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Determinants of Disparity in Desired Fertility among Married Women in Urban and Rural Areas of Southwest Nigeria.

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Abstract

Purpose: The study examined the determinants of disparity in desired fertility among married women in urban and rural centres in Southwest Nigeria.

Methodology: The study adopted a mixed method research design. A total number of one thousand one hundred and eighty-seven (1,187) women (urban=713; rural=474) of reproductive ages (15-49) years were drawn from Southwest States in Nigeria using multi-stage sampling technique. Questionnaire method was used to gather data from the field. Three levels of data analysis were undertaken to achieve the study objectives. Frequency distribution of socio-demographic factors by place of residence was used at the univariate stage of analyses, chi-square test and binary logistic regression were used at the bivariate and multivariate levels of analysis.

Findings: The results showed that more than three-quarter (79.4%) desired four children and below while more than one-fifth (20.6%) of the women desired 5 children and above. Higher percentage of women (84.8%) desired four children and below in rural area when compared with women in urban centres (75.7%). However, among those that desired 5 children and above higher proportion (24.3%) was found in the urban centres when compared with their counterpart in rural areas (15.2%). There is significant relationship ($p<0.05$) between desired number of children and education of women, husband's education, religion, age of husband and birth interval urban areas while there is significant relationship between desired number of children and women and husbands' education in rural areas. Further analysis showed that women's education especially women with below secondary education had higher odds of desiring more children than those with post-secondary education (OR: 1.57; 95% C.I: 0.70-3.56). In addition, women whose husbands had no education, below secondary education and secondary education were less likely to desire more children in the urban areas than those with post-secondary education. In rural areas, there was significant relationship ($p<0.05$) between women whose husbands had no education, below secondary education and desired fertility. Women whose husbands had no education and those whose husbands had below secondary education were 16.94 and 2.93 more likely to desire more children than those in the reference category respectively. In addition, women who were Christian were more likely to desire more children in urban areas than their counterparts who were traditionalists. It was also discovered that women who spaced their births for twenty-four months and below were 0.51 times less likely to desire more children than their counterparts in the reference category (OR:0.51; 95%C.I 0.32-0.80).

Recommendation: The study recommends that policy aimed at reducing the desired fertility in both urban and rural areas should be implemented with the hope that high fertility rate will be reduced to a manageable level.

Keywords: *Determinants, disparity, desired fertility, married women.*

Introduction

Nigeria currently has population of over 206million with a growth rate of around 2.7 percent per annum which makes her the most populous black nation in the world (Population Reference Bureau, 2020). Nigeria is projected to add additional 68 million people by 2030, and a further addition of 63 million people by 2050, which will make her the fifth most populous nation in the world behind Pakistan, United States, China and India (British Council of Nigeria, 2010). The country's total fertility rate (TFR), though diminishing remains in excess of 5.0. The country's total fertility rates oscillated between 6.6 in 1965 to 7.0 in 1975 (Asa, Titilayo, & Kupoluyi, 2018) but later dropped to 5.7 in 2003, 5.5 in 2008, 5.5 in 2013 and 5.3 in 2018 (National Population Commission, 2019). This high rate will continue to drive population growth in the region if nothing is done to reverse the ugly situation.

Studies have identified various factors which have been sustaining high fertility rate regime in sub-Sahara Africa. These factors were summarized under cultural, socio-demographic and contraception features. The demand for children is a major cultural factor that has contributed significantly to high fertility regime in sub-Sahara Africa. The demand for children is occasioned majorly by absence of old age security scheme in most of the countries in the region Nigeria inclusive, leading to desire for large families with the hope of securing care from the children when they are old. Women in peasant economies also depend on their children for economic survival(Atake & Ali, 2019). Male inheritance is another factor that propels large family as women without a male child will strive to get a boy-child irrespective of the number of girl-children she has given birth to because a male child is seeing as the woman's stay in her husband's house as her inability to bear male children will give her a stranger status in the family (Atake & Ali, 2019; Sunmola, Olaosebikan, & Adeusi, 2020). Perpetuation of family name in many culture in sub-Sahara Africa put a lot of premium on son preference as male children are expected to perpetuate family name, inherit the property left behind by the parent, raise the status of the family and protect the family members and while also providing security for women against divorce(Asogwa, Atama, Mariagoretti, & Melugbo, 2020; Inyang-Etoh, 2016).

Socio-economic and demographic factors have also been identified to support high fertility norm in sub-Sahara Africa. Studies have shown that education represses fertility intentions as women who were educated want fewer children than their colleagues who have slight or no education because they have greater freedom in procreative decision making (Amusa & Yahya, 2019). In another study it was also discovered that women with secondary or higher education prefer reduced fertility than their colleagues with less than secondary or no education(Alaba, Olubusoye, & Olaomi, 2017; Goldstone, Korotaev, Shulgin, & Zinkina, 2018). Other socio-demographic factors encouraging high fertility are age at first marriage, limited birth interval, high child mortality, rural residency, religion, children desired and age while socio-demographic factors such as income, occupation, type of marriage , urban residence, increased age at marriage, child survival and contraception will reduce fertility (Amusa & Yahya, 2019; Goldstone et al., 2018). Other studies had shown that women with higher income prefer fewer number of children than their colleagues with lower income because women with lower income tend to have many children to assist them in the future(Amusa & Yahya, 2019; Goldstone et al., 2018).

Sub-Saharan Africa is generally a region of extremely high fertility and low contraceptive prevalence (Bongaarts, 2017). With few exceptions, national fertility rates are six or more birth

per woman. Regardless of whether family planning programs are in place or the government has specific population and family planning policies, use of family planning is limited. In countries reported to have high overall contraceptive prevalence rate such as Zimbabwe and Botswana, total fertility rates (TFRs) exceeding six births per woman continue to prevail (Harper & Channon, 2016). Family planning usage in tropical Africa among ladies or in-union ladies is lesser than any other regions of the globe (Howse & Nanitashvili, 2014; United Nations, 2017).

Report released by United Nations Organisation in 2017 on World Family planning highlighted the use, level and trend of family planning in Africa which showed that in middle Africa and West Africa, 25 percent of ladies in the childbearing age range who are wedded or in a relationship were users. Across region, Africa has the lowest percentage which is 56 percent as against other regions with above 75 percent (United Nations, 2017). In tropical Africa, contraceptive prevalence rate (CPR) is 23 percent but 11 percent in West Africa (www.intrahealth.org). Across countries in West Africa, Senegal topped the list with 20 percent followed by Liberia with 19 percent and Ghana with 18 percent. Mali and Nigeria have 10 percent respectively.

However, evidence from Population Reference Bureau (2018) shows that there is an improvement over the past reports in the contraceptive prevalence rate in tropical Africa. The report shows that contraceptive rate in sub-Saharan Africa as at 2018 is now 33 percent (all methods) while contraceptive prevalence rate for modern methods is 28 percent. West Africa now has a CPR of 24 percent all methods and 18 percent modern methods. In spite of this improvement, the region still lags behind other regions that reported higher rate. Southern Africa recorded the highest rate with 55 percent followed closely by Southern Africa with 52 percent. East Africa and Middle Africa followed with 41 percent and 20 percent respectively (Population Reference Bureau, 2018). In the period , 2017 and 2030, total contraceptive prevalence in the midst of wedded or in - union ladies of childbearing age is projected to rise in parts of tropical Africa from 20 to 29 percent in West Africa; 23 to 32 per cent in Central Africa; and 43 to 56 percent in East Africa (United Nations, 2017).

In a study conducted in 2018 which examined ladies' empowerment as an supporting influence of contraceptive use in tropical Africa, it was discovered that Southern African countries have the highest contraceptive rates with Namibia topping the list with 71 percent followed by Lesotho and Zimbabwe with 69.6 percent and 68.5 percent respectively. East African countries recorded better rates than West Africa and Middle Africa. In the study, Malawi has the uppermost rate of 68.7 percent while Kenya has 56.3 percent. Burundi has the least percentage of 20 percent. West African countries have the lowest rate with Chad having the least rate of 6.7 percent followed by Gambia and Guinea with 14.4 percent and 15.2 percent respectively(Yaya, Uthman, Ekholuenetale, & Bishwajit, 2018).

In Africa, one out of five ladies has an unmet need for contraception. In tropical Africa, 24% of married ladies have unmet need (Sedgh, Hussain, Bankole, & Singh, 2007). Although, there is regional variation in unmet need for contraception in tropical Africa, there is still high unmet need in the region. In Southern Africa, the unmet need for family planning is around 10%, 22% in East Africa, 24% in West Africa and 27% in Middle Africa (United Nations, 2017). However, unmet need for family planning is expected to fall from 22 percent in 2017 to 16 percent in 2030 in East Africa and in other regions of Africa with lower rate. The rise in the prevalence rate of contraceptive is projected to be fast in Africa.

In Nigeria the story is the same. Contraceptive prevalence rate is low even with the numerous interventions on family planning and government's commitment to achieve modern contraceptive incidence rate of 36 percent by year 2018 at the 2012 London summit and another revised promise to achieve 27 percent contraceptive rate among all women by year 2020 (National Population Commission, 2019). Nigeria Demographic and Health Survey (NDHS) 2018 revealed that knowledge of contraception is generally high but uptake is low. Seventeen percent of married ladies of childbearing age were using any family planning method, an increase of 2 percentage points from the 2013 NDHS while only 12% were using modern methods. Unmet need for contraception stands at 19% (National Population Commission, 2019) which is not an improvement over 2013 figure of 16 percent. Incentive to use contraceptive is low in Nigeria because of the demand for large family which invariably leads to high births and low usage of contraceptive (Federal Ministry of Health, 2008).

These countrywide cumulative indicators disguise varied differences in the acceptance of contraceptives throughout the country. The southern regions of the nation have greater contraceptive incidence when likened to the northern regions. The northern region has the least rates of contraceptive use globally. From region to region in Nigeria, southwest has the highest contraceptive prevalent rate of 35 percent. This is followed by Southeast and South south with 26 percent and 22 percent individually. North central, North East and North West have 16 percent, 9.5 percent and 6.7 percent correspondingly (National Population Commission, 2019). Other studies have also shown similar trends in the region. A group study conducted in South East region of the country showed that the incidence rate of any methods of contraceptive use was 28.3% while modern methods was 16.3% (Egede et al., 2015). Another research conducted containing respondents aged 15 to 24 years showed that the prevalence of ever use was 11.1% and that of current use 7.3% (McCurdy, Schnatz, Weinbaum, & Zhu, 2014). Across the states of the country, contraceptive prevalence rate ranges from 29% in Lagos State in South-west Nigeria to less than 2% in Yobe and Sokoto States, North East and North West Nigeria respectively (National Population Commission, 2019). This study examined the disparity in desired fertility among married women in urban and rural areas in Southwest Nigeria

Study Methods

Data Source

The data was collected primarily from women of reproductive age (15-49) in Southwest Nigeria with the help of questionnaire methods.

Sample Design and Sample Size

A total number of One thousand and two hundred (1,200) respondents were sampled for the study. However, only one thousand, one hundred and eighty-seven questionnaires were duly completed and returned. The 2006 Census population figure was used to arrive at the number of respondents for each state. A multi-stage probability sampling technique was employed to select eligible participants for the survey. The first stage was the selection of 3 states out of the 6 states in the region. Purposive sampling technique was adopted to select 3 of the states in the region which are Lagos, Osun and Ekiti state. Lagos state represents Lagos/Ogun because the two states share some similarities. Osun state represents Oyo/Osun because of cultural similarities. Osun was created out

of old Oyo in 1991. Ekiti state represents Ondo/Ekiti due to history of cultural affiliation and genealogy.

The second stage was the selection of towns in each of the state. Purposive sampling method was adopted to select the state capital as the urban component and other towns representing rural locations in the 3 selected states. Thus, the capital city was chosen in each state. Itamaja in Ikorodu local government was chosen as the remote town in Lagos. Tonkere in Ife Central Local Government area was chosen as the remote town in Osun State. In Ekiti state, Ido-Ile in Ekiti West local government was chosen as the remote town. This means that in each of the states, two towns (urban/rural) were chosen.

The last stage was the selection of the respondents using simple random sampling technique. The same procedure was replicated in Itamaja, Tonkere and Ido-Ile in Lagos, Osun and Ekiti State respectively. Four hundred and thirty- seven (437) respondents were randomly sampled in Ikeja while two hundred and ninety two (292) were randomly sampled in Itamaja in Ikorodu LGA. One hundred and sixty six (166) respondents were randomly sampled in Osogbo while one hundred and eleven (111) were chosen in Tonkere in Ife Central LGA. In Ekiti State, one hundred and sixteen (116) respondents were chosen in Ado Ekiti while seventy eight (78) respondents were chosen in Ido-Ile in Ekiti West LGA.

Data Analysis

Data collected from the field were analysed at the univariate level using simple frequencies and percentages to explain the socio-demographic features of the respondents, Further analyses were also done at bivariate and multivariate levels by place of residence to measure the association between the predictor variables and response variable using Chi-square statistics and binary logistic regression statistics. Statistical significant level was estimated at $p<0.001$, $P<0.01$ and $P<0.05$. Data analysis was done using Statistical Package for Social Sciences (SPSS) Software Version 20.

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Definition of variables

Table 1: Variables used for analysis

Variables	Categories
Dependent variable- Desired Fertility preference	Recoded into categorical variable 0-4 children desired=1, 5 and above=2
Independent variables Education	Non formal or quaranic=1
	Below secondary school=2
	Secondary School=3
	Post-secondary=4
Husband's education	Non formal/quaranic=1
	Below secondary school=2
	Secondary=3
	Post-secondary=4
Income	Below N150,000.00=1
	N150,001-N300,000=2
	Above N300,000=3
Working	Yes=1
	No=2
Type of Marriage	Monogamy=1
	Polygyny=2
Religion	Christianity=1
	Muslim=2
	Traditional=3
Place of residence	Urban=1
	Rural=2
Age	15-24=1
	25-34=2
	35-44=3
	45 and above=4
Husband's Age	20-29=1
	30-39=2
	40-49=3
	50-59=4
	60 and above=5
Age at marriage	15-24=1
	25-34=2
	35 and above=3
Birth interval	24 months and below=1
	25 months and above=2
Current contraceptive use	Yes=1
	No=2

Results

Selected characteristics of respondents were presented in Table 2 by place of residence (Urban and Rural) in Southwest Nigeria. one thousand, one hundred and eighty-seven women (1,187) were sampled in the area. Out of this number, 713 were residing in urban area while 474 were residing in rural area. The mean age of respondents is 33.7 years. Respondents aged 25-34 years have the highest proportion in both urban and rural areas (48.7% and 42.0%) respectively followed by aged 35-44 years in urban (30.2%) and rural (35.9%). Women aged between 45 and above years have the lowest proportion in urban (10.2%) while those between ages 15-24 years have the lowest proportion in rural area (8.0%).

The mean age of respondents' husband is 41.4 years. Respondents whose husbands' age is between 30 and 39 years have the highest proportion with 40.1% in urban and 38.4% in rural respectively. This is closely followed by respondents' husbands aged 40-49 years with 35.5% residing in urban area while 34.2% were residing in rural areas. The lowest proportion of respondents' husband is found in aged 20-29 years in rural areas (4.2%) while for those in urban area the lowest proportion belonged to those aged 60 and above (5.0%). The mean age at marriage of the respondents is 24.0 years. Respondents with highest proportion of age at marriage (61.8) is found in age category 15-24 years in rural while for those in urban area, the highest proportion (49.4%)is found in the category 25-34 years. The lowest proportion of age at marriage is aged 35 and above years in both urban and rural areas.

Table 2: Socio-demographic Characteristics of married women by place of residence

Characteristics	**Urban** 713(100.0)	**Rural** 474(100.0)	**Total=1187** 1187(100.0)
Age			
15-24	78(10.9)	38(8.0)	116(9.8)
25-34	347(48.7)	199(42.0)	546(46.0)
35-44	215(30.2)	170(35.9)	385(32.4)
45 and above	73(10.2)	67(14.1)	140(11.8)
Mean age	33.0	34.6	33.7
Husband's age			
20-29	59(8.3)	20(4.2)	79(6.7)
30-39	286(40.1)	182(38.4)	468(39.4)
40-49	253(35.5)	162(34.2)	415(35.0)
50-59	79(11.1)	63(13.3)	142(12.0)
60 and above	36(5.0)	47(9.9)	83(7.0)
Mean age of husband	40.7	42.6	41.4
Age at marriage			
15-24	338(47.4)	293(61.8)	631(53.2)
25-34	352(49.4)	177(37.3)	529(44.6)
35 and above	23(3.2)	4(0.8)	27(2.3)
Mean age at marriage	24.4	23.4	24.0

Education			
Non formal/quoranic	89(12.5)	32(6.8)	121(10.2)
Below secondary	70(9.8)	67(14.1)	137(11.5)
Secondary	124(17.4)	80(16.9)	204(17.2)
Post-secondary	430(60.3)	295(62.2)	725(61.1)
Husband's education			
Non formal/quoranic	58(8.1)	26(5.5)	84(7.1)
Below secondary	58(8.1)	43(9.1)	101(8.5)
Secondary	83(11.6)	68(14.3)	151(12.7)
Post-secondary	514(72.1)	337(71.1)	851(71.7)
Working			
Yes	613(86.0)	439(92.6)	1052(88.6)
No	100(14.0)	35(7.4)	135(11.4)
Income			
Below N150,000.00	691(96.9)	458(96.6)	1149(96.8)
N150,001-N300,000	21(2.9)	13(2.7)	34(2.9)
Above N300,000	1(0.1)	3(0.6)	4(0.3)
Religion			
Christianity	512(71.8)	309(65.2)	821(69.2)
Muslims	187(26.2)	150(31.8)	337(28.4)
Traditional	14(2.0)	15(3.2)	29(2.4)
Type of Marriage			
Monogamy	624(87.5)	451(95.1)	1075(90.6)
Polygyny	89(12.5)	23(4.9)	112(9.4)
Desired no. of children			
4 and below	540(75.7)	402(84.8)	942(79.4)
5 and above	173(24.3)	72(15.2)	245(20.6)
Birth Interval			
24 months and below	512(71.8)	275(58.0)	787(66.3)
25 months and above	201(28.2)	199(42.0)	400(33.7)
Current Contraceptive use			
Yes	269(37.7)	268(56.5)	537(45.2)
No	444(62.3)	206(43.5)	650(54.8)

Respondents with post-secondary education had the highest proportion with 60.3% and 62.2% in both urban and rural areas respectively while women with below secondary education has the lowest proportion in urban area (9.8%). In the rural area, women with no formal/quoranic education have the lowest proportion with (6.8%). The distribution follows the same pattern when respondents' husbands' education was considered. The highest proportion was found in post-secondary education category with 72.1% in urban area and 71.1% in rural area respectively. The lowest proportion was found in the category of respondents' husbands' with non-formal/quaranic education with 8.1% and 5.5% in both urban and rural areas respectively. This shows the region has the most literate in Nigeria.

Further analysis shows that 86.0% of women who reside in urban area were working while 92.0% of the women in rural areas were working. Among the respondents that were working 96.9% and

96.6% were residing in urban and rural areas respectively. More than seventy percent (71.8%) and 65.2% of the respondents who reside in urban and rural area respectively were Christians while the lowest proportion was the traditional adherents with 2.0 in urban areas and 3.2% in rural area. Women who were into monogamous union in the study constituted 87.5% and 95.1% in urban and rural areas respectively while the remaining 12.5% and 4.9% were into polygynous unions in both urban and rural areas respectively. More than three-quarter (79.4%) of the respondents had 4 children and below, out of this number, 75.7% were residing in urban area while 84.8% were rural dwellers. 24.3% of the respondents had more than four children in urban area while 15.2% were rural dwellers. More than three-fifth of the respondents space their births between 24 months and below. Out of this number, 71.8% were urban dwellers while 58.0% were rural dwellers. 45.2% of the respondents were currently using contraceptive and out of this number, 37.7% were urban dwellers while 56.5% were rural dwellers.

In Table 3, there is a statistically significant relationship between education of women and number of children desired in both urban ($p<0.001$) and rural areas ($p<0.01$). Among women who had 5 children and above, women with post-secondary education reported higher rate (45.1%) in urban area and rural areas (44.4%) respectively while women who reported desiring four children and below in the two areas had post-secondary education and reported highest percentages (65.2%). Respondents with below secondary education (20.8%) and secondary education (25.0%) had 5 and more children than their counterpart in urban areas while women with no formal /quoranic education (19.1%) had 5 and more children than their counterpart in rural areas (9.7%). Similar pattern is reported for respondents' husbands' education. There is a statistically significant relationship between respondents 'husbands' education and 5 and more children desired. Respondents whose husbands had post-secondary education desired 5 or more children in both urban and rural areas more than those with secondary education or below. This is followed by those with secondary education in both the urban (15.1%) and rural (18.1%) respectively).

Table 3: Desired fertility among married women by selected socio-demographic characteristics and by place of residence.

Variables	Urban (Desired no. of children)			Rural (Desired no of children)		
	4 and below(540)	5 and above(173)	p-value	4 and below (402)	5 and above (72)	p-value
Education						
Non formal/quoranic	10.4	19.1		6.2	9.7	
Below secondary	7.6	16.8	P<0.001	12.9	20.8	P<0.01
Secondary	16.9	19.1		15.4	25.0	
Post-secondary	65.2	45.1		65.4	44.4	
Husband's education						
Non formal/quoranic	5.4	16.8		3.5	16.7	
Below secondary	8.1	8.1	P<0.001	7.7	16.7	P<0.001
Secondary	10.6	15.0		13.7	18.1	
Post-secondary	75.9	60.1		75.1	48.6	

Working						
Yes	86.3	85.0	P>0.05	92.0	95.8	P>0.05
No	13.7	15.0		8.0	4.2	
Income						
Below N150,000.00	96.5	98.3		97.0	94.4	
N150,001-N300,000	3.3	1.7	P>0.05	2.5	4.2	P>0.05
Above N300,000	0.2	0.0		0.5	1.4	
Religion						
Christianity	74.8	62.4		66.4	58.3	
Muslims	23.0	36.4	P<0.01	30.1	40.3	P>0.05
Traditional	2.2	1.2		3.5	1.4	
Type of Marriage						
Monogamy	87.6	87.3	P>0.05	95.0	95.8	P>0.05
Polygyny	12.4	12.7		5.0	4.2	
Age						
15-24	10.9	11.0	P<0.001	8.5	5.6	P>0.05
25-34	49.8	45.1		42.5	38.9	
35-44	31.7	25.4		36.6	31.9	
45 and above	7.6	18.5		12.4	23.6	
Husband's age						
20-29	8.9	6.4		4.5	2.8	
30-39	42.2	33.5		40.0	29.2	
40-49	36.5	32.4	P<0.001	33.8	36.1	P>0.05
50-59	9.3	16.8		12.7	16.7	
60 and above	3.1	11.0		9.0	15.3	
Age at marriage						
15-24	44.3	57.2		60.4	69.4	
25-34	52.4	39.9	P<0.05	38.8	29.2	P>0.05
35 and above	3.3	2.9		0.7	1.4	
Birth Interval						
24 months and below	68.7	81.5	P<0.001	57.2	62.5	P>0.05
25 months and above	31.3	18.5		42.8	37.5	
Current Contraceptive use						
Yes	40.2	30.1	P<0.05	58.0	48.6	P>0.05
No	59.8	69.9		42.0	51.4	

*=p<0.05: **=p<0.01: ***p<0.001

The relationship between religion and desired number of children shows that there is statistically significant relationship between religion and children desired. Respondents who practice Christian religion were less likely to desire 5 or more children than those who were into Islamic religion or traditionalist in urban areas. However, there is no significant relationship between religion and desired number of children in rural areas.

Further analysis shows that age of respondents is statistically significantly related with desired number of children in urban area but not in rural areas. Women aged 25-34 years have the highest proportion of women (45.1%) who desired above four children than in any other category. Similar pattern is also recorded for women who desired four children and below (49.8%). Women whose husbands' age is between 30-39 years recorded the highest number of children desired (33.5%) than in any other categories. Similar pattern is also recorded for women (42.2%) whose husbands ages are between 30-39 years. However, relationship between desired number of children and husbands' age is not statistically significant in rural areas. Furthermore, respondents whose birth interval is between 0 and 24 months recorded higher rate (81.5%) among women who desired above four children in urban areas. There is no significant relationship between desired number of children and birth interval in rural areas.

It is also reported that women who desired more than four children in urban areas have lower rate (30.2%) of contraceptive use against their counterparts who desired four children and below (40.2%) while analysis shows that there is no significant relationship between contraceptive use and desired number of children in rural areas.

Table 4: T-test showing the difference of means in Desired Fertility by urban-rural Characteristics.

Characteristics	Means	Standard Deviation	Mean Difference	T-test Statistics	P-value	95% Confidence Interval	
Place of residence						Lower	Upper
Urban	1.24	0.429	0.091	3.803	0.000	0.044	0.138
Rural	1.15	1.15					

***p-value<0.001.

The statistical difference in the mean of desired fertility between married urban and rural women in the study area was ascertained using t-test in table 4. The mean number of married women who desired more children in urban area is statistically greater than mean number of married women in rural by 0.091. This shows that there is significant difference in the mean number of married women who desired fertility between urban and rural areas ($t=3.803$, $P<0.001$) at confidence interval level between 0.044 and 0.138.

Table 5 shows the multivariate analysis of desired number of children and selected socio-economic characteristics of the respondents by place of residence using binary logistic regression. The results showed that women with below secondary education were 1.57 more likely to desire above four children than those with post-secondary education in urban areas (OR: 1.57; 95%C.I:0.70-3.56) However, there is no significant relationship between education and desired number of children in rural areas. Further analysis showed that husbands' education is significantly associated with desired number of children in both the urban and rural areas. There is significant relationship between women with no formal/quoranic education and desired children above 4 (OR: 0.26; 95%C.I:0.10-0.67), below secondary education and desired children above 4 (OR: 0.31; 95%C.I:0.12-0.77) and post-secondary education (OR: 0.23; 95%C.I:0.10-0.53) in urban areas. However, there is only significant relationship between desired children above 4 and no formal/Quoranic education (OR: 16.94; 95% C.I:4.77-60.12) and below secondary school (OR:

2.93; 95% C.I:1.13-7.58) in rural areas. Further result showed that respondents who were Christians were 1.83 times more likely to desire above four children than their counterpart in the reference category (OR: 1.83; 95% C.I:1.22-2.76). In addition, respondents whose husbands age is between 40-49 years were 3.01 times more likely to desire above four children than their counterpart in the reference category in urban areas (OR: 3.01; 95% C.I:1.04-8.73). Finally, women who spaced their births between 1 and 24 months were 0.51 times less likely to desire above four children than their counterpart in the reference category (OR: 0.51; 95% C.I:0.32-0.80). There is no significant relationship between birth interval and desired number of children in rural areas.

Table 5: Association between desired number of children and selected socio-demographic characteristics of married women by place of residence.

Variables	Urban Area		Rural Areas	
	Odds Ratio	95%CI	Odds Ratio	95%CI
Education				
Non formal/quoranic	2.46	1.06-5.70	0.44	0.10-1.91
Below secondary	1.57*	0.70-3.56	1.32	0.57-3.03
Secondary	1.16	0.52-2.56	1.72	0.76-3.90
Post-secondary	Ref	Ref	Ref	Ref
Husband's education				
Non formal/quoranic	0.26**	0.10-0.67	16.94***	4.77-60.12
Below secondary	0.31*	0.12-0.77	2.93*	1.13-7.58
Secondary	0.23***	0.10-0.53	1.43	0.61-3.37
Post-secondary	Ref	Ref	Ref	Ref
Working				
Yes	0.57	0.31-1.05	2.47	0.61-10.03
No	Ref	Ref	Ref	Ref
Income				
Below N150,000.00	0.41	0.11-1.48	0.15	0.01-1.93
N150,001-N300,000	0.00	0.00-0.00	0.31	0.02-5.63
Above N300,000	Ref	Ref	Ref	Ref
Religion				
Christianity	1.83*	1.22-2.76	1.56	0.18-13.51
Muslims	0.53	0.11-2.62	2.62	0.30-22.86
Traditional	Ref	Ref	Ref	Ref
Type of Marriage				
Monogamy	1.18	0.68-2.06	1.04	0.26-4.15
Polygyny	Ref	Ref	Ref	Ref
Age				
15-24	1.01	0.47-2.15	0.37	0.07-2.07
25-34	0.81	0.33-2.01	0.48	0.15-1.56
35-44	1.93	0.67-5.57	0.33	0.11-1.03
45 and above	Ref	Ref	Ref	Ref

Husband's age				
20-29	1.38	0.57-3.34	1.10	0.12-10.42
30-39	1.88	0.70-5.02	1.06	0.28-3.99
40-49	3.01*	1.04-8.73	2.03	0.58-7.12
50-59	3.30	0.92-11.81	1.28	0.44-3.67
60 and above	Ref	Ref	Ref	Ref
Age at marriage				
15-24	0.65	0.06-6.93	0.65	0.06-6.93
25-34	0.49	0.05-5.29	0.49	0.05-5.29
35 and above	Ref	Ref	Ref	Ref
Birth Interval				
24 months and below	0.51**	0.32-0.80	1.29	0.72-2.29
25 months and above	Ref	Ref	Ref	Ref
Current Contraceptive use				
Yes	1.40	0.93-2.11	0.62	0.35-1.12
No	Ref	Ref	Ref	Ref

*=p<0.05: **=p<0.01: ***p<0.001

Discussion

The study examined the determinants of disparity in desired fertility among married women in urban and rural areas in Southwest Nigeria. The relationship between selected socio-demographic determinants and desired fertility were examined. The study showed that more than one-fifth of the women have more than four children, out of which closed to one-quarter (24.3%) were urban dwellers while less than that were rural dwellers (15.2%). This shows that high fertility desires still prevail in the region even in urban areas. The study shows that women in urban areas have higher fertility intention than their rural counterpart. This study is supported by (Mulemena, Phiri, & Mutombo, 2020). However, the study contradicts the finding of (Akeju, Owoeye, Ayeni, & Jegede, 2021; Mulemena et al., 2020) where it was discovered that fertility desire is higher in rural areas than in urban areas.

The study showed that there is significant relationship between women with below secondary school education and desired children. Women with below secondary school education desired more children than those in the reference category in urban area. This finding is consistent with findings of the previous studies which showed that the desire for children reduces with increase in the level of education(Maytan, 2014; Mulemena et al., 2020). There is no significant relationship between women's education and children desired in rural areas. Furthermore, partners' desired for children has been found to reduce with rise in the level of education both in the urban and rural areas. This finding is consistent with the study carried out by (Ahinkorah et al., 2021)

Also, Christian religion has been found to significantly influence the desired number of children as women who were Christians were more likely to desire more children than their counterpart in the reference category. This finding is not consistent with the study by (Ahinkorah et al., 2021) where it was discovered that Muslim women desire more children than their counterpart who were non-Muslims. The finding is also not consistent with the study carried out by (Odimegwu &

Adedini, 2014) who discovered that Christian women were less likely to desire more children than their counterparts who were Muslims and traditionalists. There is no significant relationship between religion and children desired in rural areas. Women whose husband ages are between 40 and 49 years were more likely to desire more children than those in the older categories. This finding supports the finding by(Matovu, Makumbi, Wanyenze, & Serwadda, 2017). There is no significant relationship between husbands' age and children desired in rural areas.

Finally, women who spaced their births within 24 months were less likely to desire more children when compared with their counterparts in the reference category. The reason for this could be that the women have achieved their ideal sex preference as it has been found that women who had not achieved their desired number of children tend to have shorter birth interval (Fayehun, Omololu, & Isiugo-Abanihe, 2011) There is no significant relationship between birth spacing and children desired in rural areas.

Conclusion

The study examined the determinants of disparity in desired fertility among married women in urban and rural setting in Southwest Nigeria.

The finding from the study showed that the desire for children is still high in the region even higher in urban centres. This desires form the bedrock of high fertility regime in the country.

It is also discovered in the study that increase in the level of education of women and spouses leads to reduction in fertility desire or intention.

It is also discovered that Christian religion supports high fertility desire in the study area.

Husband age has been found to positively affects desired fertility and finally, it is shown from the study that women with shorter birth interval were less likely to desire fertility in the urban centre.

Recommendations

Based on the findings of the study, the following suggestions were recommended.

1. Factors that encourage high fertility norms in the region such as desire for particular child and old age security should be eradicated by government through provision of basic amenities for the people as well as payment of old-age allowances to the elderly in our society.
2. Government should make primary and secondary school education free and compulsory to increase literacy level in our country so as to reduce or eliminate factors supporting high fertility intention in our society.
3. Religious leaders should educate their members while relevant stakeholders should sensitize the people on the need to regulate their fertility desires with a view to reducing fertility level in the country.
4. Women should be advised to adequately space their births with a view to enhancing the health of the child and mother while also helping to achieve fertility reduction in the country.

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