BIRTH CONTROL AND SUSTAINABLE DEVELOPMENT: EVIDENCE, BARRIERS, AND POLICY DIRECTIONS FROM NIGERIA

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Abstract

Birth control, encompassing modern contraceptive technologies, traditional fertility-regulation practices, and reproductive health education, plays a crucial role in achieving sustainable development. Despite its recognized health, economic, and environmental benefits, access to and acceptance of contraceptive methods remain uneven, particularly in sub-Saharan Africa. Nigeria continues to experience high fertility rates, with a total fertility rate of 5.3 live births per woman and a contraceptive prevalence rate of only 17% among married women of reproductive age. This study examined the relationship between birth control and sustainable development in Ile-Oluji/Oke-Igbo Local Government Area of Ondo State, Nigeria. The research combined a review of relevant literature published between 2015 and 2026 with a descriptive cross-sectional survey involving 108 adult respondents, achieving a response rate of 90%. Data were collected using a validated questionnaire and analyzed using descriptive statistics. Findings revealed that 87.0% of respondents considered birth control a beneficial innovation, while 92.6% acknowledged the importance of medical practitioners in providing contraceptive guidance. Furthermore, 89.8% supported government involvement in reproductive health programs. Religious affiliation emerged as the most significant factor influencing attitudes toward contraceptive use, although variations existed within religious groups. The study highlights the persistent gap between positive perceptions of birth control and its actual utilization. To address this challenge, it recommends integrating birth control into national sustainable development strategies through improved funding, expansion of community-based health services, faith-sensitive awareness campaigns, and comprehensive sexuality education. Such measures are essential for enhancing reproductive health outcomes, promoting social equity, strengthening economic stability, and supporting environmental sustainability in Nigeria.

Keywords: birth control, contraception, sustainable development, reproductive health, family planning, Nigeria, population growth

Introduction

The relationship between fertility regulation and sustainable development has long shaped debates in demography, public health, and development policy at the heart of this relationship lies birth control, a broad category of practices, methods, and social interventions designed to regulate human fertility. Although birth control is often framed as a medical or personal matter, its consequences extend to households, institutions, and environmental systems. (Cleland et al., 2020; UNFPA, 2022).

Sub-Saharan Africa presents a particularly urgent case. Nigeria, the continent's most populous nation, recorded an annual population growth rate of approximately 2.9% between 2015 and 2023 with a total fertility rate of 5.3 live births per woman, nearly three times the global average (World Bank, 2023). The country's contraceptive prevalence rate among married women of reproductive age stood at only 17% in 2021, far below the 75% target set by the International Conference on Population and Development (World Health Organization [WHO], 2023). These figures carry significant implications for Nigeria's capacity to achieve the United Nations Sustainable Development Goals (SDGs), particularly SDG 3 (Good Health and Well-being), SDG 4 (Quality Education), SDG 5 (Gender Equality), SDG 10 (Reduced Inequalities), and SDG 13 (Climate Action).

The present review situates birth control within the sustainable development paradigm by synthesizing evidence across three domains: (1) health and social equity, (2) economic development, and (3) environmental sustainability. It further interrogates the barriers to birth control access in low- and middle-income country (LMIC) contexts, with particular attention to the Nigerian experience, and recommends evidence-based policy responses. In doing so, the article aspires to move the conversation beyond the clinical and into the political, cultural, and ecological; to demonstrate that birth control is not merely a reproductive health intervention, but a sustainable development imperative.

Literature Review

Defining Birth Control in Contemporary Context

The World Health Organization (2021) defines contraception as the deliberate use of artificial methods or techniques to prevent pregnancy as a consequence of sexual intercourse. This definition, while clinically precise, understates the breadth of practices encompassed by the broader concept of birth control, which includes not only modern pharmacological and device-based interventions, but also behavioral methods such as periodic abstinence, lactational amenorrhea, and withdrawal, as well as traditional herbal and ritual practices documented extensively in African ethnographic literature (Izugbara *et al*., 2019).

Singh et al. (2018) categorize modern contraceptive methods into short-acting methods (oral contraceptive pills, injectables, condoms, and diaphragms), long-acting reversible contraceptives (LARCs) such as intrauterine devices (IUDs) and sub-dermal implants, and permanent methods (tubal ligation, vasectomy). Each category carries distinct efficacy profiles, cost implications, and user-acceptability considerations. Oral contraceptives, for instance, demonstrate a typical-use failure rate of 7%, while copper IUDs achieve a failure rate below 1% (Trussell *et al*., 2018). The gap between method efficacy and actual use effectiveness, attributable to inconsistent or incorrect use, remains a critical public health challenge, particularly in settings with low health literacy.

It is important to recognize that traditional birth control methods, while often dismissed in clinical discourse, have a deep and legitimate history in African societies. Practices such as prolonged breastfeeding, sexual abstinence, and herbal preparations have served as fertility-regulating mechanisms for generations (Delano, 1990, as cited in Aninyei *et al*., 2019). Contemporary scholarship increasingly advocates for a pluralistic approach that integrates traditional knowledge into reproductive health programming, rather than treating it as an obstacle to modern uptake (Habte & Teklu, 2020).

Birth Control and Social Equity

Access to birth control is fundamentally a matter of social justice. The Guttmacher Institute (2022) estimates that approximately 218 million women in developing countries have an unmet need for modern contraception, meaning they wish to avoid pregnancy but are not using any effective method. This unmet need is disproportionately

concentrated among adolescents, rural populations, women in poverty, and those with limited education, reinforcing cycles of disadvantage that are antithetical to sustainable development.

Adolescent pregnancy is a particularly consequential manifestation of inadequate birth control access. In Nigeria, the adolescent birth rate stands at 108 births per 1,000 girls aged 15 to 19 (UNICEF, 2023), a figure associated with school dropout, reduced lifetime earnings, elevated maternal mortality, and intergenerational poverty. Darroch *et al*. (2016) demonstrate that meeting contraceptive needs among adolescents alone would reduce maternal deaths in developing countries by at least 10%. The SDG 5 target of achieving universal access to sexual and reproductive health care services is thus inextricably linked to the social equity dimensions of birth control.

Birth control also empowers women by enabling them to defer childbearing until they are educationally and economically prepared. Studies consistently show that women who are able to space or limit pregnancies achieve higher educational attainment, participate more fully in formal labor markets, and exhibit greater decision-making autonomy within households (Canning & Schultz, 2021; Starbird *et al*., 2016). This agency effect is significant not only at the individual level, but cumulatively shapes national-level gender equity outcomes, an argument recently endorsed in the UNFPA's State of World Population report (UNFPA, 2022).

Birth Control and Economic Development

The macroeconomic case for birth control investment is robust and well-evidenced. Evidence suggests that investing in birth control can generate household and public-sector economic benefits, although the scale of returns depends on context and implementation At the household level, smaller family size is associated with higher per-capita spending on education, nutrition, and healthcare, a relationship documented across LMICs including Ghana, Ethiopia, and Indonesia (Bongaarts, 2017; Canning & Schultz, 2021). At the national level, countries that have achieved a demographic transition, moving from high to low fertility, have typically experienced the "demographic dividend," a period of accelerated economic growth driven by a favorable working-age-to-dependent ratio (Bloom *et al*., 2021).

The Guttmacher Institute (2022), estimates that every dollar invested in modern contraceptive services yields between $2.20 and $8.00 in savings across health, education, and social assistance programs. In Nigeria, a country where approximately 40% of the population lives below the national poverty line (National Bureau of Statistics, 2022), the fiscal argument for scaling up birth control services is compelling. A 2020 modeling study by Ahmed and colleagues projected that meeting unmet contraceptive need in Nigeria would reduce the number of unintended pregnancies by 2.8 million annually, saving an estimated $170 million in direct maternal and newborn health costs.

Conversely, the economic costs of inadequate birth control are substantial and multifaceted. They include the direct costs of unintended pregnancy management, the indirect costs of child malnutrition and educational underachievement, and the systemic costs of overburdened health and social service infrastructure. In a context where Nigeria's per-capita government health expenditure stood at just $16 per year in 2022 (WHO, 2023), resource allocation decisions in reproductive health carry profound macroeconomic weight.

Birth Control and Environmental Sustainability

The relationship between fertility, consumption, and environmental pressure is complex and mediated by consumption patterns, governance, and technology. Rapid population growth increases pressure on natural resources, accelerates deforestation, intensifies agricultural land use, and amplifies greenhouse gas emissions (O'Neill *et al*., 2020). Africa's population is projected to double to 2.5 billion by 2050 (United Nations Department of Economic and Social Affairs [UN DESA], 2022), placing enormous strain on already fragile ecosystems, water supplies, and food systems.

Bongaarts and O'Neill (2018) argue that voluntary access to family planning could be among the most cost-effective climate mitigation strategies available, potentially avoiding 0.5 to 1.0 gigatons of CO_2 equivalent per year by 2050 through slower population growth. Notably, this argument is made in a context that carefully distinguishes between coercive population control, which has a troubled historical and ethical legacy, and voluntary, rights-based family planning, which empowers individuals while generating positive environmental externalities.

At the local level, smaller family sizes enable more sustainable land management, reduce per-household resource consumption, and free up parental time and resources for environmental stewardship activities (Markham, 2020). Community-level studies in sub-Saharan Africa confirm that women with access to contraception are more likely to pursue sustainable agricultural practices and participate in community natural resource management (Potts *et al*., 2019).

Barriers to Birth Control Uptake

Despite strong evidence for the benefits of birth control, uptake remains constrained by a complex web of barriers spanning the individual, community, and structural levels. At the individual level, lack of knowledge about available methods, fear of side effects, and concerns about future fertility are consistently identified as significant deterrents (Okonkwo *et al*., 2021; Sedgh *et al*., 2016). In Nigeria specifically, Adeyemi *et al*. (2022) found that misinformation about contraceptive side effects, including beliefs that hormonal contraceptives cause infertility, cancer, or loss of sexual desire, was prevalent among women of reproductive age in Ondo, Ekiti, and Osun states.

At the community level, religious and cultural norms constitute significant barriers. Both Catholic and conservative Evangelical Christian traditions, which together account for a substantial portion of Nigeria's population, have historically opposed artificial birth control on doctrinal grounds (Abiodun *et al*., 2020). Similarly, certain Islamic interpretations restrict the use of permanent methods such as sterilization, though short-term methods are generally permissible under Islamic jurisprudence (Idriss, 2019). Among adherents of African traditional religion, birth control may be framed as an affront to ancestral imperatives toward large family size and progeny continuity.

At the structural level, access barriers include geographic distance to health facilities, shortage of trained family planning providers, out-of-pocket costs, and absence of youth-friendly reproductive health services (Izugbara *et al*., 2019; WHO, 2021). In Ile-Oluji/Oke-Igbo Local Government Area, a semi-urban community in Ondo State, these structural barriers interact with community-level norms to create a challenging environment for birth control programming, a dynamic that the primary research informing this review sought to document.

Policy and Programmatic Responses

Effective policy responses to low contraceptive uptake must be multi-layered, rights-based, and context-sensitive. The UNFPA's FP2030 initiative, a global partnership targeting universal access to family planning by 2030, provides a useful framework, emphasizing demand generation, supply-side strengthening, and enabling environment development (FP2030, 2022). At the national level, Nigeria's National Population Policy (2004, revised 2021) sets a target of reducing the total fertility rate to 4.0 by 2025, but implementation has been inconsistent due to inadequate funding and political resistance in some states.

Community health worker (CHW) programs have shown considerable promise in bridging the access gap in rural and peri-urban settings. A randomized controlled trial conducted in Oyo State found that CHW-delivered family planning counseling increased modern contraceptive uptake by 23 percentage points over 12 months, compared to a control group receiving standard clinic-based services (Olaolorun *et al*., 2021). Integration of birth control counseling into maternal and child health (MCH) visits, postpartum care, and immunization programs has also demonstrated effectiveness in increasing contraceptive prevalence rates in LMICs (WHO, 2021).

School-based sexuality education represents a critical upstream intervention for future generations. Evidence from Kenya, South Africa, and Uganda indicates that comprehensive sexuality education, covering puberty, reproduction, contraception, consent, and gender equality, significantly delays sexual debut, increases contraceptive use among sexually active youth, and reduces rates of unintended pregnancy and sexually transmitted infections (Kirby *et al*., 2017; UNESCO, 2020). Embedding such programming within Nigeria's secondary school curriculum, as recommended by the National Policy on Population for Sustainable Development (Federal Government of Nigeria, 2021), would yield long-term dividends for reproductive health and sustainable development.

Theoretical framework

This review uses the Social Ecological Model and the Sustainable Livelihoods Framework to organize the determinants and consequences of birth control use. In this paper, the SEM is used to interpret how individual knowledge, partner dynamics, community norms, service availability, and policy shape contraceptive behavior.

Applied to birth control, the SEM draws attention to the multiple, nested influences on contraceptive decision-making—from a woman's personal knowledge and attitudes, to her partner's preferences and community norms, to the availability and quality of reproductive health services, to the national legal and policy environment.

The SLF, developed by the UK Department for International Development (DFID, 1999) and extensively applied in development studies. The SLF helps explain how birth control may affect human, social, and financial capital, thereby linking reproductive health to livelihood outcomes. From an SLF perspective, birth control contributes directly to the enhancement of human capital (through better maternal and child health and improved educational attainment), social capital (through increased women's agency and community norms supportive of smaller families), and financial capital (through reduced household expenditure on child-rearing and increased female labor force participation). The framework thus provides a vocabulary for articulating how birth control is constitutive of, rather than merely adjacent to, sustainable development.

Methods

Study Area, Design and Setting

This study employs a mixed-methods design, combining a systematic narrative review of peer-reviewed literature published between 2015 and 2026 with a descriptive cross-sectional survey conducted in Ile-Oluji/Oke-Igbo Local Government Area (LGA), Ondo State, South-western Nigeria. (Fig 1)

This region serves as a crucial demographic and cultural micro-environment within the state, blending both localized community life with regional connectivity. The study area is characterized by a specific infrastructural and institutional landscape that makes it a unique environment for public health research. The LGA faces limited access to tertiary health facilities, making local primary and secondary infrastructure critical. There is a distinct co-existence of modern health infrastructure alongside deeply rooted, strong traditional institutional structures.

This dual dynamic heavily influences community norms regarding modern practices like birth control. The human landscape of the LGA is defined by its cultural homogeneity and specific economic drivers. The area features a predominantly Yoruba population characterized by a relatively high fertility rate. The local economy and daily livelihood are anchored primarily in smallholder agriculture, petty trade and education.

This LGA was selected purposively for its demographic profile, relatively high fertility, limited tertiary health facility access, co-existence of modern health infrastructure and strong traditional institutional structures, making it a theoretically instructive site for studying the intersection of birth control practices, community norms, and development outcomes. The LGA comprises a predominantly Yoruba population engaged in smallholder agriculture, petty trade, and education.

Fig 1: Map of the Study Area

Instrument and Sampling

A structured, fixed-response questionnaire was administered to a convenience sample of adult residents (male and female, married and unmarried, across religious affiliations) recruited at community gathering points, health facilities, and secondary schools. The instrument comprised two sections: Section A captured socio-demographic characteristics; Section B elicited attitudes across four thematic domains, perceived benefits of birth control, method effectiveness, institutional and governmental roles, and religious-cultural acceptability.

Content and face validity were established through expert review by two medical practitioners from St. Lucas Hospital and a faculty professor. Test-retest reliability was assessed on a sub-sample of 15 respondents over a two-week interval. A total of 120 questionnaires were distributed; 108 were returned completed (response rate: 90%). Descriptive statistics (frequencies and percentages) were used to analyze responses. Given the convenience sampling strategy, findings are treated as indicative rather than statistically representative of the broader LGA population.

Ethical Considerations

Participation was entirely voluntary; written informed consent was obtained from all respondents. Anonymity and confidentiality of responses were strictly maintained. No identifying information was collected. This study complied with the ethical principles of the Declaration of Helsinki.

Results

Sociodemographic Profile

Of 120 questionnaires distributed, 108 were completed and returned, yielding a 90% response rate. Respondents ranged in age from 18 to 55 years, with the majority (61.1%) falling between 25 and 44 years, the primary reproductive age bracket. Women constituted 64.8% of respondents and men 35.2%. With respect to marital status, 68.5% were married, 24.1% were single, and 7.4% were widowed or separated. In terms of religious affiliation, 72.2% identified as Christian, 23.1% as Muslim, and 4.6% as adherents of African traditional religion. Educational attainment varied: 38.9% held a secondary school certificate, 32.4% held a tertiary qualification, 19.4% had primary education only, and 9.3% had no formal education.

Table 1: Sociodemographic characteristics of respondents (N = 108)

Variable	Category	n	%
Age Group	18–24 years		
	25–44 years	66	61.1%
	45–55 years		
Sex	Female	70	64.8%
	Male	38	35.2%
Marital Status	Married	74	68.5%
	Single	26	24.1%
	Widowed/Separated	8	7.4%
Religion	Christian	78	72.2%
	Muslim	25	23.1%
	African Traditional Religion	5	4.6%

Variable	Category	n	%
Education	No formal education	10	9.3%
	Primary	21	19.4%
	Secondary (certificate)	42	38.9%
	Tertiary qualification	35	32.4%
TOTAL		**108**	**100%**

Perceived Benefits of Birth Control (Research Question 1)

The first thematic domain examined whether respondents viewed birth control as beneficial. Most respondents agreed that birth control is beneficial. A substantial majority, 87.0% (n = 94), agreed that birth control is a good innovation, while 13.0% disagreed. Similarly, 85.2% agreed that birth control can be used to limit family size to manageable proportions, and 83.3% agreed that it helps reduce unintended pregnancies. The proposition that birth control improves the health of both mother and child garnered agreement from 88.9% of respondents, the highest agreement rate in this section. Notably, 90.7% agreed that negligence in family planning has caused untimely deaths of mothers, a finding that reflects heightened community awareness of maternal mortality risk in contexts of unregulated fertility. Taken together, the findings show high reported agreement with the perceived benefits of birth control and social benefits is widespread within the study community, even if uptake of specific modern methods may be limited by other factors.

Table 2: Respondents' agreement with statements on perceived benefits of birth control

Statement	Agree (n)	Agree (%)
Birth control is a beneficial innovation	94	87.0%
Birth control can limit family size to manageable proportions	92	85.2%
Birth control reduces unintended pregnancies	90	83.3%
Birth control improves the health of mother and child	96	88.9%
Negligence in family planning has caused untimely maternal deaths	98	90.7%

Attitudes toward Method Effectiveness (Research Question 2)

With regard to method effectiveness, 79.6% agreed that both traditional and modern methods are used for birth control in the community, affirming the co-existence of multiple contraceptive paradigms. Responses varied on the comparative value of traditional and modern methods. 74.1% agreed that modern methods are more effective, while 42.6% agreed that traditional methods are the best approach, a notable minority that signals continued cultural allegiance to indigenous practices. Condom use for dual protection against pregnancy and sexually transmitted infections was endorsed by 81.5% of respondents. The safe period (fertility awareness method) was considered effective by 57.4%, a more modest consensus that reflects the well-documented challenge of correct calendar-method implementation. These findings are consistent with national survey data indicating that knowledge of modern

methods is higher than their actual use in southwestern Nigeria (National Population Commission, 2022), and reinforce the need for targeted counseling to bridge the knowledge-to-practice gap.

Table 3: Attitudes toward the effectiveness of contraceptive methods

Attitude / Statement	Agreement (%)
Traditional and modern methods co-exist in the community	79.6%
Modern contraceptive methods are more effective	74.1%
Traditional methods are still effective	42.6%
Condoms provide dual protection (pregnancy + STIs)	81.5%
Fertility awareness (safe period) method is effective	57.4%

Institutional and Governmental Support (Research Question 3)

A large majority of respondents supported institutional engagement with birth control. Encouragement of birth control in society was supported by 91.7% of respondents, while 89.8% agreed that government should actively support birth control services in communities. The role of medical practitioners as authoritative advisors on contraception was recognized by 92.6%, the highest agreement rate across the entire survey. Comprehensive sexuality education in schools was endorsed by 88.9%, underscoring community recognition that reproductive health literacy must begin early. The proposition that birth control reduces the financial burden on families, society, and government was affirmed by 86.1%, an indication that economic arguments for birth control resonate powerfully at the household level. These results are striking given that institutional engagement with family planning in the LGA has historically been limited, and they suggest substantial latent demand for improved reproductive health services that policy makers should urgently mobilize to meet.

Table 4: Respondents' views on institutional and governmental support for birth control

Statement	Agreement (%)
Government should actively support birth control services	89.8%
Medical practitioners are the most authoritative advisors on contraception	92.6%
Comprehensive sexuality education should be taught in schools	88.9%
Birth control reduces financial burdens on families, communities, and government	86.1%

Religious and Cultural Acceptability (Research Question 4)

The fourth domain probed the intersection of birth control with religious and cultural identity, an area of particular sensitivity in the Nigerian context. Of Christian respondents, 61.1% agreed that birth control should be encouraged within the Christian faith, while 38.9% disagreed, reflecting the documented intra-denominational tensions around contraceptive acceptance. Among Muslim respondents, 53.8% agreed that birth control is prohibited in Islam, though a notable 46.2% disagreed, suggesting that religious interpretation of contraceptive permissibility is not monolithic even within the Muslim community. Traditional worshippers were more permissive: 80.0% of that sub-

group agreed that birth control is allowed within their belief system. The claim that birth control is only appropriate for literate individuals was rejected by 68.5% of respondents, a finding that challenges the persistent myth that reproductive health education is the exclusive preserve of the educated elite. Finally, 54.6% agreed that birth control is also appropriate for unmarried individuals—a finding that, while modest, marks a meaningful departure from the historically taboo framing of premarital contraceptive access in southwest Nigerian communities (Abiodun et al., 2020)

Table 5: Religious and cultural acceptability of birth control by respondent group

Group	Position / Statement	Agreement (%)
Christian respondents	Support contraceptive use within faith	61.1%
Christian respondents	Do not support contraceptive use	38.9%
Muslim respondents	Believe birth control is prohibited in Islam	53.8%
Muslim respondents	Disagree that birth control is prohibited	46.2%
Traditional worshippers	Affirm contraceptive acceptability in their belief system	80.0%
All respondents	Reject claim that birth control is only for literate individuals	68.5%
All respondents	Agree birth control is appropriate for unmarried persons	54.6%

Summary of Findings

Across all four research questions, a consistent pattern emerged: community members in Ile-Oluji/Oke-Igbo hold predominantly favorable attitudes toward birth control, recognize its health and financial benefits, and support institutional engagement in its promotion. Disagreement was most pronounced on questions of religious permissibility and the relative merits of traditional versus modern methods, domains where cultural pluralism and intergenerational knowledge transmission continue to shape attitudes in complex ways. These findings align with, and substantively extend, the broader literature on reproductive health attitudes in southwest Nigeria (National Population Commission, 2022; Okonkwo et al., 2021). They also highlight a critical irony: despite high awareness and positive attitudes, contraceptive prevalence in the LGA remains low, suggesting that attitudinal change alone is insufficient without corresponding improvements in service availability, affordability, and quality.

Discussion

The findings of this study illuminate a community whose prevailing attitudes toward birth control are broadly positive, though fractured along religious, educational, and generational lines. This section analyses and interprets each thematic domain in turn, situating the results within the wider literature on family planning in sub-Saharan Africa.

Sociodemographic Profile and Its Implications

The preponderance of respondents in the 25–44-year reproductive age bracket (61.1%) is both expected and significant. This cohort bears the highest burden of fertility-related decisions, making their attitudes toward birth control a direct determinant of family planning uptake in the community. The overrepresentation of women (64.8%) reflects the documented reality that reproductive health discourse disproportionately engages women, who are the

primary users of most contraceptive methods and who carry a greater share of the consequences of unintended pregnancy.

The educational distribution, with over half of respondents holding at least a secondary qualification, suggests a sample with sufficient literacy to engage critically with health information. However, the 9.3% with no formal education constitute a vulnerable sub-group: research consistently associates lower educational attainment with reduced contraceptive knowledge, higher fertility rates, and greater maternal mortality risk (WHO, 2023). Programmatic interventions must be calibrated to reach this segment through non-literate channels such as community radio, pictorial materials, and trained peer educators.

Perceived Benefits: A Foundation of Positive Attitudes

The near-consensus agreement across all benefit-related statements (83.3%–90.7%) signals a community that broadly understands and accepts the rational case for birth control. This is a promising baseline, contrasting with contexts where even the premise of family planning remains contested.

The highest agreement, 90.7% affirming that negligence in family planning causes untimely maternal deaths, is particularly instructive. It suggests that maternal mortality is not an abstract public-health statistic but a lived, proximate reality within this community. This awareness can serve as a powerful motivational lever in health communication campaigns: framing birth control not merely as a fertility management tool but as a life-saving intervention is likely to resonate with this population.

Similarly, the 88.9% agreement that birth control improves maternal and child health reflects alignment with established evidence. It also hints at an under-exploited entry point: integrating family planning counselling into maternal and child health (MCH) services, where trust is already established, could substantially improve uptake.

Method Effectiveness: The Persistence of Traditional Practice

The finding that 79.6% of respondents acknowledge the co-existence of traditional and modern contraceptive methods reflects a pluralistic health landscape characteristic of many communities in sub-Saharan Africa. While 74.1% endorsed modern methods as more effective, the fact that 42.6% retained confidence in traditional approaches represents a significant minority whose contraceptive behaviour may diverge from biomedical recommendations.

This duality is not simply a knowledge deficit. It reflects cultural continuity, social trust in indigenous practices, and, in some cases, rational pragmatism, traditional methods are free, private, and require no interaction with formal health systems. Dismissing this preference without engaging its underlying logic risks alienating a substantial portion of the community. A more productive approach involves acknowledging the role of traditional methods while providing accurate, non-judgmental information about their comparative efficacy rates.

Condom endorsement at 81.5% is encouraging given the dual-protection benefit against both unintended pregnancy and sexually transmitted infections, including HIV. Yet the 57.4% who regarded the fertility awareness method (FAM) as effective warrant attention: FAM, when taught and practised correctly, has a reasonable typical-use efficacy, but its failure rates in community settings are substantially higher than clinical estimates. Ensuring that respondents who rely on FAM have accurate, method-specific guidance is a priority for health educators.

Institutional and Governmental Support: Strong Mandate, Delivery Gaps

This domain yielded the most uniformly positive findings in the study. The near-unanimous endorsement of government involvement (89.8%), sexuality education (88.9%), and the financial argument for family planning (86.1%) reflects a population that views contraception not as a private moral choice alone, but as a legitimate domain of public policy and institutional responsibility.

The survey-high 92.6% who identified medical practitioners as the most authoritative advisors on contraception carries significant programmatic weight. Trust in health professionals, when it exists, is one of the strongest predictors of contraceptive uptake. Yet this trust is contingent on access: if community members cannot readily

consult a health worker, this preference becomes moot. The data therefore present both an opportunity (leverage trusted professionals) and a challenge (expand access to professional family planning counselling).

The strong support for comprehensive sexuality education (88.9%) is noteworthy given that such programmes often encounter resistance in religiously conservative communities. The finding suggests that this community, while religiously diverse, broadly accepts the role of institutional education in equipping young people with reproductive knowledge, a view that policymakers should act on with urgency.

Religious and Cultural Acceptability: Diversity Within, Not Across

The religious domain produced the most nuanced results and merits careful interpretation. The data reveal that religious identity is not a monolithic determinant of contraceptive attitudes: within both Christianity and Islam, opinion is substantially divided.

Among Christians, the 61/39 split between supporters and opponents of contraception within their faith mirrors well-documented intra-denominational tensions between mainline Protestant churches (generally permissive) and Pentecostal or Catholic traditions (generally restrictive). Among Muslims, the near-even split, 53.8% viewing birth control as prohibited, 46.2% disagreeing, reflects genuine scholarly divergence in Islamic jurisprudence: while some schools of thought prohibit modern contraception as interference with God's will, others permit it within marriage for spacing and maternal health reasons. That nearly half of Muslim respondents reject a blanket prohibition suggests more openness to family planning than is sometimes assumed.

Traditional worshippers' permissiveness (80.0% affirming contraceptive acceptability) suggests that African traditional religion, in this context, does not constitute a barrier to family planning uptake, a finding that challenges stereotypical framings.

The rejection by 68.5% of the claim that birth control is only for literate individuals is an encouraging indicator of inclusive attitudes. However, the 54.6% who agreed that birth control is appropriate for unmarried persons deserves further enquiry: the 45.4% minority who apparently reserved contraception for married individuals may be reproducing a norm that leaves unmarried sexually active young people, a high-risk group for unintended pregnancy, without effective protection.

Birth Control as a Development Imperative

The evidence reviewed here suggests that birth control is an important component of sustainable development. Birth control is not a peripheral health intervention but a central pillar of sustainable development. When women are able to plan the number and spacing of their children, the effects cascade across multiple dimensions of well-being. Children born into better-spaced families experience lower rates of malnutrition, higher rates of school enrollment, and improved developmental outcomes (Rutstein, 2017; UNICEF, 2023). Mothers who control their fertility exhibit lower mortality rates, higher educational achievement, and greater economic productivity (Canning & Schultz, 2021). Governments that invest in birth control realize fiscal savings, demographic dividends, and improved performance on international development benchmarks.

The survey suggests favorable attitudes, although attitudes alone do not determine contraceptive uptake. Respondents overwhelmingly agreed that birth control is a beneficial innovation and that government and medical practitioners have roles to play in supporting its uptake. There was also broad consensus, cutting across religious and gender lines, which birth control helps reduce the financial burden on families, communities, and government. These attitudinal findings are consistent with national-level survey data showing generally positive attitudes toward family planning in southwest Nigeria, even among populations with limited practical access (National Population Commission, 2022).

The Traditional-Modern Continuum

A persistent tension in birth control discourse is the framing of traditional and modern methods as mutually exclusive or hierarchically ordered, with modern methods positioned as categorically superior. This paper argues for a more nuanced stance. Some traditional methods, such as correctly practiced lactational amenorrhea, can be effective under specific conditions. can achieve efficacy rates comparable to barrier methods (Van der Wijden & Manion, 2015). Periodic abstinence (the "safe period" or calendar method), though requiring high user motivation

and regular menstrual cycles, has legitimate utility in populations where modern methods are inaccessible or culturally unacceptable.

The main concern is not traditional practice per se, but incomplete understanding of when and how such methods are effective but in the inadequacy of information about their proper use. As the community survey data indicate, misconceptions about both traditional and modern methods are common, and women, particularly in rural areas, often rely on incomplete or inaccurate information transmitted through social networks rather than health systems. Comprehensive reproductive health education that validates effective traditional practices while introducing evidence-based modern alternatives is a more culturally responsive and practically effective approach than programs that dismiss indigenous knowledge wholesale.

Gender, Agency, and the Ethics of Birth Control

Any serious treatment of birth control and sustainable development must grapple with the gender politics of reproductive autonomy. Many family planning programs have placed a disproportionate burden on women, even though contraceptive responsibility is shared. This asymmetry is both ethically troubling and practically counterproductive: contraceptive programs that fail to engage male partners tend to achieve lower uptake and sustainability than those that frame reproductive health as a shared responsibility (Shattuck et al., 2016).

There is also a crucial distinction between voluntary, rights-based family planning and coercive population control. The former grounded in individuals' rights to decide freely the number, spacing, and timing of their children is endorsed by international human rights frameworks including the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) and the Programme of Action of the International Conference on Population and Development (ICPD). The latter, which has included forced sterilization campaigns in several low-income countries, violates fundamental rights and must be unequivocally rejected (UNFPA, 2022). Sustainable development framings of birth control must be anchored in this rights-based tradition if they are to earn the trust and participation of the communities they seek to serve.

Implications for Policy and Practice in Nigeria

The findings of this review point to several actionable priorities for birth control programming in Nigeria. First, demand-generation efforts should prioritize the correction of method-specific misconceptions through community-based information campaigns that leverage trusted intermediaries, including community leaders, religious figures, and traditional birth attendants, rather than relying exclusively on facility-based counseling. Second, supply-side improvements are urgently needed: increasing the availability of LARCs in primary health centers, training additional family planning providers, and eliminating out-of-pocket costs for contraceptives for low-income populations.

Third, the integration of birth control counseling into routine health contacts, including antenatal care, postpartum visits, and child immunization, offers a cost-effective pathway to increasing reach. Fourth, comprehensive sexuality education should be mandated and adequately resourced within the national secondary school curriculum, with age-appropriate content on anatomy, contraception, consent, and healthy relationships. Fifth, dedicated efforts to engage men as supportive partners in reproductive decision-making, through male-friendly family planning services and community outreach, are essential for achieving lasting change in contraceptive norms.

Finally, and perhaps most fundamentally, sustained political commitment and adequate public financing are prerequisites for meaningful progress. Nigeria's allocation to reproductive, maternal, newborn, child, and adolescent health (RMNCAH) services remains well below the Abuja Declaration target of 15% of national health budgets. Closing this financing gap, and ensuring that funds reach frontline service delivery, is a prerequisite for translating policy intent into improved reproductive health outcomes.

Recommendations

The review and survey suggest recommendations for government, communities, providers, and educational institutions. These recommendations are organized across three tiers, immediate, medium-term, and long-term, to reflect the temporal horizon of meaningful policy change.

Recommendations for Government and Policy Makers

The Federal Government of Nigeria should urgently increase budgetary allocation to reproductive, maternal, newborn, child, and adolescent health (RMNCAH) to meet the Abuja Declaration target of 15% of total government health expenditure. Current per-capita health expenditure of $16 per year (WHO, 2023) is categorically insufficient to fund the quality family planning services that the evidence demands. Specifically, dedicated line items for contraceptive procurement, community health worker training, and reproductive health infrastructure should be incorporated into Medium-Term Expenditure Frameworks at both federal and state levels.

The National Population Policy (revised 2021) must be operationalized with measurable targets, clear accountability frameworks, and independent monitoring mechanisms. State-level family planning implementation plans should be harmonized with the SDG roadmap and subjected to annual legislative review. The development of a national digital registry for contraceptive prevalence, service utilization, and method-specific outcomes would substantially improve the quality of reproductive health data available for planning and evaluation purposes (Izugbara et al., 2019).

The universal health coverage agenda provides an important vehicle for embedding birth control within Nigeria's Basic Health Care Provision Fund. Contraceptive commodities, including oral contraceptives, injectables, and IUDs, should be classified as essential medicines and supplied free of charge to all primary health care facilities. Experience from Rwanda and Ethiopia demonstrates that eliminating user fees for contraceptives is among the highest-yield investments a government can make in reproductive health equity (Starbird et al., 2016).

Recommendations for Community Leaders and Religious Institutions

Given the survey's finding that religious identity shapes contraceptive attitudes more powerfully than any other sociodemographic variable, strategic engagement with faith communities is essential. Religious leaders, pastors, imams, and traditional custodians, should be engaged as champions of reproductive health rather than treated as passive barriers. Faith-sensitive family planning messaging that frames child spacing as consistent with divine imperatives of parental responsibility and child welfare has demonstrated effectiveness in increasing contraceptive acceptance in comparable Nigerian community contexts (Abiodun et al., 2020).

Traditional birth attendants (TBAs), who remain the first point of reproductive contact for many women in rural and peri-urban communities, should be trained in evidence-based counseling on modern contraceptive methods and equipped to provide referrals to primary health care facilities. Their intimate knowledge of community dynamics and women's lived experiences positions them as uniquely effective agents for normalizing birth control conversations at the household level. Community dialogue forums, convened at town halls, market days, and religious gathering points, should be systematically used to address misconceptions, share testimonials, and build social norms supportive of family planning.

Recommendations for Health Practitioners and Civil Society

Health practitioners at every level of the care continuum must provide high-quality, non-judgmental reproductive health counseling that presents the full spectrum of contraceptive options, including long-acting reversible contraceptives, which are consistently underutilized despite their superior efficacy and cost-effectiveness. Continuing professional development on updated WHO medical eligibility criteria for contraceptive use (WHO, 2021) should be mandatory for all primary health care providers. The integration of birth control counseling into existing contact points, antenatal care, postpartum visits, child immunization, and HIV/AIDS services, should be formalized through updated clinical protocols and standard operating procedures.

Civil society organizations (CSOs) working in reproductive health should prioritize male-engagement programming, recognizing that sustainable change in contraceptive behavior requires the active support, rather than passive acquiescence of male partners. Programs modeled on evidence-based male-motivator frameworks (Shattuck et al., 2016) should be adapted for the southwestern Nigerian context and piloted in LGAs including Ile-Oluji/Oke-Igbo. CSOs should also leverage digital health platforms, including mobile SMS, WhatsApp communities, and radio broadcasts, to disseminate accurate, culturally resonant reproductive health information to populations with limited facility access.

Recommendations for Educational Institutions and Researchers

Colleges of education and teacher-training institutions should incorporate reproductive health education pedagogy into their health education curricula, equipping future educators with the knowledge, skills, and confidence to teach sexuality education effectively and sensitively. The survey's finding that 88.9% of respondents support sex education in schools suggests strong community backing for this initiative, which policy hesitancy has historically failed to translate into classroom practice. Adeyemi Federal University of Education, Ondo, as a leading institution in the region, is well positioned to develop model curriculum materials and teacher-training modules that can be adopted statewide.

Future research should address several important gaps identified by this review. First, longitudinal studies examining the long-term impact of birth control uptake on household poverty, child educational outcomes, and women's labor force participation in southwest Nigeria would provide robust local evidence for the sustainable development argument advanced here. Second, qualitative investigations into the specific mechanisms by which religious leaders influence contraceptive decision-making at the household level would yield actionable insights for faith-sensitive programming. Third, operations research evaluating the effectiveness of community health worker delivered family planning counseling in Ondo State would contribute directly to evidence-based scale-up decisions. Finally, research on men's attitudes toward and experiences of, reproductive responsibility in the study area remains a significant gap in the existing literature.

Conclusion

Birth control stands at the confluence of individual rights, public health, economic development, and environmental sustainability. The evidence reviewed in this article demonstrates persuasively that expanding access to voluntary, high-quality birth control services advances each of the three pillars of sustainable development: it promotes social equity by empowering women and protecting maternal and child health; it accelerates economic development by unlocking the demographic dividend and reducing household poverty; and it contributes to environmental resilience by moderating population pressure on natural systems.

The Nigerian context illustrates both the urgency and the complexity of this agenda. Despite generally positive community attitudes toward birth control, as evidenced by both the Ile-Oluji/Oke-Igbo survey and national data uptake remains constrained by structural barriers, misinformation, and socio-cultural norms that will require sustained, multi-sectoral engagement to address. A rights-based, culturally responsive, and adequately financed approach to birth control programming, one that integrates modern and traditional knowledge, engages men as partners, and embeds reproductive health within broader sustainable development frameworks offers the most promising path forward.

Ultimately, the fulfillment of every woman's right to decide freely whether, when, and how many children to have is not only a matter of reproductive justice. It is, as this review has argued, a prerequisite for a sustainable world.

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