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Original Research Article

Factors associated with contraceptive use among married women in Nigeria: evidence from the Nigeria demographic and health survey

Yasmin A. Ahmed*, Türkan Günay

Department of Public Health, Dokuz Eylul University, Izmir, Turkiye

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***Correspondence:**
Yasmin A. Ahmed,
E-mail: yasmin.ahmed0809@gmail.com

ABSTRACT

Background: Contraceptive use is a key component of reproductive health, reducing unintended pregnancies and improving maternal and child health outcomes. However, uptake remains low in Nigeria. This study examined factors associated with contraceptive use among married women in Nigeria.
Methods: This study analyzed secondary data from the Nigeria Demographic and Health Survey (**NDHS**). A total of 27,841 currently married women aged 15-49 years were included. The outcome variable was current contraceptive use (any method vs non-use). Descriptive statistics summarized respondents' characteristics. Bivariate analyses assessed associations, while multivariable logistic regression identified individual, reproductive, partner and household-level variables associated with contraceptive use.
Results: Overall, 15.4% of married women reported current contraceptive use. Higher education was strongly associated with contraceptive use (aOR=2.30, 95% CI: 1.99-2.66). Women practicing Christianity/other religions (aOR=1.70, 95% CI: 1.51-1.91) had higher odds of use compared to their Muslim counterparts. Fertility preference and gender of living children were also significant. Partner's education and urban residence increased likelihood of contraceptive use. Women from rich households had higher likelihood of use (aOR=1.92, 95% CI: 1.69-2.19), while those in the South-South region (aOR=0.60, 95% CI: 0.52-0.69) had lower odds.
Conclusions: Contraceptive use among married women in Nigeria remains low and is associated with socio-demographic, reproductive, partner-related and household factors. Targeted interventions addressing female education, promoting male involvement and inequities in access may improve contraceptive uptake and reproductive health outcomes.

Keywords: Contraceptive use, Family planning, Nigeria, Reproductive health

INTRODUCTION

Family planning is a key component of reproductive health and plays a vital role in improving maternal and child health outcomes.

Expanding access to modern contraceptive methods has therefore become a global public health priority in response to population growth, high maternal and child mortality and the need to promote sustainable development.[1,2]

Despite increasing global efforts to expand access to family planning services, unintended pregnancy remains a significant public health challenge. Globally, an estimated 121 million unintended pregnancies occur annually, representing nearly half of all pregnancies worldwide.[3] The burden of unintended pregnancies is disproportionately concentrated in low- and middle-income countries, particularly in Sub-Saharan Africa, where contraceptive use remains relatively low and access to reproductive health services is often limited.[4] Socio-cultural norms, misinformation about contraceptive

methods and economic inequalities continue to influence contraceptive uptake across many countries in the region, with regional prevalence of contraceptive use estimated at approximately 24%.[5-7]

Nigeria, the most populous country in Africa, continues to experience relatively low levels of modern contraceptive use among women. Population projections suggest that Nigeria's population may exceed 400 million by 2050, potentially making it the third most populous country in the world.[7] Despite various national and international initiatives implemented to improve family planning access, modern contraceptive prevalence remains modest compared with global averages.[8,9]

According to the NDHS, the use of modern contraceptive methods among women of reproductive age was estimated at 17%.[10] Modern contraceptive use was reported to be higher among sexually active unmarried women (28%) compared with sexually active married women (12%), highlighting a persistent challenge.[10] Although Nigeria aimed to increase the prevalence of modern contraceptive use to 27% by 2020, the reported rate indicates limited progress toward achieving this target.[9,10] As a result, it is estimated that nearly 16 million women in Nigeria continue to have unmet needs for protection against unintended pregnancy and sexually transmitted infections.[10] Understanding the factors influencing contraceptive use is therefore essential for designing effective family planning programs and improving reproductive health outcomes.

Without significant improvements in reproductive health services, particularly access to modern contraceptive methods, rapid population growth may place increasing pressure on the country's health, education and social systems. The NDHS provides nationally representative data that allow for a detailed examination of contraceptive use patterns among women across the country. Identifying the factors associated with contraceptive use is essential for informing policies and programs aimed at improving access to family planning services. Therefore, this study aims to examine the factors associated with contraceptive use among married women in Nigeria using data from the 2018 NDHS.

METHODS

Study design and data source

This study analyzed secondary data from the 2018 NDHS, a nationally representative cross-sectional survey conducted by the National Population Commission (NPC) in collaboration with the National Malaria Elimination Programme (NMEP). The survey was implemented with technical support from ICF and financial support from the United States Agency for International Development (USAID) and other development partners including the Global Fund, the Bill and Melinda Gates Foundation, the United Nations Population Fund (UNFPA) and the World Health Organization. The NDHS collects demographic and health-related information to support national health planning and policy development. The 2018 survey was the sixth DHS conducted in Nigeria and was implemented using computer-assisted personal interviewing (CAPI), which enabled more efficient data collection and processing.[10]

Study population and sampling

The NDHS employed a stratified two-stage cluster sampling design based on the 2006 Nigeria Population and Housing Census sampling frame. Nigeria was stratified by its 36 states and the Federal Capital Territory, with each stratified into urban and rural areas, resulting in 74 sampling strata. In the first stage, 1,400 enumeration areas (EAs) were selected as primary sampling units using probability proportional to size sampling. In the second stage, 30 households were systematically selected from each cluster, yielding a total sample of approximately 42,000 households.

A total of 41,668 households were selected, of which 40,666 were occupied. Interviews were successfully completed in 40,427 households, resulting in a household response rate of approximately 99%. Within these households, 42,121 women aged 15-49 years were identified as eligible for individual interviews, and 41,821 women were successfully interviewed (response rate 99%).

Although the NDHS collects data from all women aged 15-49 years regardless of marital status, this study focused on currently married women. After applying the inclusion criteria, a total of 27,841 married women aged 15-49 years were included in the analysis.

Variables

The outcome variable in this study was current contraceptive use, defined as whether a woman or her partner was using any contraceptive method at the time of the survey. This variable was categorized as use of any contraceptive method (modern, traditional or folkloric) versus non-use. This broader definition was adopted to capture overall contraceptive behavior among married women, rather than focusing solely on modern methods. This approach allows for a more comprehensive understanding of factors influencing contraceptive use in settings where traditional and folkloric methods are still practiced.

Independent variables included socio-demographic, reproductive, partner-related and household characteristics. Socio-demographic variables included age, education level, occupation, religion, ethnicity, age at first cohabitation and residing with partner. Reproductive characteristics included fertility preferences, number of living children, number of living sons and daughters, number of deceased children,

abortion history and knowledge of ovulation and contraceptive methods. Partner-related characteristics included partner's age, education level and occupation. Household-level variables included place of residence, region and household wealth index.

Statistical analysis

Data were analyzed using statistical package for the social sciences (SPSS) version 23. Sampling weights provided in the NDHS dataset were applied during analysis to account for the complex survey design and ensure nationally representative estimates. Descriptive statistics were used to summarize the characteristics of the study population. Frequencies, percentages, means, medians and standard deviations were calculated for selected variables. Bivariate analyses were conducted to assess the association between the dependent variables and independent variables using chi-square tests and t tests. Variables with $p \leq 0.20$ in the bivariate analysis were included in the multivariable logistic regression model.

Multivariable logistic regression analysis was performed using the enter method to identify factors associated with contraceptive use. To explore the contribution of different groups of variables, four regression models were constructed. The first model included socio-demographic characteristics of women. The second model added reproductive characteristics. The third model included partner-related characteristics, and the final model incorporated household-level variables. Multicollinearity among independent variables was assessed prior to inclusion in the regression model. Adjusted odds ratios (aORs) with 95% confidence intervals (CIs) were reported. A p of less than 0.05 was considered statistically significant.

RESULTS

Characteristics of respondents

A total of 27,841 currently married women aged 15-49 years were included in the analysis. Overall, 15.4% of married women reported current contraceptive use, while 84.6% were not using any method at the time of the survey. The mean age of respondents was 31.9±8.6 years. The largest proportion of women were aged 25-29 years (20.6%), followed by those aged 30-34 years (18.4%). Nearly half of the respondents (45.2%) had no formal education, while 29.2% had secondary education and 9.1% had higher education.

The majority of respondents were Muslim (58.3%), while 31.7% identified as other Christian denominations and 9.2% were Catholic. Most women resided in rural areas (64.2%), while 35.8% lived in urban areas. With respect to household economic status, 22.7% of respondents belonged to the poorest households, while 16.8% belonged to the richest households. Early union formation was common among respondents. Approximately 34.3% of women began cohabiting at age 15 years or younger, while 23.2% began cohabiting at age 22 years or older. Most women (91.1%) reported living with their partners.

Regarding reproductive characteristics, the mean number of living children among respondents was 3.74±2.18. The majority of women (79.9%) reported having fewer children than their desired number. A history of abortion was reported by 15.2% of respondents. Knowledge of contraceptive methods was high, with 93.4% of women reporting knowledge of at least one modern contraceptive method. Partner characteristics also varied considerably. The mean age of partners was 42.4±11.2 years and approximately 34.9% of partners had no formal education. Most partners were engaged in agriculture or livestock-related occupations (39.7%) (Table 1).

Factors associated with contraceptive use

Bivariate analysis showed significant associations between contraceptive use and several socio-demographic, reproductive, partner-related, and household characteristics. Variables including education level, ethnicity, religion, occupation, fertility preference, number of living children, partner education, place of residence, and household wealth index were significantly associated with contraceptive use ($p<0.05$). These variables were subsequently included in the multivariable logistic regression analysis (Table 2).

Multivariable logistic regression analysis identified several factors associated with contraceptive use among married women in Nigeria. Education was one of the strongest predictors of contraceptive use. Women with primary education (OR=1.86; 95% CI: 1.61-2.15) and those with secondary or higher education (OR=2.30; 95% CI: 1.99-2.66) had significantly higher odds of contraceptive use compared with women with no formal education. Ethnicity was also associated with contraceptive use. Compared with Hausa women, Igbo (OR=1.66; 95% CI: 1.30-2.12) and Yoruba women (OR=1.63; 95% CI: 1.31-2.03) were more likely to use contraceptives. Religious affiliation was another important factor. Women identifying as Christian or other religions had higher odds of contraceptive use compared with Muslim women (OR=1.70; 95% CI: 1.51-1.91). Employment status was also associated with contraceptive use. Working women were more likely to use contraceptive methods than those not working (OR=1.20; 95% CI: 1.07-1.33).

Reproductive factors also played an important role. Women who desired no more children had significantly higher odds of contraceptive use (OR=1.57; 95% CI: 1.40-1.77) compared with those who wanted additional children. In addition, no. of living children was positively associated with contraceptive use. Each additional living son increased the odds of contraceptive use (OR=1.25; 95% CI: 1.21-1.30), while each additional living daughter increased the odds (OR=1.17; 95% CI: 1.13-1.22).

Partner characteristics also associated with contraceptive use. Women whose partners had primary education (OR=1.39; 95% CI: 1.18-1.64)/secondary/ higher education (OR=1.60; 95% CI: 1.38-1.86) more likely to use contraceptives than those whose partners had no education. Women whose partners desired fewer children also had higher odds of contraceptive use (OR=1.34; 95% CI: 1.22-1.46). Household factors were also significant. Women residing in urban areas were more likely to use contraceptives than those in rural areas (OR=1.23; 95% CI=1.12-1.35). Household wealth was also strongly associated with contraceptive use. Compared with women from poor households, women from middle-income households (OR=1.32; 95% CI=1.17-1.50) and rich households (OR=1.92; 95% CI=1.69-2.19) had significantly higher odds of contraceptive use (Table 3).

Table 1: Socio-demographic characteristics of respondents among currently married women aged 15-49 years in Nigeria, NDHS 2018, (n=27,841).

Variables	Category	N	Percentages (%)
Age group (in years)	15-19	1,746	6.3
	20-24	4,092	14.7
	25-29	5,728	20.6
	30-34	5,132	18.4
	35-39	4,652	16.7
	40-44	3,444	12.4
	45-49	3,047	10.9
Education level	No education	12,580	45.2
	Primary	4,606	16.5
	Secondary	8,120	29.2
	Higher	2,535	9.1
Ethnicity	Hausa	8,567	30.8
	Other	7,148	25.7
	Igbo	3,746	13.4
	Yoruba	3,117	11.2
	Fulani	2,532	9.1
	Kanuri/Beri	645	2.4
	Tiv	635	2.2
	Ijaw/Izon	623	2.2
	Ibibio	407	1.5
	Igala	276	1.0
	Ekoi	122	0.4
	Don't know	23	0.1
Religion	Islam	16,242	58.3
	Other Christian	8,832	31.7
	Catholic	2,550	9.2
	Other	113	0.4
	Traditional religion	104	0.4
Occupation	Sales and related work	10,942	39.3
	Not working	7,396	26.6
	Agriculture/livestock	5,030	18.1
	Services	1,615	5.8
	Professional/technical	1,342	4.8
	Production workers	849	3.0
	Clerical/administrative support	289	1.0
	Managerial	283	1.0
	Installation/maintenance/repair	47	0.2
	Other	37	0.1
	Transportation/material moving	11	0.1
Age at first cohabitation (years)	≤15	9,540	34.3
	16-17	5,189	18.6
	18-19	3,824	13.7
	20-21	2,840	10.2
	≥22	6,448	23.2
Residing with partner	Living with partner	25,364	91.1
	Living separately	2,477	8.9
	Declared infecund	757	2.7
	Sterilized (self/partner)	68	0.3

Table 2: Reproductive characteristics of respondents among currently married women aged 15-49 years in Nigeria, NDHS 2018, (n=27,841).

Variables	Category	N	Percentages (%)
Actual-ideal number of children gap	Fewer than desired	22,242	79.9
	Equal to desired	2,465	8.9
	More than desired	2,316	8.3
	Non-numeric response	818	2.9
Number of living children (n=26,022)	None	297	1.1
	1-2	8,561	32.9
	3-4	8,428	32.4
	≥5	8,736	33.6
Number of deceased children (n=26,022)	None	17,169	66.0
	1-2	6,950	26.7
	3-4	1,457	5.6
	≥5	446	1.7
History of abortion	No	23,601	84.8
	Yes	4,240	15.2
Knowledge of ovulation	After menstruation	15,317	55.0
	Mid-cycle	6,935	24.9
	Before menstruation	3,424	12.3
	Any time	1,036	3.7
	Don't know	838	3.0
	During menstruation	242	0.9
	Other	49	0.2
Fertility preference	Wants within 2 years	9,332	33.5
	Wants after 2+ years	7,987	28.7
	Wants no more	6,985	25.1
	Undecided	1,670	6.0
	Timing uncertain	1,042	3.7
	Declared infecund	757	2.7
	Sterilized (self or partner)	68	0.3
Knowledge of contraceptive methods	Knows modern method	25,997	93.4
	Knows no method	1,663	6.0
	Knows only traditional method	116	0.4
	Knows only folkloric method	65	0.2
Contraceptive use	Not using	23,541	84.6
	Using	4,300	15.4

Table 3: Partner-related characteristics of respondents among currently married women aged 15-49 years in Nigeria, NDHS 2018, (n=27,841).

Variables	Category	N	Percentages (%)
Partner age (in years)	≤24	542	1.9
	25-29	2,209	7.9
	30-34	4,048	14.5
	35-39	4,829	17.3
	40-44	4,599	16.5
	45-49	3,986	14.3
	≥50	7,628	27.4
Partner education level	No education	9,707	34.9
	Primary	4,252	15.3
	Secondary	9,154	32.9
	Higher	4,355	15.6
	Don't know	373	1.3

Continued.

Variables	Category	N	Percentages (%)
Partner occupation	Agriculture or livestock	11,066	39.7
	Sales and related work	5,242	18.9
	Professional/technical	2,300	8.3
	Transportation/material moving	2,095	7.5
	Services	1,796	6.4
	Production/construction or mining	1,625	5.9
	Not working	1,013	3.6
	Installation/maintenance or repair	961	3.5
	Managerial	855	3.1
	Clerical or administrative support	714	2.5
	Other	88	0.3
	Don't know	86	0.3
Partner's fertility preference (n=27,773)	Partner wants more	12,383	44.6
	Both want same	10,994	39.6
	Don't know	2,967	10.7
	Partner wants fewer	1,429	5.1

Table 4: Household characteristics of respondents among currently married women aged 15-49 years in Nigeria, NDHS 2018, (n=27,841).

Variables	Category	N	Percentages (%)
Place of residence	Rural	17,872	64.2
	Urban	9,969	35.8
Region	North-West	8,098	29.1
	North-East	5,587	20.1
	North-Central	5,192	18.6
	South-West	3,250	11.7
	South-East	3,117	11.2
	South-South	2,597	9.3
Household wealth index	Poorest	6,314	22.7
	Poorer	6,100	21.9
	Middle	5,566	20.0
	Richer	5,196	18.7
	Richest	4,665	16.8

Table 5: Bivariate association between explanatory variables and contraceptive use among married women in Nigeria, NDHS 2018, (n=27,841).

Variables	Category	Contraceptive use, N (%)		P value
		Not using	Using	
Socio-demographic characteristics				
Age (in years)	Mean±SD	31.63±8.82	33.65±7.31	<0.001
Education level	No education	11,917 (94.7)	663 (5.3)	<0.001
	Primary	3,782 (82.1)	824 (17.9)	
	Secondary or higher	7,842 (73.6)	2,813 (26.4)	
Ethnicity	Hausa	8,036 (93.8)	531 (6.2)	<0.001
	Igbo	2,741 (73.2)	1,005 (26.8)	
	Yoruba	2,113 (67.8)	1,004 (32.2)	
	Other	10,651 (85.8)	1,760 (14.2)	
Religion	Islam	14,835 (91.3)	1,407 (8.7)	<0.001
	Christian	8,501 (74.7)	2,881 (25.3)	
	Other	205 (94.5)	12 (5.5)	
Occupation	Working	16,800 (82.2)	3,645 (17.8)	<0.001
	Not working	6,741 (91.1)	655 (8.9)	

Continued.

Variables	Category	Contraceptive use, N (%)		P value
		Not using	Using	
Reproductive characteristics				
Age at first cohabitation (in years)	Mean±SD	18.60±5.01	18.38±5.08	0.005
Living with partner	Living together	21,462 (84.6)	3,902 (15.4)	0.367
	Living separately	2,079 (83.9)	398 (16.1)	
Actual and ideal number of children gap	Fewer than desired	1,747 (75.4)	569 (24.6)	<0.001
	More than desired	19,577 (88.0)	2,665 (12.0)	
	Equal to desired	1,588 (64.4)	877 (35.6)	
Knowledge of ovulation	Correct answer	5,688 (82.0)	1,247 (18.0)	<0.001
	Incorrect answer	17,107 (85.2)	2,961 (14.8)	
Fertility preference	Wants more children	16,227 (88.4)	2,134 (11.6)	<0.001
	Wants no more	5,209 (74.6)	1,776 (25.4)	
History of abortion	No	19,949 (84.5)	3,652 (15.5)	0.763
	Yes	3,592 (84.7)	648 (15.3)	
Knowledge of contraceptive methods	Knows modern method	21,704 (83.5)	4,293 (16.5)	<0.001
	Knows none	1,663 (100.0)	0 (0.0)	
	Knows traditional/folkloric	174 (96.1)	7 (3.9)	
Number of living children	Mean±SD	3.71±2.23	3.90±1.91	<0.001
Number of dead children	Mean±SD	0.69±1.21	0.37±0.83	<0.001
Number of living sons	Mean±SD	1.74±1.51	2.02±1.37	<0.001
Number of living daughters	Mean±SD	1.69±1.49	1.86±1.36	<0.001
Partner characteristics				
Partner age (in years)	Mean±SD	42.43±11.46	42.52±9.53	0.601
Partner education	No education	9,250 (95.3)	457 (4.7)	<0.001
	Primary	3,574 (84.1)	678 (15.9)	
	Secondary or higher	10,379 (76.8)	3,130 (23.2)	
Partner occupation	Sales	4,465 (85.2)	777 (14.8)	<0.001
	Agriculture	9,988 (90.3)	1,068 (9.7)	
	Other	9,078 (78.7)	2,455 (21.3)	
Partner fertility preference	Wants more children	11,165 (90.2)	1,218 (9.8)	<0.001
	Wants fewer children	12,376 (80.1)	3,082 (19.9)	
Household characteristics				
Place of residence	Rural	15,963 (89.3)	1,909 (10.7)	<0.001
	Urban	7,578 (76.0)	2,391 (24.0)	
Region	North-West	7,591 (93.7)	507 (6.3)	<0.001
	North-Central	4,314 (83.1)	878 (16.9)	
	North-East	5,001 (89.5)	586 (10.5)	
	South-East	2,326 (74.6)	791 (25.4)	
	South-South	2,112 (81.3)	485 (18.7)	
	South-West	2,197 (67.6)	1,053 (32.4)	
Household wealth index	Poor	11,564 (93.2)	850 (6.8)	<0.001
	Middle	4,747 (85.3)	819 (14.7)	
	Rich	7,230 (73.3)	2,631 (26.7)	

Table 6: Multivariable logistic regression analysis of factors associated with contraceptive use among married women in Nigeria, NDHS 2018, (n=27,841).

Variables	Category	aOR	95% CI	P value
Age (in years)		0.95	0.94-0.96	<0.001
Education level	No education	Ref		
	Primary	1.86	1.61-2.15	<0.001
	Secondary or higher	2.30	1.99-2.66	<0.001
Ethnicity	Hausa	Ref		
	Igbo	1.66	1.30-2.12	<0.001
	Yoruba	1.63	1.31-2.03	<0.001
	Other	1.37	1.16-1.61	<0.001
Religion	Islam	Ref		

Continued.

Variables	Category	aOR	95% CI	P value
	Christian/other	1.70	1.51-1.91	<0.001
Employment status	Not working	Ref		
	Working	1.20	1.07-1.33	0.002
Age at first cohabitation (in years)		1.03	1.02-1.04	<0.001
Fertility preference	Wants more children	Ref		
	Wants no more	1.57	1.40-1.77	<0.001
Number of living sons		1.25	1.21-1.30	<0.001
Number of living daughters		1.17	1.13-1.22	<0.001
Partner education	No education	Ref		
	Primary	1.39	1.18-1.64	<0.001
	Secondary or higher	1.60	1.38-1.86	<0.001
Partner occupation	Agriculture	Ref		
	Sales	1.05	0.92-1.20	0.451
	Other	1.17	1.05-1.30	0.004
Partner fertility preference	Wants more children	Ref		
	Wants fewer children	1.34	1.22-1.46	<0.001
Place of residence	Rural	Ref		
	Urban	1.23	1.12-1.35	<0.001
Region	North-Central	Ref		
	North-West	1.03	0.86-1.22	0.764
	North-East	1.16	1.00-1.35	0.047
	South-East	0.68	0.55-0.84	<0.001
	South-South	0.60	0.52-0.69	<0.001
	South-West	1.18	1.00-1.40	0.048
Household wealth index	Poor	Ref		
	Middle	1.32	1.17-1.50	<0.001
	Rich	1.92	1.69-2.19	<0.001

*aOR: Adjusted odds ratio; CI: Confidence interval

DISCUSSION

The findings of this study indicate that contraceptive use among married women in Nigeria remains relatively low, with only 15.4% of respondents reporting the use of any contraceptive method. This prevalence remains below national and global family planning targets and highlights persistent gaps in access to and utilization of contraceptive services in Nigeria.[10,11] Education was significantly associated with contraceptive use. Women with primary or higher levels of education were significantly more likely to use contraceptive methods compared with women with no formal education. Education may influence contraceptive use through several pathways, including improved health literacy, greater awareness of reproductive health services and increased autonomy in household decision-making. These findings are consistent with previous studies conducted in Nigeria and other Sub-Saharan African countries, which have demonstrated a positive association between female education and contraceptive uptake.[12-14]

Ethnicity and religion were also significantly associated with contraceptive use. Women from Igbo and Yoruba ethnic groups were more likely to use contraceptive methods compared with Hausa women. Similarly, Christian women had higher contraceptive use compared with Muslim women. These patterns may reflect regional, cultural and religious differences in reproductive norms and access to family planning services across Nigeria. Previous studies has similarly reported lower contraceptive use in northern regions of the country, where cultural norms favor larger family sizes and early marriage.[15,16]

Employment status was positively associated with contraceptive use. Women who were employed had higher odds of contraceptive use compared with women who were not working. Employment may enhance women's economic independence and decision-making power, which in turn may facilitate access to reproductive health services and contraceptive methods. Similar associations between women's employment and contraceptive use have been reported in studies conducted in Nigeria and other low- and middle-income countries.[17,18]

Reproductive characteristics were also significantly associated with contraceptive use. Women who reported that they wanted no more children were significantly more likely to use contraceptives compared with those who desired additional children. In addition, the number of living children was positively associated with contraceptive use, suggesting that women may be more motivated to adopt contraception after reaching or approaching their desired family size. These findings are

consistent with previous studies indicating that parity and fertility intentions are key factors associated with contraceptive adoption.[18-20]

Partner-related characteristics were also associated with contraceptive use. Women whose partners had higher levels of education were more likely to use contraceptives. Additionally, women whose partners desired fewer children were more likely to report contraceptive use. These findings highlight the important role of male partners in reproductive decision-making and underscore the importance of including men in family planning education and interventions.[21-25]

Household wealth and place of residence were also significantly associated with contraceptive use. Women residing in urban areas and those from wealthier households were more likely to use contraceptive methods. These findings may reflect better access to health facilities, improved availability of family planning services and greater exposure to reproductive health information in urban and economically advantaged settings. Similar patterns have been reported in demographic and health survey analyses across several Sub-Saharan African countries.[22-26]

These findings have important implications for achieving the sustainable development goals (SDGs), particularly SDG 3 (Good health and well-being) and SDG 5 (Gender equality). Improving access to and use of contraceptive methods is essential for reducing maternal mortality, preventing unintended pregnancies and promoting women's reproductive autonomy. Addressing the socio-demographic, economic and partner-related disparities identified in this study can support targeted interventions aimed at increasing contraceptive use and advancing progress toward universal access to reproductive health services.

Overall, the results of this study suggest that contraceptive use among married women in Nigeria is shaped by a combination of socio-demographic, reproductive, partner-related and household factors. Interventions that address these multi-level factors, particularly those aimed at improving education, economic empowerment and equitable access to family planning services, may contribute to increased contraceptive use and improved reproductive health outcomes.

Strengths and limitations

Unlike some previous studies that focused exclusively on modern contraceptive methods, this study considered the use of any contraceptive method. This provides a broader perspective on contraceptive behavior, particularly in settings where traditional and folkloric methods remain in use. However, differences in effectiveness between methods should be considered when interpreting the findings. Nevertheless, the findings remain important for understanding overall contraceptive uptake and identifying barriers to the adoption of any form of fertility regulation.

This study has some limitations. First, the cross-sectional nature of the data limits the ability to establish causal relationships between variables. Second, although sampling weights were applied, the complex survey design was not fully accounted for, which may have led to underestimation of standard errors. Finally, contraceptive use was defined broadly without distinguishing between modern and traditional methods, which may limit the interpretation of the findings.

CONCLUSION

This study examined the factors associated with contraceptive use among married women in Nigeria using nationally representative data from the 2018 NDHS. The findings indicate that contraceptive use remains relatively low among married women in Nigeria. Socio-demographic factors such as women's education, employment status, ethnicity, and religion were significantly associated with contraceptive use. Reproductive characteristics, particularly fertility preferences and the number of living children, also played an important role in contraceptive adoption. In addition, partner characteristics, including partner education and fertility preferences, as well as household factors such as place of residence and household wealth, were significant predictors of contraceptive use.

These findings highlight the multifactorial nature of contraceptive behavior and underscore the importance of addressing both individual and structural factors associated with family planning utilization. Strengthening female education, improving access to reproductive health services in underserved areas, promoting women's economic empowerment and increasing male involvement in family planning programs may contribute significantly to improving contraceptive uptake in Nigeria. Targeted interventions addressing these factors are essential for improving reproductive health outcomes and supporting Nigeria's progress toward national and global family planning goals.

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