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Original Article

Intersectional Barriers to Sexual and Reproductive Health Access Among Young People in Primary Care: A Mixed-Methods Study in Karu, Nigeria

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Abstract

Introduction: Young people's access to sexual and reproductive health (SRH) services in primary health care (PHC) facilities is shaped by intersecting social identities including gender, age, disability, socioeconomic status, and sexual orientation. In Karu Local Government Area, Nasarawa State, Nigeria, these intersecting identities compound existing structural barriers to SRH access, yet empirical evidence on their joint influence remains limited.

Methods: A convergent mixed-methods was employed. A structured questionnaire was administered to 385 young people aged 15–24 years across three PHCs, yielding 376 valid responses (97.7% response rate). Qualitative depth was provided by two focus group discussions and five key informant interviews. Descriptive statistics, chi-square tests, and binary logistic regression were used for quantitative analysis. Qualitative data were analyzed thematically. The study was grounded in intersectionality, the Health Belief Model, and the Social Ecological Model.

Results: A total of 42.1% of respondents reported discrimination in PHC settings, primarily attributed to economic status (23.9%), age (22.3%), and gender (19.2%). Only 56.3% felt safe accessing SRH services. Gender, education, income, and disability were significant predictors of perceived safety ($P<0.05$). Just 29.1% perceived PHC staff as responsive to diverse youth needs. Qualitative findings revealed breaches of confidentiality, moral judgement, and exclusionary practices particularly affecting LGBTQ+ youth and persons with disabilities.

Conclusion: Intersectional discrimination, compromised safety, and inadequate staff responsiveness undermine equitable SRH access for young people in Karu PHCs. Strengthening provider sensitivity, enhancing privacy infrastructure, and embedding intersectionality into PHC policy are essential for building youth-centred, inclusive health systems in Nigeria.

Keywords: Adolescent health, Adolescent health services, Health services accessibility, Reproductive health services, Primary health care, Social discrimination, Nigeria

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Introduction

Primary Health Care (PHC) remains the foundation of Nigeria's health system. In Karu Local Government Area of Nasarawa State, PHC facilities provide maternal and child health, immunisation, and sexual and reproductive health (SRH) services. However, young people continue to experience barriers shaped by overlapping factors including gender, age, disability, sexual orientation, and socioeconomic background.[1,2,3]

Intersectionality, introduced by Crenshaw,[4,5] explains that individuals encounter discrimination at the crossroads of multiple social identities within structures of power. In healthcare, this framework reveals how interlocking hierarchies determine who receives care and the extent to which individuals feel safe and respected.[6,7]

Studies have documented how social intersections shape health outcomes.[3,8] In Nigeria, young people from marginalised backgrounds often report stigma, neglect, or judgement during service encounters.[9] Despite investment in PHC, limited work has examined how multiple identity factors jointly influence young people's experiences in Nigerian PHCs.[10,11]

This study examined the intersectional barriers, safety concerns, and service delivery gaps affecting young people's access to SRH services in Karu PHCs. Objectives were to: (i) identify forms of intersectional discrimination; (ii) examine safety concerns; and (iii) assess PHC responsiveness to diverse youth needs.

Methods

Research Design

A convergent mixed methods design integrated quantitative and qualitative approaches.[12] The quantitative component utilized a cross-sectional survey, while the qualitative component comprised focus group discussions (FGDs) and key informant interviews (KIIs).

Three theoretical frameworks guided the study. Intersectionality served as the primary analytical lens,

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guiding selection of social identity variables (gender, age, disability, sexual orientation, socioeconomic status) and framing analysis of their simultaneous interaction.[4,5] The Health Belief Model informed questionnaire design assessing perceived barriers, susceptibility to discrimination, and self-efficacy in accessing services.[13,14] The Social Ecological Model structured interpretation across individual, interpersonal, organizational, and policy levels.[11,15]

Study Area

The study was conducted in Karu LGA, Nasarawa State, North-Central Nigeria. Karu shares a boundary with the Federal Capital Territory and functions as a peri-urban extension of Abuja, characterized by rapid urbanization, ethnic diversity, and increasing informal settlements.[16] Health services operate through a PHC network providing preventive, promotive, and curative care, though infrastructural limitations and human resource shortages frequently hinder accessibility, especially for adolescents.[9]

Study Population and Sample Size

The population comprised young people aged 15–24 years accessing selected PHCs. Sample size was calculated using $n = z^2pq/d^2$ ($z = 1.96$, $P = 0.5$, $q = 0.5$, $d = 0.05$), yielding 385.[17] A value of $P = 0.5$ was selected to represent maximum variability as no prior prevalence estimate existed. A total of 385 questionnaires were administered, with 376 valid responses (97.7% response rate); nine were excluded due to incomplete data. No design effect adjustment was applied, which is recognized as a limitation.

Sampling Technique

Multistage sampling was adopted. Stage 1 stratified Karu LGA into eleven administrative wards. Stage 2 purposively selected three PHCs (Karu PHC, Ado PHC, New Karshi PHC) based on high adolescent attendance and SRH service availability. Stage 3 employed systematic random sampling using attendance registers, selecting every third eligible youth. Stage 4 used purposive sampling for qualitative recruitment: two FGDs and five KIIs representing diverse gender, disability, and socioeconomic backgrounds.

Research Instruments and Variables

A structured questionnaire (Supplementary File 1) assessed demographics, discrimination, safety perception, and PHC responsiveness using five-point Likert scales. FGD and KII guides (Supplementary File 2) explored youth–provider relationships, confidentiality, and inclusion of marginalized groups. Tools were reviewed by experts and pre-tested in Keffi LGA, achieving strong reliability (Cronbach's $\alpha = 0.82$).[18]

The two FGDs each comprised eight to ten participants and were stratified by gender, with one group of female-identifying participants and one of male identifying and non-binary participants, in order to encourage open disclosure on sexual and reproductive health matters. FGD participants were service users aged 15–24 years attending the selected PHCs, whereas key informants were purposively selected healthcare providers, community leaders, and SRH programme officers chosen for their decision-making roles and contextual knowledge of service provision. Each FGD was led by the principal researcher with a trained note-taker present. Recordings were transcribed verbatim and analysed using inductive thematic content analysis. Coding was undertaken by the principal researcher, with codes reviewed and refined through peer debriefing with the study supervisor, and final themes confirmed through member checking with a subset of participants. No intercoder reliability statistic was calculated, as coding was conducted by a single coder with supervisory review; this is acknowledged as a limitation.

Key variables were operationalized as follows. Perceived discrimination was measured through respondent-reported experiences with follow-up items identifying the basis. Disability status and sexual orientation were self-reported. Given Nigeria's criminalization of same-sex relationships, questionnaires were self-administered privately and anonymized to mitigate social desirability bias, though under-reporting remains probable. High 'prefer not to say' rates for disability (4.4%) and sexual orientation (5.2%) indicate stigma-related non-disclosure.

Data Collection

Trained research assistants supervised data collection. Participants completed self-administered questionnaires privately after informed consent. For respondents with limited literacy, items were read aloud in English or Hausa. Qualitative data were gathered in neutral environments, audio-recorded with permission, and supplemented with field notes. Each FGD lasted 60–90 minutes.

Data Analysis

Quantitative analysis used SPSS 26.0. Descriptive statistics summarized characteristics. Chi-square tests and logistic regression assessed relationships at $P < 0.05$. For regression, perceived safety was dichotomized (Safe/Very Safe = 1; Neutral/Unsafe/Very Unsafe = 0). Qualitative data underwent thematic content analysis with inductive coding, peer debriefing, and member checking. Results were triangulated to enhance validity.[12]

Consistent with the convergent mixed-methods design, the quantitative and qualitative strands were analyzed separately and merged at the interpretation stage. Quantitative results (Table 1–6) and the qualitative themes from the FGDs and KIIs (see the Qualitative Findings: Focus Group Discussions subsection) were compared side by side using a joint display, in which each quantitative finding was matched against the qualitative theme(s) that corroborated, extended, or diverged from it. For example, the finding that only 56.3% of respondents felt safe or very safe (Table 3) was corroborated by FGD narratives of moral gatekeeping and anticipated exposure, while the reduced odds of feeling safe among respondents

Table 1. Socio-Demographic Characteristics of Respondents (n = 376)

Variable	Category	Frequency	Percentage (%)
Gender	Male	172	44.7
	Female	198	51.4
	Non-binary/Other	8	2.1
	Prefer not to say	7	1.8
Age (years)	15–19	161	41.8
	20–24	224	58.2
Education	No formal education	17	4.4
	Primary	33	8.6
	Secondary	191	49.6
	Tertiary	123	31.9
	Vocational	21	5.5
Disability Status	Yes	39	10.1
	No	329	85.5
	Prefer not to say	17	4.4
Sexual Orientation	Heterosexual	317	82.3
	Gay/Lesbian	23	6.0
	Bisexual	25	6.5
	Prefer not to say	20	5.2

Source: Field Survey, 2025.

Table 2. Reported Reasons for Perceived Discrimination

Reason for Discrimination	Frequency	Percentage (%)
Economic status	92	23.9
Age	86	22.3
Gender	74	19.2
Education level	64	16.6
Sexual orientation	36	9.4
Religion	29	7.5
Disability	21	5.5

Source: Field Survey, 2025.

with disabilities (Exp(B) = 0.49, $P = 0.014$; Table 4) were extended by FGD accounts of providers redirecting participants with disabilities away from their stated SRH needs. Points of convergence strengthened confidence in the findings, while points of divergence are noted explicitly in the Discussion.

Results

Socio-Demographic Characteristics

A total of 376 valid responses were analysed (97.7% response rate). The gender distribution was relatively balanced: 44.7% male, 51.4% female, 2.1% non-binary or other, and 1.8% preferring not to say. The majority of respondents (58.2%) were aged 20–24 years, with 41.8% aged 15–19 years. Most respondents had completed secondary education (49.6%), while 31.9% had attained tertiary education. Persons with disabilities constituted 10.1% of the sample, and 16.4% identified as sexual minorities (gay, lesbian, or bisexual). These figures reflect the demographic diversity central to the intersectionality framework applied in this study.[4,10] Notably, 4.4% of respondents selected 'prefer not to say' for disability status and 5.2% for sexual orientation; these rates of non-disclosure are themselves indicative of the stigma associated with these identities in this context and should be considered when interpreting prevalence figures. Detailed socio-demographic characteristics are presented in Table 1.

Table 3. Perception of Safety in Accessing SRH Services

Category	Frequency	Percentage (%)
Very Safe	76	19.7
Safe	141	36.6
Neutral	87	22.6
Unsafe	54	14.0
Very Unsafe	27	7.1

Source: Field Survey, 2025.

Table 4. Logistic Regression Results for Predictors of Safety Perception

Variable	B	SE	Wald	*P*-value	Exp(B)
Gender	0.43	0.19	5.13	0.024	1.54
Age	0.12	0.15	0.64	0.423	1.13
Education	0.38	0.18	4.54	0.033	1.46
Income	0.57	0.21	7.37	0.007	1.77
Disability	-0.71	0.29	6.00	0.014	0.49

Source: Field Survey, 2025.

Table 5. Perceived Responsiveness of PHC Staff

Response	Frequency	Percentage (%)
Strongly Agree	38	9.9
Agree	74	19.2
Neutral	159	41.3
Disagree	88	23.4
Strongly Disagree	17	4.5

Source: Field Survey, 2025.

Table 6. Chi-Square Results — Relationship Between Social Identities and Perceived Safety

Variable	χ^2 Value	Df	*P*-value	Cramér's V
Gender	12.38	4	0.015	0.091
Age	6.55	1	0.011	0.132
Education	13.79	4	0.008	0.096
Sexual Orientation	15.61	4	0.004	0.102
Socioeconomic Status	10.23	3	0.017	0.095

Source: Field Survey, 2025.

Discrimination in Accessing SRH Services

A total of 42.1% reported discrimination, primarily attributed to economic inequality (23.9%), age-related stigma (22.3%), and gender bias (19.2%). Discrimination manifested through provider demeanour, condescending language, and selective information withholding.[16] Table 2 presents the full distribution.

Perception of Safety in PHC Facilities

Perceived safety was assessed across physical and emotional dimensions including privacy, confidentiality, and respect. Only 56.3% of respondents felt 'safe' or 'very

safe' accessing PHC services, while 21.1% reported feeling unsafe or very unsafe. Common concerns included lack of privacy, staff judgement, and fear of exposure. A female respondent aged 19 at New Karu PHC stated: 'Sometimes you cannot even speak freely; the nurse will scold you for asking about contraceptives.' These findings align with the prior study emphasizing the role of provider attitudes in shaping healthcare safety perceptions.[16] Table 3 presents the full distribution of safety perceptions.

Predictors of Perceived Safety

Logistic regression identified gender, education, income, and disability as significant predictors of perceived safety ($P < 0.05$). Respondents with higher education and income reported greater safety, while those with disabilities were significantly less likely to feel safe (Exp(B) = 0.49; $P = 0.014$). Age was not significant. Sexual orientation and socioeconomic status were excluded from the model due to small cell sizes and potential collinearity with income, acknowledged as a limitation. Full results are in Table 4.

Perceived Responsiveness of PHC Staff

Only 29.1% agreed that PHC staff were responsive to diverse youth needs, while 41.3% were neutral and 27.9% disagreed. Qualitative data revealed perceptions of moral judgement particularly affecting unmarried women and LGBTQ+ youth. One female respondent stated: 'If you are unmarried, they ask why you need family planning. It is embarrassing.' These sentiments echo findings emphasizing stigma as a barrier to equitable healthcare.[16] Table 5 presents the distribution.

Hypothesis Testing

Chi-square tests confirmed significant associations between social identities (gender, age, education, sexual orientation, socioeconomic status) and perceived safety ($P < 0.05$), as shown in Table 6.

Qualitative Findings: Focus Group Discussions

Two FGDs were conducted, each comprising eight to ten participants (see Methods for composition). Thematic analysis generated two main themes, summarized below.

Theme 1: Moral gatekeeping and the denial of young people's sexual agency. Participants described providers as responding to SRH enquiries with reproach rather than information, particularly where the young person did not fit the expected profile of a legitimate SRH client. Marital status and disability both functioned as grounds on which staff questioned whether the participant should be seeking such services at all, redirecting the consultation away from the stated need. As one participant recalled, "When I came with my crutches, the nurse said I should focus on my health, not condoms" (Male, 22, participant with a disability, FGD 2). This theme gives experiential form to the finding that only 29.1% of survey respondents perceived staff as responsive to diverse youth needs (Table 5).

Theme 2: Visibility, surveillance and anticipated exposure. Participants characterised the PHC as a socially exposed setting in which being seen, and being talked about, carried consequences beyond the visit itself. Sexual minority participants in particular described staff behaviour—whispering, avoidance, stares—as a form of informal surveillance that made non-attendance the safer option, meaning the deterrent operated before any service was refused. As one participant put it, "If they think you are gay, they whisper or avoid you" (FGD 1), while another concluded, "For people like me, it's better to avoid the clinic. The stares alone tell you you're not welcome" (Sexual minority participant, FGD 1).

Where FGD themes diverged from or added nuance beyond the KII findings reported above, this is noted explicitly. The two strands converged on the substance of the problem—moral judgement, stigma, and condescending provider conduct—but diverged in framing: key informants located these behaviours within constraints of workload, consulting space, and training, whereas FGD participants experienced them as deliberate evaluations of their worth as clients. The group setting also surfaced a dimension absent from the individual interviews, namely that the deterrent effect is anticipatory: participants described withdrawing from care on the basis of what they expected to happen, not only what had already happened to them.

Discussion

This study examined how intersecting social identities shape young people's SRH experiences in PHC facilities in Karu LGA, Nigeria. The findings confirm that intersectional inequalities significantly shape safety perceptions, discrimination experiences, and staff responsiveness consistent with Crenshaw's argument that discrimination rarely occurs along a single axis.[5]

Integration of the quantitative and qualitative strands, consistent with the convergent mixed-methods design, showed substantial convergence between the two strands: quantitative indicators of low perceived safety and staff responsiveness were corroborated by FGD narratives describing fear of judgement and confidentiality breaches. Divergence was limited: no quantitative finding lacked a corresponding qualitative account, though the FGD material identified anticipatory avoidance of services, which the survey instrument did not capture. This convergence strengthens confidence that the statistical associations reported above reflect lived experiences rather than measurement artefacts.

The rate of reported discrimination (42.1%) in this study is notable and aligns with findings from comparable settings. Ezenwaka et al.[9] reported similar patterns of stigmatisation among young, particularly unmarried, Nigerians seeking reproductive health services, while Odo et al.[19] documented how social norms and provider bias reinforce gender-based barriers. In the present study, economic inequality emerged as the leading basis for reported discrimination (23.9%), reinforcing Marmot's[3] concept of the social gradient in health and the principle advanced by Braveman

and Gottlieb,[8] that structural determinants are the 'causes of the causes' of poor health outcomes.

Safety perceptions were moderate, with only 56.3% of respondents feeling safe or very safe. This finding is consistent with those reported in previous studies that identified confidentiality breaches as a persistent deterrent to adolescent SRH service utilisation in semi-urban PHC environments, [20, 21] and with Thomee et al.[22] who found that respectful, confidential, and non-judgmental care are decisive factors determining whether adolescents return to health facilities. The qualitative narratives in this study add further texture, revealing how moral policing and provider condescension create environments of fear and shame that discourage repeat visits.

Gender, education, income, and disability were identified as significant predictors of perceived safety ($P < 0.05$). The negative predictive role of disability (Exp(B) = 0.49) is particularly striking and corroborates evidence from Logie et al.[23] on structural and attitudinal barriers for persons with disabilities in healthcare settings. Mac-Seing et al.[24] further highlighted the compounded exclusion facing youth with disabilities, calling for inclusive healthcare systems that integrate accessibility, empathy, and respect for diversity. These findings confirm that single-axis analyses would have obscured the compounding nature of these vulnerabilities.

The low perceived responsiveness of PHC staff (29.1%) represents a systemic concern. Qualitative data documented moral judgement, condescending behaviour, and exclusionary practices particularly targeting unmarried women, LGBTQ+ youth, and persons with disabilities. This mirrors findings by García et al,[25] who found that socioeconomic inequality and gender intersect to constrain access to reproductive services, and by Penner et al.[26] who established a significant relationship between perceived discrimination and decreased adherence to healthcare regimens.

The theoretical frameworks applied—intersectionality, the Health Belief Model (HBM), and the Social Ecological Model (SEM)—each contributed distinct analytical value. The HBM was useful in explaining how perceived barriers including stigma, cost, and lack of privacy shape healthcare-seeking decisions among young people.[13,14] The SEM situated these individual-level perceptions within broader interpersonal, organisational, community, and policy contexts,[11,15] demonstrating that transforming SRH access requires simultaneous action across multiple levels of the health system.

A key limitation of this study is its cross-sectional design, which does not allow for causal inference. The study was also confined to three PHCs within one LGA, limiting generalisability to other regions of Nigeria or comparable settings. Social desirability bias may have influenced responses, particularly on sensitive items relating to sexual orientation and HIV status. Additionally, the study did not capture healthcare providers' perspectives, which would have offered complementary insight into the attitudinal and institutional factors driving the observed patterns. The sample size calculation did not incorporate a design effect adjustment for the multistage sampling approach used, which may have resulted in a marginally underpowered estimate; this is acknowledged as a methodological limitation. Facility-based sampling introduces a further source of selection bias: young people who do not access PHC services at all are entirely excluded from the sample, meaning the experiences of the most marginalised or disengaged youth are likely underrepresented. Finally, discrimination was measured through self-report rather than validated against observed provider behaviour, which limits the extent to which findings can characterise actual provider conduct as distinct from perceived conduct. Future research should employ longitudinal designs, multi-site comparisons, provider surveys, and community-based sampling to address these gaps.

Conclusion

Young people's SRH access in Karu PHCs is mediated by intersecting identities—gender, class, disability, sexual orientation—within a system that has not fully operationalized inclusivity. Intersectional discrimination, compromised safety, and inadequate staff responsiveness undermine equitable care.

Strengthening provider sensitivity through intersectionality-informed training, enhancing privacy and disability-inclusive infrastructure, and embedding youth-centered principles into PHC policy are essential. These findings contribute empirical evidence from Nigeria to the literature on intersectionality and health equity, offering actionable direction for policymakers committed to advancing inclusive SRH services.

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Authors' Contribution

Conceptualization: Adache Andrew Akor
Data Curation: Adache Andrew Akor
Formal Analysis: Adache Andrew Akor
Investigation: Adache Andrew Akor
Methodology: Adache Andrew Akor
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Validation: Adache Andrew Akor
Visualization: Adache Andrew Akor
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Competing Interests

The author declares no conflict of interest.

Ethical Approval

Ethical approval was obtained from the Bingham University Research and Ethics Committee (Reference: NHREC/21/2005/01487).

Authorization was secured from the Nasarawa State Primary Health Care Development Agency and participating PHC facilities. All procedures followed the Declaration of Helsinki (2008 revision). Written informed consent was obtained from respondents aged 18 and above, with parental consent and child assent for those under 18. This requirement introduces ethical tension in adolescent SRH research, as the most vulnerable adolescents aged 15–17 particularly LGBTQ+ youth seeking services confidentially may have been deterred from participation or exposed to harm by parental involvement, likely underrepresenting this group. Data were anonymized and access restricted to the principal researcher.

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Supplementary Files

Supplementary File 1. Structured questionnaire for young people aged 15–24 years

Supplementary File 2. Focus group discussion (FGD) and key informant interview (KII) guides

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