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Assessment of Availability and Quality of Family Planning Services in Private Health Facilities in Plateau State, Nigeria

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ABSTRACT: *Worldwide, there are inequitable differences in both the availability and quality of family planning services provided in different geographical regions of the world. In Nigeria's 2018 Demographic Health Survey, only 10.5% of women use a modern contraceptive method with 40.8% of users sourcing them from private sector providers. Despite the complementary role played by the private health facilities, women do not access and use family planning methods adequately. This study assessed the availability and quality of family planning services provided by private health facilities (PHFs) in Plateau state Nigeria. The study was a facility based cross-sectional study of private health facilities across the 17 Local Government Areas of Plateau state. A checklist questionnaire adapted from a combination of similar researches was used to capture details on availability and the quality of family planning services rendered by these private health facilities. Data analysis was done using descriptive and inferential statistics. Three hundred and fifty-six (356) private health facilities were covered in this study, the availability of family planning (FP) in Plateau state PHFs was found to be adequate in 75.3% of the facilities. The quality of family planning services was assessed, majority (59.6%) of the private health facilities has high quality. However, this does not go hand-in-hand with the availability of the same services. Reason for this was due to the differences in location, staff strength, different support given to facilities and the training of staff of the PHFs in the provision of family planning. Only 59% of these facilities were able to score above 13.5 on quality score and thereby considered as having high quality. There is need for more private health facilities inclusion in all forms of manpower development in family planning by government and other partners; this is to help improve the quality of family planning services in the private health sector of the state and country at large.*

KEYWORDS: availability, quality, family planning services, private health facilities

INTRODUCTION

Family planning (FP) refers to the planning of when to have children and the use of birth control. It allows individuals and couples to anticipate and have their desired number of children, and to achieve healthy spacing and timing of their births (Tessema, et al., 2016). Family planning is achieved through the use of contraceptive methods and the treatment of involuntary infertility. Other techniques commonly used include sexuality education, pre-conception counselling and management, and infertility management (United Nations, 2015).

Family planning as Sustainable Development Goals (SDGs)-3 target 7 is critical in accelerating progress towards attainment of universal health through; the improvement of maternal health and child survival by helping women avoid becoming pregnant too early, too late or too often which will benefit them and their children; reduction in the number of abortions especially unsafe abortion by closing the gap in the unmet need for contraceptives; prevention of sexually transmitted infections (STIs), including HIV/AIDS by improving access to condoms, both male and female; empowerment of women to be able to control the number and timing of their children; protection of the environment through population control by increasing access to voluntary family planning slow population growth rates (WHO, 2018). Family planning has advanced the human right of people to determine the number and spacing of their children and has benefited public health in general. Family planning is a cost-effective approach and increases the need for domestic investment, it allows users to simulate the effects of family planning on a variety of health and non-health SDG indicators (Mpunga, et al., 2017). Family planning prevents unwanted pregnancies and associated consequences, maternal and under-5deaths, and improves the health of both women and children.

However, globally more than 289,000 maternal deaths occurred in 2013 of which nearly 99% (286,000) of women died in developing countries of which a larger proportion was African countries.[5] Studies have shown that up to 40% of maternal deaths could have been averted through the use of family planning services (Campbell, et al., 2015). In 2018, 77 % of married or in-union women of reproductive age were using some form of contraception in the world but the use was much lower in Africa (33%) (Campbell, et al., 2015). It is estimated that globally, 225 million women who want to avoid pregnancy are not using safe and effective family planning methods (Campbell, et al., 2015).

In many parts of the world, family planning services are a key instrument in their national planning and development, The 2017 family planning summit in London reasserted family planning as one of the `best buys' in development but recognized that most countries, are far from achieving their SDG and FP2020 goals and must accelerate progress (Ali, et al., 2018).

Family planning serves a significant role in family health and the provision of reliable national demographic data generated by a country's health sectors, through the accurate service provision and proper documentation of all the services rendered per health facility and per geographical location. This information is collated on monthly basis through the national health management information system (NHMIS) data tool. Access to this service and appropriate contraceptive methods is crucial for ensuring good health outcomes for women, children and adolescent girls (Ali, et al., 2018).

Worldwide, there are inequitable differences in both the availability and quality of family planning services provided in different geographical regions of the world. Globally, 62 % of married women ages 15 to 49 use a method of family planning and 56 % use a modern method (Ali, et al., 2018). These rates are twice as high among women living in high-income countries (67 % and 60 %, respectively) compared to women living in low-income countries (34 % and 29 %, respectively)—a result of differences in access to, availability of, and demand for modern methods of contraception. Between different countries, the use of any method of family planning among married women can vary significantly, ranging from 4 % (South Sudan) to 88 % (Norway) (Winston, et al., 2018).

In 2018, the WHO assessed the service availability and readiness of health facilities to provide contraception in 10 African countries; Benin, Burkina Faso, the Democratic Republic of the Congo, Djibouti, Mauritania, Niger, Sierra Leone, Tanzania, Togo, and Uganda, found out that Rural facilities tended to have more availability of contraception than urban facilities, and government facilities have higher availability of family planning than other health providers (Ali, et al., 2018). These countries had overall low levels of all 6 tracer items (availability of family planning guidelines, staff trained in family planning, blood pressure apparatuses, combined oral contraceptive, injectable contraceptives, and male condoms on assessment), indicating low health system readiness for family planning and reproductive health. In Nigeria, the contraceptive prevalence remains at 15% (10% modern method) and has a total unmet need for contraception of 20% with 15% unmet need for spacing and 5% unmet need for limiting (Austin, 2015). The estimated overall rates and trends of modern Contraceptive Prevalence Rate (mCPR) and unmet need have remained low in Nigeria: the average annual rate of change for mCPR by the state is 0.5% (0.4%, 0.6%) from 2012-2017 (Mereer, et al., 2019). Unmet need by age-parity demographic groups varied significantly across Nigeria; parous women express much higher rates of unmet need than nulliparous women. International support for improving access to family planning (FP) services through the coalitions of governmental and non-governmental agencies have made ambitious, world-wide goals. One of such goals was referred to as *120 by 2020*, aims to increase access to modern contraceptives for 120 million more women by 2020; Unfortunately, as of 2019, the progress toward *120 by 20* fell short with only 38.8 million estimated users were added since 2012 (Mereer, et al., 2019).

The public sector plays a more prominent role than the private sector in providing modern contraceptive methods (54% and 41%, respectively), however, this role varies by method type. The public sector is the predominant source for female sterilisation (75%), IUDs (79%), implants (93%), and injectables (74%). The private sector is the main source for male condoms (81%), emergency contraception (80%), and pills (67%). In the public sector, implants and injectables are mainly obtained from government health centres (47% and 46%, respectively), while IUDs are mainly obtained from government hospitals (41%). In the private sector, emergency contraception, male condoms, and pills are primarily obtained from private chemists/patent medicine store (PMS) stores (61%, 51%, and 34%, respectively) (Austin, 2015)

The quality of family planning and reproductive health services positively affects contraceptive use and behaviour of the clients; who deserve to receive safe and high-quality services with respect and dignity. In Plateau state, according to the 2018 Demographic and Health Survey, 19.8% of women in Plateau don't

want to become pregnant and are not using a modern contraceptive method. The unmet need for family planning and the met need is 19.9% and 22.7% with a total demand of 42.2% (USAID, 2019). This demand cannot be covered by the public hospital alone, therefore the need for the private sector. Therefore, the participation of the private health sector in rendering this service will cover the lapses that the government health service had; it increases access to family planning, it increases confidence among the consumers of FP as they will have different choice of place to go for their FP services, it reduces patient waiting time in the health facilities and provides round the clock availability of FP particularly when there are industrial disputes that health workers in a particular sector (Private or Public) go on strike (USAID, 2019)..
This research is designed to assess and describe the true position of the availability and quality of family planning services offered by the 511 registered private health facilities in the state, using a quality assessment tool that takes into account the Donabedian quality family planning service indicators.

RESEARCH METHOD

This research used the cross-sectional study design. The study population was selected registered private health facilities from all 17 LGA in the state. The minimum sample size was determined using the Cochran's formula for determining the sample size for a cross-sectional study.

$$n = \frac{z_\alpha^2 \times pq}{d^2}$$

Where n = minimum sample size

Z_α = coefficient of standard normal deviate (usually expressed as 1.96 when the confidence interval is 95% i.e. α=0.05)

q= 1-p

d= absolute precision or accuracy, normally set at 0.05

P= expected population proportion of private health facilities in plateau state 0.5 (50%)

Q= (1-0.5)

Therefore:

$$n = \frac{z_\alpha^2 \times p \times (1-p)}{d^2}$$

$$n \approx 385$$

The non-responds rate was calculated as the 10% of three sample size;

= 424

A single-stage sampling technique was used to select the private health facilities. A simple random sampling technique using ballots was used to select private health care facilities that participated in the study after determining the proportion to size in each LGA.
A list of all registered private health care facilities in each LGA was made.

Table 1: A list of all registered private health care facilities in each LGA

S/NO	LGA	NUMBER OF PRIVATE HEALTH FACILITIES	PROPORTION $P = \frac{n}{N} * 100$	SAMPLE $S = \frac{P}{100} * 424$
1	BARKINLADI	18	3.5	15
2	BASSA	21	4.1	17
3	BOKKOS	23	4.5	19
4	JOS EAST	3	0.6	2
5	JOS NORTH	143	28.0	119
6	JOS SOUTH	73	14.3	61
7	KANAM	16	3.1	13
8	KANKE	14	2.7	12
9	LANGTANG NORTH	12	2.3	10
10	LANGTANG SOUTH	10	2.0	8
11	MANGU	60	11.7	50
12	MIKANG	10	2.0	8
13	PANKSHIN	11	2.2	9
14	QUA'ANPAN	34	6.7	28
15	RIYOM	10	2.0	8
16	SHENDAM	33	6.5	27
17	WASE	20	3.9	17
	Total	**511**	**100%**	**424**

Where: p= proportion. n = number of PHF per LGA. N= total number of PHF in the state. S= Sample size.

Data collection was done by the researcher and 5 other research assistant who had a minimum of NCE, CHEW or DIPLOMA qualification, were able to communicate in English both verbally and written, and were not working in any of the Private Health facilities. They were trained on; (a) selection of private health facilities sampled, (b) ethical conduct and how to obtain consent from private facilities selected without coercion (c) family planning types, quality and quantity assessment score, and (d)

administration of the instrument. This training was scheduled for two (2) days at the state ministry of health board room. An-administered questionnaire was used in the collection of the data; it has 3 sections: **Section A** -questions on the basic information about the health facility, **Section B** - Availability of family planning services, Section **C** -Qualities of family planning services and **Section D**- Concern and Support for Family Planning.

The instrument was pretested among 43 (10% of the sample size) Government facilities in the state to measure its reliability and internal consistency. This reliability was obtained using Cronbach's alpha and only values ≥0.7 were accepted otherwise adjustments were made on the questionnaire until the Cronbach's alpha value became ≥0.7.

All data collected were entered into the microsoft excel spreadsheet, cleaned, collated and subsequently exported for analyses using the Statistical package for Social Sciences (SPSS) version 25. Simple frequencies and proportions were reported for categorical variables. The measurement of variables in this research was as follow:

1. Availability of family planning methods and services: This is a dependent variable; it was measured based on a score of 11 using availability score sheet. Any health facility that scored 5 and above on this variable were operationalized as having '***ADEQUATE'*** family planning (FP) services while those that scored below 5 were considered to have '***INADEQUATE'***FP services.
2. Quality of family Planning services in Private Health Facilities: This is a dependent variable; it will be measured based on a score of 26 using FP quality score sheet. Any health facility that scores 13 and above on this variable will be operationalized as having '***HIGH'*** quality of FP services while those that scored below 13 were considered to have '***LOW'*** quality of FP services.
3. Determinant of the availability and quality of family planning methods and services were the independent variables and they were assessed from the basic information of the individual health facilities (Demographic characteristics of the PHF).

RESULTS

Three hundred and fifty-six private health facilities were covered in this study out of the 385 expected sample size in this research, (response rate of 92.5%).

Table 2: Demographic profile of the participating private health facilities

		Frequency	Percent
Location of facility L.G.A	BARKIN LADI	15	4.2
	BASSA	14	3.9
	BOKKOS	19	5.3
	JOS EAST	4	1.1
	JOS NORTH	102	28.7
	JOS SOUTH	56	15.7
	KANAM	8	2.2
	KANKE	9	2.5
	LANGTANG NORTH	6	1.7
	LANGTANG SOUTH	6	1.7
	MANGU	37	10.4
	MIKANG	6	1.7
	PANKSHIN	6	1.7
	QUAANPAN	26	9.3
	RIYOM	8	2.2
	SHENDAM	25	7.0
	WASE	9	2.5
	Total	**356**	**100.0**
Operational level of the facility	Primary Healthcare	282	78.7
	Secondary Healthcare	72	20.2
	Tertiary Healthcare	2	0.55
	Total	**356**	**100.0**

Table 2 above shows the demographic characteristics of the private health facilities in Plateau state. The participating facilities were drawn from all the 17 local government areas of the state, Jos North being the centre of commerce and the local government with the state capital city has the highest number of the facilities 102 (28.7%) followed by Jos South with 56(15.7 %), while the local government with the least facilities was Jos East with 4 (1.1%) facilities participating in this research. The majority 282 (78.7%) of the facilities were registered as Primary Health care facilities while 72 (20.2%) as secondary health facilities while only 2 (0.6%) were of the tertiary level. The Catchment (Target population) population of the entire facilities range from 1000 in the rural facilities to 140,000 in urban facilities with the mean catchment population of 11,255 per facility.

Table 4: Staff Strength in the participating private health facilities

		Frequency	Percent
Staff strength (Doctors)	NONE	126	35.4
	1	80	22.5
	2	76	21.3
	3	74	20.8
	Total	**356**	**100.0**
Staff strength (Nurse/Midwife)	NONE	22	6.2
	1	56	15.7
	2	122	34.3
	3	156	43.8
	Total	**356**	**100.0**
Staff strength (CHO/CHEW)	NONE	38	10.7
	1	64	18.0
	2	140	39.3
	3	114	32.0
	Total	**356**	**100.0**
Staff strength (Lab scientist/Technician)	NONE	72	20.2
	1	164	46.1
	2	94	26.4
	3	26	7.3
	Total	**356**	**100.0**
Staff strength (Pharmacist/Pharm. Technician)	NONE	204	57.3
	1	80	22.5
	2	48	13.5
	3	24	6.7
	Total	**356**	**100.0**
Staff strength (Support Staff*)	NONE	2	.6
	1	14	3.9
	2	64	18.0
	3	276	77.5
	Total	**356**	**100.0**

The table above shows the staff strength of the participating private health facilities. The staff strength of these facilities varies among all the private health facilities, for Physicians (doctors):74 (20.8%) facilities have more than 3 doctors while most 126 (35.4%) facilities do not have any. For Nurse/Midwife: 156 (43.8%) facilities have more than 3 Nurse/Midwife while 22(6.2%) facilities do not have a Nurse/Midwife. For Community Health Officers/Extension Workers (CHO/CHEW), 114 (32.0%) facilities have more than 3 CHO/CHEW while 38(10.7%) facilities do not have a CHO/CHEW. For Lab scientist/Technician, 24(6.7%) facilities have more than 3 Lab scientists/Technicians while 72(20.2%) facilities do not have a Lab scientist/Technician. For Pharmacist/Pharm Technician, 24 (6.7%) facilities have more than three (3) Pharmacist/Pharm Technicians while most 204(57.3%) facilities do not have a Pharmacist/Pharm Technician.

Table 5: The distribution of family planning services available at the private health facilities

Items	Categories	Frequency	Percent
Availability of a room for family planning service provision	Yes	252	70.8
	No	104	29.2
	Total	**356**	**100.0**
Existence of staff assigned to family planning services	Yes	252	70.8
	No	104	29.2
	Total	**356**	**100.0**
Number of trained staff on FP services (LARC & IUD)	None	80	22.5
	1	140	39.3
	2 and above	136	38.2
	Total	**356**	**100.0**
Categories of trained staff	NONE	72	20.2
	Doctor	54	15.2
	Nurse/Midwife	196	55.1
	CHO/CHEW	34	9.6
	Total	**356**	**100.0**
Register or evidence of client use of family planning services	Yes	260	73.0
	No	96	27.0
	Total	**356**	**100.0**
Number of days of FP services per week	1	42	11.8
	2	26	7.3
	3 and above	288	80.9
	Total	**356**	**100.0**
Availability of BP apparatus and Weighing scale present	Yes	344	96.6
	No	12	3.4
	Total	**356**	**100.0**
Availability of Pregnancy Test kits	Yes	338	94.9
	No	18	5.1
	Total	356	100.0
Availability of MEC Wheel/ counseling guide	Yes	138	38.8
	No	218	61.2
	Total	**356**	**100.0**
Availability of Infection prevention and control	Yes	314	88.2
	No	42	11.8
	Total	356	100.0
Instrument for insertion/removal of Implants and IUD	Yes	264	74.2
	No	92	25.8
	Total	**356**	**100.0**

Table 5 above presents the availability of family planning services in the private health facilities within the state. Two hundred and fifty-two (70.8%) facilities have an Available room for family planning service, 242 (68.0%) health facilities have staff assigned purposely for family planning services, 136(38.2%) have more than 2 staff trained on Family planning services, while the categories of staff trained are 54 (15.2%) doctors,196 (55.1%) Nurse/Midwives and 34(9.6%) were CHO/CHEWs. Two hundred and sixty (73.0%) facilities were able to show register of family planning as evidence of service provision while 288 (80.9%) do provide any family planning service within 3 or more days per week in the facility, only 42(11.8%) have one specific day selected for family planning provision in their facilities.

Almost all 344(96.6%) facilities had blood pressure measuring apparatus at the time of visit to the facilities, 338 (94.9%) had pregnancy test kits, only 138 (38.8%) facilities had MEC Wheel/ counseling guide, 314 (88.2%) had infection prevention and control guide while 264 (74.2%) facilities had Instrument for insertion/removal of Implants and IUD at the time of visit to the health facilities.

Figure 1: The distribution of family planning commodities in the private health facilities

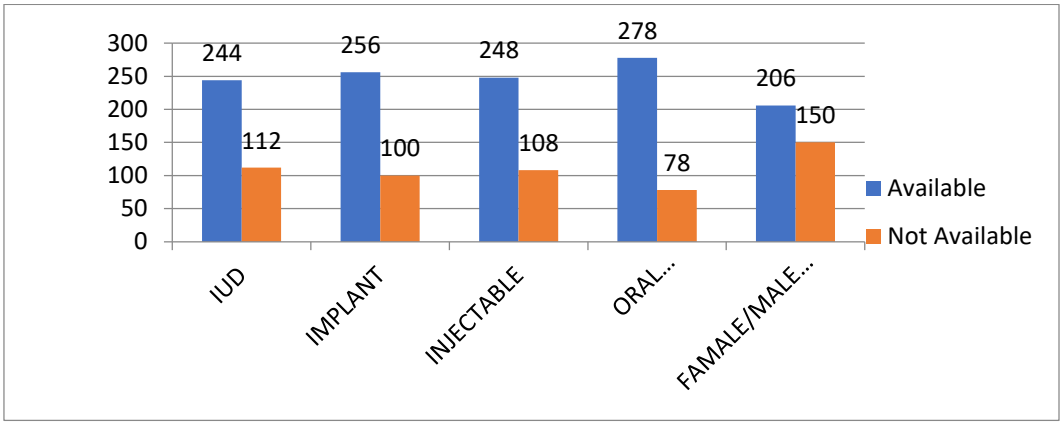

Figure 1 above shows the distribution of family planning commodities in the private health facilities; Intra-uterine Device (IUD) was available in 244(68.5%) facilities, 256 (71.9%) had Implants available, 248(69.7%) had one form of Injectable or more, 278 (78.1%) facilities had Oral contraceptive pills while 206 (57.9%) had the Female/male condom as at the time of visit to the facilities.

Figure 2: Adequacy of Family Planning service among the private Facilities

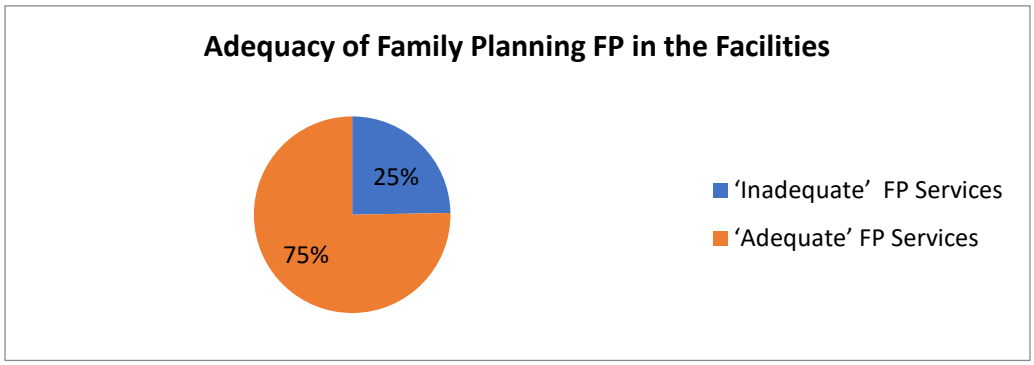

Figure 2 shows the availability of family planning services and how adequate they are in the private sector. This is categorized based on the selected items that were assessed using the availability checklist as presented in table 4.2.0 above. Only 88 (24.7%) facilities were categorized to have **INADEQUATE** family planning services while 268(75.3%) have been categorized to have **ADEQUATE** family planning service.

Figure 3: Quality of Family Planning Services

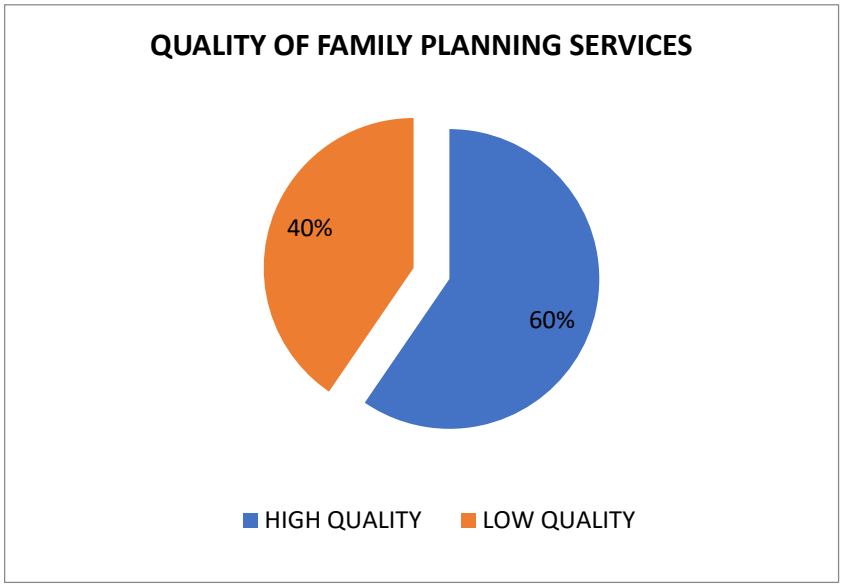

Figure 3 above shows the quality of family planning services and how adequate they are in the private sector. This is categorized based on the selected items that were assessed using the quality checklist as presented in table 4.3.0 above. One hundred and forty-four 144 (40.4%) facilities were categorized to have Low quality family planning services while 212 (57.6 %) have been categorized to have High-quality family planning services.

Table 6: Responses on concerns and support given to health facilities for family planning service.

Variable	Categories	Frequency	Percent
Do clients report back side effects?	Yes	302	84.8
	No	54	15.2
	Total	**356**	**100.0**
Do you have Pharmacovigilance report form?	Yes	76	21.3
	No	280	78.7
	Total	**356**	**100.0**
Do you have support for FP services?	Yes	134	37.6
	No	222	62.4
	Total	**356**	**100.0**
If yes, from who?	No Support	222	62.4
	Government alone	68	19.1
	NGOs (Meristop, Shops-plus, TCI, ROTARY)	56	15.7
	Both Government and NGOs	10	2.8
	Total	**356**	**100.0**
What type of support?	No support	222	62.4
	Training alone	36	10.1
	Commodities alone	38	10.7
	Equipment alone	4	1.1
	Combination of two or more supports	56	15.7
	Total	**356**	**100.0**
Do you have family planning logistic data reporting tools?	Yes	146	41.0
	No	210	59.0
	Total	**356**	**100.0**
Categories of the form present; Daily consumption register	Yes	144	40.4
	No	212	59.6
	Total	**356**	**100.0**
Categories of the form present; Bi-monthly consumption register	Yes	108	30.3
	No	248	69.7
	Total	**356**	**100.0**
Categories of the form present; Inventory control card	Yes	146	41.0
	No	210	59.0
	Total	**356**	**100.0**

The table above shows the concerns and support given to private health facilities on family planning services. Three hundred and two (84.8%) facilities said clients report to their facility on account of family planning complications while only 76 (21.3%) have Pharmacovigilance report form. Only 134 (37.6%) facilities have some forms of support for different organizations for family planning: 68(19.1%) have support from the Government alone, 56 (15.7%) have support from NGOs while 10

(2.8%) got support from both Government and NGOs. The type of support received by the health facilities was training alone 36 (10.1%), commodities 38(10.7%), equipment alone 4 (1.1%) while 56(15.7%) facilities got a combination of two or more forms of support. Based on the family planning logistic data reporting tools, only 146 (41.0%) have the logistic reporting tools; 108 (30.3%) have the Bi-monthly consumption register while 146 (41.0%) have the Inventory control card.

Table 6: Relationship between demographic characteristics of the health facilities and availability of family planning services

VARIABLE	CATEGORIES	level of availability		FET/X^2	DF	P-VALUE
		'Inadequate' Family Planning (FP) Services	'Adequate' Family Planning (FP) Services			
Operational level of the facility	Primary Healthcare	76	204	4.112	2	0.115
	Secondary Healthcare	12	60			
	Tertiary Healthcare	0	4			
Total		88	268			
Staff strength (Doctors)	NONE	34	92	2.306	3	0.511
	1	22	58			
	2	14	62			
	3	18	56			
Total		88	268			
Staff strength (Nurse/Midwife)	NONE	14	8	32.930[a]	3	0.000
	1	16	40			
	2	38	84			
	3	20	136			
Total		88	268			
Staff strength (CHO/CHEW)	NONE	14	24	21.401[a]	3	0.000
	1	24	40			
	2	38	102			
	3	12	102			
Total		88	268			
Staff strength (Lab scientist/Technician)	NONE	38	34	41.781	3	0.000
	1	30	134			
	2	20	74			
	3	0	26			
Total		88	268			
Staff strength (Pharmacist/Pharm. Technician)	NONE	60	144	16.956	3	0.001
	1	16	64			
	2	12	36			
	3	0	24			
Total		88	268			
Staff strength (Support Staff*)	NONE	2	0	30.886	3	0.000
	1	4	10			
	2	32	32			
	3	50	226			
Total		88	268			

DISCUSSION

Understanding the pattern of availability and quality of family planning and services offered by the private health sector to the general public is pivotal in designing prevention and control programme for maternal and child morbidity and mortality.

Due to the complementary role played by the private health sector in addressing the issues that concerns availability and quality family planning provision in this country, and the sensitive nature of traditional and religious coloration of the uptake of such services in plateau state and the African nation in general, there is a gradual diminishing standard practice of family planning in the public sector. This was justified in the work carried out in Kenya where all the participants said they preferred the private health facilities in giving them family planning services due to the convenience, efficiency, privacy and the limited patient waiting time (Keesara, et al., 2015). For this reason, there are a lot of people assessing the private health facilities for this sensitive service.

The assessment of the availability and quality of family planning services in the private sector is necessary for determining factors that require interventions to improve the coverage and uptake of family planning services by the general public.

In this current study, family planning services were assessed for their quality, majority (59.6%) of the private health facilities have high quality, however, this does not go hand-in-hand with the availability of the same services. This can be explained by the differences in location, staff strength, training and support to the private health facilities in the provision of family planning. The quality score used in this research checked the observation of family planning protocols standard used by the national primary health care development agency, which uses the quality checklist to score facilities on overall 26 points. This research revealed that only 59% of these facilities were able to score above 13.5 and thereby considered as having high quality. This however confirms the findings made by Riley in Ethiopia and Nigeria, that there is high-quality provision of health services in the private sector than in the public health establishments and that this high-quality service provision has been responsible for more patronage of the private health facilities (Riley, et al., 2018). The findings confirm the effort of the 2017 Family Planning Summit held in London which reasserted family planning as one of the `best buys' in development and recognized the role of the private health sector in achieving SDG and FP2020 goals (Riley, et al., 2018).

The availability of family planning (FP) in Plateau state private health facilities was found to be adequate in 75.3% of the facilities. This result contradicts the availability trends reported across the country Nigeria when only contraceptive prevalence rate was assessed in the public sector which was said to be low and inadequate (Mereer, et al., 2018). These differences might be due to the methods adopted in the two types of research, as the later research was carried out among the consumers, particularly women while this research was carried out from the facility base, it also differed in the modern Contraceptive Prevalence Rate (mCPR) where they reported that there is a very low mCPR contrary to the finding in this research which found out that there is a high availability family planning services and modern contraceptives. This is not unexpected as the private health sector has a high tendency to stock their facilities with modern contraceptives due to the relative high patronage reported

by most researchers in recent time. The availability score in this research however was similar to that of other African countries; 79.9% in the Democratic Republic of Congo (Charless, et al., 2019), while in Malawi, Kenya and Haiti, the availability of family planning services was higher than the one observed in plateau state Nigeria with 83%, 88% and 84% respectively of health facilities surveyed (Charless, et al., 2019). Among all the listed contraceptives available in the family planning units of the private health facilities, oral contraceptive pills were the highest available in 78.1% of the entire facilities understudy, this is however not surprising as the private health facilities will always want to maintain their customers at the same time maintain profit-making to ensure the availability of family planning services through the purchase of the most affordable modern contraceptive; oral pills. All the other family planning methods were available in more than 50 % of all the private health facilities in the state. Time and further research will explain this high coverage, as well as the national coverage survey of this latest study, which also covered the often-underprivileged rural environment.

In this current study, family planning services were assessed for their quality, majority (59.6%) of the private health facilities have high quality, however, this does not go hand-in-hand with the availability of the same services. This can be explained by the differences in location, staff strength, support to facilities and the training of staff of the private health facilities in the provision of family planning. The quality score used in this research checked the observation of family planning protocols standard used by the national primary health care development agency, which uses the quality checklist to score facilities on overall 26 points. This research revealed that only 59% of these facilities were able to score above 13.5 and thereby considered as having high quality. This however confirms the findings made by Riley that there is high-quality provision of health services in the private sector than in the public health establishments and that this high-quality service provision has been responsible for more patronage of the private health facilities. The findings confirm the effort of the 2017 Family Planning Summit held London which reasserted family planning as one of the `best buys' in development, and recognized the role of the private health sector in achieving SDG and FP2020 goals. This research proves a positive progress towards meeting those goals (Riley, et al., 2018)

This research examines the relationship between the demographic characteristics of private health facilities and the availability and quality of family planning in the state. The availability showed a strong statistical relationship with the various demographic characters like; staff strength (Nurse/Midwife, CHO/CHEW, Lab scientist and Pharmacists) all with p-value >= 0.001while the operational level and Doctors' staff strength showed no significant relationship with the availability of the Family planning services and methods.

On the other hand, the quality of family planning showed a significant relationship with all the demographic characteristics of the private health facilities in the state. Quality, therefore, is dependent on the operational level of the facility as well as the presence of a Doctor or Physician and all the other health workers: Nurse/Midwife, CHO/CHEW, Lab scientist and Pharmacists and the support staff.

CONCLUSION AND RECOMMENDATION

This research seeks to find out the availability of family planning and the quality of family planning services rendered by the private health facilities in plateau state. The majority of the facilities were

Primary Health facilities with a high number of Nurses/Midwives who made up the majority of the staff strength, most of the facilities were also found to have adequate family planning and high quality of Family planning service. This is possibly due to the increased attention to the private health sector by both government and Non-Governmental Organizations to achieve high patronage of Family planning. The interventions received towards making these outcomes were in the forms of training alone was 10.1%, commodities and equipment 11.8% while facilities that enjoyed all the forms of support were 15.7%. The research also discovered the association between availability of family planning and the nurse/ midwife staff strength, CHO/CHEW staff strength, lab. Scientists/ technician staff strength and the support staff strength however, the Doctors staff strength and the type of facility did not show a significant association with the availability of family planning. On the other hand, the quality of family planning services showed a significant association with all the demographic characteristics in the research: operational level of the facilities and all various staff strengths investigated in this research. There is need for more private health facilities inclusion in all forms of manpower development in family planning by government and other partners; this is to help improve the quality of family planning services in the private health sector of the state and country at large.

References

Ali M. Farron M, Dilip T.E, & Folz R. (2018). Assessment of family planning service availability and readiness in 10 African countries. *Glob Heal Sci Pract*. 6(3), 473-483

Austin, A. (2015). Unmet contraceptive need among married Nigerian women: An examination of trends and drivers. *Contraception [Internet]*, 9(1), 31-8. Available from http://dx.doi.org/10.1016/j.contraception.2014.10.002

Campbell OMR, Benova L, Maclood D, Goodman C, & Footman K. (2015). Who, what, EHere: An analysis of private sector family planning provision in Series: Who cares for women? Towards a greater understanding of reproductive and maternal healthcare markets Who, What, Where: an analysis of private sector family planning.

Charless MM, Abel NM, Simon IK, Henry MS, Baptiste KSZJ, & Francoise M.K. (2019). Availability and Quality of Family Planning Services in the City of Lubumbashi, Democratic Republic of Congo. *OALiB*, 6(02), 1-11.

Keesara SR, Juma PA, Harper CC. Why do women chose private over public facilities for family planning services? A qualitative study of post –partum women in an informal urban settlement in Kenya. *BMC Health Serv Res*, 15(1), 1-8. Available from: http://dx.doi.org/10.1186/s12913-015-0997-7.

Mereer LD, Lu F, & Proctor J.L. (2019). Sub-national levels and trends in contraceptive prevalence, unmet need, and demand for family planning in Nigeria with survey uncertainty. *arXiv.* 2, 1-9.

Mpunga D. Lumbayi J.P, Dikamba N., Mwembo A. Mapatano M.A & Wembodinga G. (2017). Availability and quality of family planning services in the democratic republic of the Congo: High potential for improvement. *Glob Heal Sci Pract.* 5(2), 274-285

Riley C, Garfinkel D, Thanel K, Esch K, Workalemahu E, ANyanti J, et al. (2018). Getting to FP2020: Harnessing the private sector to increase modern contraceptive access and choice in Ethiopia, Nigeria, and DRC, *PLoS One,* 13(2), 1-16.

Tessema GA, Gomersall JS, Mahmood MA,& Laurence C.O. (2016), Factors Determining Quality of Care in Family Planning Services in Africa: A Factors Determining Quality of Care in Family Planning Services in Africa: A Systematic Review of Mixed Evidence.

United Nations (2015). Department of Economic and Social Affairs PD. Trends in contraceptive use Worldwide

USAID (2019). Sustaining Health Outcomes through the Private Sector (SHOPS). Plateau State Profile.

Winston J, Calhoun LM, Corroon, Guilkey D, & Speizer I. (2018). Impact of the Urban Reproductive Health Initiative on family planning uptake at facilities in Kenya, Nigeria, and Senegal. *BMC Women's Health,* 18(1), 9.

World Health Organization (2018). Johns Hopkins Bloomberg School of Public Health/Centre for Communication Programs, Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs y OMS, Family Planning a global handbook for providers Evidence-based guidance developed through worldwide collaboration