



Republic of Burundi

Ministry of Public Health and the Fight against AIDS



National Reproductive Health Program

**RAPID ASSESSMENT OF THE COVID-19 IMPACT
ON THE SUPPLY AND DEMAND FOR FAMILY
PLANNING SERVICES**

Final report

Bujumbura, December 2020

SUMMARY

1. Background :

The COVID-19 pandemic has caused tremendous upheaval to health delivery systems around the world. The first case of COVID-19 was confirmed on March 31, 2020 in Burundi. A major disruption in the supply of care was observed and this had an impact on a multitude of sectors, including the supply and demand for family planning services. This could hinder the achievement of Burundi's targets, including an increase of contraceptive prevalence among married/in union women from 23% in 2016 to 40% in 2023. In the context of health emergencies such as the case of the COVID-19 pandemic, it is essential to conduct an assessment of the use of family planning services in health facilities in Burundi in order to determine the impact of COVID-19.

2. Objective :

The three main objectives of this evaluation were to (i) assess changes in the adoption of family planning before and during the COVID-19 pandemic in 2020; (ii) analyze impact indicators of the use of contraceptive modern methods (Using MSI Impact II Tool); and (iii) analyze the effect of COVID-19 on last mile assurance quality

3. Methodology :

The study is a quasi-experimental pre-post assessment of changes in contraceptive methods availability to the last mile, supply and use of family planning services related to the emergence of COVID-19. A trend analysis was conducted to assess monthly, quarterly, and annual changes in service use for the years 2017 to 2020. Family planning indicators before and after the emergence of COVID-19 were analyzed. The data used were obtained from DHIS 2 and eLMIS software. Impact indicators of the use of modern methods were estimated using the Marie Stopes International Impact 2 version 5 (MSI Impact 2.5) tool.

4. Key Findings

Out of 1388 health facilities reporting in DHIS-2 in 2020, 921 offering family planning services were included in the assessment, a proportion of 66.4%.

4.1. Use of Family Planning Services

In general, the trend of *new users* and *revisits* of contraceptive methods has seen a gradual increase for the years 2017 to 2019. For the nine-month period of the years 2019 and 2020, the comparison of *new users* shows that only injectables recorded an increase of 8.8%. The analysis by *age group* for the 9 months of the years 2019 and 2020 showed that the age group of "25 years and older" is the only one that recorded an increase specifically for oral pills, injectables and cycle beads. In addition, for the same period (2019 and 2020), the number of *revisits* decreased by 89.0% for cycle beads. Compared to the *status of the health facilities*, the public structures showed a greater decrease in the number of news users and revisits. It was also noted that *health facilities in rural areas* had experienced a decrease in almost all family planning methods for both news users and revisits.

4.2. IUD and implant removal

The same phenomenon of a decreasing trend was also observed for IUDs and removed implants when comparing the same period of the years 2019 and 2020. Although it was found that the number of IUD and implant removals increased between 2017 and 2018 on the one hand and between 2018 and 2019 on the other hand, analysis of the data for the 9-month period of 2019 compared to the same period in 2020 revealed that the number of IUDs removed decreased by 16.6% and the number of implants decreased by 8.4%.

4.3. Inventory status of family planning methods

At the health facility level, the analysis of the stock situation shows that by the year 2020, most family planning methods had reached the alert threshold except for oral pills and male condoms in the 1st trimester; oral pills and injectables in the 2nd trimester and oral pills, injectables and male condoms in the 3rd trimester. At the national level, the stock situation varied for the years 2018 and 2019, however, there was a threat of stock shortages in the 2nd and 3rd quarters of 2019 and the 3rd quarter of 2020 for almost all contraceptive methods.

4.4. Indicators of the impact of the use of modern contraceptive methods

An analysis of the evolution of the three indicators (unintended pregnancies averted, maternal deaths averted, unsafe abortions averted) between the years 2017 and 2018 showed that there had been an increase. Nevertheless, a comparison of the nine-month trends for the years 2019 and 2020 showed that all three indicators decreased. Indeed, avoided unintended pregnancies decreased by 1.1%, avoided maternal deaths decreased by 4.0% and avoided unsafe abortions decreased by 1.1%. Protection year couples increased by 3.0% between 2017 and 2018 while they decreased by 22.6% between 2019 and 2020 for the first 3 quarters.

4.5. Effect of COVID-19 on quality assurance of the last mile

The Ministry of Public Health and the Fight against AIDS has a plan for the distribution of contraceptive products and does not deviate from the plan approved by the UNFPA Regional Office. The UNFPA Country Office conducted risk assessments based on supply chain maps and found the risk to be significant.

5. Conclusion

The results of this rapid assessment showed that there was a decrease in the use of family planning services and in the impact indicators of the use of modern contraceptive methods for the period from January to September 2020 compared to the same period in 2019. In addition, the supply chain for contraceptive products has experienced disruptions as shown by the state of stocks at the health facility level.

Further qualitative research is urgently needed to understand the reasons for the decline in FP service utilization. Capacity building strategies for health facilities should be considered to maintain the supply of FP services in the context of health emergencies such as the case of the COVID-19 pandemic.

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ABBREVIATIONS AND ACRONYMS

COC	: Combined oral contraception
COP	: Estrogen-progestin contraception
COUSP	: Public Health Emergency Operations Centre
CYP	: Couple Years of Protection
DHIS 2	: District Health Information System / Gen-2
DHS-B	: Demographic and Health Survey Burundi
DMPA	: Depot medroxyprogesterone acetate
eLMIS	: electronic Logistics Management Information System
FP	: Family Planning
FP2020	: Family Planning 2020
HIS	: Health Information System
HMIS	: Health Management Information System
INSP	: National Institute of Public Health
IPPF	: International Planned Parenthood Federation
ISTEEBU	: Institute of Statistics and Economic Studies of Burundi
IUD	: Intrauterine Device
MSI	: Marie Stopes Impact 2
MSPLS	: Ministry of Public Health and the Fight against AIDS
NHIS	: National Health Information System
PNSR	: National Program of Reproductive Health
PSI	: Population Services International
RMNCAH	: Reproductive Maternal, Newborn, Child and Adolescent Health
SARS-CoV-2	: Severe Acute Respiratory Syndrome Coronavirus 2
UNFPA	: United Nations Population Fund
VSC	: Voluntary Surgical Contraception
WHO	: World Health Organization

I. CONTEXT OF THE EVALUATION

Health systems around the world have undergone enormous disruption due to the occurrence of the COVID-19 pandemic, resulting in disruptions in access to family planning information and services, as well as sexual and reproductive health. In some countries, the COVID-19 pandemic disrupted both the supply and demand for family planning service delivery, including quality assurance activities to the last mile (for end users) [1-2].

In response to this disruption, the United Nations Population Fund (UNFPA) in partnership with the Governments of the 7 selected countries, namely Democratic Republic of Congo, Kenya, Malawi, Southern Sudan, Uganda, Zambia and Burundi, undertook an evaluation of the effects of COVID-19 on family planning services and the capacity of national reproductive health programs to monitor the effectiveness of contraceptive delivery and quality of supply.

These countries are all part of FP2020 and generally have robust DHIS 2 and eLMIS systems with monthly data collection and analysis. All the countries selected for evaluation have made satisfactory and steady progress towards achieving the FP2020 targets and indicators. Although the quality of the Health Information System (HIS) data in these selected countries remains satisfactory, completeness challenges persist in some countries. To address these challenges, workshops with district data managers were conducted to encourage them to complete the DHIS 2 and eLMIS software.

The evaluation was thus conducted independently in each of the seven countries, using common data collection and analysis tools. The results of the evaluation will be used to inform future programming and will be disseminated to all stakeholders in the country.

In Burundi, this evaluation was conducted by the Ministry of Public Health and the Fight against AIDS (MSPLS) through the National Reproductive Health Program (PNSR), with support from UNFPA.

II. INTRODUCTION

The COVID-19 pandemic represents the greatest test the world has faced since the Second World War. According to the World Health Organization (WHO), as of November 1, 2020, the death toll of the pandemic reached 46,437,615 people with COVID-19 with 1,199,693 deaths [1]. In Africa, by the same date, 1,318,254 people were infected, while 29,901 people had already died as a result of the pandemic [2]. This figure would be lower than the actual number, as most countries were testing only those cases requiring hospital management and travelers.

The COVID-19 pandemic affected the organization of health systems around the world. A major disruption in the supply of care was observed due to the rapid increase in demand that health care facilities and health care personnel would have to meet. On the other hand, some governments have responded by introducing far-reaching policies, including behavioral changes aimed at limiting transmission and saving lives. This has had an impact on a multitude of sectors, including sexual and reproductive health care, for which an essential element is the provision of a safe, effective and affordable service and acceptable methods of contraception.

Research in some countries has just shown that COVID-19 has had an impact on women's ability to use contraception in several ways : (i) disruptions in the supply chain related to the limited production, distribution, and availability of contraceptive commodities, resulting in stock-outs; (ii) some health care facilities reduced their services; (iii) health care providers were diverted from providing family planning services to respond to COVID-19; and (iv) many women could not visit health care facilities because of confinement or fear of exposure to COVID-19 [4-5]. When the family planning needs of women and couples are not met, the number of pregnancies is likely to increase, affecting women throughout their lives and their families.

According to the report produced by the Public Health Emergency Operations Center (*Centre d'Opération des Urgences de Santé Publique : COUSP*), Burundi confirmed its first positive cases of COVID-19 on 31/03/2020. These were two (02) imported cases that had traveled in the previous 14 days. Since that date, the country has been implementing interventions to contain the pandemic with the support of its technical and financial partners. Under the impetus of the President of the Republic, the *MSPLS* launched, on July 6, 2020, a mass screening campaign of COVID-19 for a duration of 3 months. Within this framework, efforts have been made to decentralize diagnosis in 14 of the 18 health provinces of the country. This mass campaign, which ended on October 5, 2020, resulted in the detection of 38,445 people, 324 of whom were confirmed positive for coronavirus 2 (SARS-CoV-2). Up to October 31, 2020, the epidemiological situation of COVID 19 was summarized as 589 confirmed cases including 517 recoveries and one death [5].

Three months after the occurrence of the first cases of COVID-19, a downward trend was noted for certain health service utilization indicators. Indeed, analysis of the information generated by the computerized management tool of the National Health Information System (SNIS), DHIS-2, showed that curative consultations, prenatal consultations, deliveries assisted by qualified personnel, and bed occupancy in 2020 decreased if we compare the data for these indicators with those for the same period in 2019 (January-April).

This COVID-19 pandemic occurred while Burundi was facing the challenges of galloping demographics. The government of Burundi committed to repositioning family planning with the overall goal of promoting sustainable development, managing population growth, and ensuring equal access to contraceptive methods of choice and quality services for all women.

According to ISTEEDU (*Institute of Statistics and Economic Studies of Burundi*) projections, Burundi's population is estimated at around 12 million in 2020. In addition, the average number of children per woman was estimated at 5.5 according to DHSB III 2016-2017. As a result, Burundi has one of the highest densities per km² in the region.

The Government of Burundi's efforts were already remarkable in terms of improving the supply and use of family planning services. The review of the National Reproductive Health Program 2019 showed that the number of new users has increased positively since 2015, from 297,731 to 579,558 in 2019. The Couple Years of Protection (CYP) increased from 31.4% in 2015 to 37.5% in 2019 [6].

In order to achieve the government's goal of reaching 40% contraceptive prevalence among married/in union women by 2023 [7] and in the context of the COVID-19 pandemic where health service utilization indicators have declined, it is important to explore the impact of this health emergency on the supply and use of reproductive health services, particularly family planning.

This evaluation should make it possible (i) to have information on changes in the use of family planning services in the context of the COVID-19 pandemic in 2020; (ii) to know the trend of reproductive health indicators and (iii) to know the situation related to the last mile assurance. Thus, with this information, it will be easy to reinforce the gains and accelerate family planning interventions.

III. MAIN AND OBJECTIVES

3.1. Main

Contribute to improving the supply and demand for family planning services in the context of COVID-19 pandemic emergencies.

3.2. Objectives

3.2.1. General objective

Assess the impact of COVID-19 on the supply and demand for family planning services.

3.2.2. Specific objectives

1. Assess changes in the adoption of family planning before and during the COVID-19 pandemic ;
2. Analyze trends in impact indicators of modern contraceptive use (using the MSI Impact II tool) before and during the COVID-19 pandemic;
3. Measure the effect of COVID-19 on quality assurance to the last mile, using the data collection checklist provided.

IV. LITERATURE REVIEW

4.1. Epidemiology and response to COVID-19 in Burundi

4.1.1. Epidemiological data [5]

Burundi confirmed its first positive cases of COVID-19 at the end of March 2020. These were two (02) imported cases that had traveled in the previous 14 days to Dubai (United Arab Emirates) and Kigali (Rwanda).

From March 31 to October 31, 50,363 people were tested with 589 positive cases, an overall positivity rate of 1.17%. The number of imported cases was 144, a proportion of 24.5% and 445 were local transmission cases, a proportion of 75.6%. The attack rate was 5.38%. The weekly detection rate ranged from 2 to 3 tests per 10,000 inhabitants per week. The overall screening rate was 46 per 10,000 population. At the same date, the cure rate was 87.95% (518/589 cases), the case-fatality rate was 0.17% (1/589 cases). According to the same report, 35 health workers tested positive, representing 5.94% of the total number of cases, with zero deaths.

4.1.2. Organization of response and public health measures

Before cases of COVID-19 were found in Burundi, the MSPLS, with the support of its partners, had organized the response by taking preventive measures: (1) scrupulously observing hygiene measures by avoiding shaking hands or kissing, hand washing with clean water and soap or chlorinated water, and, (2) strict quarantine for 14 days of all persons coming from affected countries. Burundi also set up a rapid response team (Equipe d'intervention Rapide), a care center at the Prince Louis Rwagasore Clinic, the national biological diagnostic center at the National Institute of Public Health (INSP), and intensified surveillance while preparing for tracing and follow-up of contacts [8].

It was at the end of March 2020 that the first cases of contamination were notified and they were imported cases. The only case of death due to COVID-19 was reported in the situation report of July 16, 2020 [9].

The fight against COVID-19 in Burundi reached a turning point with the mass screening campaign "NDAKIRA, SINANDURA KANDI SINANDUZA Coronavirus" (*"I cure, neither contaminate myself nor infect others Coronavirus"*) initiated by S.E Gen. Maj. Evariste NDAYISHIMIYE President of the Republic and launched on July 6, 2020 and the integration of screening in National and District Hospitals.

Response activities continued with (i) epidemiological surveillance at all functional entry points at the borders with the Democratic Republic of Congo, Rwanda and Tanzania, (ii) cascade training of health care providers following their course to strengthen their capacities in terms of screening, case management and maintaining the continuity of the offer of other health services, (iii) concerning prevention, continued disinfection of infectious outbreaks (homes, health facilities, reception hotels and quarantine sites), hand washing, distancing and wearing of masks in places with high influence have been adopted according to WHO recommendations.

The planning, coordination and monitoring-evaluation of the response activities against COVID-19 were carried out by the Emergencies and Responses Department of the Health Programs and Projects Directorate and then relayed by the COUSP as of November 2020.

4.2. Response interventions against COVID-19 as proposed by WHO [10]

The control strategies for COVID-19 proposed by the WHO aimed at ensuring that all countries control the pandemic by slowing transmission and reducing mortality associated with COVID-19. Thus, each country should implement its action plan by focusing on the following strategies:

a) coordination of the national and sub-national response :

In order to ensure coordinated management of preparedness and response to COVID-19, WHO had proposed to activate national mechanisms for public health emergency management, including the establishment of a multidisciplinary national coordination cell or incident management structure, with the participation of all relevant ministries, such as health, foreign affairs, finance, education, transport, tourism, public works, water and sanitation, environment, social protection and agriculture.

b) engagement and mobilization of affected and at-risk communities :

Slowing the transmission of COVID-19 and protecting communities requires the involvement of all members of at-risk and affected communities in order to prevent infection and transmission. To this end, it was suggested that personal protective measures such as washing hands, avoiding touching the face, following hygiene rules in case of coughing or sneezing, practicing physical distancing, and respecting physical distancing and travel restrictions, where appropriate, should be adopted. It is therefore essential that international, national and local authorities engage in dialogue, through two-way participatory communication efforts, in a proactive, regular, transparent and unambiguous manner with all affected and at-risk populations.

c) Identify, test, isolate and treat cases and quarantine contacts to control transmission :

To stop the spread of COVID-19, WHO recommended that all suspected cases be identified and tested so that confirmed cases are quickly and effectively isolated and receive appropriate care, and that close contacts of all confirmed cases be rapidly identified so that they can be quarantined and medically monitored.

d) Provide clinical care and maintain essential health services to reduce mortality :

One of the characteristics of COVID-19 is the enormous pressure it places on health systems and health care workers by the large proportion of COVID-19 patients who may require quality clinical care. Contingency plans must anticipate extreme scenarios, such as the need for rapid and complete reconfiguration and a major reorientation of the entire healthcare sector. In addition to the direct mortality associated with COVID-19, the national and subnational response must also address the indirect mortality risks posed by the potential disruption of essential health and social services. The heavy burden that COVID-19 places on health systems, combined with the disruptive effects of protection strategies, physical distancing, and travel restrictions, must be mitigated to minimize the adverse health consequences of COVID-19 on people who depend on essential services not associated with COVID-19. Maintaining public confidence in the ability of the health system to safely meet essential needs and control the risk of infection in health care facilities is thus critical to ensuring appropriate health care utilization behavior and compliance with public health advice.

4.3. Organization of Family Planning service provision in Burundi [11]

With regard to the supply of FP services, the authorities are carrying out several actions related to the supply of modern contraceptives. These actions aim at : (i) integrating the management of contraceptive products into that of other pharmaceutical products; (ii) improving the contraceptive logistics information and management system ; (iii) community-based distribution of contraceptives at the national level; (iv) Expanding the range of contraceptive methods with emphasis on long-acting methods; (v) Establishing a referral system for Voluntary Surgical Contraception (VSC) and improving the supply of quality FP services.

According to Burundian standards, the means of contraception to be offered in health facilities are: condoms (male & female), oral contraceptives (COC & COP), Intra-Uterine Devices, implants, injectables (IM & SC), voluntary surgical contraception and cycle necklace. SC injectables (SAYANA Press) have been introduced into the range of contraceptive products available in Burundi since the beginning of 2020.

The following table presents the range of contraceptive methods according to the levels of the health system:

Table 1 : Contraceptive methods offered in Burundi by Health system level

Health system level	Contraceptive methods offered
<u>Community</u> (Community Health Workers and Health Promotion Technicians)	<ul style="list-style-type: none"> • Oral pills (Combined oral contraceptive pills, progestin only oral contraceptive pills) • Female and male condom • Injectables IM DMPA (Depo-Medroxyprogesterone Acetate) and subcutaneous DMPA (Sayana Press)
<u>Elementary level</u> (Health Center)	<ul style="list-style-type: none"> • Female and male condom • Oral pills (Combined oral contraceptive pills, progestin only oral contraceptive pills, and morning-after pills or emergency pills (postinor)) • Injectables IM DMPA (Depo-Medroxyprogesterone Acetate) and subcutaneous DMPA (Sayana Press) • Implant (Jadelle) • IUD • Cycle Beads
<u>Secondary level</u> and <u>Tertiary</u> (District Hospitals, Private Clinics, Regional Hospitals and National Hospitals)	<ul style="list-style-type: none"> • Female and male condom • Oral pills (Combined oral contraceptive pills, progestin only oral contraceptive pills, and morning-after pills or emergency pills (postinor)) • Injectables IM DMPA (Depo-Medroxyprogesterone Acetate) and subcutaneous DMPA (Sayana Press) • Implant (Jadelle)

Health system level	Contraceptive methods offered
	<ul style="list-style-type: none"> • IUD • Cycle Beads • Voluntary Surgical Contraception (VSC): Vasectomy and tubal ligation

Since 2008, national training manuals for providers on contraceptive technology have been developed and updated in 2013 in accordance with international protocols and standards, based on the free and informed choice of all contraceptive methods, taking into account the prevention of infections and the management of side effects.

4.4. Continuity of family planning services during the period of the COVID-19 pandemic

During the period of the pandemic, the National Reproductive Health Program adapted the family planning service offer, organized close coaching in the health structures to ensure the continuity of the family planning service offer, mobilized the necessary resources to make masks available. The National Reproductive Health Program has also organized and implemented sensitization activities through spots broadcast in the media and on social networks to bring and maintain the population in the continuity of family planning services use.

4.5. Overview of research for the effects of the COVID19 pandemic on family planning service utilization in low and middle income countries

In Burundi, there had not yet been any studies that showed the impact of COVID-19 on the supply and utilization of family planning services. Nevertheless, a cross-sectional study has just been done on "understanding the influence of COVID-19 on hospital mortality in Burundi". This study explored the place of COVID-19 symptoms among deaths occurring from January to May 2020 (during the pandemic) compared to January to May 2019 (before the pandemic) [12].

In addition, in other countries, results on the impact of COVID-19 on family planning and RH service utilization have just been published. These results are summarized below :

A study was conducted in Kenya by Duncan Shikuku and collaborators to explore the early indirect impact of the COVID-19 pandemic on the utilization and outcomes of reproductive, maternal, newborn, child and adolescent health services in Kenya. Data for the first four months (March-June) of the pandemic and the equivalent period in 2019 were extracted from Kenya's HIS. The results showed that there were no differences in the monthly mean (\pm SD) attendance of family planning services ($431,930.5 \pm 19,059.9$ versus $448,168.3 \pm 31,559.8$), post-abortion care ($3,206.5 \pm 111.7$ versus $448,168.3 \pm 31,559.8$), $p > 0.05$. However, there were upward trends in adolescent pregnancy rates, significant increases in youth FP use (25.7% to 27.0%), use of injectable (short-term) FP methods (58, 2% to 62.3%), Caesarean section rates (14.6% to 15.8%), adolescent maternal deaths (6.2% to 10.9%), and stillbirths (0.9% to 1.0%) with a reduction in (long-term) implant use (16.5% to 13.0%) ($p < 0.05$) [13].

Another study conducted in South Africa by Tsholofelo Adelekan and colleagues analyzing the early effects of the COVID-19 pandemic on family planning in Gauteng, South Africa for the

period March-April 2020, showed that primary health care utilization figures in the province decreased by nearly 500,000 visits following the lock-in period. The shift from contraceptive methods to those with lower efficacy was noted. Year-over-year comparisons from April 2018 to April 2020 showed a steady decline in the use of injectable methods and an increase in the use of oral contraceptive pills [14].

Another study of the impact of the COVID-19 crisis on meeting family planning needs covering all regions of the world estimated that 77% of women of reproductive age (15-49) would have their family planning needs met by contraceptive methods in 2020. However, given the potential impact of COVID-19 on method-specific use, this could drop to 71%, representing approximately 60 million fewer contraceptive users worldwide in 2020. Overall decrease in contraceptive use will depend on the methods used by women and their partners and the types of disruption experienced [15].

V. METHODOLOGY

5.1. Evaluation framework [16]

Burundi's health system is organized in a pyramid shape and is structured on 4 levels: the central level, the intermediate level, the peripheral level and the community level.

- The central level includes the Office of the Minister, the Permanent Secretariat, the General Inspectorate of Health and the Fight against AIDS, four General Directorates, seven personalized institutions including the reproductive health program, ten departments and seven health programs.
- The intermediate level is composed of 18 provincial health offices.
- The peripheral level is composed of 47 health districts. The health district is the operational unit of the health system. It includes the health centers (CDS) and the district hospital, which is the primary referral hospital.
- The community level is involved in the health system through the management of the CDS by setting up health and management committees. They are also represented by community health agents who act as the interface between the CDS and the community through promotional, preventive and curative activities including the management of certain simple pathologies and the provision of certain contraceptive products.

5.2. Research question

The research questions for this evaluation are as follows:

- Were there any notable changes in the use of family planning services before and during the COVID-19 pandemic?
- What are the trends in impact indicators of modern contraceptive use (unintended pregnancies averted, unsafe abortions avoided, maternal deaths averted) before and during the COVID-19 pandemic?
- What are the effects of COVID-19 on quality assurance down to the last mile?

5.3. Methods and tools

This is a quasi-experimental pre-post evaluation of changes in contraceptive availability to the last mile, supply and use of family planning services related to the emergence of VIDOC-19.

A trend analysis was conducted to assess monthly, quarterly, and annual changes in service use for the years 2017 to 2020. Impact indicators of family planning service utilization before and after the emergence of COVID-19 were analyzed.

Prior to using the data in the DHIS 2 and eLMIS software, a workshop to analyze the completeness and accuracy of the data with the HIS managers of the health districts was organized. Missing data were completed and outliers were corrected.

The data used were processed and analyzed in Excel. The impact indicators of the use of modern methods were estimated using the Marie Stopes International Impact 2 version 5 (MSI Impact 2.5) tool.

The analysis of changes in the use of services was broken down by type of users (old and new), age, status of the health facilities (public, religious, associative and private) and by the location of the health facilities (rural and urban).

5.4. Criteria for inclusion and exclusion of the study population

The health facilities that were included in the evaluation were those that offer family planning services and whose data were reported in the National Health Information System (SNIS).

For the analysis of data on the status of stocks, the health facilities were considered instead of districts because the health districts do not have stocks of contraceptive products. The central level was eligible to be included in the assessment.

VI. ANALYSIS OF DATA AND RESULTS

6.1. Distribution of Health Facilities offering family planning services

In 2020, the country had 921 health facilities offering family planning services out of 1,388 functional at the national level, a proportion of 66.4%. The majority of health facilities were public (74%), health center type (92%) and were located in rural areas (80%).

The following table illustrates the distribution of health facilities by status, type and location from 2017 to 2020.

Table 2 : Distribution of health facilities for the assessment

Characteristics of health facilities		2017 (N=831)		2018 (n=866)		2019 (N=887)		2020 (N=921)	
		n	%	n	%	n	%	n	%
Status	Public	610	73	634	73	647	73	681	74
	Confessional	45	5	38	4	35	4	36	4
	Associative	23	3	27	3	25	3	28	3
	Private	153	18	167	19	180	20	176	19
Type	Hospital/Clinic	50	6	57	7	66	7	70	8
	Health centre	781	94	809	93	821	93	851	92
Locali- zation	Urban	167	20	183	21	190	21	182	20
	Rural	664	80	683	79	697	79	739	80
Total health facilities		831	100	866	100	887	100	921	100

6.2. Changes in the use of family planning services before and during the COVID-19 pandemic

6.2.1. Trends of new users at the national level in 2017, 2018, 2019 et 2020

The results were presented starting with the comparison between years (percentage changes and raw data), then between quarters, and finally between months (the average number of months, details of monthly data are in Appendix 2).

Between the years 2017 and 2018, there was an increase of *new users* for almost all contraceptive methods, except for male condoms (-4.8%) and cycle beads (-4.0%). The same increasing trend was also observed between 2018 and 2019 for all contraceptive methods.

Comparative analysis for the first nine months (January to September) of the years 2019 and 2020 shows that there is a decrease ranging from 8.8% for oral pills to 74.8% for female condoms. Long-acting methods showed a decrease of 37.0% for IUDs and 24.1% for implants. Only injectables experienced an increase of 8.8%.

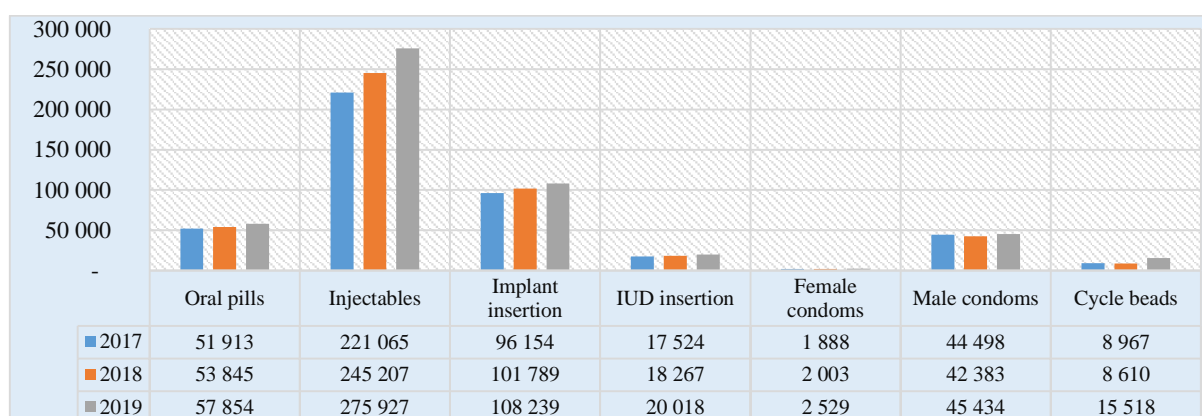
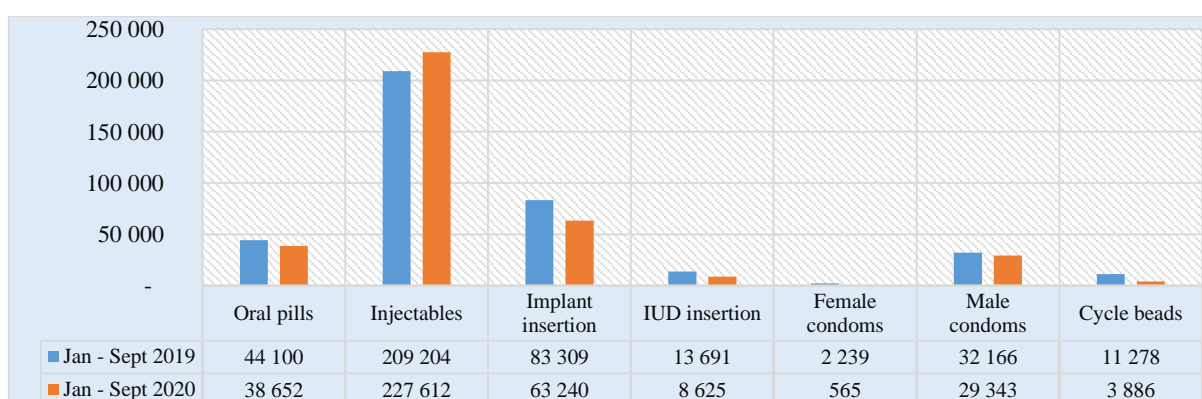
The following table shows the percentage increase or decrease of *new users* contraceptives methods.

Table 3 : Percentage change of new users contraceptives methods

Contraceptive methods	Between 2017 and 2018 (%)	Between 2018 and 2019 (%)	*Between 2019 and 2020 (%)
Oral pills	3,7	7,4	-12,4
Injectables	10,9	12,5	8,8
Implant insertion	5,9	6,3	-24,1
IUD insertion	4,2	9,6	-37,0
Female condoms	6,1	26,3	-74,8
Male condoms	-4,8	7,2	-8,8
Cycle beads	-4,0	80,2	-65,5

*The comparison between 2019 and 2020 was made for the 9 months data (January to September)

In general, the trend of *new users of contraceptive methods* has seen a gradual increase for the years 2017 to 2019 (Figure 1). For the nine months of 2019 and 2020, the comparison shows that all contraceptive methods except injectables have decreased (Figure 2).

**Figure 1 : Comparison of the new users between the years 2017, 2018 and 2019****Figure 2 : Comparison of the new users between the years 2019 and 2020**

The trend of *new users of contraceptive methods* has seen a gradual increase for the same quarters from 2017 to 2019. However, for the year 2020, we note that for all three quarters, only injectables have increased (see Figure 4).

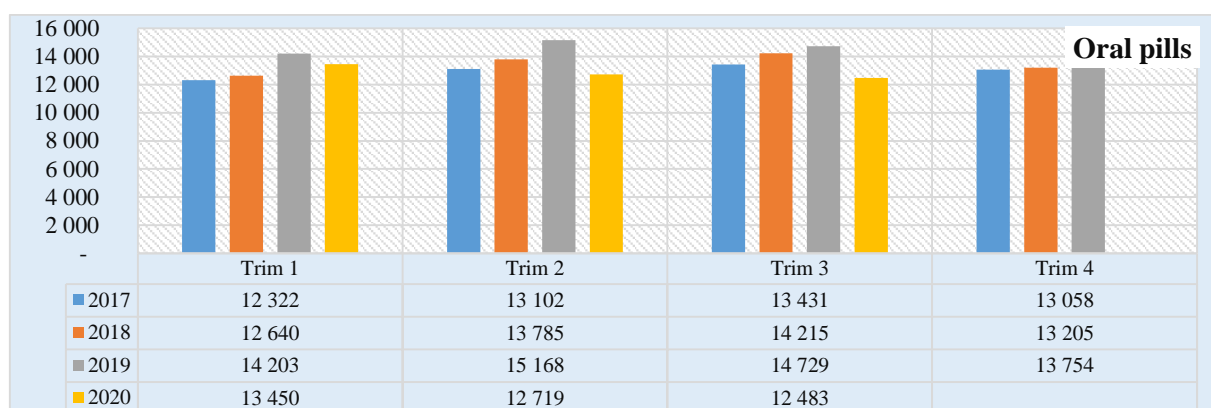


Figure 3: Comparison of the oral pills new users between quarters, from 2017 to 2020

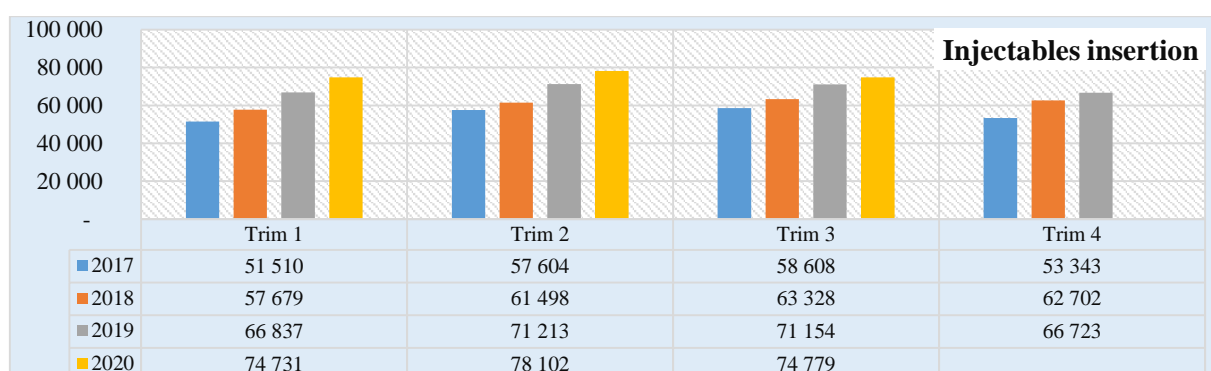


Figure 4: Comparison of the injectable new users between quarters, from 2017 to 2020

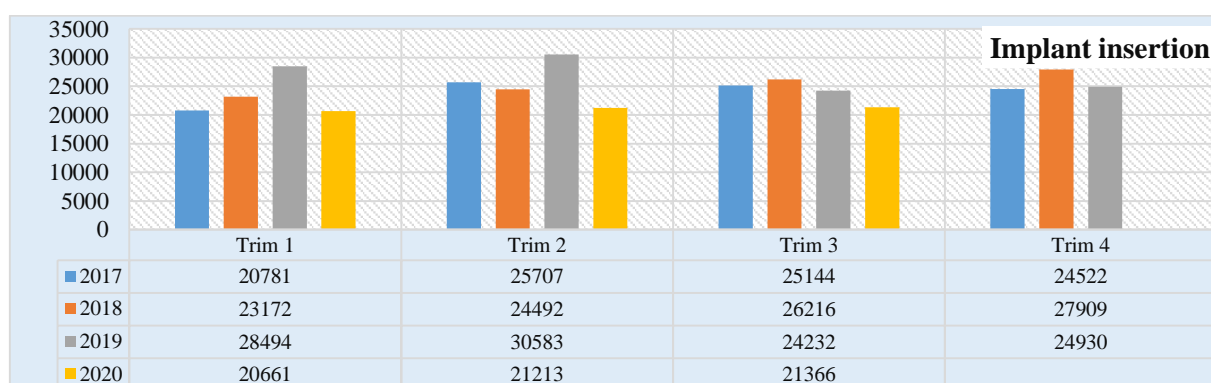


Figure 5 : Comparison of the implant new users between quarters, from 2017 to 2020

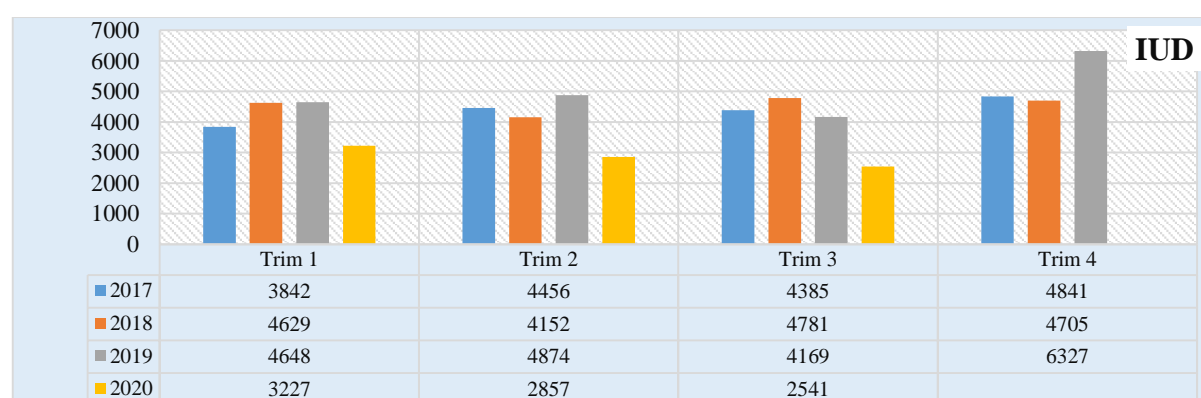


Figure 6 : Comparison of the IUD new users between quarters, from 2017 to 2020

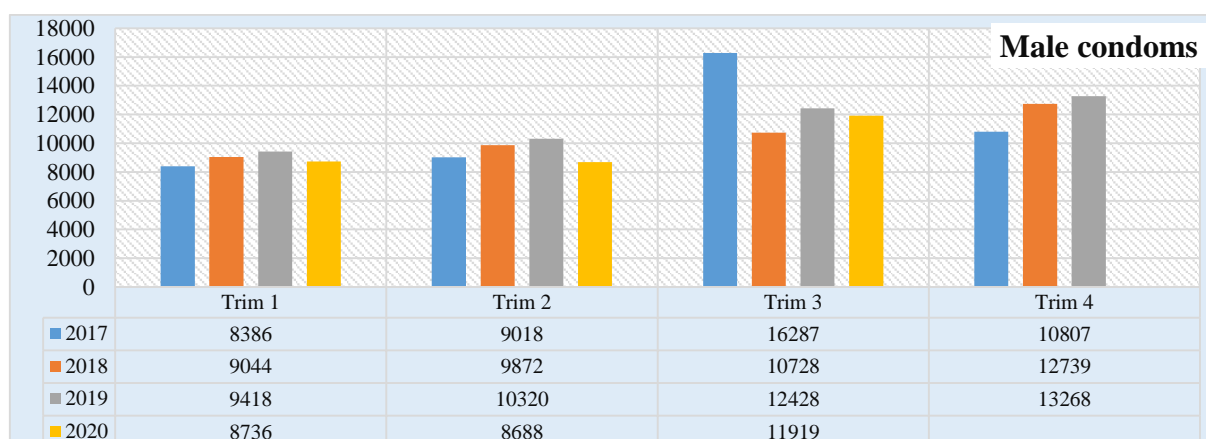


Figure 7 : Comparison of the male condom new users between quarters, from 2017 to 2020

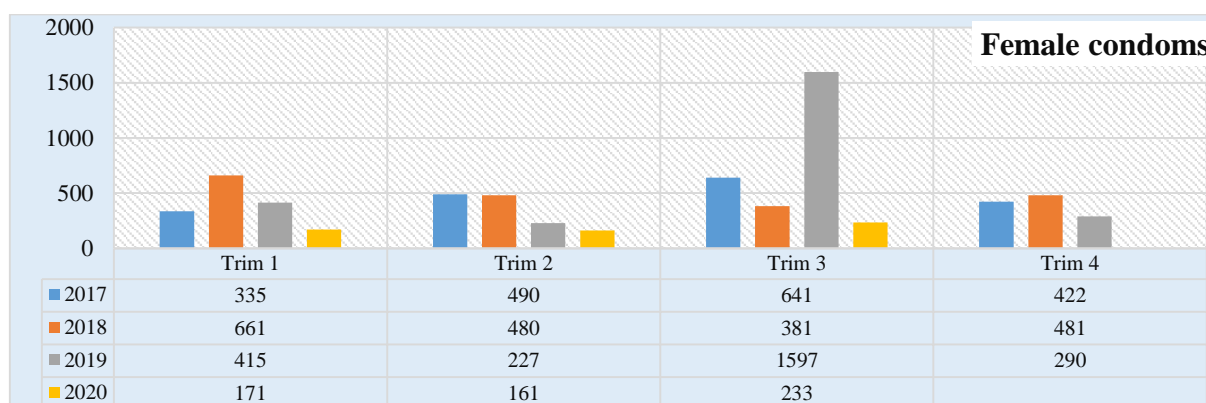


Figure 8 : Comparison of the female condom new users between quarters, from 2017 to 2020

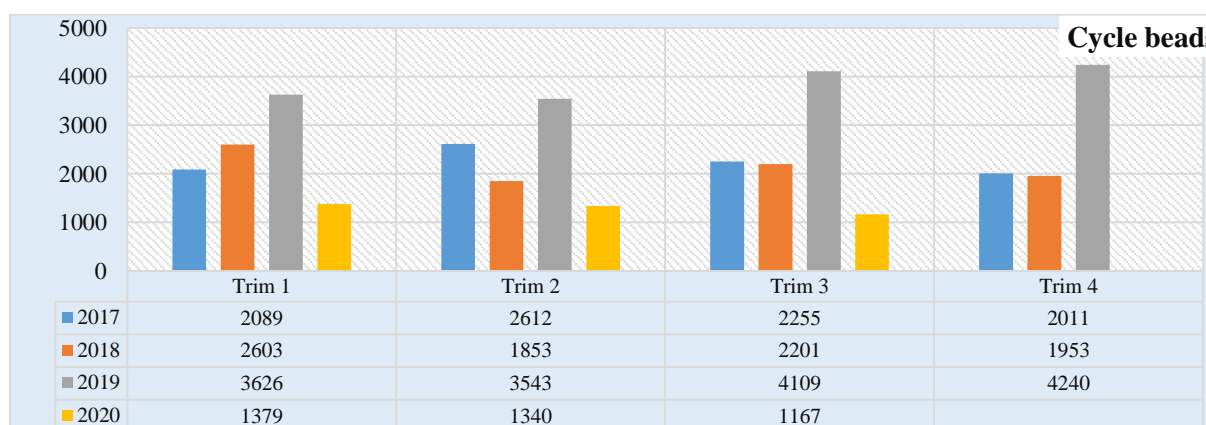


Figure 9 : Comparison of the cycle beads new users between quarters, from 2017 to 2020

Trend analysis of the monthly average of new acceptors for the years 2017 to 2019 shows a gradual increase. The following table shows the monthly average (and its standard deviation SD) of *new users* by year and by contraceptive method.

Table 4 : Trend in the average monthly number of new users per year and per contraceptive method (2017 - 2019)

Contraceptives methods	Jan - Dec 2017			Jan - Dec 2018			Jan - Dec 2019	
	Mean	SD		Mean	SD		Mean	SD
Oral pills	4 326	309	↗	4 487	394	↗	4 821	435
Injectables	18 422	1 561	↗	20 434	1 267	↗	22 994	1 594
Implant insertion	8 013	773	↗	8 482	720	↗	9 020	1 011
IUD insertion	1 460	169	↗	1 522	125	↗	1 668	687
Female condoms	157	66	↗	167	79	↗	211	397
Male condoms	3 708	1 546	↗	3 532	1 055	↗	3 786	909
Cycle beads	747	227	↗	1 195	200	↗	1293	171

SD : Standard deviation

For the nine months of the years 2019 and 2020, the comparison of monthly averages of *new users* shows that all methods noticed a decrease except for injectables as shown in Table 4 below.

Table 5 : Trend in the average monthly number of new users per year and per contraceptive method (2019 - 2020)

Contraceptives methods	Jan - Sept 2019			Jan - Sept 2020	
	Mean	SD		Mean	SD
Oral pills	4 900	437	↘	4 295	342
Injectables	23 245	1 754	↗	25 290	1 627
Implant insertion	9 257	1 074	↘	7 027	588
IUD insertion	1 521	167	↘	958	167
Female condoms	249	458	↘	63	23
Male condoms	3 574	914	↘	3 260	828
Cycle beads	1 253	179	↘	432	91

SD : Standard deviation

6.2.1.1. National new users trends by age group from 2017 to 2020

The analysis of the evolution of *new users* by *age group* nationally for the years 2017, 2018 and 2019 shows that the trend is uneven, with disparities between age groups and by contraceptive method. Nevertheless, the large number of *new users* is found for 25 years old and over age group for all methods.

The following graphs (10 and 11) illustrate the comparison of trends in new takers by age group for the years 2017, 2018, and 2019.

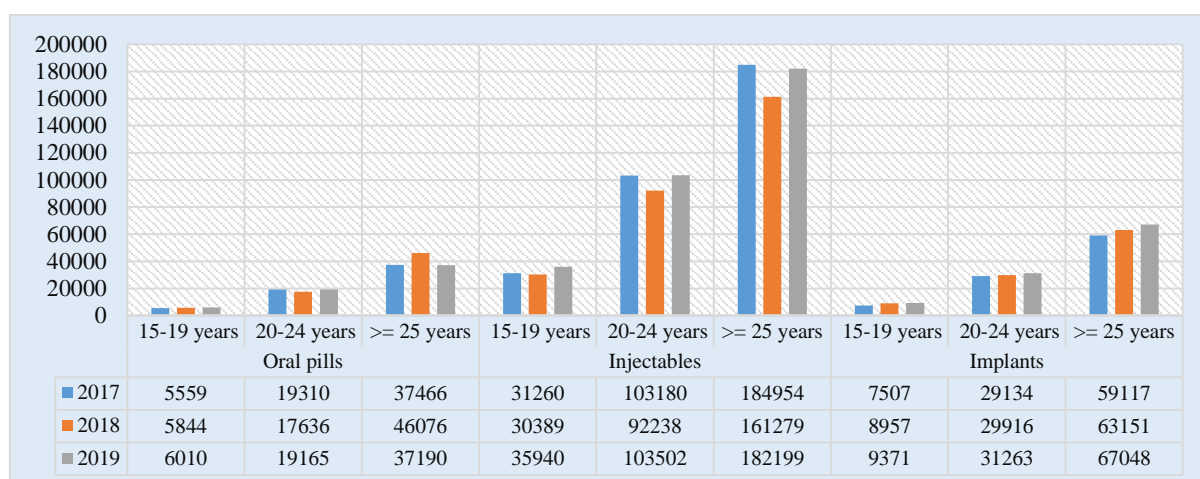


Figure 10 : Comparison of the new users of hormonal methods trends by age group for the years 2017, 2018, and 2019

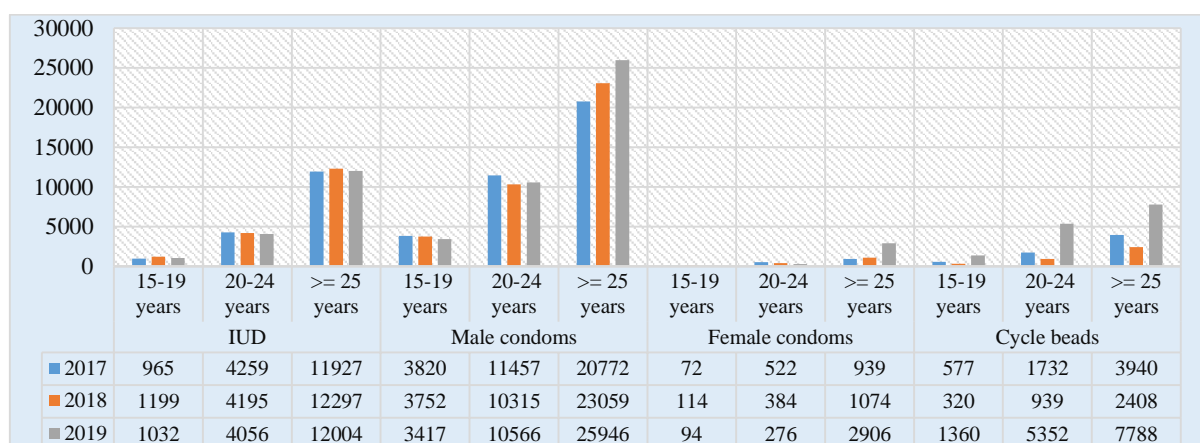


Figure 11 : Comparison of the new users of other methods trends by age group for the years 2017, 2018, and 2019

Analysis of the change in *new users* by age group at the national level for the 9 months (January to September) of the years 2019 and 2020 shows that for all age groups and for all methods, there was a decrease in new acceptors, except for the "25 years and older" age group for oral pills, injectables and cycle beads. The following graphs illustrate the comparison of trends in *new users* by age group for the 9 months (January to September) of 2019 and 2020.

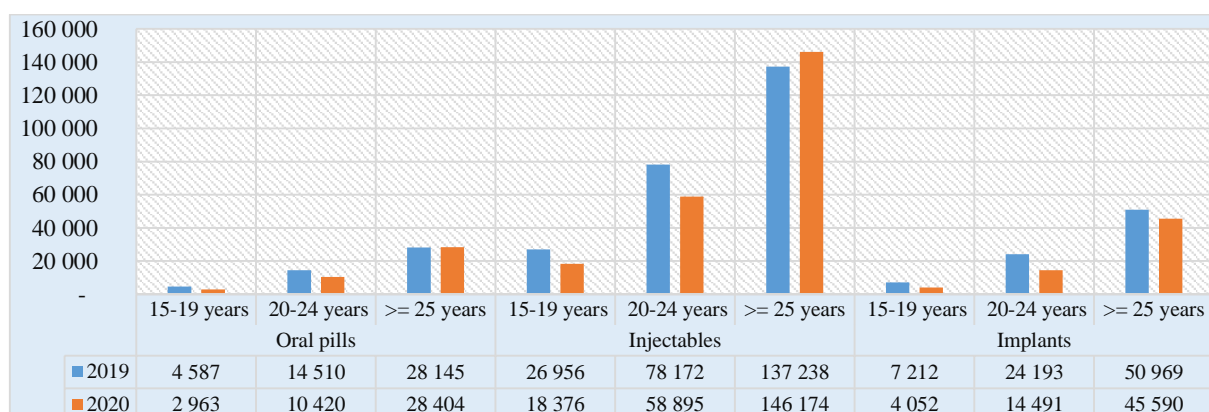


Figure 12 : Comparison of the new users of hormonal methods by age group for the years 2019 and 2020

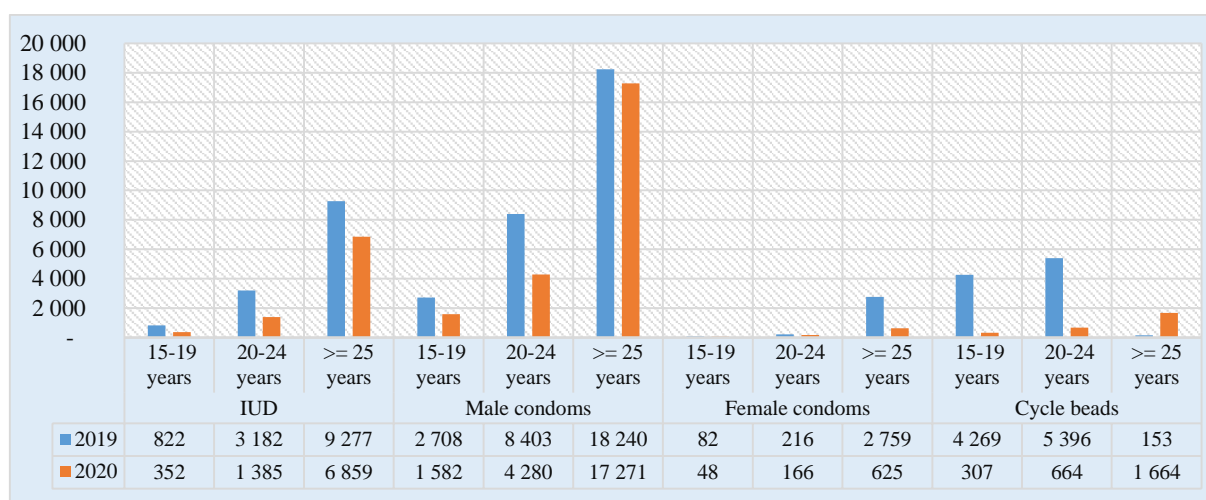


Figure 13: Comparison of the new users of other methods by age group for the years 2019 and 2020

6.2.1.2. Trends of new users by health facilities status from 2017, 2018, 2019 to 2020

Between the years **2017 and 2018**, the analysis of trends at the national level by health facility status showed that:

- *Public health facilities* experienced a decrease in the use of condoms (male: 0.25%; female: 0.3%) and cycle beads (9.5%);
- *Confessional health facilities* experienced a decrease in the use of oral pills (12.7%), injectables insertion (6.8%), implants insertion (15.2%), female condoms (60.0%) and cycle beads (32.5%);
- For *associative health facilities*, new users decreased for pills (19.7%), injectables (18.8%) and implants insertion (15.2%);
- For *private health facilities*, male condoms (35.4%) and female condoms (24.1%) have decreased.

Between the years **2018 and 2019**, analysis of trends at the national level showed that:

- *Public health facilities* experienced a decrease of female condom (35.3%);
- *Confessional health facilities* experienced a decrease of oral pills (1.4%), IUDs (6.1%) and male condoms (14.9%);
- For the *associative health facilities*, new users of male condoms (87.9%) and female condoms (79.2%) decreased;
- For the *private health facilities*, new users of IUD decreased by 3.3%.

The following table shows the increase or decrease of contraceptive methods new users, by status of the health facilities as a percentage.

Table 6 : Percentage change of new users by health facilities status for the years 2017, 2018 and 2019

Contraceptives methods	Between 2017 and 2018 (%)				Between 2018 and 2019 (%)			
	Public	Confessionnal	Associative	Private	Public	Confessionnal	Associative	Private
Oral pillx	3,4	-12,7	-19,7	3,9	1,8	-1,4	47,5	24,6
Injectables	11,3	-6,8	-18,8	11,4	8,7	9,7	3,6	42,3
Implant insertion	5,9	-8,5	-15,2	10,5	3,9	24,6	20,7	28,8
IUD insertion	0,6	0,3	44,2	34,6	9,9	-6,1	30,5	-3,3
Male condoms	-0,2	37,0	208,3	-35,4	6,2	-14,9	-87,9	41,0
Female condoms	-0,3	-60,0	35,8	-24,1	-35,3	4,5	-79,2	337,5
Cycle beads	-9,5	-32,5	-19,0	62,1	91,4	20,9	22,0	57,7

The following graphs show the evolution of *new users* by method and by health facility status, at the national level for annual data in 2017, 2018 and 2019.

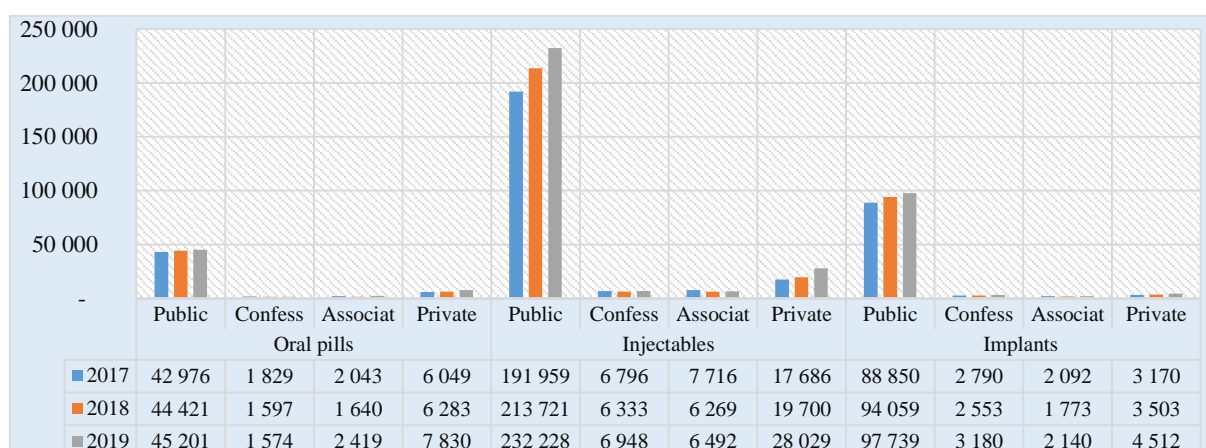


Figure 14 : Comparison of the hormonal methods of new users by health facilities status for the years 2019 and 2020

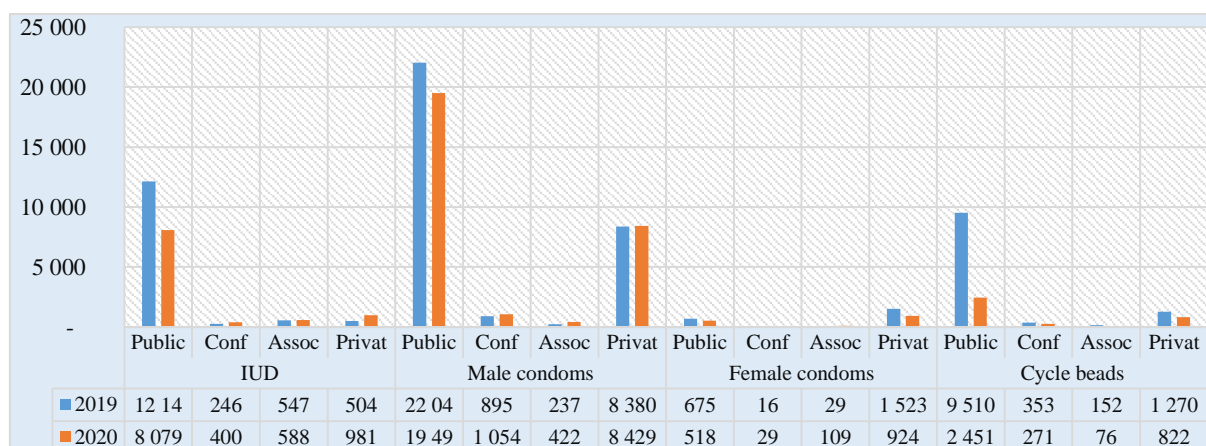


Figure 15 : Comparison of the new users of others methods by health facilities status for the years 2019 and 2020

For the comparison of *new users* between the 9 months (January to September) of the years 2019 and 2020, we notice that:

- For the *public health facilities*, all contraceptives methods have decreased ;
- For the *confessional health facilities*, all contraceptives methods increased, except for oral pills (7.2%), implants insertion (26.7%) and cycle beads (23.2%) ;
- For the *associative confessional health facilities*, new users of oral pill (0.5%), implant (5.3%) and cycle beads (50.0%) decreased ;
- For the *private health facilities*, new users of female condoms and cycle necklaces decreased by 39.3% and 35.3% respectively.

Table 7 : Percentage change for new users by facility status for the years 2019 and 2020

Contraceptives methods	(January – September) 2019 <u>AND</u> (January – September) 2020			
	Public	Confessionnal	Associative	Private
Oral pills	-15,7%	-7,2%	-0,5%	24,2%
Injectables	-3,9%	4,0%	20,0%	14,9%
Implant insertion	-27,9%	-26,7%	-5,3%	25,4%
IUD insertion	-33,5%	62,6%	7,5%	94,6%
Male condoms	-11,6%	17,8%	78,1%	0,6%
Female condoms	-23,2%	81,3%	275,9%	-39,3%
Cycle beads	-74,2%	-23,2%	-50,0%	-35,3%

The following graphs show the evolution of *new users* by method and by facility status at the national level for the nine months (January to September) of 2019 and 2020. The data for the cycle beads can be found in the table in Appendix 2.

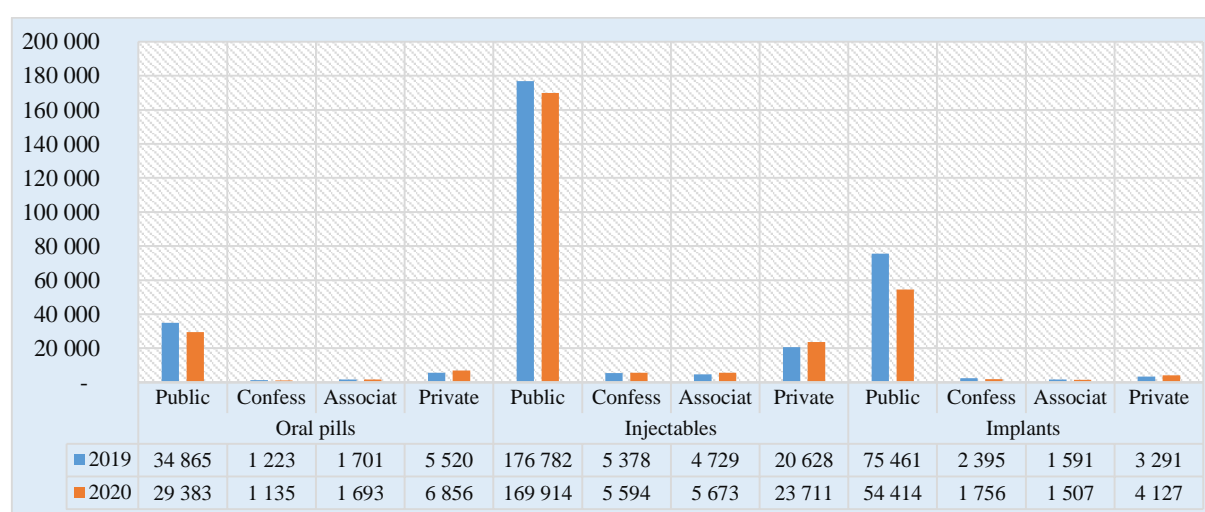


Figure 16: Comparison of the new users of hormonal methods by health facility status from January to September for the years 2019 and 2020

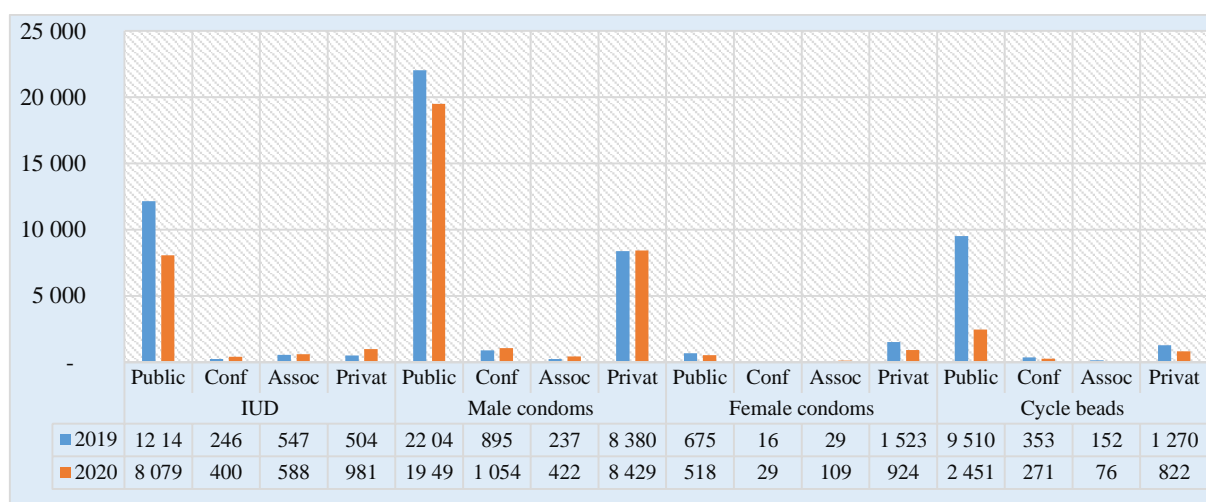


Figure 17 : Comparison of the new users of others methods by health facility status from January to September for the years 2019 and 2020

6.2.1.3. Trends of new users by health facilities location from 2017, 2018, 2019 to 2020

Between 2017 and 2018, analysis of national trends by health facilities location showed that:

- Health facilities in *rural areas* had seen a decrease in new users for male condoms (4.1%), female condoms (15.4%) and cycle beads (16.5%);
- In the *urban areas*, only oral pills (0.5%) and male condoms (5.8%) decreased.

Between 2018 and 2019, trend analysis showed that:

- Health facilities in rural areas had seen a decrease for IUD (6.0%) and female condoms (29.4%) new users ;
- In urban areas, the health facilities had experienced a decrease only in the use of male condoms (11.1%).

For the comparison between the 9 months (January to September) of 2019 and 2020, we note that:

- The Rural health facilities experienced a decrease for all methods;
- In urban areas, health facilities experienced a decrease in almost all methods, except for oral pills (6.1%), injectables (9.1%) and IUDs insertion (62.2%).

Table 8 : Percentage change for new users by health facilities location from 2017 to 2020

Contraceptives methods	Between 2017 and 2018		Between 2018 and 2019		* Between 2019 and 2020	
	Rural	Urban	Rural	Urban	Rural	Urban
Oral pillx	4,0%	-0,5%	2,5%	18,1%	-14,5%	6,1%
Injectables	11,8%	5,9%	2,5%	17,9%	-3,5%	9,1%
Implants insertion	5,8%	4,9%	4,9%	10,7%	-25,7%	-22,5%
DIU insertion	0,0%	24,4%	-6,0%	103,5%	-41,3%	62,2%

Contraceptives methods	Between 2017 and 2018		Between 2018 and 2019		* Between 2019 and 2020	
	Rural	Urban	Rural	Urban	Rural	Urban
Male condoms	-4,1%	-5,8%	13,1%	-11,1%	-6,3%	-44,2%
Female condoms	-15,4%	31,1%	-29,4%	141,3%	-14,8%	-38,6%
Cycle beads	-16,5%	46,3%	109,3%	17,6%	-71,6%	-53,2%

*The comparison between 2019 and 2020 was made for the 9 months data (January to September)

The following graphs show the evolution of new users by method and by health facilities location, at the national level from 2017 to 2019.

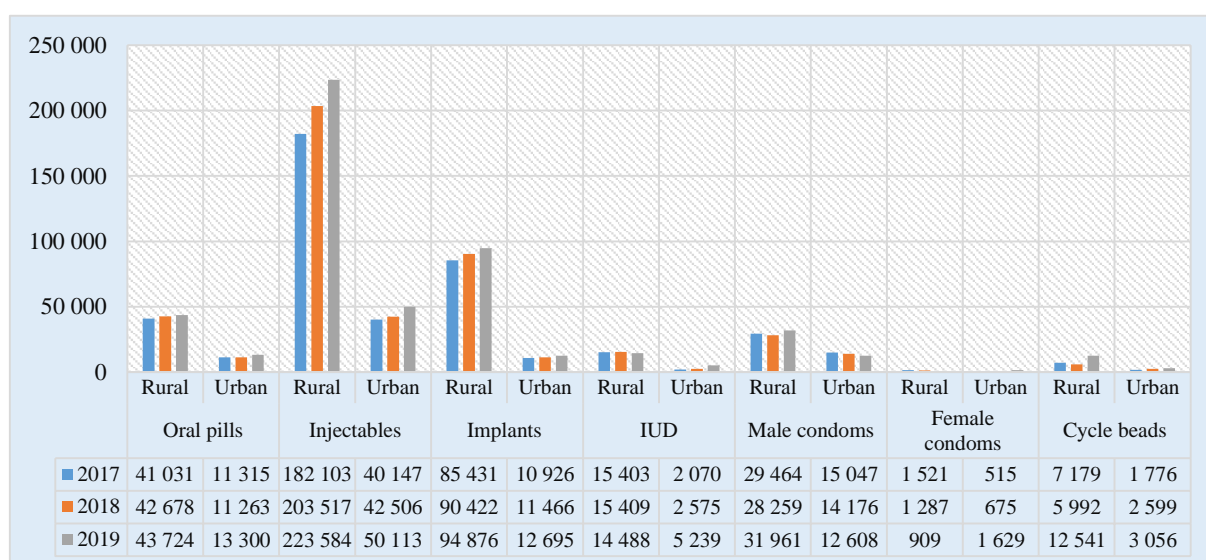


Figure 18 : Comparison of the new users by health facilities location for the years 2017, 2018 and 2019

The following graphs show the evolution of new users by method and by health facilities location, at the national level from January to September for the years 2019 to 2020.

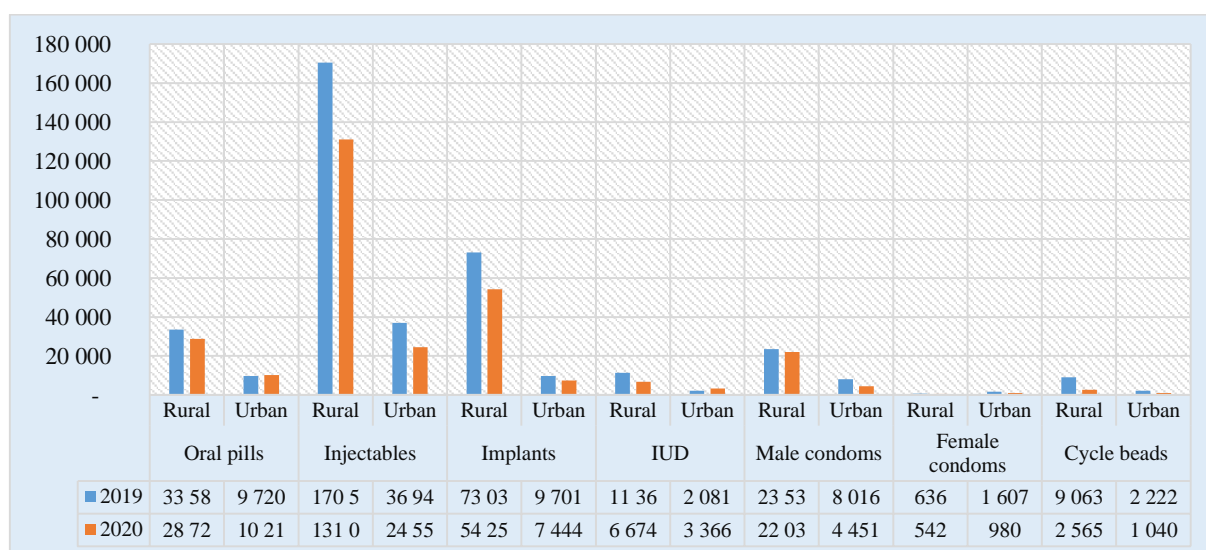


Figure 19 : Comparison of the new users by health facilities location for the years 2019 and 2020

6.2.2. Trends of revisits at the national level from 2017 to 2020

The results were presented starting with the comparison between years (percentage changes and raw data), then between quarters, and finally between months (average monthly numbers, details of monthly data are in Appendix 3).

Between 2017 and 2018 there was a decrease of the number of *revisits* for implants insertion (18.2%), IUDs insertion (6.4%) and cycle beads (56.6%). Between 2018 and 2019, implants insertion, IUDs insertion, female and male condoms decreased by 4.9%, 12.2%, 67.9% and 45.9% respectively.

Comparative analysis of the number of *revisits* in the first 9 months of 2019 and 2020 shows that there is a decrease ranging from 0.3% for injectable to 89.0% for cycle beads.

Table 9 : Percentage change of the revisits between years and by contraceptive method

Contraceptive methods	Between 2017 and 2018 (%)	Between 2018 and 2019 (%)	*Between 2019 and 2020 (%)
Oral pills	10,9%	1,8%	-7,1%
Injectables	14,7%	6,7%	-0,3%
Implant	-18,2%	-4,9%	-17,2%
IUD	-6,4%	-12,2%	-21,0%
Female condoms	139,2%	-67,9%	-9,5%
Male condoms	3,9%	-45,9%	-10,7%
Cycle beads	-56,6%	305,3%	-89,0%

**The comparison between 2019 and 2020 was made for the 9 months data (January to September)*

The following graph shows the revisits trend by contraceptive method for the years 2017, 2018, and 2019.

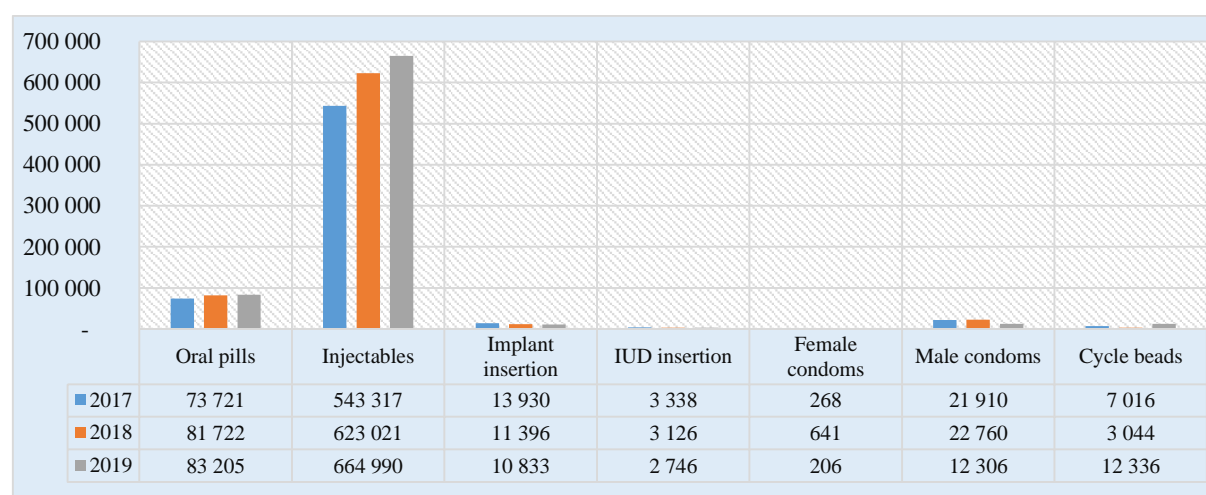


Figure 20 : Comparison of the revisits by contraceptive method, from 2017 to 2019

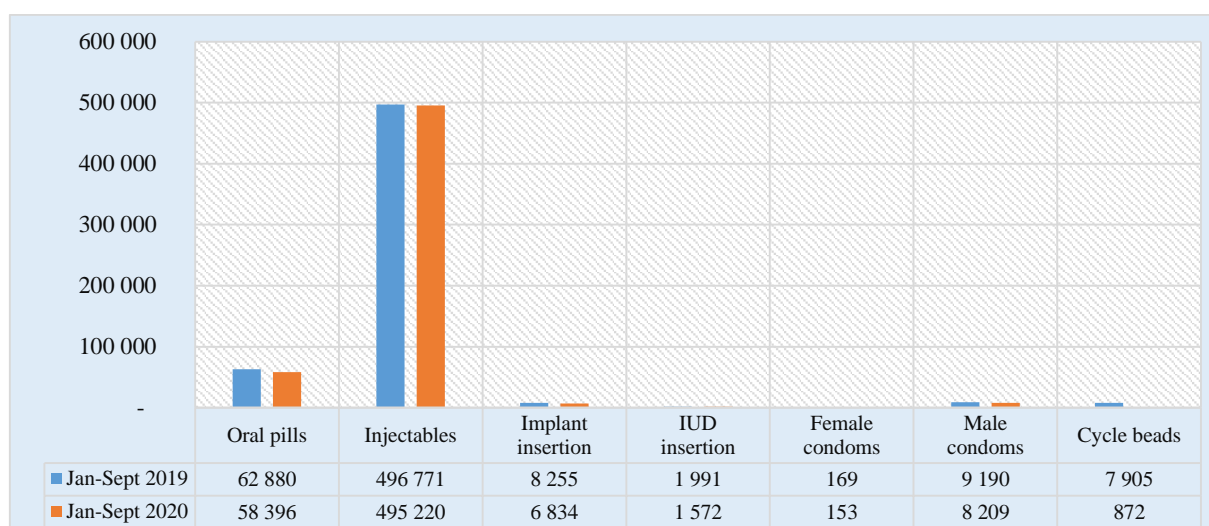


Figure 21 : Comparison of the revisits by contraceptive method, from January to September, 2019 and 2020

In general, the trend for *revisits* of oral pills and injectables has seen a gradual evolution for the same quarters from 2017 to 2019. For other methods, the trend varies from one year to another. It should be noted that the number of *revisits* has decreased for the three quarters of the year 2020, except for injectables, where there was a slight increase ranging from 159,044 to 161,613 (Figure 21).

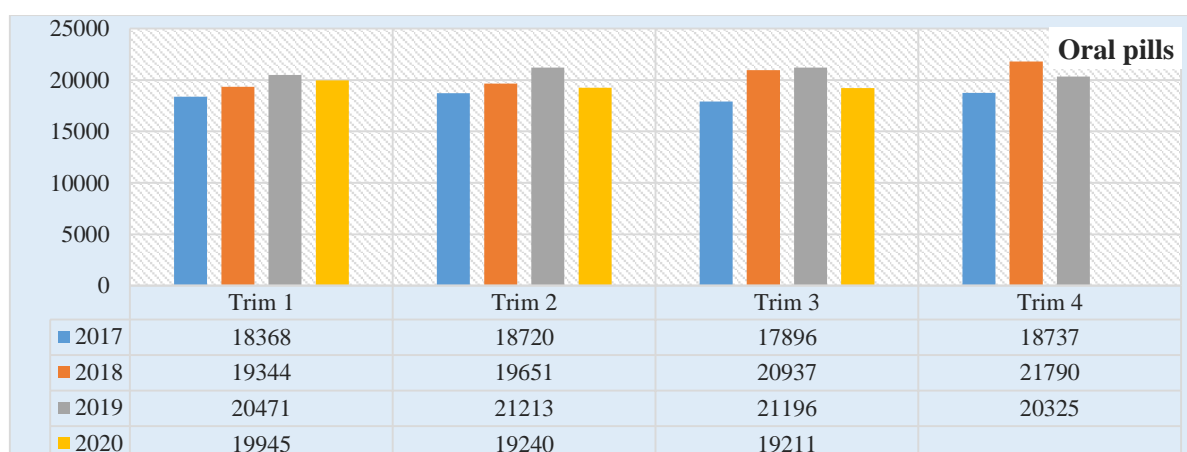


Figure 22 : Comparison of the oral pills revisits between quarters, from 2017 to 2020

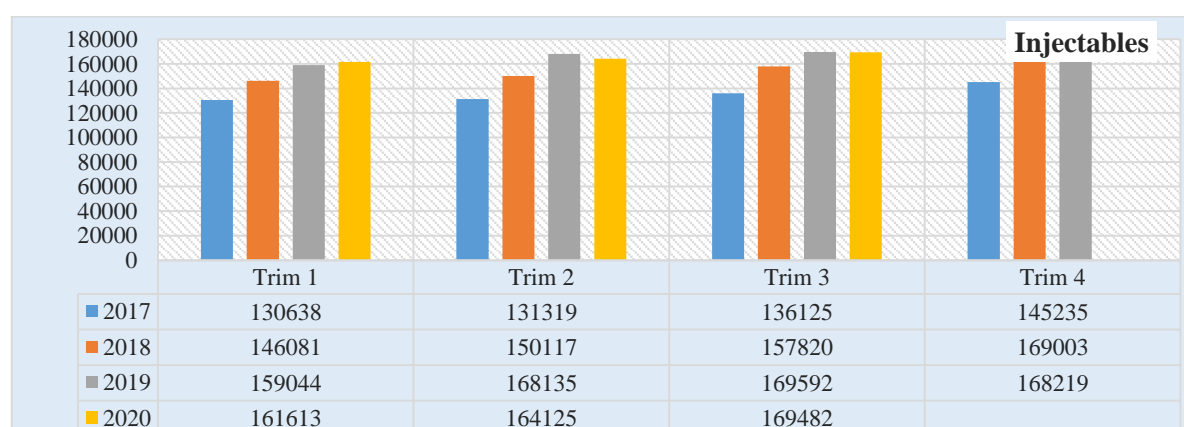


Figure 23 : Comparison of the injectable revisits between quarters, from 2017 to 2020

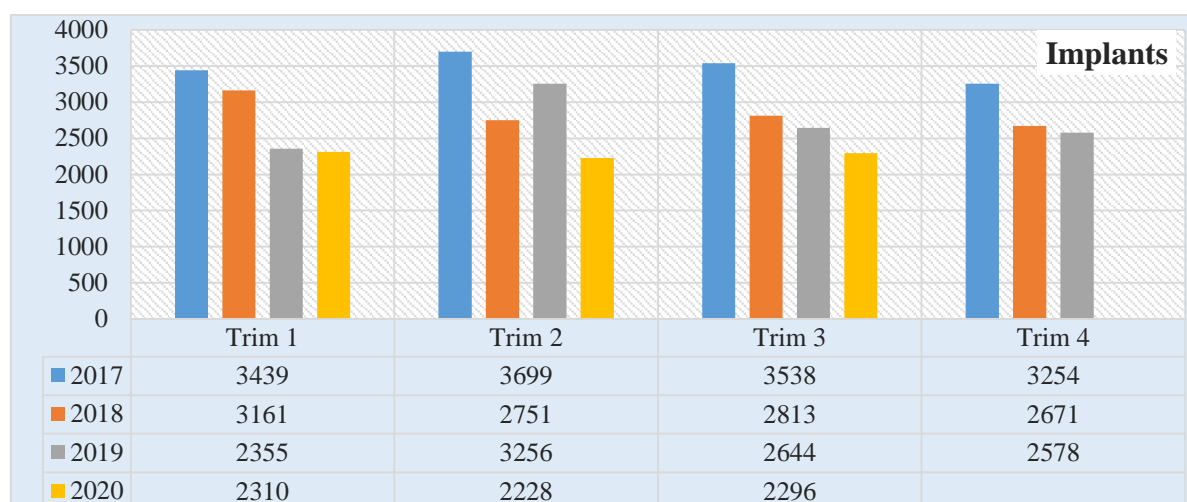


Figure 24 : Comparison of the implant revisits between quarters, from 2017 to 2020

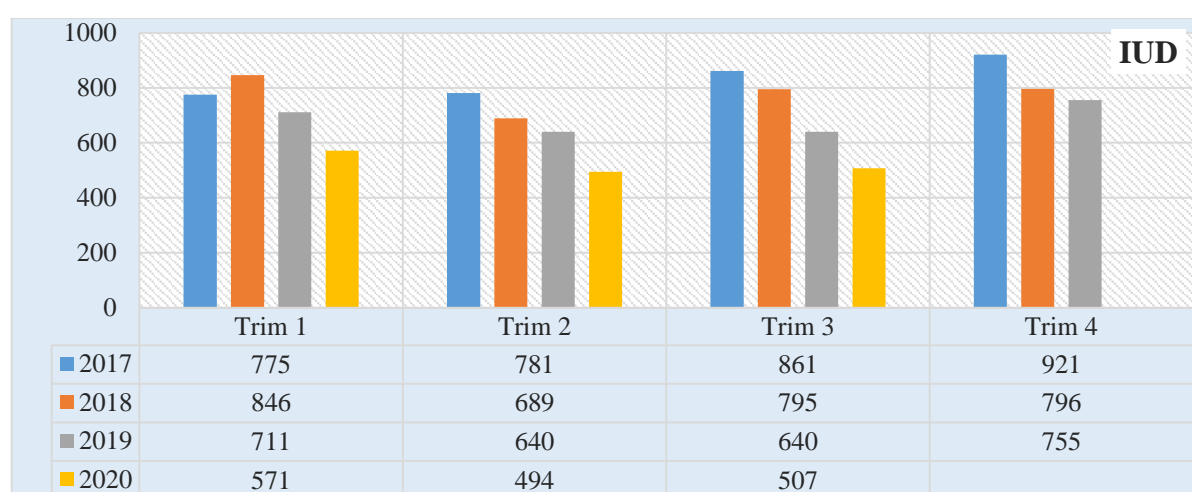


Figure 25 : Comparison of the change in former IUD acceptors between quarters, from 2017 to 2020

A comparative analysis of the trend in the monthly average of *revisits* for the years 2017, 2018 and 2019 shows an irregular evolution. However, for the nine months of the years 2019 and 2020, the comparison of the monthly averages of the *revisits* shows that all methods have decreased.

Table 10 : Change in the average monthly number of revisits by contraceptive method (2017-2019)

Contraceptive methods	Jan - Dec 2017			Jan - Dec 2018			Jan - Dec 2019	
	Mean	SD		Mean	SD		Mean	SD
Oral pills	6 143	473	→	6 810	593	→	6 934	518
Injectables	45 276	2 823	→	51 918	3 480	→	55 416	2 315
Implant	1 161	130	→	950	136	→	903	163
IUD	278	43	→	261	62	→	229	33
Male condoms	1 826	1 392	→	1 897	2 904	→	1 026	258
Female condoms	22	19	→	53	62	→	17	7
Cycle beads	585	215	→	254	169	→	1 028	645

SD : Standard Deviation

Table 11 : Change in the average monthly number of revisits by contraceptive method (2019-2020)

Contraceptive methods	Jan - Sept 2019			Jan - Sept 2020	
	Mean	SD		Mean	SD
Oral pills	6 987	534	↘	6 488	615
Injectables	55 197	2 559	↘	55 024	2 792
Implant	917	184	↘	759	86
IUD	221	30	↘	175	18
Male condoms	1 021	261	↘	912	131
Female condoms	19	7	↘	16	10
Cycle beads	878	642	↘	97	29

SD : Standard Deviation

6.2.2.1. National trends of revisits by health facilities status from 2017 to 2020

The comparison between the years 2017 and 2018 showed that:

- In *public health facilities*, the revisits for implants, IUDs, male condoms and cycle beads decreased by 14.0%, 11.1%, 25.6% and 76.9%, respectively;
- For *private health facilities*, all methods had a decrease, except for oral pills and injectables.

The comparison between the years 2018 and 2019 showed that:

- The revisits of implants (6.6%), IUDs (1.0%) and female condoms (69.9%) decreased in *public health facilities*;
- For *confessional health facilities*, there was no decrease of revisits for any contraceptive method.

Table 12 : Percentage change of revisits by facility status between 2017, 2018 and 2019

Contraceptive methods	Between 2017 and 2018 (%)				Between 2018 and 2019 (%)			
	Public	Confessionnal	Associative	Private	Public	Confessionnal	Associative	Private
Oral pills	9,8	-9,9	2,9	8,3	7,7	0,8	0,0	43,8
Injectables	13,3	3,8	33,1	4,5	13,8	0,0	0,0	62,6
Implant	-14,0	-42,1	-25,9	-38,4	-6,6	9,5	6,0	27,8
IUD	-11,1	-14,3	6,2	-31,6	-1,0	108,3	-21,8	88,4
Male condoms	-25,6	28,1	17,7	-72,6	12,9	8,0	-16,5	41,4
Female condoms	139,0	70,0	29,1	-4,4	-69,9	87,5	-42,3	-36,0
Cycle beads	-76,9	-32,3	-52,6	-85,1	71,9	10,3	94,6	50,0

For the comparison of the revisits between the 9 months (January to September) of the year 2019 and the 9 months of 2020, we notice that for:

- For the *public health facilities*, only *revisits* of female condoms did not decline ;
- For *confessionnal health facilities*, the *revisits* decreased for almost all contraceptive methods, except for injectables, implants and IUDs ;
- For *associative health facilities*, the *revisits* of IUDs (8.2%), female condoms (2.8%) and cycle beads (42.1%) decreased ;
- For *private health facilities*, only *revisits* of female condoms (36.0%) decreased.

Table 13 : Percentage change of revisits by health facilities status between 2019 and 2020

Contraceptive methods	Between (January – September) 2019 <u>AND</u> (January – September) 2020 (%)			
	Public	Confessionnal	Associative	Private
Oral pills	-9,8	-25,3	21,9	44,8
Injectables	-1,6	1,5	18,6	77,2
Implant	-26,4	95,4	4,6	27,8
IUD	-39,2	35,3	-8,2	88,4
Male condoms	-19,2	-30,5	27,4	41,4
Female condoms	69,5	-86,7	-2,8	-36,0
Cycle beads	-98,7	-51,0	-42,1	50,0

Figures 26 and 27 show the raw data for the changes identified in Table 11 for revisits by method and health facility status, nationally for the years 2017, 2018, and 2019. The data for cycle beads can be found in the table in Appendix 3.

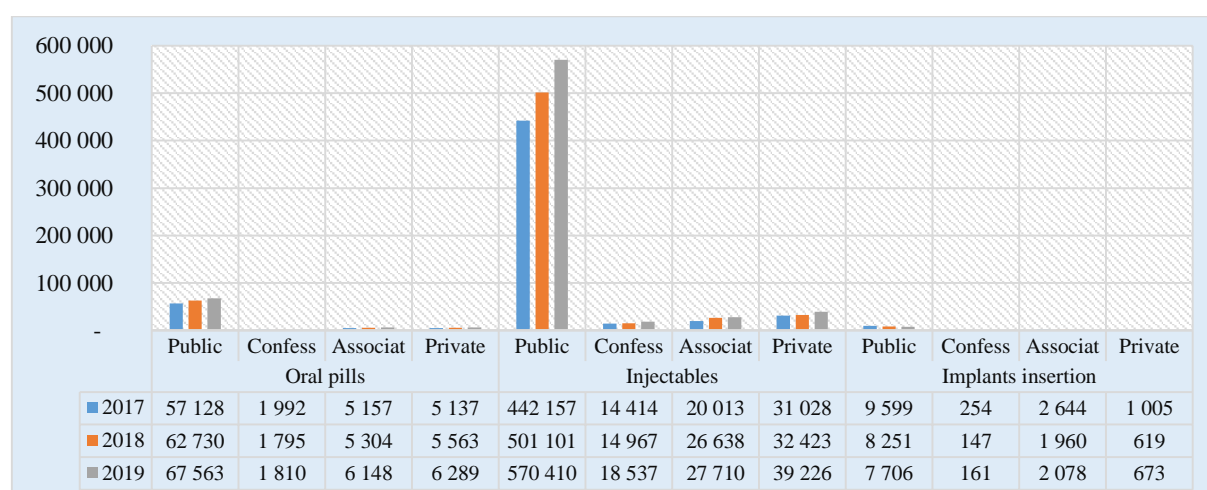


Figure 26: Comparison of the revisits for hormonal methods by health facility status from 2017 to 2019

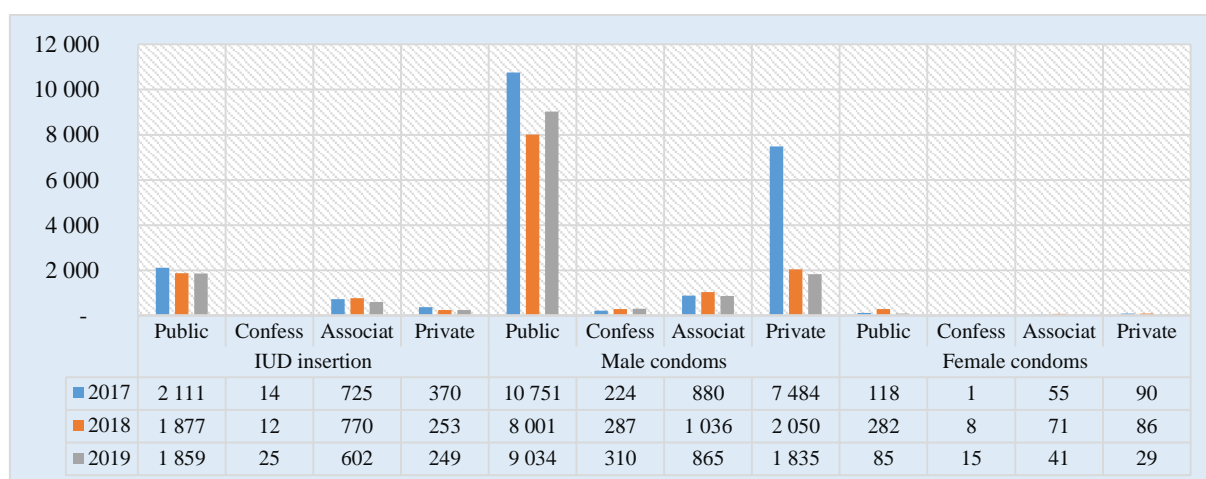


Figure 27: Comparison of the revisits for other methods by health facility status from 2017 to 2019

Figures 28 and 29 show the raw data for the changes identified in Table 12 for revisits by method and health facility status, nationally from January to September of 2019 and 2020. The data for the cycle beads can be found in the table in Appendix 3.

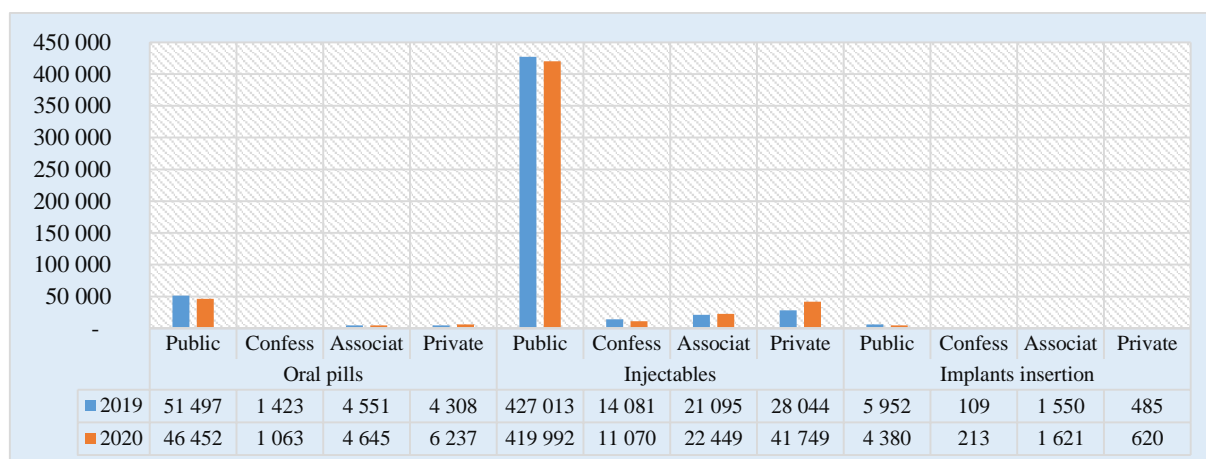


Figure 28: Comparison of the revisits for hormonal methods by health facility location from 2019 to 2020

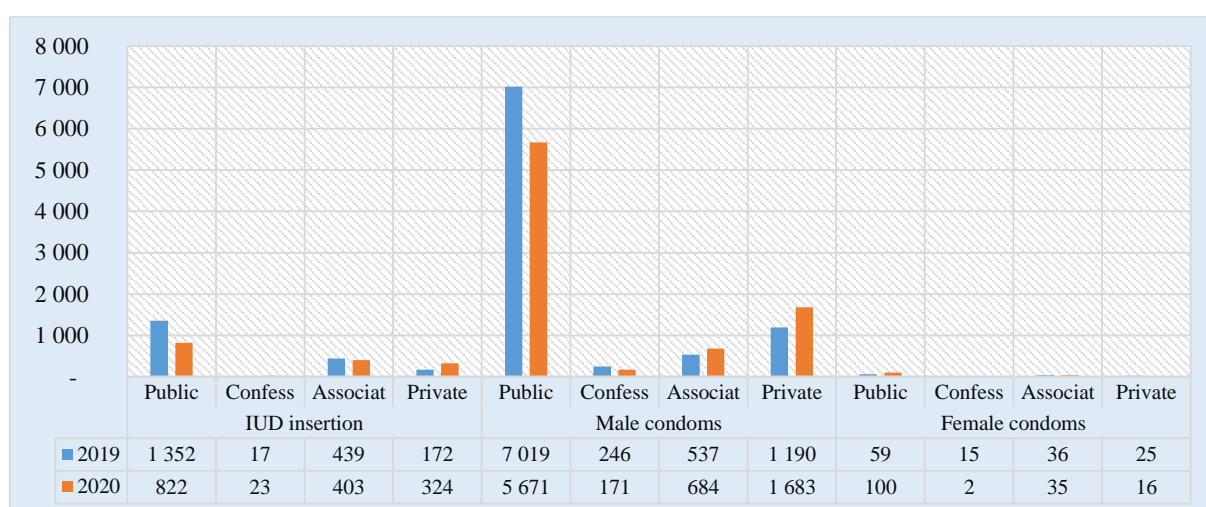


Figure 29 : Comparison of the revisits for other methods by health facility location from 2019 to 2020

6.2.2.2. National trends of revisits by health facility location setting from 2017 to 2020

Between 2017 and 2018, rural health facilities experienced a decrease of revisits for four FP methods: implants (14.4%), IUDs (7.0%), male condoms (25.8%) and cycle beads (54.8%). The IUDs (-26.2%), implants (-12.3%) and cycle collars (-64.3%) decreased in urban health facilities.

Between 2018 and 2019, *health facilities in rural areas* decreased for IUDs (9.5%) and female condoms (67.7%), while in *urban areas*, IUDs (-2.2%), male condoms (-81.1%) and female condoms (-77.5%) showed decreases.

Between January and September of 2019 and 2020, *rural health facilities* experienced a decrease in almost all contraceptive methods except for female condoms, which increased by 44.7%, while *urban health facilities* experienced an increase of 6.9% for oral pills, 6.3% for injectables and 23.0% for male condoms.

Table 14 : Percentage change of revisits by health facility location between 2017, 2018, 2019 and 2020

Contraceptive methods	Between 2017 and 2018		Between 2018 and 2019		Between 2019 and 2020	
	Rural	Urban	Rural	Urban	Rural	Urban
Oral pills	9,3%	7,0%	9,6%	6,1%	-9,5%	6,9%
Injectables	13,8%	12,6%	15,2%	10,0%	-0,7%	6,3%
Implant	-14,4%	-26,2%	-13,6%	19,6%	-19,6%	-10,1%
IUD	-7,0%	-12,3%	-9,5%	-2,2%	-37,0%	-1,7%
Male condoms	-25,8%	51,1%	25,7%	-81,1%	-17,5%	23,0%
Female condoms	142,6%	126,7%	-67,7%	-77,5%	44,7%	-27,1%
Cycle beads	-54,8%	-64,3%	345,6%	174,4%	-91,7%	-70,7%

Figure 30 shows a progressive increase for some contraceptive methods (oral pills, injectables) regardless of the localization medium. For other contraceptive methods, the trend was irregular.

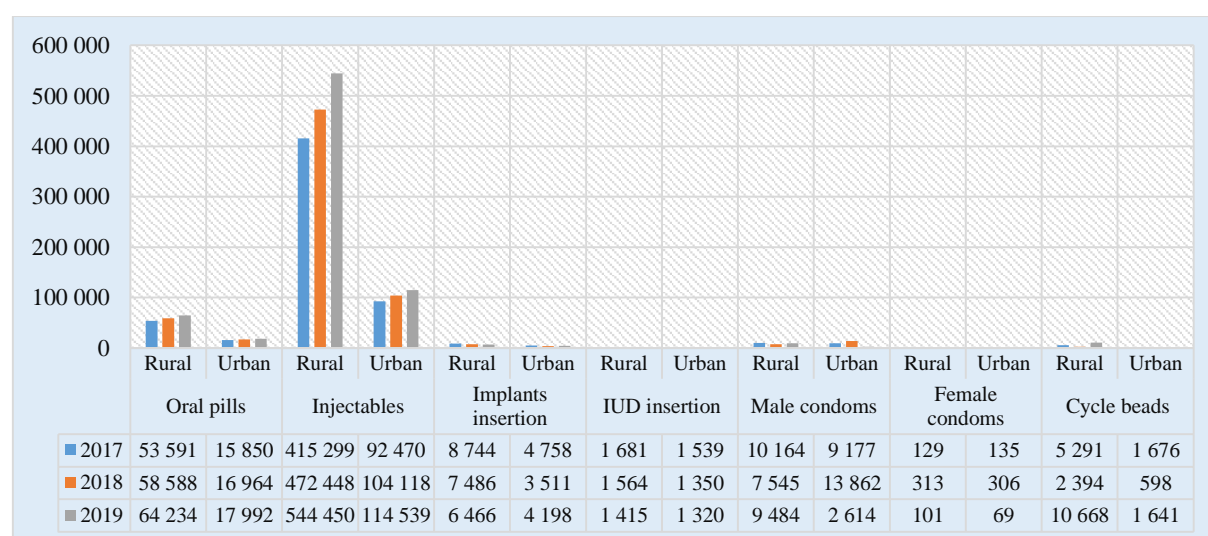


Figure 30 : Comparison of the revisits by health facility location from 2017 to 2019

Figure 31 shows that the number of *revisits* decreased for injectables, implants and IUDs, regardless of health facility location, for the January to September periods of 2019 and 2020.

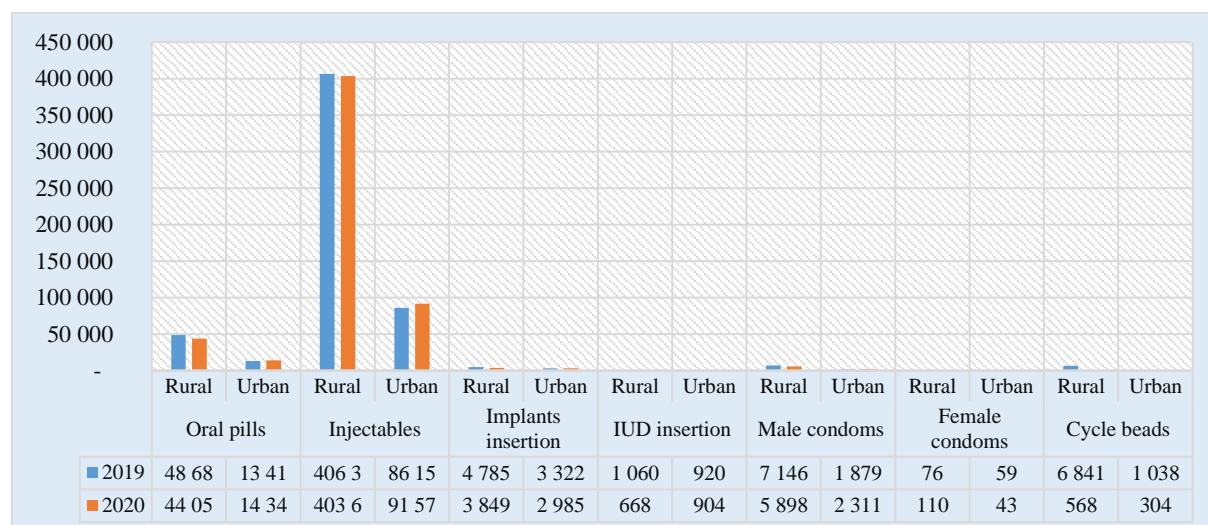


Figure 31 : Comparison of revisits by health facility location for the 9 months of the years 2019 and 2020

6.2.3. Trends of contraceptive methods distributed from 2017 to 2020

The results were presented starting with the comparison between years (percentage changes and raw data), then between quarters, and finally between months (the average number of months, details of monthly data are in Appendix 4).

Between the years 2017 and 2018, there was an increase of the quantities administered for almost all contraceptive methods except IUDs (60%) and postinor (6.4%). Between the years 2018 and 2019, injectables, IUDs and postinor decreased by 0.6%, 4.2% and 15.5% respectively. Between the first nine months (January to September) of the years 2019 and 2020, the quantities distributed of contraceptive methods have decreased except for injectables and postinor, which recorded an increase of 0.5% and 16.8%.

The following table shows the percentage increase or decrease in new contraceptive acceptors.

Table 15 : Percentage change in quantities of contraceptive methods administered in 2017, 2018, 2019 and 2020

Contraceptive methods administered	Between 2017 and 2018 (%)	Between 2018 and 2019 (%)	* Between 2019 and 2020 (%)
Oral pills	3,0%	5,4%	-11,2%
Injectables	14,5%	-0,6%	0,5%
Implants	2,6%	5,8%	-22,8%
IUD	-6,0%	-4,2%	-36,3%
Female condoms	35,0%	111,5%	-15,5%
Male condoms	0,5%	12,1%	-49,4%
Postinor	-6,4%	-15,5%	16,8%

*The comparison between 2019 and 2020 was made for the 9 months data (January to September)

The following graphs show the trend of quantities distributed between the years 2017, 2018 and 2019 on the one hand (Figure 32) and between the nine months of the years 2019 and 2020 on the other hand (Figure 33).

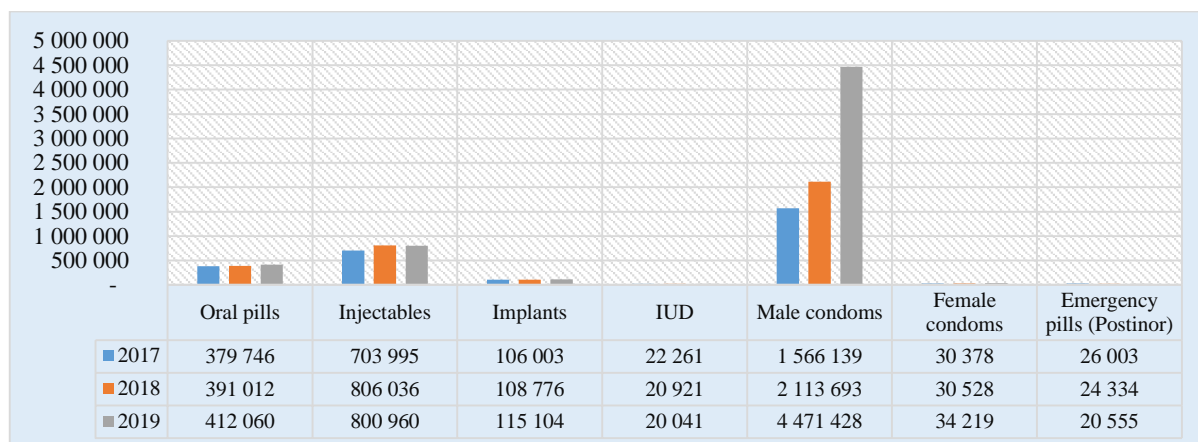


Figure 32: Comparison of contraceptive method distributed from 2017 to 2019

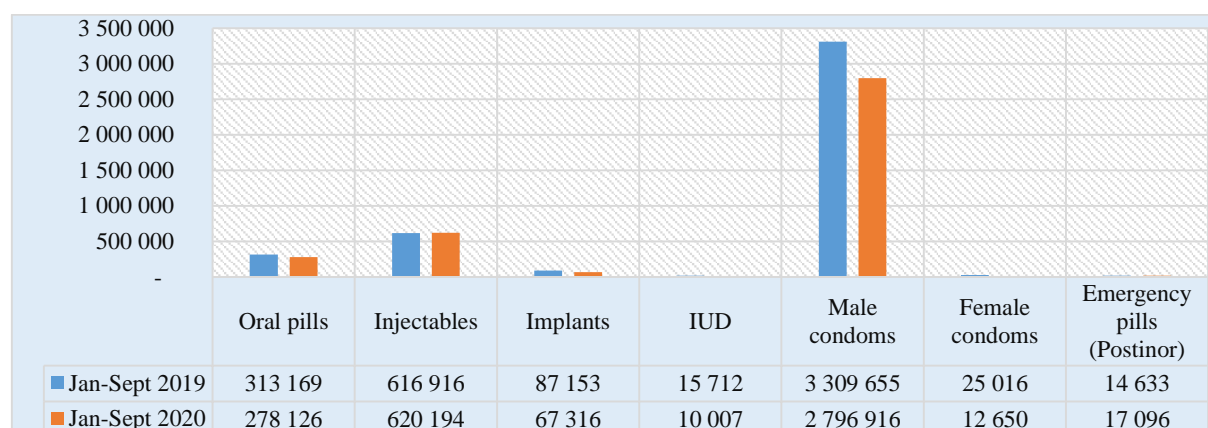


Figure 33: Comparison of contraceptive method distributed, January to September, 2019 and 2020

The following graphs show trends of the quantities of contraceptives administered. Implants, IUDs, and female condoms have shown a very remarkable decrease in the year 2020 and in all three quarters.

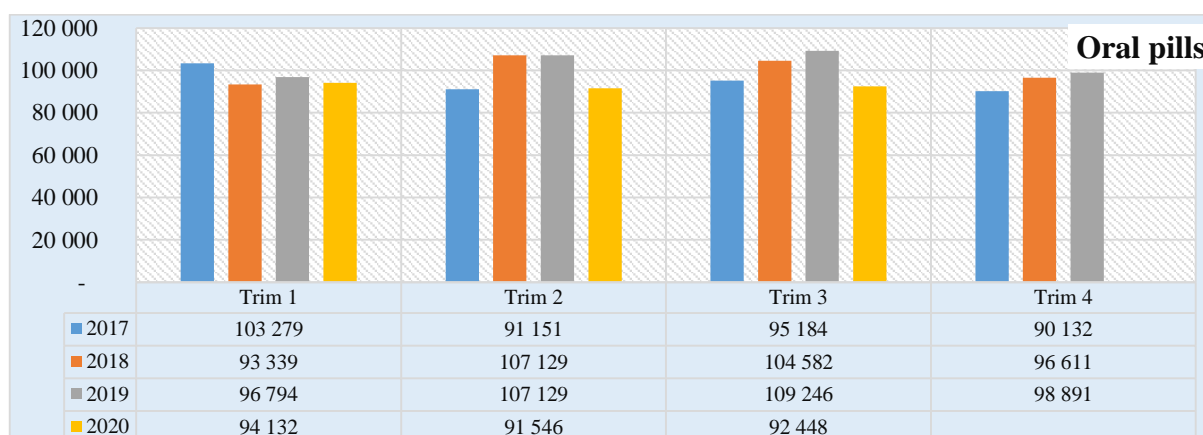


Figure 34 : Comparison of oral pills quantities distributed, by quarter, 2017 to 2020

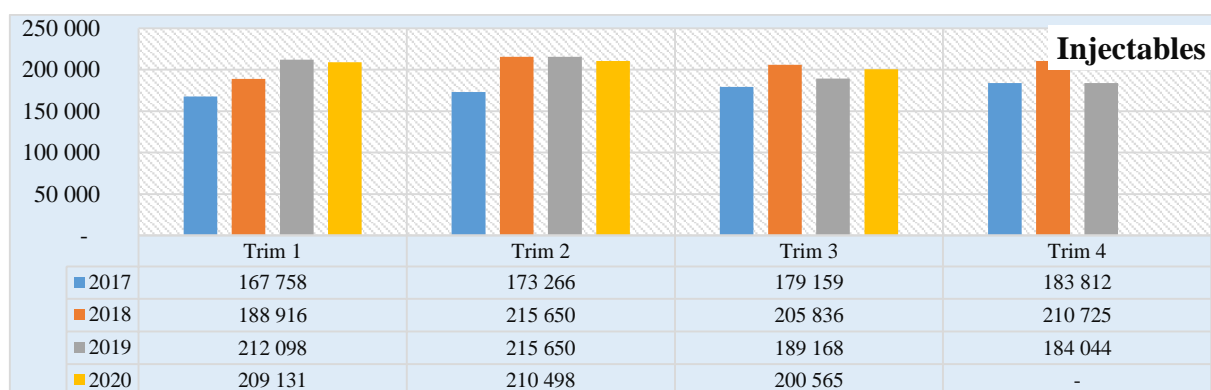


Figure 35 : Comparison of injectables quantities distributed, by quarter, by quarter, by quarter, 2017-2020

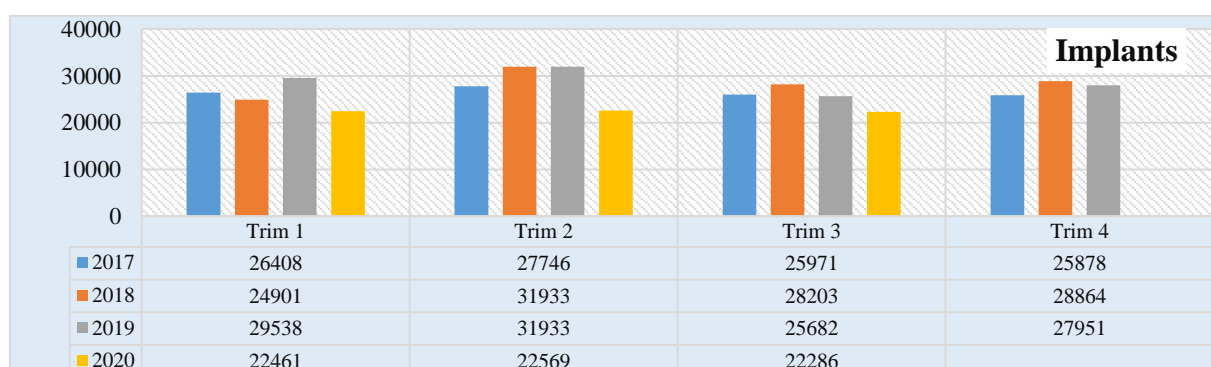


Figure 36 : Comparison of the Implants quantities distributed, by quarter, 2017-2020

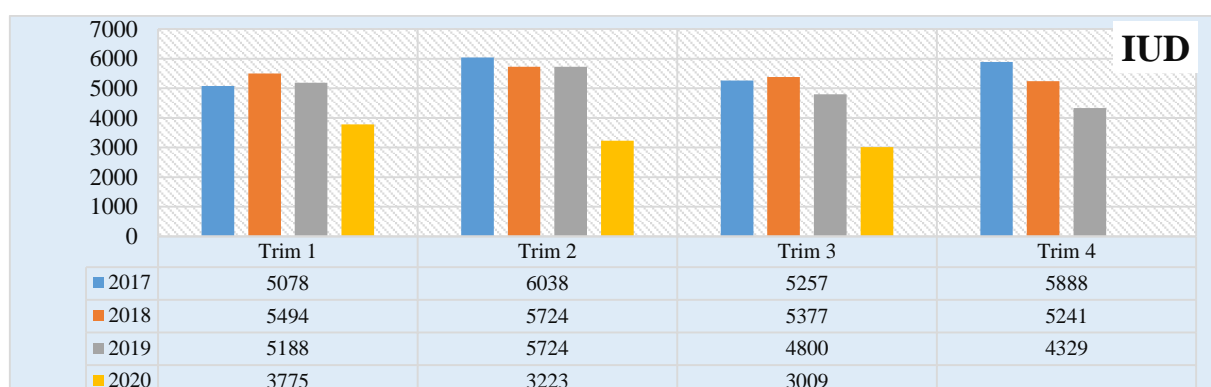


Figure 37: Comparison of IUD quantities distributed, by quarter, by quarter, 2017-2020

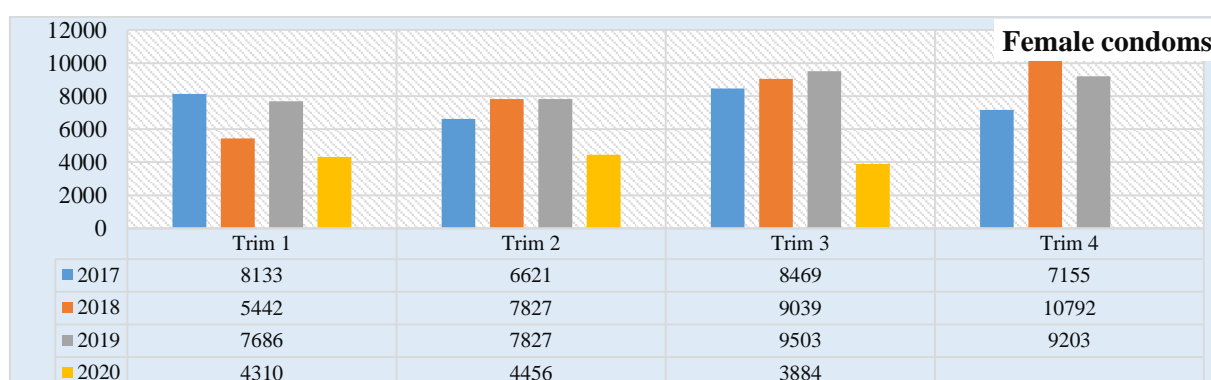


Figure 38 : Comparison of female condoms quantities distributed, by quarter, by Quarter, 2017-2020

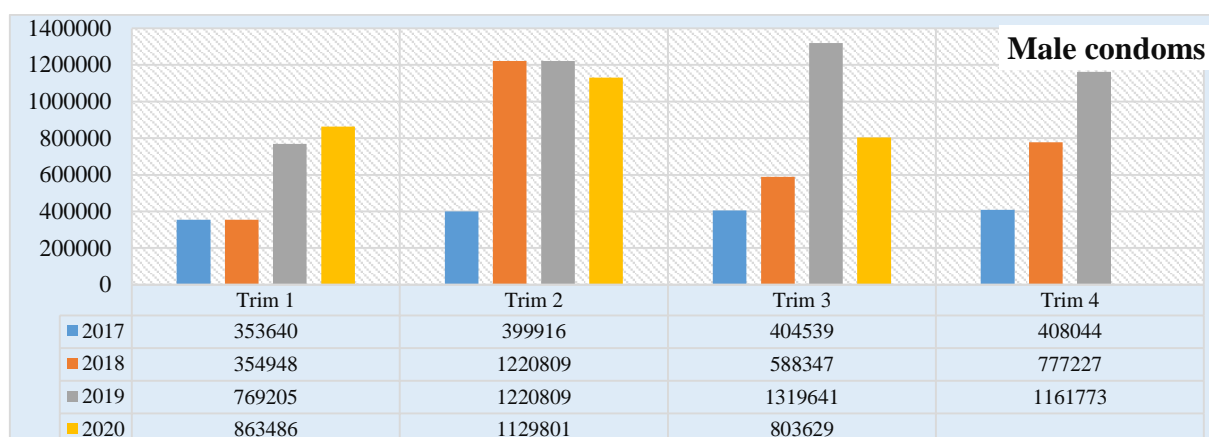


Figure 39 : Comparison of male condoms quantities distributed, by quarter, 2017-2020

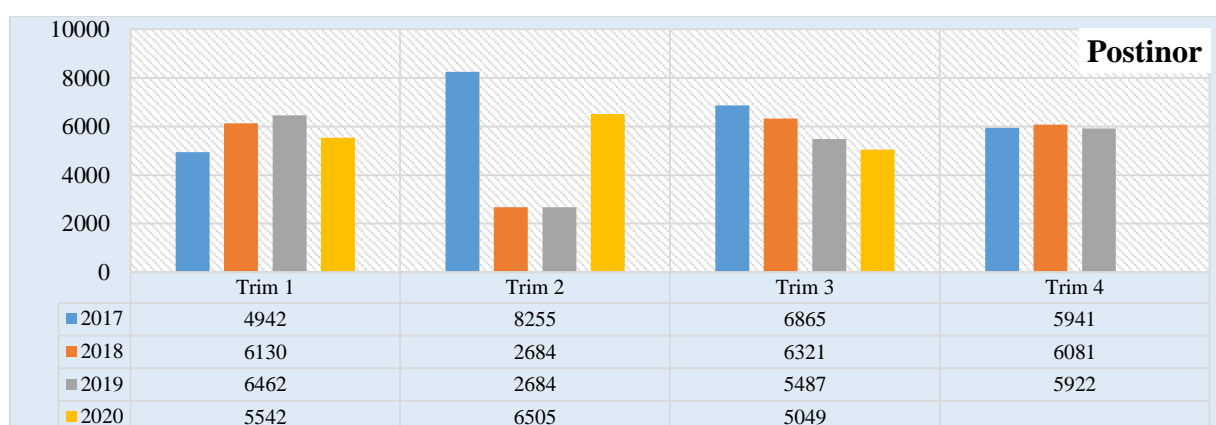


Figure 40 : Comparison of the quantities of emergency pills (postinor) distributed, by quarter, 2017-2020

Trend analysis of the monthly average of the quantities of contraceptive methods administered for the years 2017 to 2019 shows a gradual change for almost all contraceptive methods. However, the comparison between 2019 and 2020 for the first 9 years shows that the quantities distributed of all contraceptive methods have decreased except for injectables and postinor.

The following table shows the monthly mean (and its Standard Deviation SD) of quantities of contraceptive methods administered per year and per contraceptive method.

Table 16 : Change of average monthly number of contraceptive method administered (2017 - 2019)

Contraceptive methods administered	Jan - Dec 2017			Jan - Dec 2018			Jan - Dec 2019	
	Mean	SD		Mean	SD		Mean	SD
Oral pills	31 646	3 751	↗	32 584	3 575	↗	34 338	3 076
Injectables	58 666	3 585	↗	67 170	4 107	↘	66 747	6 284
Implants	8 834	1 291	↗	9 065	616	↗	9 592	1044
IUD	1 855	223	↘	1 743	108	↗	1 670	222
Male condoms	130 512	26 056	↗	176 141	62 270	↗	372 619	110 432
Female condoms	2 532	676	↗	2 544	1 381	↗	2 852	393
Postinor	2 167	522	↘	2 028	207	↘	1 713	524

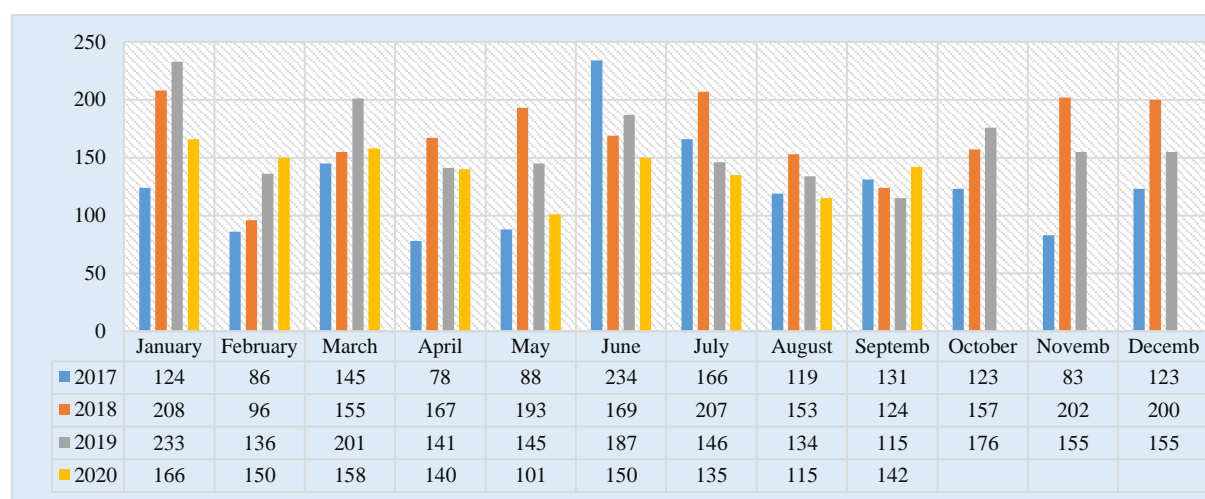
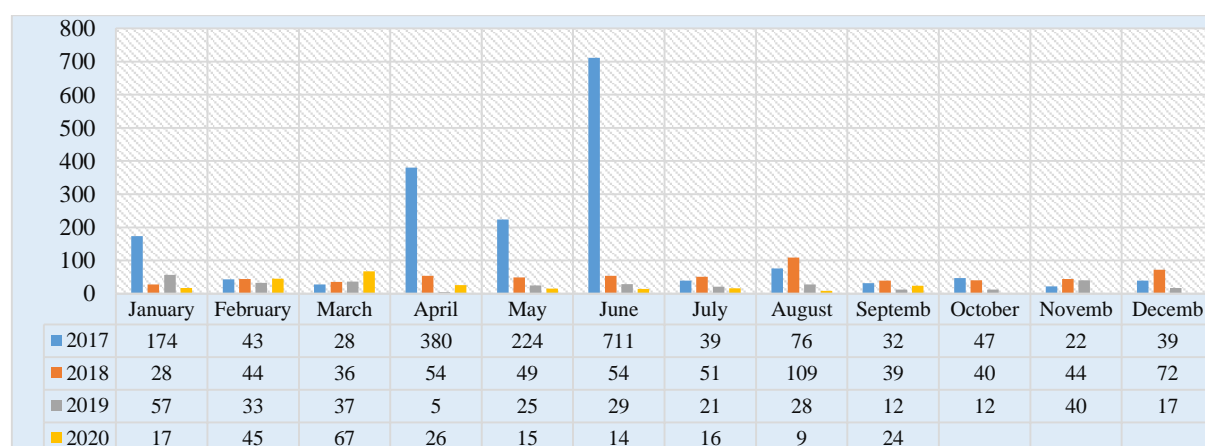
Table 17 : Change of average monthly number of contraceptive method administered (2019 - 2020)

Contraceptive methods administered	January - September 2019			January - September 2020	
	Mean	SD		Mean	SD
Oral pills	34 797	3 390	↘	30 903	2 037
Injectables	68 546	5 999	↗	68 910	8 835
Implants	9 684	1 105	↘	7 480	658
IUD	1 746	202	↘	1 112	188
Male condoms	367 739	91 133	↘	310 768	122 195
Female condoms	2 780	353	↘	1 406	200
Postinor	1 626	575	↗	1 900	578

6.2.4. Use of voluntary surgical contraception before and during the COVID-19 pandemic

Tubal ligations increased by 35.4% between 2017 and 2018 and decreased by 5.3% between 2018 and 2019. Between 2019 and 2020 they decreased by 12.6%.

Vasectomies decreased gradually by 65.8% between 2017 and 2018 and by 49.0% between 2018 and 2019. Between 2019 and 2020, they decreased by 5.7%.

**Figure 41 : Comparison of the monthly trend for tubal ligations performed from 2017 to 2020****Figure 42 : Comparison of monthly trend for vasectomies performed from 2017 to 2020**

6.2.5. Trend analysis of IUD and implant removals before and during the COVID-19 pandemic

The number of *IUDs removed* increased by 3.7% between 2017 and 2018. Between 2018 and 2019, there was an increase of 17.2%. Between 2019 and 2020, it decreased by 16.6%. The analysis of the evolution of the number of *IUDs removed* per month for the years 2019 and 2020 shows that from March 2020 there was a decrease until September 2020 compared to the same period of 2019.

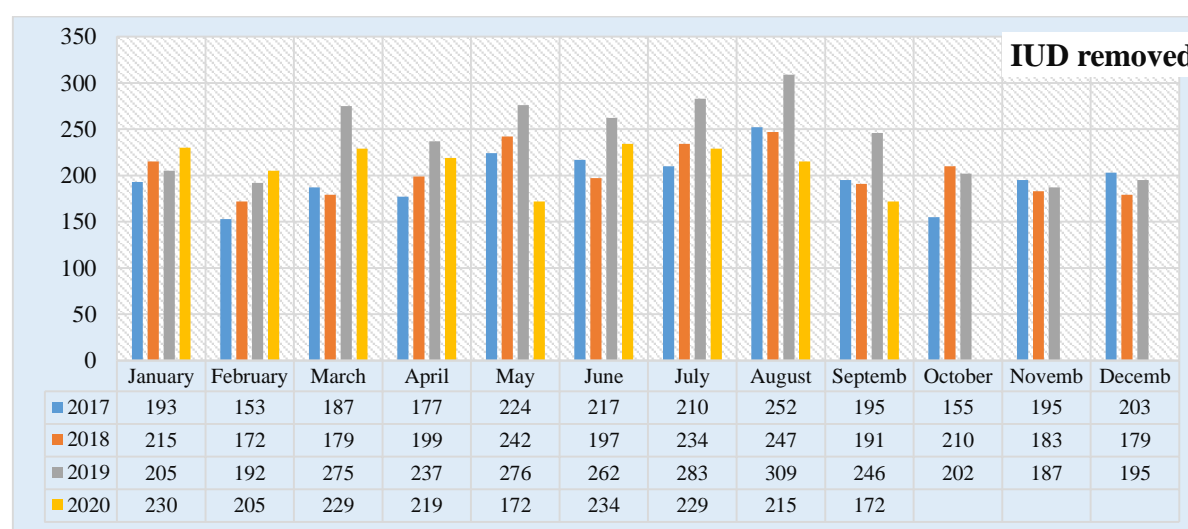


Figure 43 : Comparison of monthly trend for IUD removals

The number of *implants removed* increased by 21.6% between the years 2017 and 2018. Between the years 2018 and 2019 there was an increase of 4.7%. Between 2019 and 2020 it decreased by 8.4%. The analysis of the *implant removal* trend shows that from April 2020 onwards the number of implants removed decreased compared to the same period in 2019.

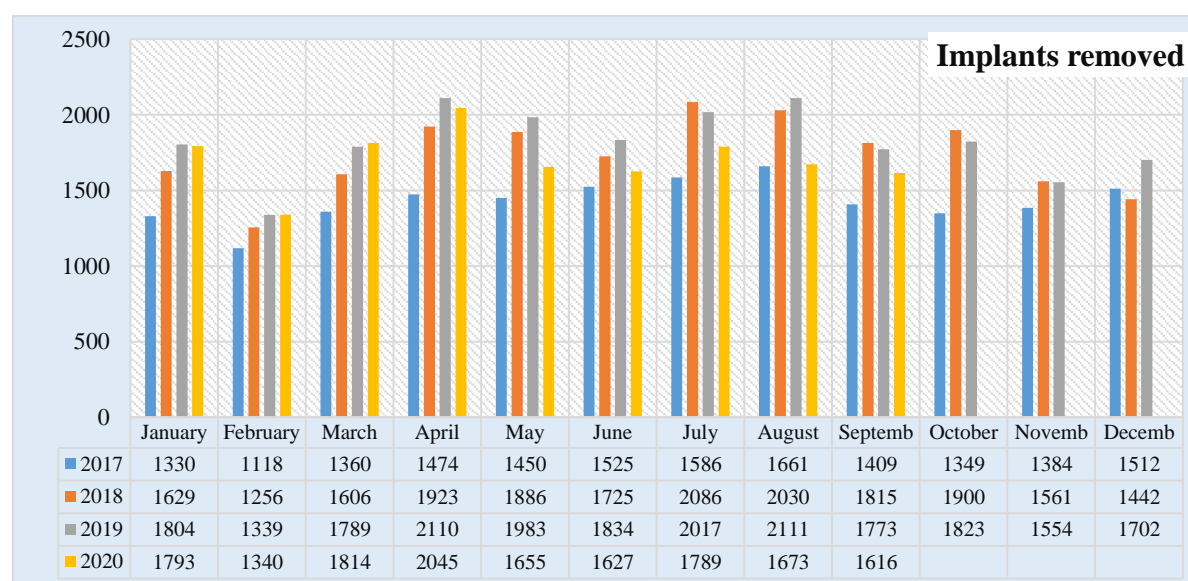


Figure 44 : Comparison of Monthly Trend of Implant Removals

6.3. Inventory status of family planning methods

First, the results were presented for *the health facilities* (FOSA), by the number of months corresponding to the quantities of contraceptive methods available at the end of the quarters of the years 2017, 2018, 2019 and 2020. Then the results on the number of months corresponding to the quantities of contraceptive methods available at *the national level* (National Program of Reproductive Health) were presented for the same periods mentioned above. The detailed data by quarter are presented in Appendix 5.

6.3.1. At the level of health facilities

The following table illustrates the comparison of the number of months corresponding to the quantities of contraceptive methods available at the end of the quarters between the years 2017, 2018 and 2019. IUDs, condoms, and emergency contraceptives (postinor) had the quantities in stock more than 4 months old for all quarters from 2017 to 2019.

Table 18 : Number of months corresponding to the quantities of contraceptive methods available at the facility level

Contraceptive methods	End term 1			End term 2			End term 3			End term 4		
	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
Oral pills	4	3	3	3	3	3	3	3	3	4	3	3
Injectables	2	2	2	2	2	2	3	2	2	3	2	2
Implants	3	3	3	3	3	3	3	3	3	4	3	3
IUD	8	7	7	7	8	6	6	6	7	6	6	7
Male condoms	4	3	3	6	3	1	6	3	1	5	2	1
Female condoms	9	11	14	13	11	16	10	13	16	20	15	13
Postinor	8	6	3	7	7	5	5	5	7	5	5	6

The following table compares the number of months corresponding to the quantities of contraceptive methods available at the end of the quarters between the years 2019 and 2020. For the year 2020, there was a global minimum stock in health facilities for almost all contraceptive methods, particularly for the 1st and 2nd quarters.

Table 19 : Number of months corresponding to the quantities of contraceptive methods available in the health facilities

Contraceptive methods	End term 1		End term 2		End term 3	
	2019	2020	2019	2020	2019	2020
Oral pills	3	6	3	5	3	4
Injectables	2	1	2	2	2	2
Implants	3	1	3	1	3	1
IUD	7	1	6	1	6	1
Male condoms	3	2	1	1	1	2
Female condoms	14	1	17	1	17	1
Postinor	3	1	5	1	7	1

6.3.2. At the national level (National Reproductive Health Program)

The following table illustrates the comparison of the number of months corresponding to the quantities of contraceptive methods available at the end of the quarters between the years 2017, 2018 and 2019.

Most of the contraceptive methods were in overstocking in 2017, the inventory situation varied for the years 2018 and 2019 but shows a threat of a break in the 2nd and 3rd quarters of the year 2019 for almost all contraceptive methods.

Table 20 : Number of months corresponding to the quantities of contraceptive methods available at the national level (PNSR)

Contraceptive methods	End term 1			End term 2			End term 3			End term 4		
	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
Oral pills	19	7	10	16	8	10	13	5	6	9	15	8
Injectables	78	52	63	76	44	2	74	42	2	50	40	26
Implants	39	18	7	35	15	0	32	7	0	23	5	6
IUD	28	13	2	25	10	1	23	8	0	15	6	7
Male condoms	128	69	33	141	66	5	126	58	7	96	53	21
Female condoms	32	9	78	29	7	51	17	2	49	14	0	54
Postinor	12	16	4	7	11	2	5	7	3	20	4	12

The following table illustrates the comparison of the number of months corresponding to the quantities of contraceptive methods available at the end of the quarters (January to September) between the years 2019 and 2020. The inventory situation for most contraceptive methods was in danger of being depleted, particularly in the third quarter of 2019 and 2020.

Table 21 : Number of months corresponding to the quantities of contraceptive methods available at the national level (PNSR)

Contraceptive methods	End term 1		End term 2		End term 3	
	2019	2020	2019	2020	2019	2020
Oral pills	10	6	10	7	6	10
Injectables	7	3	0	1	0	0
Implants	2	6	1	22	0	20
IUD	60	34	2	29	2	27
Male condoms	33	14	5	15	8	8
Female condoms	80	0	53	0	50	0
Postinor	5	5	2	2	3	0

6.4. The impact of the use of modern contraceptive methods

*Unwanted pregnancies averted*¹ increased by 30.9% between the years 2017 and 2018, while it decreased by 1.1% between 2019 and 2020 for the first 3 quarters.

*Averted maternal deaths*² increased by 27.2% between 2017 and 2018 while they decreased by 4.0% between 2019 and 2020 for the first 3 quarters.

*Avoided unsafe abortions*³ increased by 30.9% between the years 2017 and 2018 while it decreased by 1.1% between 2019 and 2020 for the period of the first 3 quarters.

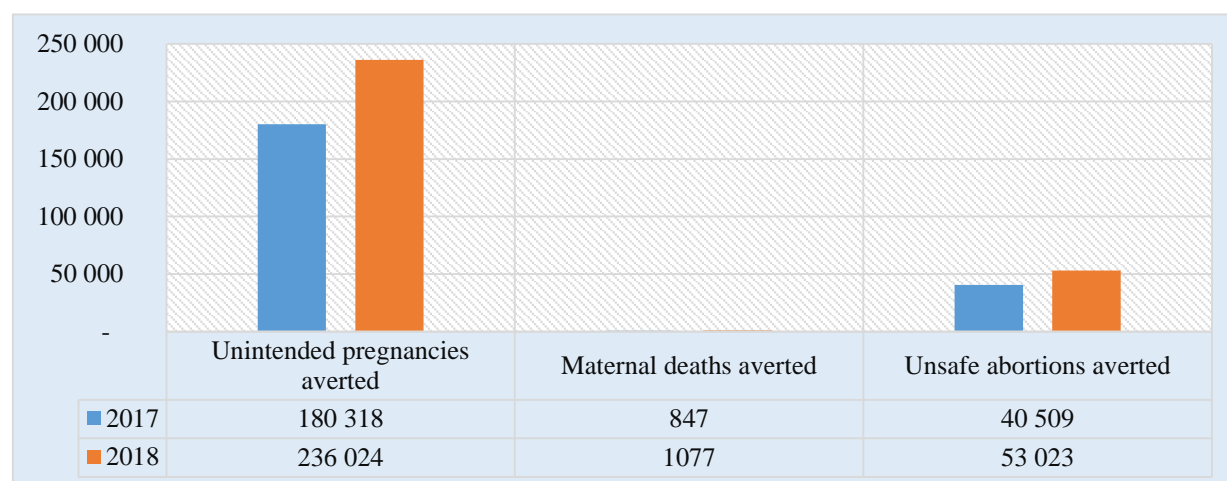


Figure 45 : Comparison of use of modern method impact indicators between 2017 and 2018

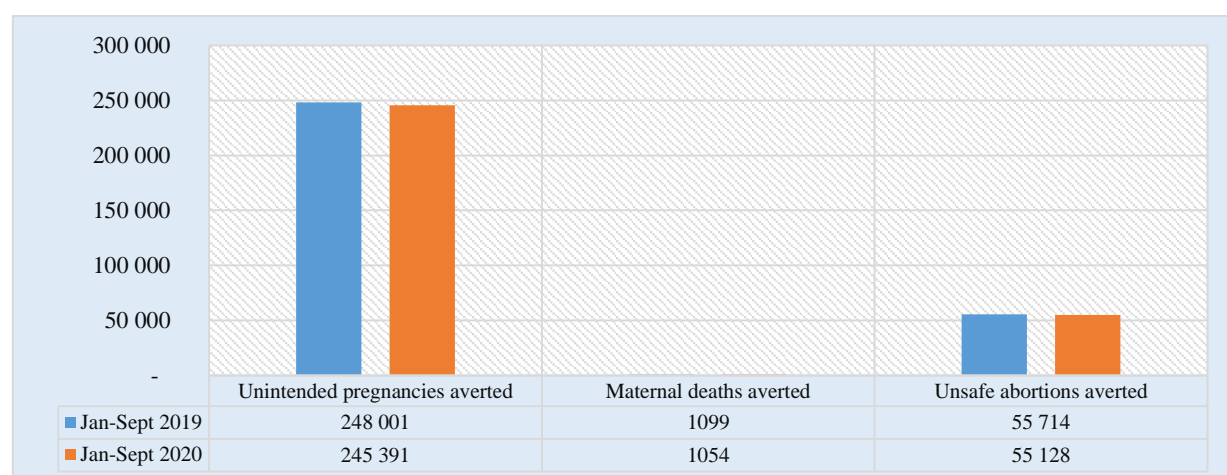


Figure 46: Comparison of use of modern method impact indicators between 2019 and 2020

¹ The number of unwanted pregnancies averted is the number of unwanted pregnancies averted during a specified baseline period as a result of the protection provided by the use of modern contraceptives during the baseline period

² The number of maternal deaths averted is the number of maternal deaths averted during a specified baseline period due to the protection provided by modern contraceptive use during the baseline period

³ Number of unsafe abortions avoided through the use of modern contraceptives is the number of unsafe abortions avoided during a specified baseline period due to the protection provided by the use of modern contraceptives during the baseline period

6.5. Trend of the « couple index protection indicator

By definition, the protection year couple represents the estimated protection provided by family planning services during a one-year period, based on the amount of contraceptives sold or distributed free to clients during that period. The Couple-Year Protection Index is equal to 12 couples-months of protection (CMP), which is interpreted as a couple who have used contraception for 12 months.

The Couple-Year Protection Index increased by 3.0% between 2017 and 2018, from 777,573 to 800,590. They decreased by 22.6% between 2019 and 2020 from 652,709 to 505,304 for the period January to September.

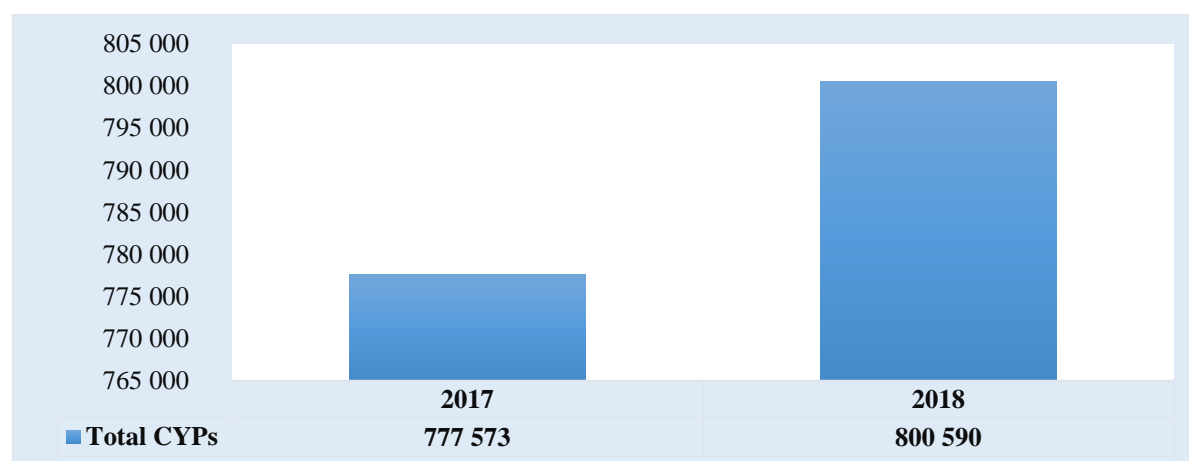


Figure 47: Comparison of Couples-Years Protection index between the years 2017 and 2018

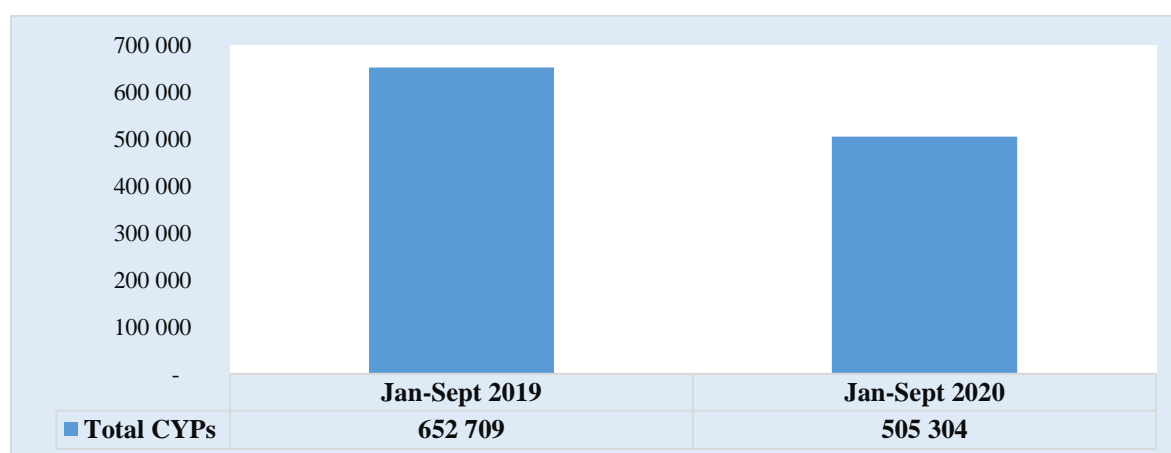


Figure 48: Comparison of couples-year protection index indicator between the nine months of the years 2019 and 2020

6.6. Effect of COVID-19 on Quality Assurance to the Last Mile

To achieve the MSPLS family planning objectives, one of the strategies is to improve the contraceptive supply and management chain. The PNSR is responsible for monitoring the management of the contraceptive supply chain down to the last mile, quantifying contraceptive needs, and mobilizing resources for the purchase of contraceptive products. It also organizes a quarterly update of the contraceptive supply plan. The latter is in line with the plan approved by the UNFPA Regional Office.

Implementing partners have submitted the supply chain mapping and submitted the reports as planned.

The UNFPA Country Office compiled and conducted risk assessments based on supply chain maps, program reports and other relevant sources of information. The risk was significant due to, among other things, the increased risk of corruption and the level of stock-outs.

He submitted the risk assessment reports to the finance branch. However, it should be noted that :

- (i) Spot checks and audits based on risk assessments are planned for 2021 ;
- (ii) post-marketing surveillance for selected products, evaluation of acquisition, distribution and stock movement for the first 3 quarters of 2020 is planned in 2021.

The MSPLS, UNFPA and CSM (Condom Social Marketing) did not make quarterly stock adjustments in Q1-3 and there was no need to make any adjustments. The CSM did not identify any problems (low, overstocking, shortages) regarding contraceptive stocks.

VII. DISCUSSION

The objective of this evaluation was to identify significant changes in the use of family planning services and to describe trends indicators of the impact of using modern contraceptive methods before and during the COVID-19 pandemic. In addition, it was intended to analyze the effects of COVID-19 on the supply chain down to the last mile assurance.

The family planning utilization data were extracted from DHIS-2 software for the period 2017 to 2020. They included new acceptors disaggregated by age, facility status, and facility location, old acceptors disaggregated by facility status and facility location, FP method quantities administered, IUDs and implants removed, vasectomies and tubal ligations performed. For the 2020 data, the period covered was from January to September. Quantities of FP methods administered by community actors were not considered.

The data concerning the state of stocks were used from the DHIS-2 software for the health facilities and from the eLMIS software for the national level. Data from partners such as PSI and Red Cross were not taken into account because they are not reported in the National Health Information System, the sources consulted did not cover all the periods concerned by the evaluation.

Although there were workshops with data managers at the district level to complete and correct the data, the quality of the National Health Information System data remains questionable and controversial because of the irregularities observed in the validation procedures for the data found in DHIS-2.

7.1. Notable changes in the use of contraceptive methods

7.1.1. New users

In general, the trend of contraceptive method **new users** has been increasing gradually for the years 2017 to 2019 (*Table 3 and Figure 1*). For the nine-month period between 2019 and 2020, the comparison of new acceptors shows that almost all contraceptive methods showed a decrease ranging from 8.8% for male condoms to 74.8% for female condoms. Only injectables showed an increase of 8.8% (*Table 3 and Figure 2*).

Analysis of the change of new users by **age group** at the national level for the years 2017, 2018 and 2019 shows disparities in trends between age groups and by contraceptive method, the trend is irregular but shows an overall positive trend (*Figures 10 and 11*). Analysis of the change of new users by age group at the national level for the 9 months (January to September) of the years 2019 and 2020 shows that for all age groups and for all methods, there has been a decrease, except for the "25 years old and over" age group for oral pills, injectables, and cycle beads (*Figures 12 and 13*).

The results showed that, compared to the **status of the health facilities**, new users changed irregularly between 2017 and 2018, but between 2018 and 2019 there were few contraceptive methods that showed a decrease compared to the previous period (*Table 6 and Figures 14 and 15*). However, for the nine-month period between 2019 and 2020, the decreasing trend was noticeable for all FP methods for *public-status health facilities* (*Table 7 and Figures 16-17*).

Compared to the **location of the health facilities**, an irregular trend was observed for the years 2017, 2018 and 2019 (*Table 7 and Graph 18*). For the years 2019 and 2020, *rural health facilities* experienced a decrease in all FP methods ranging from 6.3% (male condoms) to 71.6% (cycle necklaces), while those in *urban areas* did not see a decrease in the use of pills, injectables and IUDs (*Table 7 and Figure 19*).

7.1.2. Revisits

The results of the analysis of FP service utilization by *revisits* showed almost the same trends as those of *new users*. Disaggregation was done for the status and location of the health facilities. No analysis was done with respect to the age group because *revisits* are not disaggregated by age in DHIS2.

Between 2017 and 2018, there was a decrease in *revisits* for implants (18.2%), IUDs (6.4%) and cycle beads (56.6%). Between 2018 and 2019, implants, IUDs, female and male condoms decreased by 4.9%; 12.2%; 67.9% and 45.9% respectively (*Table 9*). Comparative analysis of the number of *revisits* of contraceptive methods in the first three quarters of the years 2019 and 2020 shows a decrease ranging from 0.3% for injectables to 89.0% for cycle beads (*Table 9 and Figures 20-25*).

The results also showed that, compared to the **status of the health facilities**, *revisits* experienced a greater decrease between 2017 and 2018, particularly for *private-status health facilities*. The comparison between 2018 and 2019 revealed few methods that experienced a decrease in *revisits* (*Table 12 and Figures 26-27*). However, for the nine-month period between 2019 and 2020, the downward trend was noted for almost all FP methods in *public health facilities*, except for female condoms (*Table 13 and Figures 28-29*).

Compared to the **location of the health facilities**, the irregular trend in the variation of *revisits* was observed for the years 2017, 2018 and 2019 (*Table 14 and Figure 30*). For the nine-month period of the years 2019 and 2020, the health facilities located in *rural areas* had experienced a decrease for almost all FP methods, except for male condoms. On the other hand, *urban health facilities* in injectable pills and male condoms recorded an increase (*Table 14 and Figure 31*).

7.1.3. Contraceptive methods administered

Between the years 2017 and 2018, there was an increase of quantities administered for almost all contraceptive methods, except for IUDs (60%) and postinor (6.4%). Between the years 2018 and 2019, injectables, IUDs and postinor experienced a decrease of 0.6%; 4.2% and 15.5% respectively. Between the first nine months (January to September) of 2019 and 2020, the quantities of contraceptive methods distributed decreased, except for injectables and postinor, which increased by 0.5% and 16.8%.

7.1.4. Removal of implants and IUDs

The same phenomenon of a downward trend was observed for IUDs and implants removed. Although the number of IUD and implant removals was found to have increased between 2017 and 2018 on the one hand and between 2018 and 2019 on the other, analysis of data from the January to September period of 2019 compared to the same period of 2020, revealed that the number of IUDs and implants removed decreased by 16.6% and 8.4% respectively.

It would be interesting to explore the factors underlying the decrease in the number of IUDs and implants removed to take appropriate action.

7.2. Status of family planning method stocks

Since the *health districts* do not have transit stocks, it was deemed more logical to focus the analysis on the stock situation at the *health facility* level. Concerning the national level, only data from the PNSR were taken into account in the analyses because data from partners were not available for the entire period.

At the *health facility level*, IUDs, condoms and emergency contraceptives (postinor) were in stock for more than 4 months, for all quarters from 2017 to 2019 (*see Table 18*). For the year 2020, there was a global minimum stock in health facilities for almost all contraceptive methods, particularly for the first and second quarters (*see Table 19*).

At the *national level*, most contraceptive methods were in overstocking in 2017; the state of stocks varied for the years 2018 and 2019, but there was a threat of a shortage in the second and third quarters of 2019 for almost all contraceptive methods (*see Table 20*). The stock situation for most contraceptive methods was in danger of being disrupted, particularly in the third quarter of 2019 and 2020 (*see Table 21*).

7.3. Indicators of the impact of the use of modern contraceptive methods

An analysis of the evolution of the three indicators (*Unintended pregnancies averted, Maternal deaths averted, Unsafe abortions averted*) between the years 2017 and 2018 showed that there had been an increase. Nevertheless, a comparison of the nine-month trends for the years 2019 and 2020 showed that all three indicators decreased. Indeed, *unintended pregnancies averted, maternal deaths averted and unsafe abortions averted* decreased by 1.1%, 1.1% and 4.0% respectively. These results could be explained by the decrease of acceptors of modern contraceptive methods.

7.4. Effect of COVID-19 on the last mile assurance

The supply chain risk assessment conducted by the UNFPA Country Office showed that the risk was significant due in part to the country's score on corruption and the level of stock-outs.

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VIII.CONCLUSION

In general, the results of this evaluation showed that new users and revisits of contraceptive methods, voluntary surgical contraception, IUD and implant removal, impact indicators of modern contraceptive use gradually changed from 2017 to 2019.

For the period from January to September 2020 compared to the same period in 2019, the results of this rapid assessment showed that there was a decrease in (i) new users and revisits (*except for injectables*), (ii) the quantities of contraceptive methods administered (*except injectables and postinor methods*) and (iii) impact indicators of modern contraceptive use.

Concerning the state of stocks of contraceptive products at the health facility level, the results show that most FP methods had reached the alert threshold, particularly in the 1st and 2nd quarters of 2020, whereas at the national level, most contraceptive methods were in danger of being discontinued, particularly in the 3rd quarters of 2019 and 2020.

These results lead to the conclusion that during the period of the COVID-19 pandemic, there was a decrease in the use of family planning services. Since Burundi did not experience interventions such as "containment" as adopted by some countries in the context of the COVID-19 pandemic, additional research using qualitative approaches is urgently needed to understand the reasons for the decrease in the use of family planning services and indicators of the impact of the use of modern contraceptive methods.

IX. RECOMMENDATIONS

In light of these findings, the following recommendations are proposed:

To the Ministry of Public Health and the Fight against AIDS

- *Strengthen the capacity of health facilities with regard to the provision of health services in general and FP services in particular, in the context of health emergencies such as the case of the COVID-19 pandemic ;*

There is growing recognition of the significant negative impact of vertical responses to COVID-19 on the supply and utilization of health services. Resource mobilization focuses on response interventions, which contributes to crowding out other health priorities if integrative approaches are not adopted.

- *Strengthen Behavior Change Communication (BCC) strategies for the population on health service utilization and family planning;*

In the context of epidemics, populations are likely to avoid using health services for fear of becoming infected with COVID-19. BCC strategies would help maintain and boost the use of health services by the population, even in epidemic situations.

The involvement of high authorities and the media in awareness campaigns could help improve the use of family planning services even in epidemic situations.

- *Strengthen community interventions related to family planning ;*

The involvement of community health workers has an advantage because they are the first point of contact with the population. Thus, it is important to provide them with the resources and skills needed to monitor adherence and administer contraceptive methods in the community.

With regard to the National Reproductive Health Program

- *Conduct action research to explore the root causes of the decline in FP service utilization and the challenges faced by providers in providing FP services in the context of the COVID-19 pandemic.*

To the Management of the National Health Information System for Reproduction

- *Integrate data on condom distribution by partners such as PSI and Burundi Red Cross into the DHIS-2;*
- *Disaggregate data from former acceptors by age in DHIS 2.*

With respect to the United Nations Population Fund

- *Strengthen technical and financial support to ensure the continuity of family planning services in the context of epidemics such as the COVID-19 case.*

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APPENDICES

Appendix 1 : Terms of Reference for the Evaluation

TERMS OF REFERENCE FOR THE RAPID ASSESSMENT OF THE IMPACT OF COVID-19 ON THE SUPPLY AND DEMAND FOR FAMILY PLANNING SERVICES

I. Background

The COVID-19 pandemic has caused enormous disruption to health systems worldwide, disrupting access to family planning information and services, as well as sexual and reproductive health in general. Despite this disruption, the need for family planning has remained the same. In addition, the COVID-19 pandemic disrupted both the supply of and demand for family planning service delivery, including critical last-mile quality assurance activities (for end users), and the impact of this disruption prompted the regional office to undertake this evaluation. The disruption and its effect on family planning services (program outputs and outcomes), as well as the program's ability to monitor delivery effectiveness and contraceptive quality, should also be documented. UNFPA country offices, with support from the regional office, will conduct rapid assessments for this purpose in the seven selected countries.

Restrictions on COVID-19 varied from country to country. Some countries have implemented total locks, while others have varying degrees of movement restrictions. All of this, coupled with the fear of contracting the disease in confined spaces, may also have contributed to reduced service utilization.

The evaluation of the effect of COVID-19 will examine FP2020 core indicators that are regularly monitored and for which data are readily available. The selected countries are all part of FP2020 and generally have robust DHIS 2 and HMIS systems. Data limitations present significant challenges for regular monitoring of key indicators. To produce reliable annual estimates despite a lack of data sources, FP 2020 uses the Family Planning Estimation Tool (FPET). The countries selected in this assessment have strong teams that collect and analyze data monthly. In general, all of the countries selected for the assessment have made good and steady progress toward the FP2020 targets/indicators.

In general, the quality of HMIS data in the selected countries remains satisfactory, i.e., above the national targets (above 80%). However, this does not mean that there are no challenges. For example, in some health facilities in Kenya, Malawi, Burundi, and South Sudan, the completeness and timeliness of data reporting were below national targets, while Zambia and Uganda are countries with strong HMIS.

The assessment will be conducted independently in each of the seven countries, using common data collection and analysis tools. Each country will hire a suitably qualified consultant to conduct the assessment and analysis. The results of the assessment will inform future programming and will be disseminated to all stakeholders in the country.

It is in this context that UNFPA is seeking to support selected countries in the region, including Burundi, to conduct an independent national rapid assessment of the impact of COVID-19 on family planning service delivery, including last mile insurance (LMA).

A national consultant to be recruited by the UNFPA Burundi Office will provide technical support to the National Reproductive Health Program to produce a quality report.

II. objectives

The 3 main objectives are to:

2.1. Assess changes in the uptake of family planning and related services before and during the VIDOC-19 pandemic in 2020.

The following elements of FP service utilization will be assessed (using DHIS 2, HMIS):

- a) Trends in family planning utilization at all levels of service delivery points, nationally by month and quarter from Q1 to Q4 of 2017, 2018, 2019 ;
- b) Comparative analysis of FP service utilization at all levels of service delivery points, nationally, by month and quarter for quarters 1-3 of 2019-2020 ;
- c) Contraceptive stock status (eLMIS) at national and district levels, by quarter for Q1 to Q4 of 2017, 2018, 2019 and compare stock status for Q1 to Q3 2019 and same quarters for 2020 ;
- d) Trends in Couple Year Protection (CYP) for 3 years (2017-2019) and compare CYP (Couple Year Protection) Q1-Q3 of 2019 and same quarters for 2020.

2.2. Analyzing reproductive health outcomes (using the MSI Impact II tool)

- a) Trends in unintended pregnancies avoided over 3 years (2017-2019) and compare unintended pregnancies avoided Q1-Q3 of 2019 and same quarters for 2020 ;
- b) Trends in unsafe abortions avoided for 3 years (2017-2019) and compare unsafe abortions avoided Q1-Q3 of 2019 and the same quarters for 2020;
- c) Trends in maternal deaths avoided for 3 years (2017-2019) and compare maternal deaths avoided Q1-Q3 of 2019 and the same quarters for 2020.

2.3. Monitor the effect of COVID-19 on last mile insurance, using the data collection checklist provided to assess:

- a) Submission of Supply Chain Maps by Implementing Partners (IPs)
- b) Submission of reports on PI supplies with products worth
- c) 100,000 or more.
- d) Submission by Country Bureaus of SCM IP Risk Assessments via Procurement
- e) Chain (CS) maps, program supply reports, and other relevant sources of information.
- f) Country offices conduct spot checks and audits based on risk assessments
- g) Country offices conducting post-market surveillance

III. Expected outcome

At the conclusion of this evaluation, the following deliverables are expected:

- The database in Excel and SPSS including the evaluation data
- The report on the impact of COVID 19 on FP is available in electronic format

IV. Methodology

The study is a quasi-experimental pre-post evaluation of changes in FP service utilization and health outcomes related to the emergence of COVID-19. A trend analysis will be conducted to assess monthly and quarterly changes in utilization of selected services and reproductive health outcome indicators before and after the emergence of COVID-19. The January-March 2020 quarter will be treated as the cut-off point for the emergence of COVID-19. In order to improve the understanding of the potential effects of COVID-19, data on the selected indicators will be analyzed for the years 2017 to 2020.

Service utilization data will be obtained from DHIS 2, HMIS and eLMIS. Reproductive health outcome measures will be calculated using the Avenir Health Track20 tools, the Marie Stopes Impact 2 tool, and the Marie Stopes Impact 3 tool.

The quality assurance component of the last mile will be a performance evaluation comparing actual activities that took place in the first, second and third quarters of 2020 with what was planned for the same period.

There will be NO comparison with 2019 as the AML started in 2020. Precautions will be taken to ensure that other causes of delay are specifically identified and that not everything is attributed to COVID-19.

V. Data analysis

Data collection will be done using a standardized checklist. The data collected will be analyzed using standard data analysis tools - the Avenir Health tool used for the effect of COVID-19 on family planning, the Marie Stopes Impact 2 tool and the DHIS and HMIS data analysis tools. The tools were discussed and agreed upon with the country offices.

Analysis of changes in service utilization and associated reproductive health outcomes before and during the COVID-19 epidemic should be disaggregated by age, sex, wealth quintile, rural and urban areas, as provided in the data analysis tools.

VI. Timeline

All steps in the evaluation process up to the production of a final evaluation report will not exceed 25 days (November 30, 2020)

- ✓ Discussions with the PNSR and UNFPA team on the evaluation of the impact of COVID19 on FP in Burundi

- ✓ Recruitment of the national consultant: October 26-29, 2020
- ✓ Meeting to analyze the completeness of available data: 4/11/2020
- ✓ Briefing on the rapid assessment of the impact of COVID-19 on FP: 6/11/2020
- ✓ SIS RO meeting for data collection: 11-13/11/2020
- ✓ Mid-term workshop to validate interim results: 11/18/2020
- ✓ Detailed comparative analysis of FP uptake and service delivery, maternal health outcomes between Q1-3 of 2019 and Q1-3 of 2020, by age group, rural/urban housing, and wealth quintile, and if possible, new (additional) and revisited, and analysis of implementation of the planned last mile insurance (LMA) process - 24 November 2020
- ✓ Draft report writing - November 30, 2020
- ✓ Final report and summative meeting - December 7, 2020

Appendix 2 : New users of contraceptive methods at the national level, by month, for years 2017, 2018, 2019 and 2020

Contraceptive methods	New users : 2017												Total	Mean	SD
	January	February	March	April	May	June	July	August	September	October	November	December			
Oral pills	4086	3644	4592	4544	4431	4127	4668	4476	4287	4733	4178	4147	51913	4326,1	309,3
Injectables	16620	14949	19941	19104	18275	20225	19389	19347	19872	17749	17391	18203	221065	18422,1	1561,2
Implants	6852	6238	7691	8246	8628	8833	8612	8609	7923	8051	8383	8088	96154	8012,8	773,0
IUD	1407	1163	1272	1335	1470	1651	1482	1372	1531	1607	1777	1457	17524	1460,3	168,9
Female condoms	101	58	176	141	104	245	209	251	181	105	90	227	1888	157,3	66,3
Male condoms	3606	1939	2841	3058	2634	3326	2691	6947	6649	3077	4039	3691	44498	3708,2	1546,1
Cycle beads	1016	552	521	680	776	1156	1034	827	394	682	666	663	8967	747,3	226,7

Contraceptive methods	New users : 2018												Total	Mean	SD
	January	February	March	April	May	June	July	August	September	October	November	December			
Oral pills	4561	3677	4402	4636	4551	4598	5217	4789	4209	4780	4385	4040	53845	4487,1	393,7
Injectables	19152	17297	21230	20253	20601	20644	22431	21051	19846	21120	20734	20848	245207	20433,9	1267,4
Implants	8097	6980	8095	8021	8437	8034	8591	8557	9068	9347	9696	8866	101789	8482,4	719,8
IUD	1532	1581	1516	1282	1370	1500	1520	1643	1618	1503	1761	1441	18267	1522,3	125,3
Female condoms	99	264	298	106	232	142	116	91	174	93	274	114	2003	166,9	78,6
Male condoms	2915	2674	3455	4018	2790	3064	3412	4573	2743	4158	6140	2441	42383	3531,9	1054,6
Cycle beads	1266	798	539	751	530	572	775	799	627	727	572	654	8610	717,5	200,0

Contraceptive methods	New users : 2019												Total	All year		Nine months	
	January	February	March	April	May	June	July	August	September	October	November	December		Mean	SD	Mean	SD
Oral pills	5014	4363	4826	5378	5236	4554	5381	5135	4213	5030	4493	4231	57854	4821,2	435,1	4900,0	436,8
Injectables	22982	20075	23780	24809	24097	22307	25870	23766	21518	22204	21531	22988	275927	22993,9	1593,5	23244,9	1753,6
Implants	9548	9025	9921	10060	10542	9981	9121	7652	7459	8292	8252	8386	108239	9019,9	1011,4	9256,6	1073,9
IUD	1489	1528	1631	1531	1698	1645	1662	1238	1269	3781	1290	1256	20018	1668,2	687,2	1521,2	167,1
Female condoms	140	54	221	95	64	68	70	66	1461	117	115	58	2529	210,8	396,6	248,8	457,7
Male condoms	3444	2605	3369	3410	4529	2381	3554	3480	5394	4921	4632	3715	45434	3786,2	909,3	3574,0	913,9
Cycle beads	1348	1168	1110	1162	1310	1071	1643	1337	1129	1418	1351	1471	15518	1293,2	170,8	1253,1	178,8

Contraceptive methods	New users : 2020									Total	Nine months	
	January	February	March	April	May	June	July	August	September		Mean	SD
Oral pills	4767	3995	4688	4547	3904	4268	4482	4148	3853	38652	4294,7	342,1
Injectables	25947	22257	26527	27616	24769	25717	26486	23905	24388	227612	25290,2	1627,4
Implants	7715	5886	7060	7206	6756	7251	7843	6644	6879	63240	7026,7	588,0
IUD	1260	807	1160	997	872	988	968	805	768	8625	958,3	167,4
Female condoms	46	51	74	45	56	60	74	116	43	565	62,8	23,1
Male condoms	3269	2553	2914	3169	2913	2606	5037	4176	2706	29343	3260,3	827,6
Cycle beads	504	428	447	404	454	482	537	412	218	3886	431,8	91,1

Appendix 3 : Revisits of contraceptive methods at the national level, by month, for years 2017, 2018, 2019 and 2020

Contraceptive methods	Revisits : 2017												Total	Mean	SD
	January	February	March	April	May	June	July	August	September	October	November	December			
Oral pills	6382	5606	6380	6403	6417	5900	6389	6520	4987	5928	6660	6149	73721	6143,4	473
Injectables	42171	43098	45369	41017	43395	46907	47352	46369	42404	47034	47915	50286	543317	45276,4	2823
Implants	1325	980	1134	1087	1169	1443	1205	1078	1255	1022	1116	1116	13930	1160,8	130
IUD	246	274	255	285	218	278	287	322	252	227	366	328	3338	278,2	43
Female condoms	10	10	16	17	19	7	17	11	76	29	23	33	268	22,3	19
Male condoms	1145	1278	1167	1048	4550	939	1075	4202	3553	1017	978	958	21910	1825,8	1392
Cycle beads	789	925	210	524	509	650	688	737	348	370	801	465	7016	584,7	215

Contraceptive methods	Revisits : 2018												Total	Mean	SD
	January	February	March	April	May	June	July	August	September	October	November	December			
Oral pills	7042	6066	6236	6297	7027	6327	7502	7166	6269	7835	7418	6537	81722	6810,2	593
Injectables	50188	45356	50537	49751	51383	48983	52766	53954	51100	58582	55159	55262	623021	51918,4	3480
Implants	1028	872	1261	801	1067	883	1019	929	865	898	1012	761	11396	949,7	136
IUD	287	313	246	217	272	200	384	212	199	227	355	214	3126	260,5	62
Female condoms	19	51	22	18	31	28	26	28	171	31	196	20	641	53,4	62
Male condoms	1269	1077	863	954	945	1051	1274	1302	945	1047	11107	926	22760	1896,7	2904
Cycle beads	379	647	135	420	277	298	285	176	126	135	125	41	3044	253,7	169

Contraceptive methods	Revisits : 2019												Total	All year		Nine months	
	January	February	March	April	May	June	July	August	September	October	November	December		Mean	SD	Mean	SD
Oral pills	7310	6070	7091	7436	6959	6818	7893	6800	6503	7296	6806	6223	83205	6933,8	518	6986,7	533,5
Injectables	54858	49882	54304	56897	55752	55486	59649	55049	54894	56895	54275	57049	664990	55415,8	2315	55196,8	2558,7
Implants	677	866	812	1324	901	1031	855	985	804	768	918	892	10833	902,8	163	917,2	184,2
IUD	213	299	199	210	225	205	207	225	208	251	216	288	2746	228,8	33	221,2	30,4
Female condoms	27	20	32	15	20	14	12	20	9	10	19	8	206	17,2	7	18,8	7,3
Male condoms	1456	837	801	901	1426	1034	1079	923	733	1090	1314	712	12306	1025,5	258	1021,1	261,2
Cycle beads	346	295	200	913	617	976	2008	1795	755	1603	941	1887	12336	1028,0	645	878,3	641,7

Contraceptive methods	Revisits : 2020									Total	Mean	SD
	January	February	March	April	May	June	July	August	September			
Oral pills	7908	5783	6254	6439	6346	6455	6906	6278	6027	58396	6488,4	615
Injectables	57117	49405	55091	55383	52414	56328	59194	54722	55566	495220	55024,4	2792
Implants	910	648	752	722	743	763	861	693	742	6834	759,3	81
IUD	201	196	174	171	178	145	157	187	163	1572	174,7	18
Female condoms	15	8	19	37	21	13	24	5	11	153	17,0	10
Male condoms	1056	760	916	962	831	1072	914	998	700	8209	912,1	128
Cycle beads	117	87	132	57	97	55	105	85	137	872	96,9	29

Appendix 4 : Quantities of contraceptive methods administered at the national level, by month, for years 2017, 2018, 2019 and 2020

Quantités distribuées	2017												Total	Mean	SD
	January	February	March	April	May	June	July	August	September	October	November	December			
Oral pills	40942	28061	34276	30023	33413	27715	32480	34193	28511	30425	30964	28743	379746	31646	3751
Injectables	58720	49605	59433	55502	56793	60971	62467	59150	57542	60633	60376	62803	703995	58666	3585
Implants	11959	6477	7972	8515	9306	9925	8718	9001	8252	8318	9014	8546	106003	8834	1291
IUD	1703	1538	1837	1658	2280	2100	1888	1573	1796	1869	2093	1926	22261	1855	224
Male condoms	115158	106320	132162	131340	96562	172014	155330	126114	123095	177360	100792	129892	1566139	130512	26056
Female condoms	3230	1362	3541	1687	2160	2774	2989	2878	2602	1917	2114	3124	30378	2532	676
Postinor	1683	1554	1705	3314	2893	2048	2439	2392	2034	2186	1942	1813	26003	2167	522

Quantités distribuées	2018												Total	Mean	SD
	January	February	March	April	May	June	July	August	September	October	November	December			
Oral pills	34740	27388	31211	32551	32951	30978	41081	33321	30180	36223	30942	29446	391012	32584	3575
Injectables	64837	56996	67083	68104	67307	65148	72338	68272	65226	73022	68997	68706	806036	67170	4108
Implants	8784	7738	8379	9161	9245	8402	9363	9334	9506	9716	9785	9363	108776	9065	616
IUD	1860	1817	1817	1482	1634	1693	1868	1734	1775	1721	1800	1720	20921	1743	108
Male condoms	122515	112866	119567	124072	144502	124597	154829	211713	221805	243597	293318	240312	2113693	176141	62270
Female condoms	2291	1584	1567	1306	1873	2076	2747	3574	2718	2242	6469	2081	30528	2544	1381
Postinor	2167	1890	2073	2204	2007	1591	2370	2140	1811	2151	1895	2035	24334	2028	207

Quantités distribuées	2019												Total	All year		Nine months	
	January	February	March	April	May	June	July	August	September	October	November	December		Mean	SD	Mean	SD
Oral pills	36286	29261	31247	37904	37738	31487	38404	34115	36727	34548	32806	31537	412060	34338	3076	34797	3390
Injectables	74011	65120	72967	75854	72746	67050	69276	61531	58361	63429	56888	63727	800960	66747	6284	68546	5999
Implants	9937	9396	10205	10731	11158	10044	9760	7993	7929	8610	10435	8906	115104	9592	1044	9684	1105
IUD	1647	1689	1852	1787	1926	2011	1898	1449	1453	1397	1408	1524	20041	1670	222	1746	202
Male condoms	254336	203572	311297	395622	375644	449543	434833	453854	430954	470112	513983	177678	4471428	372619	110432	367739	91133
Female condoms	2613	2439	2634	2659	2611	2557	2927	3606	2970	2505	3213	3485	34219	2852	393	2780	353
Postinor	2320	1980	2162	888	906	890	1948	1763	1776	2102	1709	2111	20555	1713	524	1626	575

Quantités distribuées	2020									Total	Mean	SD
	January	February	March	April	May	June	July	August	September			
Oral pills	34853	29081	30198	31670	29677	30199	33440	30147	28861	278126	30903	2036,7
Injectables	83883	57403	67845	76505	61752	72241	76031	60301	64233	620194	68910	8834,9
Implants	8553	6401	7507	7662	7096	7811	8177	6993	7116	67316	7480	657,8
IUD	1581	1082	1112	1085	990	1148	1085	967	957	10007	1112	188,3
Male condoms	211891	404712	246883	529626	184243	415932	362227	182417	258985	2796916	310768	122195,4
Female condoms	1480	1674	1156	1239	1523	1694	1313	1380	1191	12650	1406	200,0
Postinor	2159	1609	1774	2353	2059	2093	2670	1753	626	17096	1900	578,0

Annexe 5 : Inventory of family planning methods

▪ At the level of health facilities

Contraceptive methods	Counting unit	2017				2018				2019				2020		
		End Term 1	End Term 2	End Term 3	End Term 4	End Term 1	End Term 2	End Term 3	End Term 4	End Term 1	End Term 2	End Term 3	End Term 4	End Term 1	End Term 2	End Term 3
Oral pills	Cycles	117854	95502	107769	114614	113448	105929	99679	91236	109882	103006	114581	169959	172108	157975	128824
Injectables	Bottles	126215	134439	148412	150698	159522	130769	131534	143798	153029	148275	130542	133666	95484	136916	139093
Implants	Items	29368	29202	28997	31095	31284	26880	26253	24325	30991	27225	29929	8552	7662	8326	6658
IUD	Items	15199	12938	12000	12055	11806	13878	10364	11187	11808	10828	10878	1581	1085	1085	1167
Male condoms	Items	586024	781066	744487	661415	608217	511941	474199	374264	954045	485940	536464	211963	529626	363523	532447
Female condoms	Items	24042	32041	25989	51653	27566	28182	33097	37815	40184	45912	46067	1480	1239	1313	1414
Postinor	Doses	16273	15667	11828	11803	12090	14287	9373	10537	4517	8352	11350	2159	2353	2670	984

▪ At the national level

Contraceptive methods	Unité de comptage	2017				2018				2019				2020		
		End Term 1	End Term 2	End Term 3	End Term 4	End Term 1	End Term 2	End Term 3	End Term 4	End Term 1	End Term 2	End Term 3	End Term 4	End Term 1	End Term 2	End Term 3
Oral pills	Cycles	611090	509389	401674	291996	224289	247390	163029	492206	340896	340896	200795	268438	179173	207027	303567
Injectables	Bottles	145282	140455	137258	93678	90769	76204	73574	69044	104648	3814	3436	44233	37400	32750	29900
Implants	Items	2266019	2062113	1895913	1352753	1190659	994326	480588	314184	490925	32024	33340	398715	223075	93275	0
IUD	Items	247127	222322	202676	131463	113945	91124	70707	53531	16755	4896	3481	65807	46470	163800	146100
Male condoms	Items	16766532	18433462	16493621	12558015	12085029	11563230	10165411	9391630	12166058	1728395	2770803	8000377	4282272	4611024	2493148
Female condoms	Items	80093	73536	41833	34686	22464	17966	6044	0	221956	146689	138382	154898	18	0	0
Postinor	Doses	26648	15973	11416	42834	31910	23134	14736	8724	7588	2672	5161	19799	9980	3100	0