χ^2=15.889,N=589, df=1, P=.000
	No	31(15.6)	22(5.6)	53(9.0)	
	Total	199(100.0)	390(100.0)	589(100.0)	
Improved reproductive health knowledge to reduce misconception and stigma attached to IVF practice	Yes	59(29.6)	162(41.5)	221(37.5)	χ^2=7.946,N=589, df=1, P=.005
	No	140(70.4)	228(58.5)	368(62.5)	
	Total	199(100.0)	390(100.0)	589(100.0)	

Table 5: Cross tabulation of gender and measures to improve perception on the use of IVF
Source: Field survey 2014

Table 5 shows that female respondents 368(94.4%) and male respondents 168(84.4%) indicated enlightenment campaign/creation of awareness about IVF treatment using the mass and print media. 347(89.0%) of the female respondents and 160(80.4%) of the male respondents emphasized reduction of the cost of IVF treatment. The result shows that majority of the respondents indicated that creation of awareness about IVF treatment using the mass and print media and reduction of cost of IVF treatment is the major ways of improving the use of IVF. The result of the χ^2 = 15.889, and χ^2 = 8.080 respectively which shows that enlightenment campaign/creation of awareness about IVF treatment was statistically significant at $p< 0.000$ while reduction of cost of IVF treatment was statistically significant at $p< 0.004$. This implies therefore that enlightenment campaign/creation of awareness about IVF treatment and reduction of cost of IVF treatment are strong determinant factors for improving perceptions and the use of IVF for the treatment of infertility in the society. The KII respondenst interviewed also supported these findings.

"IVF service is not well grounded. Aside Life Specialist Hospital, Nnewi, which is a private hospital, we do not have public fully fledged ART centre here in Amanbra State. Therefore IVF centres are not readily available to those who may want to access the services" (Female IVF client aged 40 years).

Another KII respondent corroborated the observation and emphasized that:

To prevent infertility, there should be a lot of crusade about the condition, the treatment and care centres including IVF should be introduced in the tertiary hospitals which will drastically reduce the cost. The rate is very low here. In the entire state there is only one or two centres where IVF is done. But there are centres in Lagos, Port-Harcourt and Abuja. Some people are not aware of it and those who knew about it could not afford the high cost with low success rate. IVF is a very expensive treatment to embark on. Government should provide a lot of fund for research, training and treatment. They should subsidize the setting up, treatment and training of medical personnel (Male medical practitioner, aged 55 years).

5. Discussion of Findings

Fertility and parenthood are highly valued in Anambra state and indeed Nigeria to the extent that procreation is usually considered the most important purpose of marriage. Results of this study show that infertility problems can be treated using assisted conception technology such as In Vitro Fertilization (IVF). The result shows that IVF is not favourably disposed to, due to a number of social and cultural challenges. It was found that acceptability and use of IVF intervention in resolving problem of infertility among the Igbos comes with an array of factors, such as high cost of IVF and religious dogmas. The strong influence of religion could be seen in the explanations offered for declining IVF. This implies that some people would decline IVF because they had faith that God would provide them with babies without having to resort to any assisted conception intervention. Key informant interviews on cultural factors influencing the use of IVF revealed various responses that pointed towards the negative influence of both Christianity and Islam on the acceptance of ART.

Others are traditional value attached to procreation or motherhood, misconception of what IVF is all about, lack of awareness about IVF, lack of co-operation from husband etc. All these act as catalysts for its use or non use. This is consistent with the study by Nwokocha (2004) who found that acceptability of IVF, and subsequently its adoption are contextually influenced by the prevailing socio-cultural factors. This finding also agrees with UNPA (2010) which reported that the adoption of IVF is equally not well embraced and that the reaction of people to assisted reproductive treatment is often negative. The reasons are not entirely on the cost alone but social cultural as well. It appears that the respondents accepted that IVF is the last resort to overcoming infertility

6. Conclusion

The emergence of IVF in the treatment of infertility is a welcome development because it offers hope for couples affected by the condition. However, IVF intervention is encumbered by social, economic and cultural, factors that affect it utilization in Anambra state. High cost of the treatment, religious dogmas and traditional norms and values about procreation are important determinant factors in the use of IVF. There is therefore an urgent need to vigorously create awareness about IVF treatment to dispel the misconceptions about IVF and enhance its utilization in Anambra state.

7. Recommendations

The study has shown that majority of respondents experiencing infertility lamented the huge cost of procuring IVF treatment. There is therefore the need for government to subsidise the cost of infertility treatment. In addition, relevant NGOs and the private sector should be encouraged in subsidizing the cost infertility treatment. The study also recommends that to help reduce the rate of stigmatization attached to the practice in Anambra state it is important for the National Orientation Commission to initiate value reorientation among members of the society to re-address these suffocating cultural norms and values attached to procreation.

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