



## Evaluation of the choices and availability of family planning services in Lagos State: A secondary analysis of census-based health facility assessment data from Noi Polls

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### ABSTRACT

#### Article History

Received: 18 November 2022

Revised: 2 February 2023

Accepted: 16 February 2023

Published: 27 February 2023

#### Keywords

Available FP services

Census-based data

Contraceptive methods

Family planning

Health facility assessment

Lagos State.

Maternal mortality rates remain unacceptably high, especially in developing countries like Nigeria. Nigeria is responsible for about 20% of all global maternal deaths, with a Nigerian woman having a 1 in 18-lifetime risk of dying because of pregnancy or childbirth. Evidence-based strategies have been proposed, including family planning (FP), to reduce the incidence of maternal mortality, which is the only strategy that reduces the proportion of high-risk pregnancies and births and reduces exposure to the risk of maternal mortality. Despite these benefits, there is still a high unmet need for family planning services. The present study assesses the choices and availability of FP services in Lagos state health facilities, examines the challenges, barriers, and cultural restraints to modern contraception, and proffers solutions that will help increase FP uptake in the state. The study also presented supply-and-demand interventions that are most effective at increasing voluntary contraceptive uptake in Lagos state.

**Contribution/Originality:** There is a gap in studies that assess FP services and commodities availability in Lagos state health facilities. This study fills that gap and contributes the necessary literature to aid health administrators and policymakers in developing policies and interventions most effective at increasing voluntary contraceptive uptake in Lagos state.

### 1. INTRODUCTION

In low to middle-income countries, pregnancy, and childbirth-related complications are the leading cause of death among adolescent girls ages 15-19. The adverse incidence is partly due to a lack of accessibility to family planning (FP) services. Thus, expanding the reach of these services, which include contraceptive information and reproductive health education, is one of the most lucrative interventions for preventing maternal, infant, and child deaths worldwide. By supporting the health and well-being of women and children globally, FP underpins other positive outcomes such as poverty reduction, teen pregnancy reduction, gender equity, human immunodeficiency viruses (HIV) and other sexually transmitted infections (STI) prevention, and a reduction in infant mortality rate [1, 2].

Modern reversible contraception has prevented unintended pregnancy [3] and short inter-pregnancy intervals, leading to adverse health consequences for mothers and infants [4-8]. While there are several facilitators of contraceptive use, high-quality interpersonal communication from FP providers, such as counseling on proper use and possible side effects [9-14], clarification of misconceptions [15, 16], and addressing spousal dynamics [17-19] are associated with increased contraceptive uptake and continuation among women [20]. Another vital factor in the utilization of FP services is quality, ensured by upholding the principle that "client-provider interactions respect informed choice, privacy and confidentiality, client preferences, and needs" [21].

As a key partner in FP2020, the United States Agency for International Development (USAID), the largest bilateral FP donor in the world, upholds the values of voluntarism and informed decision-making in all of its FP initiatives requiring the provision of information on various FP methods, including the advantages and health risks of specific methods [22].

Like many countries in sub-Saharan Africa, Nigeria continues to face challenges with meeting the health needs of its population, especially in sexual and reproductive health. Despite dwindling funding from international development partners for Family Planning (FP) services and the revision of the Nigeria Family Planning Blueprint (Scale-Up Plan): 2014-2018 to the currently revised Nigeria Family Planning Blueprint 2020-2024, there is no line item for FP services and commodities in Nigeria's 2022 budget. Given Nigeria's projected annual population growth rate of 2.6% and an estimated population of over 400 million by 2050 [23], the UN department of economic and social affairs questioned the country's continued commitment to closing the enormous FP access gaps throughout the nation. Therefore, it is crucial that family planning services and commodities are both in demand and readily available in medical facilities.

The availability of family planning services is paramount to advancement in health, human rights, economic development, and demographic demonization [24]. Worldwide, about 289,000 maternal deaths were recorded in 2013, of which 99 percent (286,000) of women died in developing nations, with African countries accounting for most of these deaths [25]. Contraception prevented about 250,000 maternal fatalities worldwide in 2008 by preventing undesired pregnancies, which accounted for 40% of the 355,000 maternal deaths [26, 27]. A recent study on Family planning: the unfinished agenda, predicted that 40% of maternal deaths would be averted if women had used family planning services [28].

Premature birth, low birth weight, and complications during labor are common in babies born to women under 18, resulting in a child or mother's death [28, 29]. Women who use FP can postpone their first pregnancy until they are 18 or older. Health Also, FP can help women wait at least two years before trying to conceive again, drastically lowering the number of newborns, child, and infant deaths [25]. Similarly, according to a recent study, FP can help reduce one in three maternal deaths by helping women postpone childbirth, avoid unexpected pregnancies and miscarriages, and stop reproduction once they attain their desired family size [29].

In 2015, 64% of European women used some contraception methods, while contraceptives were not as widespread in Africa (33%) [30]. The United Nations Fund for Population Activities estimated that globally, 225 million women who want to avoid pregnancy are not using safe and effective family planning methods. Most women with this unmet need for contraceptives live in sixty-nine of the poorest countries. Some studies have also stipulated that this dearth is due to rapidly growing populations with a concurrent shortage of family planning services [31].

Contrary to popular belief, FP allows women and men to do more than limit the size of their families. It protects people's health and rights while improving the family's quality of life and, in turn, society. The adage that a healthy nation is a wealthy one will hold for a long time. Since FP is one of the best approaches to minimize maternal, newborn, and child mortality [32], it serves as a legitimate poverty reduction avenue. Similarly, the Federal Government of Nigeria (FGN) proposed that reducing the number of undesired pregnancies, abortions, and the fraction of high-risk deliveries might reduce maternal mortality. Meeting women's modern contraceptive needs

is predicted to avoid a quarter to a third of all maternal fatalities and save between 140,000 and 150,000 lives per year.

According to the World Health Organization (WHO), FP is the ability of people and couples to foresee and achieve the desired offspring independent of space and time. It is accomplished by using contraceptive techniques and treating unintended infertility [29]. Individuals and couples can obtain the name, location, and time of contraceptive use through FP [33]. In 2017, 63% of married women or those who choose to have children utilized a contraceptive technique [33]. Contraception usage is over 70% in Europe, Latin America, the Caribbean, and North America, but less than 25% in Central and West Africa [34] and Nigeria in particular [35]. Despite women's adequate knowledge and the unmet need for FP, the contraceptive prevalence rate is only 17%; 12% use modern methods, and 5% use traditional methods [36]. A greater understanding of the barriers to FP that informs service utilization and preferences is needed to improve service delivery.

Providing quality, affordable, and appropriate maternal health services in underdeveloped nations improves women's FP experiences [37], leading to greater uptake. Challenges of demand (such as accessibility) and supply (unqualified or scarce health personnel), compounded by economic, cultural, cognitive, and administrative barriers, influence women's tendency for uptake [38, 39]. Nevertheless, elements of the healthcare setting can be exploited to improve women's use if they are aware of their preferences [30].

FP can improve partner engagement in decisions about whether and when to have children and the health benefits of mother and child [40, 41]. Couples who can plan their families are less physically, emotionally, and financially stressed, have more time and energy for personal and family growth and have more economic opportunities [28, 38]. As a result, good FP relieves community resources, including social services and health care.

In order to provide 120 million women and girls with modern contraceptives by 2020, the global family planning initiative FP2020 was launched in 2012 [26, 27, 42-44]. For each of the ten FP dimensions, the FP2020 Rights and Empowerment Working Group established guiding principles to advance this objective. Two of the ten dimensions are service quality and availability [42]. The principles of accessibility state that healthcare facilities, providers, and contraceptive methods must be accessible "to ensure that individuals can exercise full choice from a full range of methods" and that contraceptive methods must also be accessible without informational or other barriers [42].

The present study aims to assess FP services and commodities availability in Lagos state health facilities. Specific objectives of the study are: To assess the choices and availability of contraception in Lagos state health facilities, to examine the challenges, barriers, and cultural restraints to the use of modern contraception, and to proffer solutions that will help increase FP uptake in the state, to examine the impact of making a wide variety of contraceptive options accessible and available to women and couples on contraceptive uptake, unintended pregnancy, and maternal and infant morbidity and mortality, and to examine the supply-and demand-side interventions that are most effective at increasing voluntary contraceptive uptake in Lagos state.

### 1.1. Study Area

Lagos is one of Nigeria's 36 plus 1 states, with 14,368,000 people in 2020 [45]. Lagos is Nigeria's most densely populated state, accounting for roughly 7% of the country's population [42, 46-48]. It divides into five administrative divisions: Ikeja, Badagry, Ikorodu, Lagos Island, and Epe (LGAs), into 20 Local Government Areas and 37 Local Council Development Areas. Lagos State is the smallest state in Nigeria and covers 358,862 hectares, or 3,577 square kilometers, or about 0.4 percent of Nigeria's total land area. The state spans 356,861 hectares, with 75,755 hectares of wetlands [49]. The state is in Nigeria's southwestern region [49-52]. Lagos state economy, infrastructure, and healthcare systems have improved significantly in the last decade. The State Government has made significant progress in its quest to improve health systems through family planning programs, according to

the Health Facility Monitoring and Accreditation Agency (HEFAMAA). Lagos has over 10,000 skilled healthcare workers spread across 20 local governments, according to HEFAMAA. Lagos State has 2,333 hospital/clinic beds, with 458 public and 1875 private accredited facilities, 1574 primary, 756 Secondary, and 3 tertiary facilities [52]. Primary Health Centers, Maternal/Child Health Clinics, Specialist Clinics, and Diagnostic Centers are among the over 2,500 accredited healthcare facilities (private and public) in the state that provide healthcare services. While these facilities provide health education, the high rate of preventable deaths in Lagos, especially maternal and child mortality, is profoundly concerning [49, 50].

## 2. DATA AND SAMPLING METHODS

The study leveraged primary data collected on health facilities assessment in Lagos state by Noi Polls. Noi Polls adopted a quantitative research methodology for the health facility assessment. At the same time, Health Systems Consult Limited (HSCL) developed a list of health facilities using information from the State Ministry of Health (SMOH). The list served as a sample frame for health facilities in Lagos state. The sampling frame consisted of 2,398 health facilities, and a census approach was adopted. The data collection method used was Computer Assisted Telephone Interview (CATI). Health facilities' target respondents (chief medical directors, medical directors, and facility administrators) were interviewed over the telephone using Questionnaire Processing Software for Market Research (QPSMR). The telephone interview call protocol specifies that each health facility in the sample frame is attempted six times for an interview before the health facility falls into the category of an unsuccessful call. Noi Polls engaged vital stakeholders to refine the technical assistance plan for the health facility assessment. These stakeholders included the State Ministry of Health (SMOH), the Lagos State Health Management Agency (LASHMA), the Health Facility Monitoring and Accreditation Agency (HEFAMAA), the Association of General and Private Medical Practitioners of Nigeria (AGPMPN), and other relevant professional bodies. The final health facility assessment dataset contains information on Facility Ownership, Facility level of care, Accrediting body, Human Resources for Health, Basic Medical & Infection Prevention Equipment, Infrastructure, Available Services, Health Insurance Coverage, Medicines & Commodities, Financial Management Systems, Clinical Governance, and Covid-19 Response.

## 3. STATISTICAL METHOD AND RESULTS

The method of analysis employed in the study is descriptive statistics. We used percentages to assess the distribution of family planning services across the state.

## 4. INTERPRETATION OF RESULT

Table 1 shows that 58% representing 729 facilities in Lagos state offer family planning services to clients, while 42% representing 527 facilities do not. By facility's locality, we observed that 55.4% of the health facilities in the state's urban areas provide family planning services, and 66.9% (192) of the rural facilities also offer the same services. 93.8% of government/public health facilities in Lagos state offer family planning services; this is significantly higher when compared to private for-profit (51.8%) and faith-based institutions (38.1%). Also, primary healthcare facilities engage more in family planning services (71%) than secondary healthcare facilities (18.4%).

Table 2 represents an assessment of facilities offering family planning services by the local government area. Ibeju/Lekki local government area has the highest percentage of facilities in the state offering family planning services; the LGA has 83.9% of its healthcare facilities, i.e., 26 in 31 facilities offering family planning services to the residents. Epe local government area has the second-highest statistics of healthcare facilities by LGA offering FP services in the state, with 83.3% of its healthcare facilities, i.e., 10 in 12 facilities offering family planning services. However, Epe LGA has the least number of healthcare facilities in Lagos state, followed by Apapa, with 16 facilities, of which 81.3% offer family planning services. In Mushin LGA, 39.6% of healthcare facilities offer FP services, i.e.,

19 in 48 facilities. Alimosho is the local government with the highest number of facilities (221); only 58.9% of these facilities (i.e., 132) offer family planning services. We also examined the different family planning services provided by healthcare facilities by local government areas in Lagos state and presented our findings in Table 2. The result shows that all the facilities in the local governments except Ikeja, Mushin, and Ikorodu, with 96.6%, 94.7%, and 98.5%, respectively, provide family planning counseling services. More than 50% of the facilities in each local government area provide the listed family planning services except for sterilization, which is below 50% except for Ifako-Ijaye, Ikorodu, Oshodi-isolo, and Surulere LGA.

We presented the different family planning services provided in Lagos State healthcare facilities by facility type and ownership, level of care, and locality in Table 3. Family planning counseling is readily available and provided by 99.6% of the facilities offering FP services in the state. Contraceptive injectables were the next most common FP service provided by the facilities in the state; this commodity was available in 94.9% of the FP services facilities in Lagos State. Only 42.2% of the facilities providing FP services in the state provide sterilization as a family planning method. The sterilization method is not widely practiced by residents in the state, as shown by the few healthcare facilities that provide the service. 99.6% and 99.5% of the facilities in the urban and rural areas, respectively, offer family planning counseling services. Health facilities in the urban areas providing sterilization services are 42.1% and 42.7% for rural areas. More facilities in rural areas (96.4%) than urban ones (94.4%) provide conceptive injectables. The result shows that all the government/public facilities offer counseling services, likewise faith-based and secondary healthcare facilities. 99.4% of the private-for-profit and 99.6% of the facilities in the rural areas also offer counseling services.

**Table 1.** The percentage of facilities providing FP services by ownership type, level of care, and locality.

FP Services	Total	Ownership type			Facility's level of care		Facility's locality	
		Government / Public	Private-for-profit	Others (Non-government organizations (NGOs), mission/Faith-based)	Secondary health care (SHC) facility	Primary health care (PHC) facility	Urban	Rural
Yes	58.0	93.8	51.8	38.1	18.4	71	55.4	66.9
No	42.0	6.2	48.2	61.9	81.6	29	45.6	33.1

**Table 2.** Percentage of facilities providing FP services and the various FP services offered across the local government area (LGA).

LGA	% of Facilities offering FP services		% Of available FP services							
	Yes	No	FP counseling	Contraceptive injectables	Oral contraceptive pills	Intra uterine contraceptive devices IUCD	Provision of implants	Provision of condoms (Male)	Provision of condoms (Female)	Sterilization
Agege	63.9	36.1	100	87.0	91.3	73.9	73.9	87.0	82.6	39.1
Ajeromi-Ifelodun	76.9	23.1	100	97.5	95.0	97.5	95.0	95.0	87.5	40.0
Alimosho	59.7	40.3	100	95.5	93.2	93.9	89.4	86.4	73.5	48.5
Amuwo-Odofin	62.7	37.3	100	93.8	84.4	87.5	75.0	68.8	46.9	37.5
Badagry	75.7	24.3	100	96.4	96.4	89.3	85.7	100	100	17.9
Ifako-Ijaye	75.0	25.0	100	95.2	95.2	92.9	83.3	99.1	66.7	52.4
Ikeja	39.7	60.3	96.6	86.2	82.8	79.3	82.8	75.9	69.0	34.5
Mushin	39.6	60.4	94.7	100	89.5	100	100	89.5	78.9	21.1
Ojo	65.3	34.7	100	100	95.9	91.8	89.8	75.5	69.4	42.9
Oshodi-Isolo	57.1	42.9	100	97.5	97.5	92.5	92.5	80.0	67.5	55.0
Apapa	81.3	18.8	100	100	100	84.6	76.9	84.6	61.5	23.1
Eti-Osa	47.3	52.7	100	93.2	93.2	84.1	79.5	70.5	59.1	43.2
Lagos Island	50	50	100	85.7	85.7	78.6	78.6	85.7	85.7	50.0
Lagos Mainland	59.3	40.7	100	93.8	93.8	68.8	87.5	81.3	75.0	50.0
Surulere	42.1	57.9	100	95.8	91.7	91.7	81.3	81.3	68.8	54.2
Epe	83.3	16.7	100	100	100	60	70.0	90	80	10.0
Ibeju/Lekki	83.9	16.1	100	92.3	96.2	73.1	73.1	92.3	80.8	19.2
Ikorodu	66.0	34.0	98.5	98.5	95.5	87.9	89.4	80.3	60.6	53.0
Kosofe	50.0	50.0	100	92.5	82.5	85.0	85.0	80.0	72.5	35.0
Shomolu	50.0	50.0	100	83.3	83.3	94.4	88.9	72.2	61.1	28.0

**Table 3.** Percentage of FP services provided in the state healthcare facilities; classification by ownership type, level of care, and locality.

Services	Total	Facility's level of care		Facility ownership type			Facility locality	
		SHC facility	PHC facility	Government/ Public	Private-for-profit	Others (NGOs, mission/Faith-based)	Rural	Urban
FP counselling	99.6	100	99.6	100.0	99.4	100.0	99.6	99.5
Contraceptive injectables	94.9	96.5	94.8	97.8	94.4	100.0	94.4	96.4
Oral contraceptive pills	92.5	86.0	93.0	98.4	90.7	75.0	92.2	93.2
Intra uterine contraceptive devices IUCD	88.3	93.0	87.9	83.5	90.4	62.5	89.9	83.9
Provision of implants	85.6	89.5	85.3	90.1	84.6	50.0	86.2	83.9
Provision of condoms (Male)	82.9	80.7	83.0	99.5	77.6	62.5	83.1	82.3
Provision of condom (Female)	71.1	63.2	71.7	98.4	62.2	50.0	69.6	75
Sterilization	42.2	75.4	39.4	16.5	51.0	37.5	42.1	42.7

## 5. DISCUSSION OF FINDINGS

The study findings reveal that 58% of the total surveyed facilities offer family planning services; this shows that family planning services in Lagos State health facilities are not readily available despite government efforts over the years. Could the low availability and strengthening of family planning services in the state be responsible for the recent high population growth? Oh yes. Our findings align with those of [Speidel, et al. \[24\]](#) they noted that the key to improving health, economic development, human rights, and slowing population growth is by strengthening family planning services. Moreover, the critical determinant of contraceptive use is the availability of family planning services [\[27, 37, 53, 54\]](#). A quick observation of the facilities by locality shows that 55.4% (537) of the facilities in the urban areas of Lagos state provide family planning services, compared to 66.9% (192) of the facilities in the rural areas. This finding shows that though more facilities are in urban areas, family planning services are higher in rural areas. Thus, corroborating findings from [Ali, et al. \[39\]](#); [World Health Organisation \[33\]](#) that facilities in rural areas have higher availability of family planning than urban areas.

We further assess the facilities by ownership type. The findings reveal that 93.8% of the government/public-owned healthcare facilities provide family planning services compared to 51.8% for private-for-profit health facilities and 38.1% for faith-based facilities. This finding agrees with [Ali, et al. \[39\]](#); [World Health Organisation \[33\]](#); they obtained a similar result in their study on "The Assessment of Family Planning Service Availability and Readiness in 10 African countries" published in *Global Health: Science and Practice* journal. Thus, government-owned healthcare facilities consider family planning a critical issue and give priority attention compared to other healthcare facilities in the state. Our findings also agree with [Kanma-Okafor, et al. \[27\]](#); [Cleland, et al. \[37\]](#) they noted that people prefer government-owned healthcare facilities for family planning services over others (private-for-profit and faith-based). [Kanma-Okafor, et al. \[27\]](#); [Cleland, et al. \[37\]](#) reported that residents in a state prefer family planning services offered at primary healthcare centers. Findings from this study agree with those from [Kanma-Okafor, et al. \[27\]](#); [Cleland, et al. \[37\]](#) as 71% of the primary healthcare facilities in Lagos state provide family planning services compared to 18.4% of secondary healthcare facilities. Findings show that family planning services differ across local government areas in the state. The highest is the Ibeju/Lekki (83.9%) and Epe (83.3%), while the least are Mushin (39.6%) and Ikeja (39.7%).

Findings from this study also revealed the different family planning methods provided at the healthcare facilities in Lagos State. All the state government-owned, faith-based, and secondary healthcare facilities provide family planning counseling; this shows how vital counseling is regarding family planning. Findings also show a more significant percentage of the facilities recommended using the listed family planning methods, except sterilization recommended by 42.2% of the studied facilities (*See Table 3*). Our findings agree with the study conducted by [Ali, et al. \[39\]](#); [World Health Organisation \[33\]](#) which revealed a relatively high availability of more than one conceptive method in their study area. Aside from family planning and sterilization, the other family planning methods recommended at facilities in the state are contraceptive injectables, oral contraceptives pills, intrauterine contraceptive devices, provision of implants, and provision of male and female condoms, also outlined by [Isonguyo and Adindu \[29\]](#); [Chukwuji, et al. \[43\]](#).

As observed in this study, one of the most recommended FP services is the contraceptive injectables provided by 94.9% of the studied facilities, followed by oral contraceptive pills (92.9%). These two services were also highly recommended at the rural facilities 96.4% and 93.2%, respectively, than the urban facilities 94.9% and 92.5%. [Onoja, et al. \[41\]](#); [Tessema, et al. \[40\]](#) obtained a similar result in a study titled "Comparative Analysis of Family Planning Services in Urban and Rural Health Facilities in Nigeria." Interestingly, government-owned facilities provide more implants and male and female condoms than other facilities in the state. Also, private for-profit provides intrauterine contraceptive devices (IUCDs) family planning services more than other facilities in the state. Secondary facilities (75.4%) and private for-profit facilities (51%) provide sterilization services more than other facilities in the state.



### 5.1. The Choices and Availability of Contraception in Lagos State Health Facilities

Access to, availability, and affordability of appropriate contraception methods are critical for universal access to sexual and reproductive health. Everyone should have access to various contraceptive methods from which to choose [53].

The prevalence of contraception is highest in states with uniformly high access to more options, such as female sterilization, IUDs, pills, injectables, and condoms. Personal access to each method and all methods in the Lagos state population is limited without top choice [53]. To the extent that the ability to choose adequate contraceptive protection depends on easy access to various methods, there is a clear need for increased policy and programmatic attention to providing a diverse range of methods.

In Lagos State, there is only a small selection of contraceptive options available, especially in the public sector. Women find it difficult and take longer to decide which method is best for them when it comes to their reproductive needs. All modern contraceptives are very effective, but for some women, long-acting, reversible contraceptive (LARC) methods—like IUDs and contraceptive implants—are more effective when used. As opposed to condoms or oral contraceptive pills or injectables, they don't require women to remember to use them every time they engage in sexual activity. To ensure that women's contraceptive needs are met, it is essential that these methods are easily accessible in Lagos state [55].

The fact that every woman has different needs that might change over her lifetime necessitates the availability of additional FP methods. In addition to serving as a practical family planning method, combined oral contraceptives can be used by women with certain medical conditions to treat conditions like premenstrual syndrome and menorrhagia [56]. Women and men who have had their desired number of children should strongly consider surgical sterilization, which is not readily available in the state. This method does not require hormones, which is contraindicated for women with specific medical conditions and has no adverse side effects. Numerous issues hamper the provision of surgical sterilization in Lagos State. For most surgical services, the available resources are insufficient. Poor roads, a lack of resources and surgical expertise, as well as the high costs of surgical care are barriers to access to surgery in Lagos State [57]. In general, the initial costs of permanent contraceptive methods are higher than those of LARC or shorter-acting options. The materials required to carry out the procedures frequently lack lists of necessary medications and medical supplies, just like with LARC methods. These materials from programmatic strategies that place a greater emphasis on delivering goods than on providing services are frequently disregarded by management. However, programs for family planning that do not include permanent methods fall short of offering a wide range of options and exclude families that would most benefit from such options [58].

Emergency contraception is not a common, long-term method of birth control worldwide, but it can be very effective in preventing unintended pregnancies when other methods are overlooked, fail, or a woman is unable to discuss contraceptive use. According to the literature, emergency contraception hasn't proven to be a net benefit for population-level pregnancy prevention [59]. It is typically less effective than conventional contraceptive methods at preventing pregnancy, but in some circumstances, it is still a vital option [60]. Levonorgestrel is one of many readily available emergency contraceptive pills that are on the WHO Essential Medicines List. However, due to the exclusion from national healthcare, family planning, social marketing, and educational programs, accessibility remains constrained [61]. Ulipristal acetate is a newer emergency contraceptive pill, more effective at preventing pregnancy than levonorgestrel, especially after 72 hours of intercourse [60]. However, it is more expensive and not yet widely available in Lagos state [62] nor on the WHO Essential Medicines List [63]. The copper IUD is a different option for post-coital contraception that is highly effective regardless of weight and is effective for up to seven days after unprotected intercourse. However, it is not frequently available to many women on a scheduled, much less urgent, basis in many high-income countries [64], let alone low-income countries. In the context of post-rape care, gender-based violence, and in situations where women have few opportunities to access and use regular

contraceptive methods, it is crucial that emergency contraceptive methods are readily available in Lagos State. Every woman who uses emergency contraceptive services ought to be given the chance to start using a regular, more potent method of contraception in the medical facilities. If a woman wants to start using regular contraception, copper IUDs are the best option. The copper IUDs are ideal for women who wish to initiate regular contraception. The method works as an emergency contraceptive and is a highly effective LARC method.

### *5.2. Increasing Access to, and Utilization of Family Planning Services*

With all of the benefits that family planning services in Lagos state provide to women, families, and society as a whole, increasing access to and use of such services is critical. FP2020 established a clear mandate to increase the number of contraceptive users to 120 million by 2020 to galvanize global support with a measurable outcome [65].

While this mandate is admirable, a strive to maintain women's rights in pursuing it must be adhered to, and contraceptive use must be genuinely voluntary. Family planning services must be provided without coercion, focusing on adequate supplies and removing barriers to access [66].

The World Health Organization recently issued guidelines on human rights in family planning service provision [23]. Despite the clear need and decades of work on family planning programming, with a few exceptions, it remains unclear which societal factors are most important to increase family planning uptake and which programming strategies are most beneficial. Although improved economic conditions are associated with increased contraceptive uptake [67], an understanding of the specific programmatic interventions that are most beneficial remains elusive. A systematic review of literature in 36 of 49 studies published between 1995 and 2009 found that the majority of both supply-side and demand-side interventions had a beneficial effect on increasing contraceptive use. However, fewer studies were able to show an effect on fertility-related measures such as unintended pregnancy. These are indeed the outcome of interest for policy-makers. Additionally, little information is available on the Lagos state population-level impact of male involvement and public-private partnerships, as well as the comparative costs of various programmatic strategies.

### *5.3. Challenges, Barriers, and Cultural Restraints to the Use of Modern Contraception*

Modern contraception positively impacts women's health in Lagos State, outweighing any risks (real or imagined), obstacles, and difficulties. One of the major problems is the lack of access to and variety in contraceptive methods. The most vulnerable groups, such as the poor and young, continue to have high unmet needs. In Lagos state, the obstacles to serving the most vulnerable have not been clearly defined. Potential obstacles include those resulting from the culture and health systems, provider beliefs, negative user attitudes toward contraception, and others. Users who only occasionally engage in sexual activity might not think they need contraceptives. In addition, many people are only familiar with a small number of methods or may hold traditional or religious beliefs that forbid the use of contraceptives [68]. Results from a systematic literature review of 12 studies assessing the barriers to contraceptives in Lagos State indicate a limitation in the hormonal method used due to ignorance, access barriers, and concern over side effects, particularly fear of infertility [69]. Although condoms were frequently more readily available, their use as a method of contraception was constrained by their associations with disease and promiscuity, and greater male control. The review concluded that promoting the use of modern contraceptive methods calls for a comprehensive, multifaceted intervention, as well as the simultaneous distribution of knowledge, support, life skills, and access to services geared toward young people. The dual function of condoms as a contraceptive and a tool for STI/HIV prevention should be continuously emphasized, as should interventions aimed at combating misperceptions of modern contraceptive methods. An analysis of the needs, obstacles, and strategies for access and use of contraception by adolescents in low- and middle-income countries, as well as programmatic experience, led to the conclusion that all adolescents, particularly those who are not married, face numerous obstacles to obtaining and using contraception [70]. The authors advocated for enacting and putting into practice

laws and policies that would promote sex education, teen-friendly medical care, and contraception through various channels and community support for adolescent services. According to a study of Nigerian women, the top perceived barriers that account for low contraceptive use are cultural (20.3%), ignorance (44%), misinformation (32.6%), superstition (22.0%), and perceived side effects (44%) [27].

Family planning services and methods may not be widely accessible in Lagos State due to the high cost. Some methods have high upfront costs, especially those that are long-lasting and permanent. However, compared to the price of injectables, pills, or condoms, their yearly costs are typically lower (notably, contraceptive implants cost a similar amount per year of use as other hormonal methods). Increased per capita income, better social and economic conditions for women, and future generations of healthier, better-educated children are additional economical and non-economic benefits of the fertility decline enjoyed by countries that invest in family planning [71].

#### *5.4. Supply-and Demand-Side Interventions that can increase Voluntary Contraceptive Uptake in Lagos State*

##### *5.4.1. Supply-Side Interventions*

- Consistent, sustainable supply and distribution of FP commodities: In Lagos State, a significant challenge often encountered is the insufficient stock with the untimely and inadequate distribution of FP commodities to the last mile, reaching from the warehouse to the LGA and then the health facilities.
- These challenges often lead to the unavailability of contraceptive commodities at facilities, especially in rural areas. Therefore, a consistent and sustainable channel for procuring, supplying, and distributing contraceptive commodities is essential to increase voluntary contraceptive uptake in the state. There will be constant availability of commodities for intending users at every point, including facilities in hard-to-reach rural areas of the state. The state should also explore a sustainable financing mechanism for state-level procurement of contraceptive commodities to buffer supplies from the federal and prevent stock-outs at health facilities in the state.
- Increasing range of available methods: Ensuring the availability of contraceptive method mix can increase Lagos state's voluntary uptake of contraceptive services. We expect that clients are counseled on all family planning methods and supported by the provider to choose their preferred method. Clients may refuse to take up contraceptive services if their preferred method is unavailable. However, with various methods available, they are more likely to take up the service by choosing from the range of available methods.
- Quality service provision: One factor influencing the client's uptake of contraceptives is the client's satisfaction with provider interaction during counseling. Therefore, having well-trained providers capable of providing counseling, sustaining quality provider-client interactions, dispelling myths and misconceptions, and providing quality services is an intervention capable of increasing voluntary uptake of FP services in Lagos state.
- Public-private partnership: Private facilities provide most Lagos State residents health care services. However, these facilities do not view offering FP services, especially long-acting methods [72, 73], and, as such, do not have readily trained FP service providers nor stock FP commodities. The non-offering of FP services in these facilities has led to many missed opportunities, as potential FP acceptors may walk in and out of the facility without hearing about FP or accessing FP services. Having well-trained FP providers and supplying FP commodities to the private facilities by engaging with the private sector in Lagos State to align service delivery and commodity distribution goals will drive voluntary uptake of FP services.
- Inclusion of contraceptive services into the Benefits package of the Lagos State Health Scheme: while contraceptive commodities are provided free of charge to clients at public facilities, hidden charges billed as cost of consumables still exists, which often deter clients from taking up contraceptive services. At private facilities, on the other hand, clients are required to pay out of pocket for both costs of commodities and consumables. The current benefit package of the LSHS does not cover the provision of FP services except

counseling. As a result, enrolled clients must pay for the services (either consumable alone or with commodities) at public and private facilities. Including a full range of contraceptive services into the benefits package of the LSHS will make contraceptive services available to enrolled clients at no cost in both public and private facilities, which has the potential to increase voluntary uptake of the services.

#### 5.4.2. Demand Side Interventions

- Community outreaches: Involves community health officers (CHOs) and community health extension workers (CHEWs) going into communities to give health talks on family planning and inform community members on the range of methods available for uptake. They can also provide contraceptives during the outreaches, such as condoms, pills, and injectables, and refer community members to PHCs for long-acting methods.
- Engaging Religious and community leaders as FP advocates: influential religious and community leaders can be engaged to discuss and educate them on the benefits and potential impacts of family planning. After that, they will be encouraged to promote family planning within their respective spheres of influence.
- Using traditional media and social media to promote FP: scaling up information, education, and communication efforts through appropriately tailored messages on various media platforms can improve knowledge about FP and increase voluntary uptake. The use of social media can be beneficial for reaching adolescents. In addition, having confidential, dedicated phone lines that intending users can call to address their concerns may increase voluntary uptake.
- Male involvement in family planning: Identifying male advocates and engaging them to promote family planning, especially among other men in their communities. In addition, men should be encouraged to accompany their spouses to health facilities on various clinic days to learn about family planning and support their spouses in deciding to take up contraceptive services and choice of method.
- MNCH/FP integration: integrating FP counseling and services into other maternal and child health services can increase FP services. FP counseling during Antenatal care (ANC) clinics can help women prepare to take up FP services following delivery. In contrast, women who otherwise would not go to the facility solely for FP services may be more likely to take up the services if made available during child immunization clinics.

## 6. CONCLUSION

FP is essential in population control, reduction of maternal mortality, and economic planning. Only 58% of the surveyed facilities offer FP services; this shows that FP services in Lagos State health facilities are not readily available despite government efforts. The assessment also shows that 55.4% (537) of the facilities in the urban areas of Lagos state provide FP services, compared to 66.9% (192) of the facilities in the rural areas. This finding implies that though more facilities are in urban areas, FP services are higher in rural areas.

Also, 93.8% of the government/public-owned healthcare facilities provide FP services compared to 51.8% for private-for-profit health facilities and 38.1% for faith-based facilities. This result implies that government-owned healthcare facilities consider family planning a critical issue and give priority attention compared to other healthcare facilities in the state. Our findings further show that government-owned facilities provide more implants and male and female condoms than other facilities in the state. Also, private for-profit provides intrauterine contraceptive devices (IUCD) family planning services more than other facilities in the state. Secondary facilities (75.4%) and private for-profit facilities (51%) provide sterilization services more than other facilities in the state. It is important to note that access to, availability, and affordability of appropriate contraception methods are critical for achieving universal sexual and reproductive health access. Therefore, easy accessibility to such methods in Lagos state is critical to ensuring women's contraceptive needs are met. Among other challenges, the study identified the cost of family planning programs and methods as barriers to their wide availability in Lagos state.

Other challenges include but are not limited to negative user attitudes towards contraception, provider beliefs, and those arising from the culture and health systems. We further recommended some supply-and-demand-side interventions that will be most effective at increasing voluntary contraceptive uptake in Lagos state.

**Funding:** This research is supported by the Bill and Melinda Gates Foundation through the Nigerian-led Strategic Purchasing for Family Planning grant assigned to HSCL (Grant number: INV-007359).  
**Competing Interests:** The authors declare that they have no competing interests.  
**Authors' Contributions:** All authors contributed equally to the conception and design of the study.

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