

Socioeconomic Determinants of Contraceptive use Among Women with Disabilities in Yobe State, Nigeria

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Abstract

Access to contraception is a fundamental component of sexual and reproductive health and a key determinant of women's autonomy and wellbeing. However, women with disabilities remain disproportionately excluded from family planning services, particularly in low-resource settings. This study examined the socioeconomic determinants of contraceptive use among women with disabilities in Yobe State, Nigeria. A cross-sectional descriptive survey design was adopted, involving 459 women with disabilities aged 15 years and above selected from Potiskum, Damaturu, and Yusufari Local Government Areas. Data were collected through face-to-face interviews using a structured questionnaire and analysed using SPSS version 26. Descriptive statistics were employed to summarise respondents' socio-demographic and socioeconomic characteristics, while chi-square tests were used to assess the associations between educational attainment, employment status, and contraceptive use. The findings showed that the majority of respondents were married, predominantly Muslim, and belonged to diverse ethnic groups. Educational attainment was generally low, with most respondents having only Islamic/Qur'anic or no formal education, and unemployment was widespread. The chi-square analysis revealed statistically significant associations between educational level and contraceptive use, as well as between employment status and contraceptive use. Women with higher levels of education and those who were employed or self-employed demonstrated higher contraceptive uptake. These results indicate that education and employment are critical determinants of contraceptive use among women with disabilities in Yobe State, operating within a broader context of gender norms, religious beliefs, and disability-related stigma. The findings therefore suggest that reproductive health policies and programmes in Yobe State should prioritise disability-inclusive education, employment and livelihood support for women with disabilities, and the integration of disability-sensitive family planning services within existing maternal and reproductive health frameworks.

Keywords: Women, Disabilities, Contraceptive, Socioeconomic, Determinants, Reproductive.

Introduction

High fertility and low contraceptive use characterize Nigeria's reproductive health landscape. The country's total fertility rate remains among the world's highest (≈ 6 children per woman) and modern contraceptive prevalence is only $\approx 12\%$ nationally. This national average conceals extreme regional disparities: uptake is far lower in the North than the South. For example, in Yobe State (North-East Nigeria) modern contraceptive use among

married women was estimated at only 1.7% (versus $\approx 29\%$ in Lagos and $\approx 7.8\%$ in the North-East overall). Lamidi (2015) similarly reported that fewer than 1% of married women in Yobe were using modern methods. These data underscore Yobe's reproductive health disadvantage: poverty is high and female education low, contributing to very low family planning coverage compared to wealthier southern states. In northern states like Kaduna, only about 13.7% of women use modern contraception, reflecting cultural norms, limited-service access, and gender barriers that favor traditional methods or spousal decision-making.

Women with disabilities (WWD) constitute roughly 15% of the world's population, yet they often face even greater disadvantages in reproductive health. Globally, WWD are "less likely to have access to family planning services than other women of the same age" (Zandam et al., 2022). In Nigeria, WWD experience multiple intersecting barriers: lack of sexual/reproductive health education, negative attitudes among families and providers, inaccessible information or facilities, and financial constraints. These barriers are compounded by disability-specific challenges (for example, communication difficulties for women with hearing impairments). Nigerian data confirm a disparity: the 2018 DHS shows unmet need for family planning is about 10 percentage points higher among WWD (only 19% of needs met) than among other women ($\approx 28\%$). Zandam et al. (2022) further found that Nigerian WWD have significantly lower awareness of modern contraceptives and are less likely to receive family planning information via media than non-disabled peers. In summary, the general neglect of WWD in family planning especially in low-resource settings, means their contraceptive behaviors remain under-studied.

Despite these needs, there is a striking gap in the literature on WWD's contraceptive use in Nigeria, particularly in disadvantaged regions. Few studies have examined how socioeconomic factors (education, wealth, employment, marital status, etc.) influence contraception among WWD. Theoretical models predict that higher social status (education, wealth, autonomy) should increase contraceptive uptake, but it is not known if these relationships hold among disabled women in Yobe. Moreover, Yobe's compounded challenges widespread poverty, conservative norms, and limited health infrastructure may uniquely shape disabled women's family planning choices. Existing Nigerian research (primarily from urban or southern contexts) has not explored these determinants for WWD in the North. Thus, there is a clear literature gap: no published study has systematically assessed the socio-economic correlates of contraceptive use among women with disabilities in Yobe State.

Problem Statement

The research problem is that women with disabilities in Yobe State face intersecting inequities regional and disability-related that undermine contraceptive use, yet the socioeconomic drivers of these outcomes are poorly understood. Yobe State, situated in Nigeria's impoverished North-East, has among the lowest modern contraceptive prevalence rates in the country. This regional disadvantage suggests that general barriers

(poverty, low female education, gender norms) already limit all women's access to family planning in Yobe.

Superimposed on this, disability creates additional obstacles: Nigerian WWD report lower awareness of contraceptive methods and encounter stigma, communication and mobility barriers, and provider biases. For example, WWD often need permission from family, may feel embarrassed communicating through interpreters, or have difficulty reaching clinics (cost and transport issues). Yet without empirical data, we do not know how socioeconomic factors (such as education level, wealth status, employment, marital status, or health decision-making autonomy) affect whether disabled women in Yobe use contraception. This gap hampers effective policy: if we cannot identify which social and economic determinants most influence contraceptive uptake for Yobe's disabled women, health programs cannot tailor interventions to their needs. Therefore, this study aims to fill this knowledge void by investigating the socioeconomic determinants of contraceptive use among women with disabilities in Yobe State. The findings will clarify whether factors like higher education or household wealth (which increase contraception in other groups) similarly benefit disabled women in a disadvantaged region, thereby informing strategies to improve their reproductive health access.

Research Objectives

1. To examine the socioeconomic profile of women with disabilities in Yobe State in terms of age, marital status, religion, ethnicity, educational attainment, and employment status.
2. To assess the relationship between educational attainment and contraceptive use among women with disabilities in Yobe State.
3. To determine the association between employment status and contraceptive use among women with disabilities in Yobe State.

Research Questions

1. What are the socioeconomic characteristics of women with disabilities in Yobe State with respect to age, marital status, religion, ethnicity, educational attainment, and employment status?
2. Is there a significant relationship between educational attainment and contraceptive use among women with disabilities in Yobe State?
3. Is there a significant association between employment status and contraceptive use among women with disabilities in Yobe State?

Methodology

Study Area

The study was carried out in Yobe State, situated in north-eastern Nigeria. The state is largely rural, with agriculture and informal trading constituting the primary sources of livelihood. Geographically, Yobe State lies between latitudes 10°30'N and 13°27'N and

longitudes $9^{\circ}35'E$ and $12^{\circ}30'E$, and is characterized by a semi-arid climate, scattered rural settlements, and limited health infrastructure (Figure 1). Based on the 2006 national population census, the projected population of the state is 4,193,649 (National Population Commission [NPC], 2023). Yobe State is ethnically diverse, comprising Kanuri, Kare-Kare, Fulani, Hausa, Bade, Ngizim, Ngamo, and other minority groups, and the population is predominantly Muslim. Potiskum, Damaturu, and Yusufari Local Government Areas (LGAs) were purposively selected to reflect urban, semi-urban, and rural settings and to ensure adequate representation of women with disabilities across varied socioeconomic contexts.

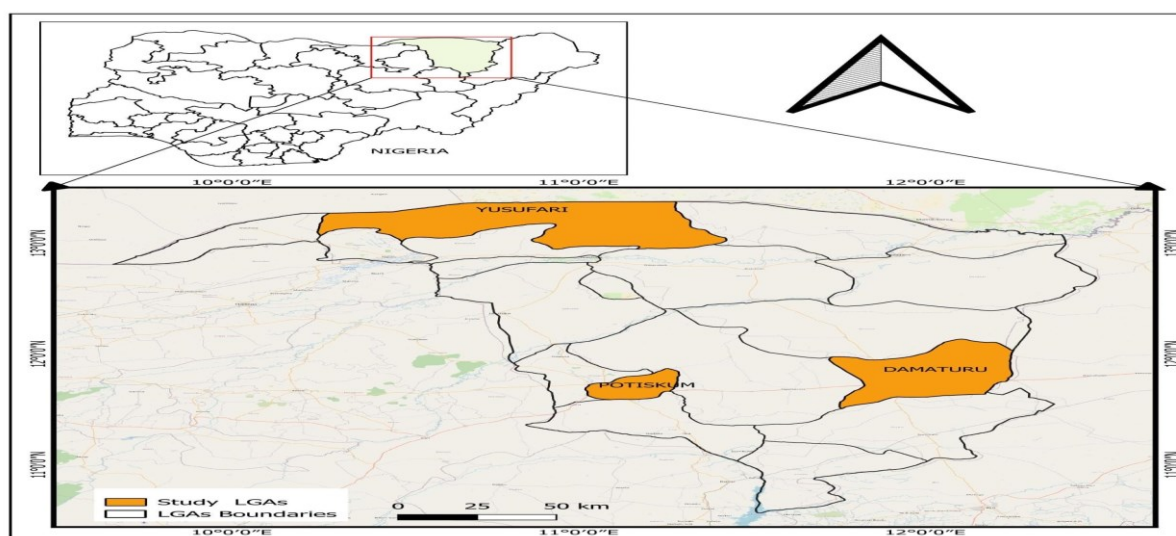


Figure 1: Map of Yobe Showing the Study Area

Source: Geographic information service (GIS) laboratory, Yobe State University, Damaturu

Research Design

A descriptive survey approach was employed to investigate the socioeconomic correlates of contraceptive use among women with disabilities in Yobe State, Nigeria. This design is well suited for studies that aim to characterize populations and examine relationships among categorical variables, including educational attainment, employment status, and contraceptive utilization, within a single temporal context (Babbie, 2020). The approach facilitated the collection of quantitative data across multiple Local Government Areas (LGAs), supporting both comparative and inferential analyses.

Study Population

The study population comprised women with disabilities aged 15 years and older who were resident in the selected Local Government Areas (LGAs). Disability categories included physical, visual, hearing, and other functional limitations. The minimum age criterion was consistent with definitions of reproductive and working-age populations commonly used in demographic and health research (WHO, 2022).

Sample Size and Sampling Procedure

A total of 459 women with disabilities were recruited for participation in the study. The sample size was determined based on participant accessibility and the need to achieve proportional representation across the selected Local Government Areas (LGAs), consistent with sampling approaches used in community-based disability research conducted in low-resource settings (United Nations Department of Economic and Social Affairs, 2021).

The study utilized a multistage sampling technique. Stage one involved the purposive selection of Potiskum, Damaturu, and Yusufari LGAs to capture urban, semi-urban, and rural contexts. In stage two, women with disabilities were identified through disability associations, community gatekeepers, and local health workers, reflecting established practices in settings where comprehensive sampling frames are unavailable (Trani et al., 2011). Stage three employed snowball sampling to reach additional participants, particularly those in remote or socially isolated areas (Emmett & Alant, 2006). This approach ensured adequate representation across age categories, marital status, ethnic groups, and socioeconomic strata.

Data Collection Instrument

Data were collected using a structured questionnaire adapted from established and validated tools on disability, reproductive health, and contraceptive use (WHO & World Bank, 2011). To enhance comprehension and inclusivity particularly among respondents with limited literacy the instrument was translated into Hausa and Kanuri. The questionnaire consisted of three sub-scales: socio-demographic characteristics (age, marital status, religion, and ethnicity), socioeconomic characteristics (educational level and employment status), and reproductive health behaviours, including contraceptive knowledge, use, type, and frequency. A pilot test involving 30 women with disabilities from neighboring Borno State (Biu Local Government Area) was conducted to evaluate reliability. Cronbach's alpha coefficients were 0.72 for the socio-demographic sub-scale, 0.78 for the socioeconomic sub-scale, and 0.81 for the reproductive health sub-scale, with an overall alpha of 0.79, indicating good internal consistency and instrument reliability.

Method of Data Collection

Data were collected through face-to-face interviews, an approach well suited for populations with low literacy levels and diverse forms of disability (Groce & Trani, 2009). This method helped reduce non-response bias and ensured the inclusion of women with limited formal education.

Data Analysis

Data coding and analysis were performed using SPSS version 26.0. Descriptive statistics, including frequencies, percentages, and cumulative percentages, were used to summarise socio-demographic variables (age, marital status, religion, and ethnicity) and

socioeconomic variables (education and employment). Inferential analysis involved the use of the chi-square test of independence to assess the association between socioeconomic characteristics specifically education and employment and contraceptive use among women with disabilities. Observed and expected frequencies were computed, and chi-square statistics, degrees of freedom, and p-values were reported to establish statistical significance (Field, 2018).

Results of the Study

Age Distribution of Women with Disabilities

Table 1 shows that women with disabilities in the three selected Local Government Areas of Yobe State, Potiskum, Damaturu, and Yusufari, are predominantly concentrated within the middle and later age categories (26–58 years), while younger women aged 15–25 years constitute the smallest proportion across all locations. Specifically, women aged 37–47 years form the largest group in Potiskum, those aged 48–58 years dominate in Damaturu, and respondents in Yusufari are evenly distributed between the 26–36 and 37–47 age groups.

This age structure is consistent with established demographic and disability research, which shows that the prevalence of disability increases with age due to cumulative exposure to health risks, chronic conditions, and life-course disadvantages. The World Report on Disability documents that disability is more common among older adults globally, particularly in low- and middle-income countries where access to preventive and rehabilitative health services is limited (WHO & World Bank, 2011). The dominance of middle-aged and older women in the present study, therefore, reflects both demographic realities and the life-course nature of disability rather than a sampling anomaly. The relatively small proportion of women aged 15–25 years may also reflect social and structural factors affecting the visibility of younger women with disabilities. Evidence from global sexual and reproductive health literature indicates that adolescents and young women with disabilities are frequently excluded from research, health services, and community programmes due to assumptions of asexuality, overprotection by families, and stigma surrounding disability and sexuality (WHO, 2014; UNFPA, 2018). In the Yobe State context, where cultural norms strongly regulate female sexuality and mobility, these barriers may further limit the participation of younger women with disabilities in community-based surveys and reproductive health discussions.

Table 1: *Age of Women with Disability*

LGA			Frequency	Percent (%)
Potiskum		15 - 25	18	7.3
		26 - 36	59	24.0
		37 - 47	65	26.4
		48 - 58	53	21.5
		59 and Above	51	20.7

LGA			Frequency	Percent (%)
		Total	246	100.0
Damaturu		15 - 25	16	9.5
		26 - 36	41	24.3
		37 - 47	35	20.7
		48 - 58	50	29.6
		59 and Above	27	16.0
		Total	169	100.0
Yusufari		15 - 25	3	7.1
		26 - 36	12	28.6
		37 - 47	12	28.6
		48 - 58	11	26.2
		59 and Above	4	9.5
		Total	42	100.0

Source: Author's Analysis, 2024.

From a reproductive health perspective, the dominance of women in the middle and later reproductive ages has essential implications for contraceptive behaviour. Women in these age groups are more likely to be married, to have experienced multiple pregnancies, and to face heightened economic and caregiving responsibilities, all of which can influence demand for contraception. However, national evidence indicates that modern contraceptive use in Yobe State remains among the lowest in Nigeria, even among married women (NPC & ICF, 2019). This suggests that age alone does not determine contraceptive uptake. Instead, age interacts with broader socioeconomic constraints, remarkably low levels of education, and limited employment opportunities to shape reproductive decision-making among women with disabilities.

Marital Status of Women with Disabilities

Table 2 indicates that a substantial majority of women with disabilities in Yobe State are married (59.9%), while notable proportions are divorced (22.4%) or widowed (12.6%), and only a small fraction remains single (5.0%). Most Nigerian women of reproductive age are married or in unions, especially in rural areas like Yobe. In the Yobe study, the majority of participants were married, as is typical for rural Nigeria. However, marriage does not guarantee contraceptive use. Recent analyses find married women often have lower modern contraceptive prevalence than unmarried women. For instance, Sanni et al. (2025) reported that married Nigerian women had significantly lower odds of using any contraception (adjusted OR≈0.79) compared to unmarried women. Likewise, Abubakar and Abubakar (2024) found that unmarried women were about 1.5 times more likely to use modern methods than married women. These patterns echo DHS findings that over 90% of married Nigerian women were not using a modern method. In short, even though most Yobe respondents were married, national data suggest marital status alone does not predict higher use; in fact, married rural women often face greater

cultural barriers to family planning than singles (NPC [Nigeria] & ICF, 2019; Abubakar & Abubakar, 2024).

Table 2: *Marital Status*

Marital Status	Frequency	Percent (%)
Single	23	5.0
Married	275	59.9
Divorced	103	22.4
Widowed	58	12.6
Total	459	100.0

Source: Author's Analysis, 2024.

The high proportion of married women reflects the strong cultural and religious expectations surrounding early and near-universal marriage in northern Nigeria, where marriage is widely regarded as a social obligation for women regardless of disability status. National demographic evidence confirms that marriage remains almost universal among women in the region, often occurring at relatively young ages (NPC & ICF, 2019). Within this context, disability does not necessarily preclude marriage, but it may shape the conditions under which marital unions are formed and sustained.

Religious Affiliation of Women with Disabilities

Table 3 shows that the majority of women with disabilities in Yobe State identify as Muslims (95.9%), while only a small minority are Christians (4.1%). Yobe State is predominantly Muslim, unlike much of southern Nigeria. Nationally, religious affiliation is a strong predictor of contraceptive use. Sanni et al. (2025) found that Muslim women had especially low uptake: the adjusted odds of modern method use among Muslims was only about half that of the reference group (AOR $\approx$ 0.49, $p < 0.001$). Christians also had lower odds than nonreligious women (AOR $\approx$ 0.86), but the Muslim effect was larger.

Table 3: *Religion*

Religion	Frequency	Percent
Islam	440	95.9
Christianity	19	4.1
Total	459	100.0

Source: Author's Analysis, 2024.

These patterns help explain Yobe's very low use: the entire region's Muslim-majority population practices contraception at far lower rates than the predominantly Christian South. Indeed, the North-East zone had modern prevalence of just 7.8%, versus 24.3% in the Southwest. In summary, the Yobe findings (with mostly Muslim women using contraception very rarely) are consistent with recent surveys showing religion – especially

Muslim affiliation as a significant barrier to contraceptive uptake in Nigeria (Sanni et al., 2025; NPC [Nigeria] & ICF, 2019).

Ethnic Composition of Women with Disabilities

Table 4 presents the ethnic composition of women with disabilities in Yobe State. The distribution includes a variety of ethnic groups native to the region, with the highest representation among the Kare-Kare (19.83%), Kanuri (19.17%), and Fulani (15.90%) ethnic groups. The Hausa (13.94%), Ngizim (10.24%), and other ethnic groups (6.75%) also have significant representation. Minorities such as the Bade (5.89%), Ngamo (4.36%), and Bolewa (3.92%) follow. One entry is ambiguous due to incomplete categorization.

Table 4: *Ethnicity*

Ethnicity	Frequency	Percent (%)
Kanuri	88	19.17
Hausa	64	13.94
Fulani	73	15.90
Bade	27	5.89
Kare-Kare	91	19.83
Bolewa	18	3.92
Ngizim	47	10.24
Ngamo	20	4.36
Other ethnic groups	31	6.75
Total	459	100.0

Source: Author's Analysis, 2024.

The ethnic distribution reflects the broader demographic patterns of Yobe State, which is home to diverse ethnic communities, with Kanuri, Kare-Kare, and Fulani being dominant (National Population Commission [NPC], 2023). The notable representation of these groups among women with disabilities may not necessarily indicate higher prevalence of disability within those groups, but could reflect their demographic weight in the population and their greater visibility in social research.

The largest proportion of respondents were Kare-Kare (19.83%), which is slightly higher than Kanuri (19.17%). This finding is notable given that the Kanuri are often regarded as the dominant ethnic group in Yobe State (Mustapha, 2006). Ethnic identity can significantly shape attitudes toward disability, including perceptions, care practices, and patterns of social inclusion. Research in northern Nigeria has shown that disability is frequently interpreted through cultural, spiritual, or metaphysical lenses, which may influence how persons with disabilities are treated within their communities (Sango et al., 2022). Among some northern Nigerian ethnic groups, such beliefs can result in both compassionate care and social exclusion, depending on prevailing local norms and interpretations.

Educational Attainment of Women with Disabilities

Table 5 shows that only 12.42% of WWDs in Yobe attained tertiary education, compared to 12.64% with secondary education, 16.34% with primary education, and 58.61% with no formal education (Islamic/Qur'anic). This pattern reveals a persistent educational gap. SSA data corroborate this, showing that fewer than 10% of children with disabilities complete secondary education compared to over 40% of non-disabled peers (World Bank, 2018).

From the perspective of the Social Model of Disability, these disparities are not primarily the result of individual impairments but are shaped by environmental and institutional barriers. Such barriers include inaccessible physical infrastructure, limited availability of trained personnel, and persistent stigma within educational and social institutions, all of which restrict meaningful participation by persons with disabilities (UNESCO, 2020).

Table 5: *Educational Background Status*

Educational Background	Frequency	Percent
Non formal education (Islamic/Qur'anic)	269	58.61
Primary certificate	75	16.34
Secondary certificate	58	12.64
Tertiary certificate	57	12.42
Total	459	100.0

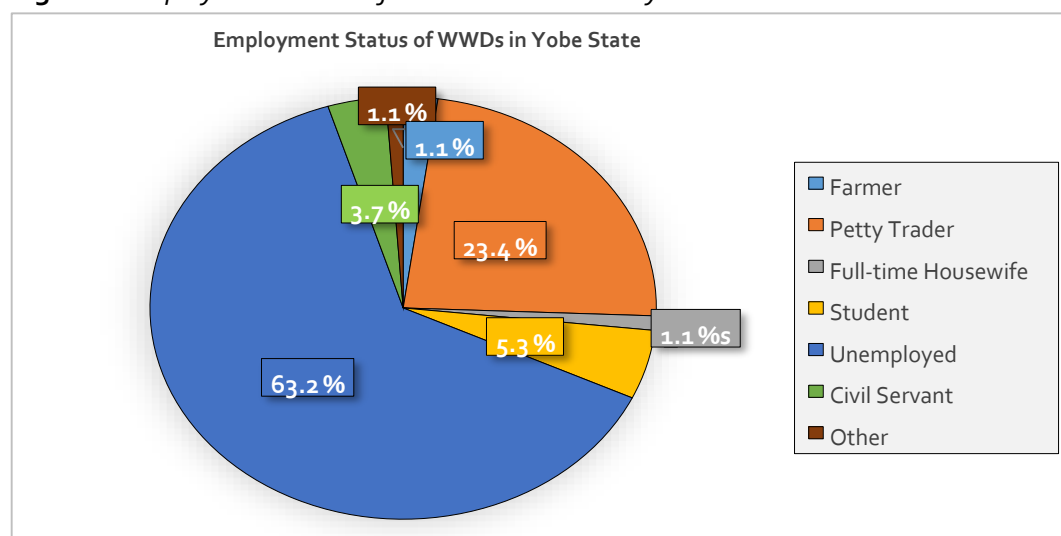
Source: Author's Analysis, 2024.

Research across SSA emphasizes that exclusionary practices in schools, combined with gender-based biases, push girls with disabilities out of formal education (Samia et al., 2022). In Yobe, socio-economic pressures further exacerbate this, as families often prioritize able-bodied children for limited educational resources. Consequently, lower educational attainment contributes to restricted employment options, marital dependency, and social exclusion.

Employment Status of Women with Disabilities

Figure 2 shows that the employment landscape of women with disabilities in Yobe State is dominated by unemployment (63.2%), with only a small proportion engaged in income-generating activities, mainly petty trading (23.4%). Formal employment is minimal, with civil servants constituting just 3.7% of respondents, while farming, tailoring, and other forms of work account for marginal shares. This indicates widespread economic exclusion and limited access to stable livelihoods among women with disabilities in the study area.

Figure 2: *Employment Status of Women with Disability in Yobe State*



Source: Author's Analysis, 2024.

Employment and wealth generally correlate with higher contraceptive use in Nigeria. The Yobe study noted that women with any form of employment were more likely to use contraception. National DHS data support this: Abubakar & Abubakar (2024) show that employed (working-class) women had about 1.15 times the odds of use compared to unemployed women. Similarly, Sanni et al. (2025) found wealthier women had much higher use, while the poorest had much lower odds. In rural areas (like Yobe), uptake is especially low: only 8.0% of rural women (versus 18.9% of urban women) reported using a modern method. These findings echo the Yobe context, where few women work outside the home and services are sparse. In sum, the Yobe pattern (more use among employed/higher-income women) mirrors national and international trends: socioeconomically disadvantaged women (less educated, rural, unemployed) have markedly lower modern contraceptive prevalence (Abubakar & Abubakar, 2024; Sanni et al., 2025).

Chi-Square Analysis of Socio-Economic Characteristics and Contraceptive Use

Tables 6a and 6b demonstrate a statistically significant association between educational attainment and contraceptive use among women with disabilities in Yobe State ($\chi^2 = 20.51$, $df = 5$, $p = 0.001$). Contraceptive use increases consistently with higher levels of education, with women who attained secondary and tertiary education reporting markedly higher uptake compared with those who had Islamic/Qur'anic, non-formal, or no formal education. This distribution shows that education is a critical enabling factor for contraceptive use in this population.

Table 6a: *Observed Frequencies: Education vs. Contraceptive Use*

Education	No	Yes	p-values
Islamic/Qur'anic	50	134	0.001
Non-Formal Education	1	6	
None	46	58	
Primary Certificate	13	33	
Secondary Certificate	6	22	
Tertiary Certificate	2	28	

Source: Author's Analysis, 2024.

Table 6b: *Expected Frequencies: Education vs. Contraceptive Use*

Education	No	Yes
Islamic/Qur'anic	54.42	129.58
Non-Formal Education	2.07	4.93
None	30.76	73.24
Primary Certificate	13.60	32.40
Secondary Certificate	8.28	19.72
Tertiary Certificate	8.87	21.13

Source: Author's Analysis, 2024.

The Yobe study's chi-square results showed a strong association between education and contraceptive use. This is in line with recent research. As noted, national DHS data show education greatly increases contraceptive uptake. For example, Abubakar & Abubakar (2024) found an 88% reduction in contraceptive use among women with no schooling. This held true even after adjusting for other factors. Likewise, Zandam et al. (2022) reported that Nigerian women with disabilities had far lower family planning awareness than nondisabled peers even after accounting for education, suggesting that education remains a key determinant. Overall, both Yobe-specific and broader analyses confirm that each step up in education is associated with significantly higher contraceptive prevalence.

Chi-Square Analysis of Employment Status and Contraceptive Use

Tables 7a and 7b show a statistically significant association between employment status and contraceptive use among women with disabilities in Yobe State ($\chi^2 = 27.37$, $df = 7$, $p = 0.0003$). Women who were employed or engaged in self-employment, particularly civil servants, petty traders, and students, reported higher contraceptive use compared with unemployed women and full-time housewives. This finding highlights employment as a key socioeconomic determinant of contraceptive behaviour in the study population.

Table 7a: *Observed Frequencies: Employment vs. Contraceptive Use*

Employment	No	Yes	p-value
Civil servant	0	14	0.0003
Farmer	5	3	

Employment	No	Yes	p-value
Fulltime housewife	5	0	
Hair pleating	1	1	
Petty trader	30	65	
Student	2	21	
Tailor	1	2	
Unemployed	74	175	

Source: Author’s Analysis, 2024.

Table 7b: Expected Frequencies: Employment vs. Contraceptive Use

Employment	No	Yes
Civil servant	4.14	9.86
Farmer	2.37	5.63
Fulltime housewife	1.48	3.52
Hair pleating	0.59	1.41
Petty trader	28.10	66.90
Student	6.80	16.20
Tailor	0.89	2.11
Unemployed	73.64	175.36

Source: Author’s Analysis, 2024.

The Yobe analysis also linked employment status with use: employed women had higher contraceptive rates. National evidence concurs. Abubakar & Abubakar (2024) report that working women had higher odds of use (adjusted OR ≈ 1.15). Sanni et al. (2025) likewise found higher uptake among wealthier, typically employed women. Conversely, rural and unemployed women show far lower use (only ~8% in rural areas). The chi-square association in Yobe thus matches the national picture: women who participate in the workforce or have independent income are more likely to use contraception than those who do not, consistent with both DHS and peer-reviewed analyses.

Education, Disability Type, and Contraceptive Use

Figure 3 demonstrates a strong association between educational attainment and contraceptive use among women with disabilities in Yobe State. Women who completed secondary and tertiary education exhibit substantially higher contraceptive uptake relative to women with no formal education. This pattern aligns with robust quantitative evidence indicating that education significantly influences modern contraceptive utilisation among women with disabilities in sub-Saharan Africa. A systematic review and meta-analysis found that secondary and tertiary educational attainment were positively associated with higher odds of contraceptive use among women with disabilities, compared with no formal education (secondary education: POR = 2.31; tertiary education: POR = 3.37), highlighting the role of education in enhancing both awareness and access to family planning services.

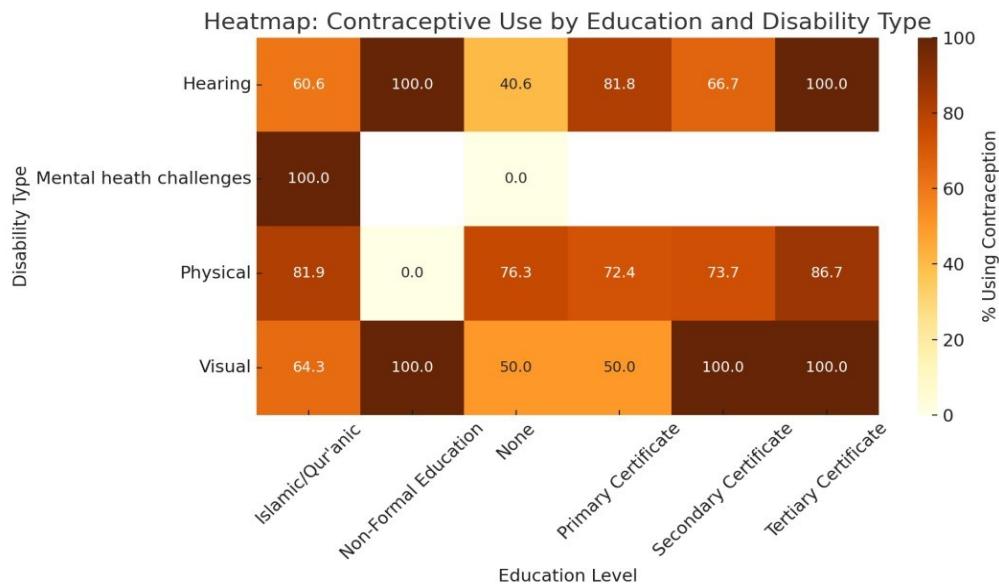


Figure 3: Heat map of Contraceptive Use by Education and Disability Type
Source: Author's Analysis, 2024.

Broader research confirms that sexual health knowledge and modern contraceptive use are generally low among women with disabilities, and that education, socio-economic status, marital status, and media access are important determinants of use. A spatial analysis of data from ten African countries showed that sexual health knowledge among women with disabilities ranged from as low as 3 % in Nigeria to 27% in Uganda, with modern contraceptive use following a similarly low pattern across settings (Bolarinwa et al., 2025). Higher educational attainment, community literacy, and media exposure were associated with higher knowledge and use of modern contraceptives.

Moreover, variation in contraceptive use by type of disability is consistent with literature documenting systemic barriers faced by subgroups of women with disabilities. These barriers include limited access to accessible sexual health information, communication challenges, stigma, and inadequate health system responsiveness (Tenaw et al., 2023). A scoping review of sexual and reproductive health research among women with disabilities in sub-Saharan Africa found that contraceptive use remains low overall, and that research on the topic is sparse and uneven across countries.

Conclusion

This study examined the socioeconomic determinants of contraceptive use among women with disabilities in Yobe State, Nigeria, against the backdrop of persistent inequalities in access to sexual and reproductive health services. The findings clearly demonstrate that women with disabilities in Yobe State are socially active, largely married, and embedded within prevailing religious, cultural, and ethnic structures, contradicting widespread assumptions that disability equates to asexuality or exclusion from family life. However,

their reproductive choices and contraceptive behaviors are strongly shaped and constrained by adverse socioeconomic conditions.

The study revealed a predominantly married population of women with disabilities, reflecting cultural norms of early and universal marriage in northern Nigeria. At the same time, the relatively high proportions of divorced and widowed women point to marital instability and heightened vulnerability, which may further limit reproductive autonomy and consistent contraceptive use. The religious homogeneity of the study population, overwhelmingly Muslim, underscores the importance of faith-based norms in shaping attitudes toward contraception, while the diverse ethnic composition highlights the need to understand disability and reproductive health within an intersectional cultural framework.

A key finding of the study is the markedly low level of formal education among women with disabilities in Yobe State. The dominance of Islamic/Qur'anic education and the very small proportion of women attaining secondary or tertiary education reflect entrenched structural barriers to inclusive education. This educational disadvantage has significant implications for contraceptive knowledge, access to information, and the ability to engage with health services. Similarly, limited employment opportunities and economic dependency further weaken women's capacity to make autonomous reproductive decisions and to afford or access contraceptive services.

Overall, the study confirms that socioeconomic factors particularly education and employment are critical determinants of contraceptive use among women with disabilities in Yobe State. These factors do not operate in isolation but intersect with gender norms, disability-related stigma, religion, and ethnicity to shape reproductive health outcomes. The absence of disability-inclusive reproductive health policies and programs at the state level exacerbates these challenges, leaving many women with disabilities with unmet contraceptive needs.

Recommendations

Based on the findings of this study, the following recommendations are proposed:

1. Government and non-governmental organizations should prioritize inclusive and accessible education for girls and women with disabilities. This includes strengthening special and inclusive education policies, providing scholarships, assistive devices, and disability-friendly learning environments, and integrating reproductive health education into both formal and Islamic/Qur'anic schooling systems.
2. Targeted livelihood and skills-development programs should be designed for women with disabilities to enhance their economic independence. Access to vocational training, microcredit schemes, and inclusive employment opportunities can improve women's autonomy and positively influence contraceptive uptake and reproductive decision-making.

3. Reproductive health and family planning programs in Yobe State should be explicitly designed to include women with disabilities. Health facilities should be made physically accessible, and information on contraception should be provided in disability-friendly formats, including sign language, Braille, and simplified language.
4. Continuous training should be provided to healthcare workers on disability inclusion, respectful care, and the sexual and reproductive rights of women with disabilities. This will help reduce stigma, negative attitudes, and discriminatory practices within health facilities.
5. Given the strong influence of religion and culture in Yobe State, religious leaders, traditional rulers, and community gatekeepers should be actively engaged in promoting accurate information about family planning and the reproductive rights of women with disabilities. Faith-sensitive advocacy can help address misconceptions and resistance to contraceptive use.

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