Abidjan Youth Respondent-Driven Sampling Survey (Abidjan YRDSS): Final Report







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List of Abbreviations

AIBEF	Association Ivoirienne pour le Bien-Etre Familial
CNESVS	Comité national d'éthique des sciences de la vie et de la santé
CSE	Comprehensive sexual education
DHS	Demographic & Health Survey
EC	Emergency contraception
GBV	Gender-based violence
IPPF	International Planned Parenthood Federation
IQR	Interquartile range
IUD	Intrauterine device
LARC	Long-acting reversible contraception
MAJ	Mouvement d'Action des Jeunes
PMA2020	Performance Monitoring & Accountability 2020
RDS	Respondent-driven sampling
SRH	Sexual and reproductive health
STI	Sexually transmitted infection

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Background

Côte d'Ivoire, like many countries in sub-Saharan Africa, has a burgeoning youth population, with over half of youth living in an urban area (UNFPA, 2018). Urban adolescents and youth have thus become a target group for reproductive health research and services given the population's growing size, limited data on their reproductive health behaviors, and low levels of contraceptive use. According to the 2011-12 Demographic & Health Survey (DHS), 15.5% of 15-19-yearold females and 23.3% of 20-24-year-old females report current use of any method of contraception and according to the 2017 Round 1 national survey in Côte d'Ivoire conducted by Performance Monitoring & Accountability 2020 (PMA2020), age of first sex among urban women occurred almost four years before age of first contraceptive use (PMA2020, 2017; Institut National de la Statistique (INS) and ICF International, 2012).

PMA Agile, a project within PMA2020, sought a means of measuring contraceptive awareness and use among adolescents and youth as they enter a period of probable sexual activity. Capturing this information from youth clients of health facilities, especially unmarried females, is challenging due to social and familial pressure to hide sexual activity and contraceptive use. In the recent PMA2020 household survey, 30% of all females in Abidjan aged 15-19 years and 35% aged 15-24 years report current use of contraception, primarily emergency contraception (EC) and male condoms (PMA2020, 2017). PMA Agile typically monitors contraception uptake via clinic-based surveys of providers and clients; however, in this age group, it is suspected that youth and adolescents may be procuring contraceptives via other means, making young contraceptors effectively "hidden" to clinic staff and compromising the accuracy of clinic-based survey measures. How young females and males procure their methods is not well known and it is assumed their sexual partners, relatives or other adults assist in procurement. In addition, data on the contraceptive behaviors of adolescent and youth males are not frequently captured in household surveys, leaving the behaviors of this segment of the population hidden, as well.

It is within this context that PMA Agile in collaboration with the Association Ivoirienne pour le Bien-Etre Familial (AIBEF) conducted a survey of youth aged 15-24 years in Abidjan using respondent-driven sampling (RDS) methodology.

This study aims to inform about awareness, use, and acquisition of contraception among female and male unmarried youth and adolescents, aged 15-24 years, and enable reach into a population and topic that may be otherwise hidden. The objectives of the study are as follows:

- 1. To estimate the percent of 15-24 unmarried females and males aware of different methods of contraception
- 2. To estimate the percent of 15-24 unmarried females and males using contraceptive methods
- 3. To understand the sources of and patterns of contraceptive methods among unmarried females and males 15 to 24

About PMA2020 & PMA Agile

The PMA2020 Project is implemented by the Bill & Melinda Gates Institute for Population and Reproductive Health at the Johns Hopkins Bloomberg School of Public Health. PMA2020 supports regular low-cost, rapid turnaround, nationally-representative surveys using mobile technology to gather, analyze and disseminate health information at both household and facility levels. PMA Agile is a separate but related three-year grant that has been developed to capitalize on PMA2020 to build a monitoring and evaluation platform for large-scale projects that will enable near-continuous tracking of family planning performance and progress toward their intended results. PMA Agile tracks change at the health system level through quarterly public and private health facility audits and periodically through the conduct of client exit interviews about contraceptive behaviors. PMA Agile is operational in seven countries in Africa and Asia, including Côte d'Ivoire, working through local university and research organizations with the aim of building local capacity.

About the Association Ivoirienne pour le Bien-Etre Familial (AIBEF)

AIBEF is the Ivoirian affiliate of the International Planned Parenthood Federation (IPPF), whose regional office for Africa is based in Nairobi, Kenya. AIBEF was created on September 11, 1979 by group of professionals from diverse backgrounds, including economists, demographers, state officials, and doctors, who were aware of and wanted to address the problems of maternal mortality and early pregnancy. As a pioneer in family planning and an essential partner in the field of sexual and reproductive health (SRH) in Côte d'Ivoire, AIBEF's mission is to provide quality SRH services, and to defend and promote gender and sexual rights for all, especially for disadvantaged populations and the most vulnerable groups. AIBEF opened its first clinic in 1986 within the Centre Hospitalier et Universitaire de Treichville and now has nine regional offices throughout Côte d'Ivoire, as well as two SRH training centers in Abidjan and Daloa, a youth center in Yopougon, Abidjan, and a youth network, Mouvement d'Action des Jeunes, with nine regional branches. In addition, as part of a collaborative agreement with the Ministère de la Santé et de la Lutte contre le Sida

(Ministry of Health and the Fight against AIDS), AIBEF manages 300 public and private health centers offering family planning services throughout the country. Beyond family planning, AIBEF clinics also offer obstetrical and gynecological care, including pre-natal, post-natal, delivery, and post-abortion care, cervical and breast cancer screening, pediatric care, general medicine, HIV services, STI treatment, and laboratory services. AIBEF also develops projects to address issues such as adolescent and youth pregnancy, gender-based violence, cervical cancer prevention, and comprehensive sexuality education. In addition, the organization conducts studies such as Knowledge, Attitude and Practice (KAP) of clandestine abortion in Côte d'Ivoire.

Methods

Design

From 10 August 2018 to 10 November 2018, PMA Agile and AIBEF conducted a study among unmarried adolescents and youth aged 15 to 24 years living in Abidjan, Côte d'Ivoire. The study utilized respondent-driven sampling (RDS), a chain-based recruitment method, given feasibility concerns for household- and clinic-based sampling for this study population. RDS is premised on the assumption that peers are better able to locate and recruit other members of a hidden population than health facility or research staff. Thus, RDS surveys have been widely used for hard-to-reach populations, including men who have sex with men, people who inject drugs, and homeless youth. While typically indicated for hidden populations, RDS is similarly valuable for hidden behaviors. In settings where sexual activity and contraceptive use among adolescents are intentionally hidden due to social and familial pressure, RDS can be a valuable means of recruiting adolescents for survey and intervention research on this hidden topic.

The study began with a formative research phase, which included a focus group discussion with seven members of AIBEF's youth group, Mouvement d'Action des Jeunes (MAJ), to explore RDS acceptability, sensitivity of survey question themes, and interest in the study among youth. We characterized youth network properties including subgroupings and the level of networking within and across subgroupings, identified necessary seed characteristics and potential seeds, and refined survey domains, consistent with formative RDS recommendations (Johnston LG M. M., 2008) (Johnston LG W. S.-L., 2010).

Sample

The target sample size of the study was 2000 participants.¹ Eligible seeds and participants were unmarried adolescents aged 15-24 years who have resided in Abidjan for at least one year. Seeds were purposefully selected to serve as the initial contacts for recruiting from the target population through the youth network of the MAJ. Seed characteristics included sex, age, commune in Abidjan, and level of schooling. Five seeds were launched on August 10 (2 males, 3 females), 2 seeds were launched on October 5 (2 females), and 1 seed was launched on October 15 (1 female). After selection and enrollment of initial seeds, recruitment of the target sample size was achieved through peer-to-peer coupon distribution.

Data Collection Tools

Participants completed an anonymous survey that focused on six main areas related to youth sexual and reproductive health: demographic information; fertility preferences; partnerships and sexual activity; contraceptive knowledge and current use; future intentions related to contraceptive use; and social influence. For questions related to current use of contraception, participants could report the method(s) that they or their partner, if they reported that they had a current partner, was/were currently using. Participants reported for themselves or on behalf of their partners. All responses were self-reported except participant age, which was verified by study staff using the participant's photo identification to ensure that the participant met the age eligibility requirement.

To maximize confidentiality and minimize bias, the survey was self-administered via a handheld tablet, which has been demonstrated to enhance accuracy in reporting on sensitive topics among many populations (Ghanem KG, 2005). Staff assistance and/or staff administration of the questionnaire was also available in cases of limited literacy or unfamiliarity with use of a tablet. If the participant opted to self-administer the questionnaire, a member of the study staff was always present in the room to answer questions.

Participants self-reported the size of their social network to account for potential bias due to differences in selection probability for participants with larger versus smaller networks as required for RDS implementation. To improve accuracy (Johnston LG M. M., 2008), network size questions were asked sequentially and structured to ensure reciprocity in social ties. The sequence was: how many youth between age 15 and 24 who are unmarried and live in Abidjan, 1) do you know personally (know their names), 2) do you know

¹The sample size was estimated using a baseline modern contraceptive prevalence rate of 35% among Abidjan unmarried females age 15 to 24 observed in the PMA2020 Côte d'ivoire round 1 survey (n=248). With a +/- 3 percent margin of error, a simple random sample would require 972 participants, to which we applied a deff of 2.0 to reach 1944. This was then rounded up to 2000 participants.

who also know you, 3) do you know who know you and whom you have seen or spoken to at least once in the past six months, with the final question serving as the participant's network size. This sequence of questions was always administered by an interviewer to allow for explanation and further probing given the specificity of the questions. The survey was developed in English, professionally translated into French, and piloted with native speakers to ensure comprehension. Discrepancies were resolved through an iterative process.

Implementation & Study Procedures

Participant enrollment and data collection took place in the offices of AIBEF's Treichville headquarters. A second site in Yopougon had been considered during the formative research phase but was determined to be unnecessary after the first few weeks of data collection, as participants were able to come to Treichville from all areas of the city and full study staff capacity was needed at the Treichville location.

When a seed or recruit presented for data collection, staff first verified coupon validity and assessed the participant's eligibility. Consent was conducted in a private space; parental consent for minors under age 18 was waived for this study, as it was considered low risk and parental involvement may have dissuaded participant enrollment or influenced participant responses.

Following informed consent, participants were oriented to the survey procedures. After survey completion, consistent with RDS methods (Magnani R, 2005), seeds and subsequent recruits were provided with up to three recruitment coupons each to recruit additional adolescents into the study until recruitment goals were reached. Each coupon had an expiration date, after which it could not be redeemed. Coupon expiration dates were used to control recruitment pace and to end recruitment when the sample size was achieved. Coupons were identifiable by sequential numbers which linked recruits to their recruiters, enabling creation of recruitment chains. Coupon data were input into electronic coupon manager forms (OpenDataKit software), which were uploaded and monitored daily for duplicate coupons and missing referral linkages. All coupons included a coupon number, barcode of the corresponding coupon number, and a referral number that linked the participant with their recruiter. Coupons also included a map and address of the study site, study hours, office phone number, and a description of study eligibility criteria.

After survey completion, participants received a primary compensation of 2500CFA (approximately US\$5) to compensate them for their time and participation and 2500CFA for transport reimbursement. Prior to their

departure from the study office, participants received a short explanation about coupon distribution from study staff and were informed that they could receive a secondary compensation of 1500CFA (approximately US\$3) per recruit if they successfully distributed coupons to eligible participants who came to the office and completed the study. Participants received a one-page recruitment script to take with them that outlined this information. All participants were also given a coupon stub that included their own coupon number and the coupon number(s) of their recruit(s) to show to study staff at their second visit in order to receive their secondary compensation. If participants returned for a second visit to claim their secondary compensation, they also received 2500CFA for transport reimbursement. Appropriate amounts for compensation were discussed with AIBEF staff and youth focus group members prior to study launch.

Procedures to ensure data quality included a staffmonitored data collection room and participant notification that they would not receive recruitment coupons if they appeared to complete the survey haphazardly. Rate of nonresponse by respondent was monitored throughout the data collection period.

To taper participant enrollment, coupon distribution was reduced to one outgoing coupon per participant on October 5 and ended on October 13 for recruitment chains originating from seeds 1-5. Coupon distribution was reduced to one outgoing coupon per participant on October 24 for recruitment chains originating from seeds 6-8 and ended on October 29. Male enrollment was stopped after October 11 due to high male enrollment up to that date, which accounted for slightly more than half of the target study sample size at that date, and a growing gender disparity in the overall sample.

Ethical review

All study procedures were approved by Institutional Review Boards at Johns Hopkins Bloomberg School of Public Health and the Comité national d'éthique des sciences de la vie et de la santé (CNESVS) of the Ministry of Health and Public Hygiene, Côte d'Ivoire.

RDS Results

The following table and figures illustrate the study enrollment pace and coupon distribution, a key element for RDS implementation. Overall, 4285 coupons were issued, including coupons for 8 seeds, of which 2134 (49.8%) were returned within their validation period. Of participants who returned valid coupons, 97.1% were deemed eligible to participate and 100% of these participants consented to be in the study. The final analytic sample came to 2068 after five participants were excluded for incomplete data.

Table 1. RDS implementation parameters	
Coupons issued	4285
Coupons returned outside of validation period (after expiration date)	183
Coupons returned within validation period (including seeds)	2134
Coupon return rate within validation period (returned/issued)	49.8% (2134/4285)
Eligible participants/coupons returned	97.1%(2073/2134)
Consented/eligible	100.0% (2073/2073)
Complete data/consented	99.8% (2068/2073)
Number of recruits by seed (mean, range)	258.8 (4-985)
Number of recruitment waves per seed (mean, range)	6.4 (1-12)

Figure 1. Overall daily enrollment







Figure 3. Cumulative weekly enrollment overall and by gender



Males were highly likely to distribute their coupons to other males, while females were only slightly more likely to distribute to females prior to the stoppage of male enrollment (51.9%) [Table 2]. Due to the gender differences in recruitment pace, recruitment was closed to males in mid-October to avoid gender imbalance in the final sample. Overall probability of female-to-female distribution increased to 70.8% after limiting enrollment to only females [Table 3].

Table 2. Transition matrix by gender (11-Oct-18)					
	Male	Female			
Male	79.6%	20.4%			
Female	48.1%	51.9%			

Table 3. Transition matrix by gender (10-Nov-18)					
	Male	Female			
Male	64.5%	35.5%			
Female	29.2%	70.8%			





In examining coupon distribution by modern contraceptive use, 64.1% of non-users distributed a coupon to another nonuser and 35.9% distributed a coupon to a modern method user. Approximately 56% of users gave a coupon to a non-user and 43.7% of users gave a coupon to another user of modern contraception. Current use of a modern contraceptive method is based on self-report.

Table 4. Transition matrix by participant's reported use of modern contraception					
	Non-user	User			
Non-user	64.1%	35.9%			
User	56.3%	43.7%			

Data weights

The sample was weighted to accommodate the RDS design. Weights were generated using the RDS-II (Volz-Heckathorn) estimator to account for differences in reported network size of participants and therefore the participant's likelihood of receiving a coupon. A sensitivity analysis compared the RDS-I, RDS-II, and RDS-SS weighting systems and found results to be very similar, to the 0.002 decimal point on modern contraceptive prevalence; RDS-II was selected as the RDS weighting approach. Using data from the 2011-12 DHS, a postestimation weight was developed and combined with the RDS weight to account for differences in demographics (education) in the sample as compared with the underlying population of unmarried adolescents and youth in Abidjan measured in household-based surveys. Unless otherwise indicated, all final results in Tables 5-20 are fully weighted using RDS-II and post-estimation weights. In this sample, female respondents reported smaller network sizes on average (mean network size for females = 13.1; mean network size for males = 21.9) and therefore females are weighted more heavily using the RDS weights.

Results

Demographic information

After stopping male enrollment on October 11, gender equilibrium improved and the final analytic sample came to 1035 females and 1033 males. After weighting, the percentage of males and females came to 43.9% and 56.1%, respectively. Approximately one-quarter of sample participants (24.8%) were 15-17 years old, 41.2% were 18-20 years old, and 34.1% were 21-24 years old; after weighting, the distribution in each age category was about one-third. The sample population is highly educated with 45.3% reporting that their highest level of education is secondary school and 51.4% reporting that their highest level of education is secondary school and 51.4% reporting that their highest level of education was as follows: 17.1% never educated, 20.4% with a primary education, 52.7% with a secondary education, and 8.7% with higher education. More females had no education (26.7% vs. 4.8% of males) or primary education (25.4% vs. 13.9% of males) and more males had attended secondary school (68.9% vs. 40.0% of females) or higher (10.6% vs. 7.1% of females). Participants resided in a range of communes within Abidjan, with the greatest proportion coming from Yopougon (26.1%), which is the largest commune in Abidjan by both population and area size (Institut national de la statistique, 2014). After weighting, Port Bouet represented the largest share of the population, which is a neighboring commune to the study site.

Table 5. Demographic characteristics								
	Ov	verall (N=20)68)	Males (N	=1033)	Females (I	N=1035)	
Indicator	N	U%*	W%**	N	W%	N	₩%	
Sex						·		
Male	1033	49.95%	43.9%					
Female	1035	50.05%	56.1%					
Age group								
15-17 years	512	24.8%	33.3%	224	31.0%	288	35.1%	
18-20 years	851	41.2%	33.2%	429	34.6%	422	32.0%	
21-24 years	705	34.1%	33.6%	380	34.4%	325	32.9%	
Municipality								
Abobo	305	14.8%	12.0%	193	18.2%	112	7.2%	
Adjamé	41	2.0%	0.9%	25	1.4%	16	0.5%	
Attécoubé	234	11.3%	17.3%	144	30.3%	90	7.0%	
Bingerville	25	1.2%	0.4%	12	0.5%	13	0.3%	
Cocody	220	10.6%	3.9%	112	2.4%	108	5.1%	
Plateau	14	0.7%	0.3%	10	0.3%	4	0.3%	
Yopougon	540	26.1%	20.5%	265	22.2%	275	19.2%	
Treichville	140	6.8%	6.6%	48	4.7%	92	8.1%	
Koumassi	182	8.8%	4.8%	106	7.1%	76	3.0%	
Marcory	62	3.0%	4.1%	25	2.5%	37	5.3%	
Port Bouet	299	14.5%	29.0%	88	9.8%	211	44.0%	
No response	6	0.3%	0.3%	5	0.6%	1	0.0%	
Education								
Never	21	1.0%	17.1%	2	4.8%	19	26.7%	
Primary	24	1.2%	20.4%	8	13.9%	16	25.4%	
Secondary	937	45.3%	52.7%	462	68.9%	475	40.0%	
Higher	1063	51.4%	8.7%	545	10.6%	518	7.1%	
Quranic/Bible school only	5	0.2%	0.1%	3	0.2%	2	0.0%	
No response	18	0.9%	1.1%	13	1.5%	5	0.7%	

*U%: Unweighted percent

*W%: Weighted percent

Sexual experience

Approximately two-thirds of respondents reported that they had ever had sex, with more males (68.3%) than females (64.2%) reporting that they were sexually active. Age at first sex did not vary significantly by gender; the median value was 16 for male respondents (IQR: 15-18) and 16 (IQR: 16-18) for female respondents. Most sexually active respondents reported that their last sexual encounter was within the last month (53.8%). At their first sexual encounter about half of all sexually active respondents had a contraceptive method on hand (50.7%), with female respondents more likely to have had a method available (63.7%) than males (35.2%).

Table 0. Sexual experience								
	Overall (N=2068)		Males (N=	1033)	Females (N=1035)			
	Ν	W%	Ν	W%	Ν	W%		
Ever had sex	1377	66.0%	741	68.3%	636	64.2%		
	(N=13	77)*	(N=741)		(N=636)			
Age at first sex [median, IQR**]	16(15-18)		16 (15-18)		16 (16-18)			
Time since last sex								
In the past 6 days	335	18.1%	149	16.9%	186	19.2%		
Between 1 week and 1 month	462	35.7%	228	33.3%	234	37.8%		
Between 1 month and 1 year	324	26.5%	210	29.8%	114	23.6%		
l year or more	88	5.0%	66	4.8%	22	5.0%		
Had a contraceptive method on hand at first sex	632	50.7%	262	35.2%	370	63.7%		

*Sexually active respondents

**IQR: Interquartile range

Fertility experience and preferences

Among all female respondents, 21.6% had ever been pregnant, including those who report being currently pregnant. Among males, 8.9% ever had a pregnant partner or a partner who is currently pregnant. Only 10.7% of females and 1.3% of males report having given birth or having a child. About two-thirds of all respondents (69.4%) want to have a child at some point in the future. The largest share of female respondents wants to wait 4-6 years before having a child (20.2%), and the largest share of male respondents wants to wait 10 or more years (17.3%) if they reported a preference for wait time. These respondents include those who may already have a child or children already.

Table 7. Fertility experience and preferences among all participants								
	Overall (N=2068)		Males (N=1033)		Females (N=1035			
Indicator	N	W%	N	W%	N	W%		
Ever pregnant (females)/ever partner pregnant (males)	251	16.0%	109	8.9%	142	21.6%		
Ever given birth (females)/have a child (males)	65	6.6%	17	1.3%	48	10.7%		
Want to have a child in the future	1371	69.4%	644	70.2%	727	68.7%		
Desired wait time before (next) child								
Soon / Now	145	8.0%	61	8.0%	84	8.0%		
<lyear< td=""><td>24</td><td>2.6%</td><td>11</td><td>5.2%</td><td>13</td><td>0.5%</td></lyear<>	24	2.6%	11	5.2%	13	0.5%		
1-3 years	168	12.9%	57	8.5%	111	16.4%		
4-6 years	384	18.1%	156	15.4%	228	20.2%		
7-9 years	168	4.0%	87	4.6%	81	3.5%		
≥10 years	268	11.9%	172	17.3%	96	7.6%		
Cannot get pregnant/cause a pregnancy	52	3.6%	18	2.0%	34	4.8%		
Other / Don't know / No response	859	39.0%	471	39.1%	388	39.0%		

Contraceptive knowledge and information sources

Nearly all participants (95.0%) had heard of at least one method of contraception, 81.4% felt that they can access contraception information, and 68.7% knew of a place where they can obtain a method of contraception. These figures did not differ significantly by sex, although females were more likely to know of a place to obtain contraception (72.5% compared to 63.8% of males). In addition, over half of male participants (66.4%) and about one-third of female participants (35.7%) had heard of pills that can cause an abortion.

While participants reported a range of people in their lives who served as sources of contraception information, teachers were the most informative source of information for 23.4% of participants, followed by their friends (17.5%), and their mothers (14.3%). Mothers were the most significant source of information for females (18.6%), followed by teachers (18.1%) and friends (17.4%). For males, teachers were the most important source of information (30.2%), followed by friends (17.6%) and fathers (10.1%). While reported as the most informative source for only 1% of participants, social media was reported as one source of contraceptive information for nearly one-tenth of participants (10.5%), showing that this new technology may be accessible to youth in Abidjan and a worthwhile means of targeting youth with SRH information.

Table 8. Family planning knowledge and information sources among all respondents

	Overal	ll (N=2068)	Males (N=1033)		Females (N=1035)	
Indicator	N	W%	N	W%	N	W%
Has heard of at least one contraceptive method	2022	95.0%	1010	96.5%	1012	93.8%
Has heard of abortion pill	1153	49.2%	643	66.4%	510	35.7%
Can access contraception information	1752	81.4%	861	79.6%	861	82.8%
Knows a place to obtain contraception	1555	68.7%	757	63.8%	798	72.5%
Source of contraceptive information (all that apply)						
Mother	729	28.6%	335	27.0%	394	29.8%
Father	371	16.4%	278	28.4%	93	7.0%
Sister(s)	611	22.3%	223	18.1%	388	25.5%
Brother(s)	421	15.7%	309	30.5%	112	4.0%
Other female family member	272	10.1%	111	16.0%	161	5.4%
Other male family member	238	9.9%	176	8.9%	62	10.7%
Friend(s)	991	38.5%	479	45.1%	512	33.3%
Health worker	671	25.3%	353	26.9%	318	23.9%
Doctor	587	25.7%	302	27.3%	285	24.4%
Nurse	360	14.2%	182	12.2%	178	15.8%
Pharmacist	293	10.9%	160	14.9%	133	7.8%
Teacher	1251	37.8%	654	48.6%	597	29.4%
Religious leader	135	3.5%	81	5.0%	54	2.3%
Internet	403	8.5%	237	12.7%	166	5.3%
Social media (Facebook, WhatsApp)	391	10.5%	216	14.9%	175	7.1%
Other	89	4.3%	50	6.5%	39	2.5%
No one	20	3.6%	11	0.5%	9	6.0%
Most informative source of contraceptive information						
Mother	274	14.3%	119	8.8%	155	18.6%
Father	59	4.6%	47	10.1%	12	0.4%
Sister(s)	141	6.4%	23	2.1%	118	9.7%
Brother(s)	54	2.6%	45	5.6%	9	0.3%
Other female family member	16	2.1%	4	0.9%	12	3.1%
Other male family member	12	0.7%	5	0.2%	7	1.2%
Friend(s)	279	17.5%	124	17.6%	155	17.4%
Health worker	122	4.8%	61	4.1%	61	5.3%
Doctor	117	4.5%	50	4.7%	67	4.4%
Nurse	46	5.7%	17	0.9%	29	9.4%
Pharmacist	15	0.7%	7	0.3%	8	0.9%
Teacher	698	23.4%	387	30.2%	311	18.1%
Religious leader	3	0.1%	3	0.2%	0	0.0%
Internet	58	0.7%	37	1.4%	21	0.2%
Social media (Facebook, WhatsApp)	42	1.0%	23	1.9%	19	0.3%
Other	11	1.3%	7	2.6%	4	0.3%
No one	35	4.2%	23	1.7%	12	6.1%
Don't know / No response	90	5.4%	51	6.8%	35	4.3%

Contraceptive use and procurement

Among all respondents, 41.5% had ever used a contraceptive method and slightly less (34.3%) reported that they were currently using a method. Males were more likely to be ever or current users (48.6% and 38.4% respectively) than females (36.0% and 31.1%).

Participants were asked to select all methods that they and/or their partner, if they reported a partner, were "currently" using. The most common method reported by both males and females was male condoms (85.0% of males, 60.1% of females). The second most common method among males was the female condom, accounting for 26.6% among current users, compared to 8.6% of female users who report using this method. Use of pills and emergency contraception (EC) differed by sex: 18.8% of males reported that they use the pill as their current method, while 14.6% of females reported pill use. However, 31.8% of females reported that they use EC as their current method, compared to 5.8% of males. This discrepancy may simply reflect a difference in methods used among the participants and their partners, but may also indicate a lack of knowledge among males about the type of pill their partner is using for contraception, or misunderstanding by both males and females about the difference between pills and EC. Reported use of a long-acting reversible contraceptive (LARC) method (implant or IUD) was low overall, with 2.4% of respondents reporting current use of a LARC.

	Our set II		Malaa		Females	
	00	erall	Males		Females	
Indicator	Ν	W%	N	W%	N	W%
	(N=2	2068)	(N=1)	(N=1033)		l=1035)
Ever user	1025	41.5%	560	48.6%	465	36.0%
Current user	839	34.3%	442	38.4%	397	31.1%
Current user (modern method)	810	33.2%	425	37.2%	385	30.1%
Current user (LARC method)	61	2.4%	23	1.8%	38	2.8%
Current method (all selected)*	(N=	839) [*]	(N=4	42)	(N=397)
Implant	55	6.0%	19	3.9%	36	8.1%
IUD	15	1.4%	11	1.7%	4	1.2%
Injectables	31	3.6%	13	1.5%	18	5.6%
Pill	137	16.7%	86	18.8%	51	14.6%
Emergency contraception	185	19.0%	63	5.8%	123	31.8%
Male condom	622	72.4%	363	85.0%	259	60.1%
Female condom	124	17.5%	90	26.6%	34	8.6%
Standard days/cycle beads	135	7.1%	61	5.5%	74	8.8%
LAM/breastfeeding	7	0.6%	7	1.2%	0	0.0%
Withdrawal	83	5.4%	52	8.9%	31	1.9%
Other	29	2.9%	17	5.5%	12	0.4%
	(N=267)**		(N=122)		(N=145)
"Do you think you will use a contraceptive method to delay or avoid getting pregnant at any time in the future?" among non-users who have had sex in the last 3 months	186	83.7%	83	70.7%	103	89.6%

Table 9. Contraceptive use

*Current contraceptive users

**Non-users who have had sex in the last 3 months

Among participants that are currently using a modern method of contraception (implant, IUD, injectables, pills, emergency contraception, male condom, female condom, or cycle beads), 50.7% were male and 49.3% were female. The majority of current modern method users were over 18 years (75.7%) and had attended secondary school (53.6%). Approximately one-fifth of users live in Yopougon (22.9%) or Attécoubé (22.9%), followed by Port Bouet (18.5%) and Abobo (13.5%).

Table 10. Current users of modern contraception by background characteristics									
	Overall	(N=810)*	Males (N=425)	Females (N=385)				
Indicator	N	W%	N	W%	N	W%			
Sex									
Male	425	50.7%							
Female	385	49.3%							
Age									
15-17 years	109	24.3%	67	31.1%	42	17.6%			
18-20 years	344	34.6%	175	33.1%	169	36.1%			
21-24 years	357	41.1%	183	35.8%	174	46.2%			
Highest level of education									
Never	8	20.2%	2	13.0%	6	27.1%			
Primary	5	11.1%	3	15.1%	2	7.2%			
Secondary	280	53.6%	149	56.4%	131	51.0%			
Tertiary	509	13.7%	265	13.9%	244	13.5%			
Koranic/Bible school only	2	0.1%	1	0.1%	1	0.0%			
No response	6	1.3%	5	1.4%	1	1.2%			
Municipality									
Abobo	122	13.5%	87	22.2%	35	5.0%			
Adjamé	15	1.2%	10	1.7%	5	0.8%			
Attécoubé	84	22.9%	50	39.7%	34	6.6%			
Bingerville	8	0.5%	5	0.4%	3	0.5%			
Cocody	103	7.7%	55	3.5%	48	11.8%			
Plateau	7	0.7%	5	0.4%	2	0.9%			
Yopougon	239	22.9%	113	12.0%	126	33.4%			
Treichville	45	4.3%	17	4.1%	28	4.6%			
Koumassi	68	5.1%	39	7.5%	29	2.7%			
Marcory	22	2.3%	9	2.7%	13	1.9%			
Port Bouet	94	18.5%	33	4.9%	61	31.8%			
No response	3	0.6%	2	1.2%	1	0.0%			

Table 10. Current users of modern contraception by background characteristics

*Current modern contraceptive users

Figure 5 illustrates modern contraceptive prevalence (MCP) by reported commune of residence.



Figure 5. Modern contraceptive prevalence by commune

For questions related to contraceptive procurement, participants were asked about the most effective method among their current methods, if they selected more than one.² For example, if a participant reported that they were using both an IUD and male condoms, the following questions only asked about their IUD.

The highest percentage of participants (55.4%) obtain their current method of contraception at a pharmacy. This was found to be the most popular source for both males (53.2%) and females (57.5%).

Most users report that they obtain their current method themselves (62.2%), although this percentage was lower for females (53.4%) than for males (71.3%). More females (38.3%) rely on their partner than males (14.2%). Among those who report that they rely on their partner or another person to obtain their current method, 23.3% say that they are "entirely" dependent on that person to obtain the method, 25.3% say that they are "somewhat" dependent, and 42.6% say that they are "not at all" dependent. The most common reason for relying on someone else to obtain their method was that it is the partner's responsibility to obtain it (49.1%). This response was more common among

females (59.6%) than among males (29.5%). More female respondents reported that they rely on others because the other person knows better where to go (29.2%) compared to males (16.0%). More males report that they fear that they will be denied the method (20.9%) compared to females (0.3%). Other reasons for relying on others to obtain their current contraceptive method include: it is easier/more convenient (16.4%), it allows the other person to pay (13.1%), fear someone will see them obtaining the method (10.0%), and fear that they will be shamed by the provider (8.1%).

²Method ranking list: implant; IUD; injectables; pill; emergency contraception; male condom; female condom; standard days/cycle beads; LAM/breastfeeding; withdrawal; other method

Table 11. Contraceptive procurement & reliance on self vs. others among current users								
	Ove	erall	N	Males Fema		emales		
	N	W%	N	W%	Ν	W%		
Indicator	(N=8	39)*	(N	=442)	(N=397)		
Source of current method								
University hospital	31	2.2%	21	1.4%	10	3.1%		
General hospital	102	11.4%	53	13.1%	49	9.8%		
Urban health center	23	4.1%	10	3.5%	13	4.6%		
Family planning clinic	24	0.6%	9	0.5%	15	0.7%		
Mobile clinic	4	0.9%	2	0.4%	2	1.4%		
Community health worker	5	0.6%	3	0.7%	2	0.4%		
Private hospital/clinic	22	2.9%	12	1.7%	10	4.0%		
Pharmacy	401	55.4%	196	53.2%	205	57.5%		
Private doctor/nurse	31	2.6%	22	4.1%	9	1.1%		
Shop/store	45	2.2%	30	3.4%	15	1.1%		
Faith-based organization/church	0	0.0%	0	0.0%	0	0.0%		
Friend/relative	63	3.7%	33	4.7%	30	2.8%		
Non-profit organization	3	0.04%	2	0.1%	1	0.0%		
Market/hawker	15	3.5%	14	6.5%	1	0.7%		
Other	22	1.1%	8	0.4%	14	1.8%		
Don't know/No response	48	8.8%	27	6.4%	21	11.1%		
Person who obtains current method								
Self	492	62.2%	296	71.3%	196	53.4%		
Partner	249	26.5%	85	14.2%	164	38.3%		
Other	32	3.8%	20	4.3%	12	3.4%		
Don't know/No response	66	7.5%	41	10.2%	25	4.9%		
Level of dependence on others to obtain current method	(N=2	81)**	(N	=105)	(N=176)		
Entirely dependent	28	23.3%	8	10.9%	20	28.7%		
Somewhat dependent	87	25.3%	44	45.5%	43	16.6%		
Not dependent	142	42.6%	47	28.7%	95	48.7%		
No response	24	8.7%	6	15.0%	18	6.1%		
Reasons for relying on someone else for obtaining method (all that apply)	(N=1)	L 5) ***	1)	N=52)		(N=63)		
Easier/more convenient	30	16.4%	17	32.6%	13	7.7%		
It is my partner's responsibility	50	49.1%	18	29.5%	32	59.6%		
Allows the other person to pay	17	13.1%	9	17.0%	8	11.0%		
The other person knows better where to go	16	24.6%	8	16.0%	8	29.2%		
Fear that I will be denied the method	15	7.5%	12	20.9%	3	0.3%		
Fear that someone will see me obtaining the method	34	10.0%	14	21.4%	20	4.0%		
Fear of being shamed by provider for obtaining a method	28	8.1%	10	9.9%	18	7.1%		
Other	2	4.8%	2	13.6%	0	0.0%		

*Current contraceptive users

**Respondents who report that a partner or "other" person obtains their current method

*** Respondents who report being "entirely dependent" or "somewhat dependent" on others to obtain their current method

Table 12 disaggregates the data by current contraceptive users whose most effective current method is male-controlled (male condoms) and those who most effective method is female-controlled (pills, emergency contraception, female condoms, cycle beads). IUD, implant, and injectables, while female-controlled, are excluded from this grouping because a female user cannot truly rely on someone else to obtain this method for them. The female-controlled methods classified here can be obtained by a male partner for the female partner's use, as male condoms can be obtained by a female partner for the male partner's use.

In exploring the reasons why participants rely on others to obtain their method for them by type of method, the sample size greatly diminishes (n=51 for users of male-controlled methods; n=53 for users of female-controlled methods). This should be considered when reading the percentages reported.

After disaggregating by these two types of users, Table 10 shows that 91.1% of males who use a male-controlled method obtain the method themselves, compared to only 27.0% of females. By contrast, 71.4% of female users of a male-controlled method rely on their partner to obtain it. Of 132 females who rely on their partner or another person, 17.0% report that they are "entirely" dependent and 10.0% are "somewhat" dependent on the other person to obtain it. Only 17 males (4.9%) report that their partner or another person obtains their method. Among females who are "entirely" or "somewhat" dependent, the most common reason for relying on someone else was that they consider it the partner's responsibility to obtain the method.

Among users of female-controlled methods, 71.6% of females obtain their method themselves compared to 21.3% of males. Males were more likely to report that their partner obtains the method (49.8%). Most females who rely on their partner or someone else were entirely (52.7%) or somewhat dependent (32.4%) on that person to obtain the method, compared to 10.8% and 43.1% of males who are entirely or somewhat dependent on the other person. Of the 53.9% of males and 85.1% of females who are "entirely" or "somewhat" dependent on someone else, the most common response among males for relying on that person was that it was easier/more convenient (33.2%). Among females, the idea that it was their partner's responsibility (54.0%) and that the other person knows better where to go (51.1%) ranked highest among all reasons.

Table 12. Current users' reliance on others to obtain current method by method type

	Users	sers of male-controlled method ¹			Users of female-controlled methods ²							
	0\	verall	М	ales	Fer	nales	Ov	erall	M	ales	Fem	ales
Indicator	N	W%	N	W%	N	W%	N	W%	N	W%	N	W%
Person who obtains current method	(N=	425) [*]	(N=	266)	(N=	:159)	(N=	302) *	(N=	159)	(N=:	157)
Self	264	68.2%	240	91.1%	24	27.0%	180	55.5%	46	21.3%	122	71.6%
Partner	141	27.4%	11	3.0%	130	71.4%	95	33.1%	62	49.8%	28	25.2%
Other	8	1.3%	6	1.9%	2	0.3%	12	5.7%	9	12.5%	2	2.5%
Don't know/No response	12	3.1%	9	4.0%	3	1.3%	15	5.8%	9	16.4%	5	0.8%
Level of dependence on others to obtain current method	(N=	149)**	(N	=17)	(N=	132)	(N=]	L 07) **	(N	=73)	(N=	34)
Entirely dependent	19	16.5%	3	12.5%	16	17.0%	7	31.1%	4	10.8%	3	52.7%
Somewhat dependent	32	13.5%	6	42.0%	26	10.0%	46	37.9%	31	43.1%	15	32.4%
Not dependent	81	61.0%	7	34.0%	74	64.3%	48	21.5%	33	28.9%	15	13.6%
No response	17	9.0%	1	11.6%	16	8.7%	6	9.5%	5	17.2%	1	1.3%
Reasons for relying on someone else for obtaining method (all that apply)	(N=	51)***	()	I=9)	(N	=42)	(N=!	53)***	(N:	=35)	(N=	18)
Easier/more convenient	9	15.2%	2	20.5%	7	13.9%	15	15.8%	10	33.2%	5	4.1%
It is my partner's responsibility	25	65.4%	2	31.9%	23	73.7%	21	43.2%	13	27.0%	8	54.0%
Allows the other person to pay	4	3.8%	1	2.7%	3	4.0%	10	11.9%	6	16.3%	4	8.9%
The other person knows better where to go	4	7.8%	1	35.2%	3	1.0%	11	36.0%	6	13.6%	5	51.1%
Fear that I will be denied the method	3	7.4%	2	35.4%	1	0.4%	9	5.5%	7	13.4%	2	0.2%
Fear that someone will see me obtaining the method	15	7.4%	2	9.8%	13	6.8%	17	9.7%	10	20.6%	7	2.4%
Fear of being shamed by provider for obtaining a method	13	4.3%	2	7.2%	11	3.6%	13	9.5%	7	10.9%	6	8.6%
Other	0	0.0%	0	0.0%	0	0.0%	2	7.7%	2	19.2%	0	0.0%

 1 Male condom

²Pill, emergency contraception, female condom, cycle beads

*Current contraceptive users

**Respondents who report that a partner or "other" person obtains their current method

*** Respondents who report being "entirely dependent" or "somewhat dependent" on others to obtain their current method

Figures 6 and 7 illustrate the reasons why participants rely on a partner or other person to obtain their current method. Participants could select all that apply. Figure 6 shows these reasons for users of male-controlled methods (condoms) by gender and Figure 7 shows these reasons for users of female-controlled methods (pills, emergency contraception, female condoms, cycle beads) by gender.

Figure 6. Reasons for relying on others for method procurement among male and female users of malecontrolled methods*

*Male-controlled methods include male condoms

Reasons for relying on someone else for obtaining method among users of male-controlled methods (N=51)



Figure 7. Reasons for relying on others for method procurement among male and female users of femalecontrolled methods*

*Female-controlled methods include pill, emergency contraception, female condoms, and cycle beads

Reasons for relying on someone else for obtaining method among users of female-controlled methods (N=53)



Emergency contraception

Emergency contraceptive (EC) use as a current method of contraception was reported by approximately one-fifth of current contraceptive users (19.5%). Among respondents who reported using EC as a current method of contraception, use varied by demographic characteristics [Table 13]. EC use was more commonly reported among females (85.1%), particularly females aged 21-24 years (48.8% of females). Among males, EC use was most common among 18-20-year olds (48.3%).

	Overall	(N=185)	Males	Males (N=62)		(N=123)		
Indicator	Ν	W%	Ν	W%	Ν	W%		
Sex								
Male	62	14.9%						
Female	123	85.1%						
Age								
15-17 years	11	17.8%	3	4.2%	8	20.2%		
18-20 years	78	33.6%	32	48.3%	46	31.1%		
21-24 years	96	48.6%	27	47.5%	69	48.8%		
Highest level of education								
Never	4	39.2%	0	0.0%	4	46.0%		
Primary	1	3.6%	1	24.2%	0	0.0%		
Secondary	37	39.0%	9	36.3%	28	39.4%		
Tertiary	142	17.1%	51	31.3%	91	14.6%		
Koranic/Bible school only	0	0.0%	0	0.0%	0	0.0%		
No response	1	1.2%	1	8.3%	0	0.0%		

Table 13. Users of emergency contraceptive (EC) by background characteristics

Among the 185 respondents who reported that they are currently using EC as a current method of contraception, 71.3% (n=146) reported that they currently use at least one other method. Questions were asked about current use but not about concurrent use at last sex, so dual use does not indicate dual protection as EC may not have been used in conjunction with another method in the same sexual encounter. As mentioned above, respondents were asked to select all methods that they are using if they or their partner are "currently" doing anything to delay or avoid getting pregnant.

Figure 8 shows the number and percentage of participants who report currently using only EC as their contraceptive method, EC and another method of contraception, or only another method of contraception out of all current users. Five percent of males and 21.8% of females report that they currently use both EC and another contraceptive method among all current contraceptive users.

Figure 8. Dual use of methods with EC by gender among current users



Of all current users, 146 report using EC and another method of contraception, 81.8% of whom are female [Table 14]. These users tended to be older, with over 95% 18 years or older among both males and females (76.2%), and educated (41.7% have secondary education and 18.4% have higher education); however, 40.5% of female users have never attended school. The most common second method reported was male condoms for both males (90.5%) and females (93.3%).

Table 14. Characteristics of dual method users (EC + other method)								
	Overall	(N=146)	Males	(N=53)	Female	s (N=93)		
Indicator	Ν	W%	Ν	W%	N	W%		
Sex								
Male	53	18.2%						
Female	93	81.8%						
Age								
15-17 years	6	23.9%	2	3.9%	4	28.3%		
18-20 years	65	19.5%	29	46.5%	36	13.5%		
21-24 years	75	56.7%	22	49.6%	53	58.2%		
Highest level of education								
Never	3	33.2%	0	0.0%	3	40.5%		
Primary	1	5.1%	1	27.8%	0	0.0%		
Secondary	26	41.7%	6	31.8%	20	43.8%		
Tertiary	115	18.4%	45	30.9%	70	15.7%		
Koranic/Bible school only	0	0.0%	0	0.0%	0	0.0%		
No response	1	1.7%	1	9.5%	0	0.0%		
Other method currently using								
Implant	11	11.0%	6	16.2%	5	9.9%		
IUD	8	4.2%	6	16.3%	2	1.5%		
Injectables	10	4.6%	7	16.6%	3	2.0%		
Pill	23	18.4%	11	23.7%	12	17.2%		
Male condom	126	92.8%	48	90.5%	78	93.3%		
Female condom	29	28.9%	18	44.4%	11	25.5%		
Standard days/cycle beads	45	11.9%	17	23.4%	28	9.3%		
LAM/breastfeeding	5	3.0%	5	16.2%	0	0.0%		
Withdrawal	26	6.7%	15	24.7%	11	2.7%		
Other	8	1.8%	6	9.8%	2	0.0%		

In a subsequent question that asked if a participant had used emergency contraception in the past 12 months regardless of whether they had reported it as a current method, approximately 16.8% of all sexually active participants (18.6% of males; 15.4% of females) reported that they or their partner had used EC within this time period.

Dual protection with condoms

Among respondents who reported that they are currently using male or female condoms as their method of contraception, 41.6% (n=293) reported that they currently use at least one other method. Questions were asked about current use but not about concurrent use at last sex, so dual use does not indicate dual protection as a condom may not have been used in conjunction with another method in the same sexual encounter. The respondent was asked to select all methods that they are using if they or their partner are "currently" doing anything to delay or avoid getting pregnant.

Figure 9 shows the number and percentage of participants who report currently using only male and/or female condoms as their contraceptive method, condoms and another method of contraception, or only another method of contraception. About one-quarter of males and females report that they currently use both condoms and another contraceptive method among all current contraceptive users. Males were more likely to only use condoms (63.0%) than females (35.4%), with females more likely to use another method only (39.3%) than males (13.9%).

Figure 9. Dual use of methods with condoms* by gender among current users

*Condoms include male and female condoms



Of all current users, 293 report using condoms and another method of contraception [Table 15]; this group is roughly equal between males and females. The most common second method reported was the pill (53.3%) and emergency contraception (81.3%) among males and females, respectively.

Table 15. Characteristics of duar method users (condoms + other method)									
	Overall	(N=293)	Males (N=149)	Females	(N=144)			
Indicator	Ν	W%	Ν	W%	N	W%			
Sex									
Male	149	46.9%							
Female	144	53.1%							
Age									
15-17 years	27	27.5%	17	28.3%	10	26.7%			
18-20 years	129	25.7%	71	34.5%	58	18.0%			
21-24 years	137	46.8%	61	37.2%	76	55.3%			
Highest level of education									
Never	3	18.6%	0	0.0%	3	35.1%			
Primary	2	11.0%	2	23.5%	0	0.0%			
Secondary	70	48.9%	39	55.6%	31	44.62%			
Tertiary	216	20.3%	106	20.3%	110	20.3%			
Koranic/Bible school only	1	0.3%	1	0.5%	0	0.0%			
No response	1	1.0%	1	2.1%	0	0.0%			
Other method currently using]								
Implant	17	6.0%	10	4.5%	7	7.4%			
IUD	11	2.6%	8	4.0%	3	1.4%			
Injectables	16	4.1%	10	6.2%	6	2.2%			
Pill	90	37.1%	61	53.3%	29	22.7%			
Emergency contraception	129	53.1%	49	21.1%	80	81.3%			
Standard days/cycle beads	98	15.2%	50	17.7%	48	13.0%			
LAM/breastfeeding	5	1.7%	5	3.5%	0	0.0%			
Withdrawal	66	19.3%	45	36.8%	21	3.8%			
Other	17	10.5%	12	21.9%	5	0.5%			

Relationship power dynamics and threats to sexual/reproductive autonomy

Another theme explored in the questionnaire was power dynamics in relationships and threats to the participant's sexual or reproductive autonomy. Among sexually active participants who reported that they have a partner, 56.6% reported that they felt "capable" or "very capable" of negotiating sex with their partner. This was roughly equal among female respondents (55.9%) and male respondents (57.4%). More respondents (71.7%) felt "confident" or "very confident" using contraception with their partner: 87.6% of males and 58.7% of females.

Among all respondents who reported having a current partner, 80.9% felt that their current partner shows that they care even when they disagree, 82.1% felt that their partner shows respect for their feelings about issues they disagree on, and 44.7% report that they try not to cause problems because they are afraid of what their partner might do.

In terms of sexual coercion, 17.6% female respondents reported that any partner, past or current, had ever pressured them not to use birth control and 32.1% reported that a partner had agreed to use a condom and then removed it during sex. A higher percentage of male respondents (46.9%) reported that they had agreed to use a condom and then removed it during sex. Both male and female respondents reported ever receiving something in exchange for sex (22.1% and 9.4%, respectively). More males reported ever giving something in exchange for sex (37.9%) than females (4.6%). Options for something exchanged for sex included money, food, gifts, safety, shelter, or other; more than one option could be selected for both questions.

Table 16. Relationship power dynamics and threats to sexual/reproductive autonomy among sexually active respondents with a partner, all respondents with a partner, and all sexually active respondents

	Ove	erall	Ма	les	Females	
Indicator	N	W%	Ν	W%	N	W%
Capability of negotiating sex with partner	(N=1)	104) [*]	(N=5	549)	(N=	555)
Very capable	293	25.4%	126	25.5%	167	25.3%
Capable	397	31.2%	194	31.9%	203	30.6%
Somewhat capable	207	14.9%	111	10.8%	96	18.2%
Not at all capable	97	16.9%	62	21.6%	35	13.1%
Don't know/No response	110	11.6%	56	10.2%	54	12.7%
Confident using contraception with partner	(N=1)	104) [*]	(N=5	549)	(N=5	555)
Very confident	565	43.5%	290	55.1%	275	34.0%
Confident	356	28.2%	176	32.5%	180	24.7%
Somewhat confident	104	15.5%	52	6.2%	52	23.2%
Not at all confident	25	5.1%	10	1.9%	15	7.6%
Don't know/No response	54	7.7%	21	4.3%	33	10.4%
	(N=1322)**		(N=6	538)	(N=6	584)
My current partner shows s/he cares for me even when we disagree	1177	80.9%	556	79.1%	621	82.3%
My current partner shows respect for my feelings about issues we disagree on	1155	82.1%	540	76.1%	615	86.7%
I try not to cause any problems with my current partner because I am afraid of what my partner might do	649	44.7%	333	53.9%	316	37.7%
Current partner has ever been violent	202	20.0%	101	14.9%	101	24.0%
	(N=13	77)***	(N=7	741)	(N=6	536)
Has a partner ever pressured you not to use birth control, taken your birth control (like pills) away from you, or kept you from going to the clinic to get birth control?					96	17.6%
Has a partner ever agreed to use a condom and then removed it during sex?					237	32.1%
Have you ever agreed to use a condom then removed it during sex?			300	46.9%		
Ever received something in exchange for sex	224	15.2%	122	22.1%	102	9.4%
Ever provided something in exchange for sex	233	19.8%	190	37.9%	43	4.6%

*Sexually active respondents with a current partner

**Respondents with a current partner

****Sexually active respondents

Table 17. Relationship power dynamics and threats to sexual/reproductive autonomy by age among males (who are sexually active and/or have a current partner)

	15-17	years	18-20	years	21-24	years
Indicator	N	W%	N	W%	N	W%
Capability of negotiating sex with partner	(N=	94) [*]	(N=2	237)	(N=2	218)
Very capable	24	10.4%	60	43.7%	42	19.1%
Capable	41	29.2%	80	26.4%	73	38.6%
Somewhat capable	13	9.9%	49	8.3%	49	13.7%
Not at all capable	8	44.1%	26	15.9%	28	11.7%
Don't know/No response	8	6.4%	22	5.7%	26	16.8%
Confident using contraception with partner	(N=94)*		(N=2	237)	(N=2	218)
Very confident	48	65.8%	128	57.6%	114	45.7%
Confident	30	24.0%	71	29.1%	75	41.1%
Somewhat confident	7	5.3%	26	8.1%	19	5.1%
Not at all confident	5	3.1%	2	2.1%	3	1.0%
Don't know/No response	4	1.9%	10	3.1%	7	7.1%
	(N=1	25) ^{**}	(N=2	275)	(N=2	238)
My current partner shows s/he cares for me even when we disagree	108	67.6%	247	80.4%	201	86.4%
My current partner shows respect for my feelings about issues we disagree on	107	65.7%	230	82.7%	203	77.5%
I try not to cause any problems with my current partner because I am afraid of what my partner might do	72	66.6%	137	49.3%	124	48.8%
Current partner has ever been violent	19	10.5%	45	17.5%	37	15.7%
	(N=1)	28)***	(N=3	309)	(N=	304)
Have you ever agreed to use a condom then removed it during sex?	50	61.7%	117	32.6%	133	49.6%
Ever received something in exchange for sex	37	28.0%	50	24.7%	35	15.6%
Ever provided something in exchange for sex	38	47.8%	82	32.0%	70	36.5%

*Sexually active respondents with a current partner

**Respondents with a current partner

****Sexually active respondents

Table 18. Relationship power dynamics and threats to sexual/reproductive autonomy by age among females (who are sexually active and/or have a current partner)

	15-17	years	18-20	years	21-24 years	
Indicator	N	W%	Ν	W%	N	W%
Capability of negotiating sex with partner	(N=	82)*	(N=2	252)	(N=2	221)
Very capable	24	22.7%	65	11.9%	78	35.3%
Capable	25	41.2%	97	36.9%	81	20.9%
Somewhat capable	12	15.1%	45	33.3%	39	10.3%
Not at all capable	7	15.2%	18	9.1%	10	14.5%
Don't know/No response	14	5.7%	27	8.8%	13	19.0%
Confident using contraception with partner	(N=	82)*	(N=2	(N=252)		221)
Very confident	36	42.5%	122	25.9%	117	34.7%
Confident	29	30.6%	77	14.9%	74	27.8%
Somewhat confident	8	15.9%	29	49.1%	15	10.6%
Not at all confident	3	8.7%	9	5.8%	3	8.3%
Don't know/No response	6	2.3%	15	4.3%	12	18.8%
	(N=143)**		(N=299)		(N=2	242)
My current partner shows s/he cares for me even when we disagree	125	76.0%	274	95.7%	222	79.2%
My current partner shows respect for my feelings about issues we disagree on	125	87.9%	270	95.2%	220	79.7%
I try not to cause any problems with my current partner because I am afraid of what my partner might do	75	34.4%	140	36.6%	101	41.6%
Current partner has ever been violent	21	10.8%	44	36.0%	36	28.6%
	(N=9	3)***	(N=2	286)	(N=2	257)
Has a partner ever pressured you not to use birth control, taken your birth control (like pills) away from you, or kept you from going to the clinic to get birth control?	11	1.2%	48	18.1%	37	25.2%
Has a partner ever agreed to use a condom and then removed it during sex?	30	31.5%	116	29.9%	91	34.3%
Ever received something in exchange for sex	18	8.4%	48	6.1%	36	12.9%
Ever provided something in exchange for sex	11	4.8%	20	3.0%	12	6.1%

*Sexually active respondents with a current partner

**Respondents with a current partner

****Sexually active respondents

Contraceptive demand, community attitudes, and exposure to messaging

Participants reported a high level of exposure to contraceptive messages in the media (90.6%) but were less likely to report favorable community attitudes towards their use of a contraceptive method (55.5%). In the last 12 months, 37.2% of respondents recommended a contraceptive method to friends or family.

	Overall (N=2068)		Males (N=1033)		Females (N=1035)			
Indicator	Ν	W%	Ν	W%	Ν	W%		
Do you think there are some people in your community who will praise, encourage, or talk favorably about you if they knew that you were using a contraceptive method?	1202	55.5%	611	54.1%	591	56.6%		
Report exposure to contraceptive messages on the radio, television, print, by text, or on social networks in the last few months	1852	90.6%	906	88.3%	946	92.4%		
In the last 12 months, have you recommended any contraceptive method to your friends and/or relatives?	803	37.2%	423	41.9%	380	33.5%		

Table 19. Contraceptive demand, community attitudes and exposure to messaging

Quality of contraceptive services

Among current users who reported that they obtain their current method of contraception themselves, 76.7% obtained their method of choice at the visit. In addition, almost half (45.1%) reported that they were informed about possible side effects that they or their partner might experience with that method. Of those respondents, 63.0% were told what they should do if they or their partner experienced side effects or problems. Over three-quarters (82.5%) of users who obtain their current method themselves from a health facility, clinic, or hospital would recommend that facility to a relative or friend.

Table 20. Quality of contraceptive services reported by current users

	Overall		Males		Females	
	N	W%	N	W%	N	W%
Indicator	(N=4	92) [*]	(N=296)		(N=196)	
Current users reporting they obtained their method of choice at visit	382	76.7%	227	85.6%	155	65.2%
Current users reporting they were informed about side effects	217	45.1%	132	52.1%	85	32.9%
	(N=2	17)**	(N=132)		(N=85)	
Current users who were informed of what to do if they experienced side effects	139	63.0%	85	62.9%	54	63.2%
	(N=40	06)***	(N=2	233)	(N=]	L 73)
Would recommend relative/friend to provider/facility where they obtained method	332	82.5%	192	92.0%	140	71.5%

*Current users who reported that they obtain their contraceptive method themselves

**Current users who were told about side effects

***Current users who obtain their method themselves from a health facility/clinic/hospital

Summary of results

RDS was chosen as the methodology for this study of contraceptive knowledge, behaviors, and practices of unmarried youth as a way of uncovering data on hidden behaviors and practices. Peer-to-peer recruitment and a self-administered survey were expected to facilitate a higher number of and more forthcoming responses on sensitive subjects from adolescents and youths in the study compared to traditional face-to-face household-based surveys or client exit interviews. Using this approach, we found that **most participants had ever had sex (66.0%), 41.5% had ever used a contraceptive method and slightly less (34.3%) reported that they were currently using a method.** Pharmacies were found to be the main source for obtaining contraception, although pharmacists were not reported as a key source of contraceptive information for youth in the study. In this vein, **male condoms, female condoms, emergency contraception, and pills were found to be the most common methods used,** all of which can be obtained at a pharmacy. Both males and female respondents reported that teachers were one of the most informative sources of contraceptive information (30.2% and 18.1% of all sources).

This study also showed that females are more likely to rely on their partner or another person to obtain their current method than males (38.3% vs. 14.2%, respectively), often because they feel it is their partner's responsibility to obtain the method (59.6%).

Finally, for condoms and EC, two of the most commonly reported methods, we explored participant reported use of other methods of contraception. Approximately two-thirds of male contraceptive users and about one-third (35.4%) of female contraceptive users relied exclusively on condoms for contraception. Exclusive reliance on EC was much lower at 0.7% of male users and 10.0% of female users.

Recommendations

Expanding youth access to contraception

Contraceptive knowledge was high at 95% in this study sample, yet lifetime and current contraceptive use lagged behind at 41.5% and 34.3%, respectively. Less than 5% of respondents were currently using LARC methods. For sexually active nonusers, upwards of 80% of the sample indicated intention to use contraception in the future. Many adolescents and youth rely on their partners to obtain contraceptive methods (38.3% among female users and 14.2% among male users). Among those relying on partners, almost one in four (23.3%) indicate they are entirely reliant on partners to obtain contraception. Reasons for partner procurement centered predominantly on convenience and perceived responsibility, however fear of shame, being seen and being denied a method also featured in youth decision-making. Taken together, these results demonstrate the need for continued efforts to expand youth access to contraception, and ensure that youth have reliable, safe, and confidential access to contraceptives and accurate information about their use.

Engagement with pharmacists

In this sample, pharmacies were the main contraceptive service delivery point for youth (55.4% of current users). Of all respondents who report that EC is among their current methods, 78.5% obtain EC at a pharmacy. Of all respondents who report that male condoms are (one of) their current methods, 60.5% obtain them at a pharmacy. Strikingly, pharmacists are not the main source of information on contraceptive methods for youth. It is possible that contraceptive clients are not engaging directly with pharmacists for contraceptive procurement but rather interacting primarily with cashiers. This gap suggests an opportunity to better engage pharmacies and pharmacists in provision of contraceptive information, including method efficacy. Further work is needed to explore options to expand knowledge through common contraceptive service delivery points, for example posting referral information or conducting pharmacist training. A working group to that engages members of the regulatory community, for example the Direction of Pharmacy and Medicine, the National Program for the Development of Pharmaceutical Activities, the Coordinating Department of the National Program of School and University Health and Adolescent and Youth Health, can be convened to provide strategic direction. A similar working group should address commercialization of EC and to communicate its use, effects, and consequences in the medium and long term.

Contraceptive messaging for youth should emphasize availability of highly efficacious contraceptive methods, and the need for dual protection with condoms

Almost two thirds of males in the study (63%), and over a third of females (35.4%) reported using condoms without other forms of contraception. Because more efficacious contraceptive methods exist, and because of the risk of condom removal (reported by 46.9% of young men), and breakage, youth-oriented communication on contraceptive use should clarify the full available range of contraceptive methods and their efficacy. It is equally important that messaging on long-acting reversible contraceptive methods be accompanied by information on the role of condoms in preventing sexually transmitted infections.

Reaching all youth with Comprehensive Sexual Education (CSE): in-school and out-of-school adolescents

Currently in Côte d'Ivoire, CSE is taught in schools beginning in primary school and the first cycle of secondary school. The content focuses on family relationships, knowledge of the body, responsible sexuality for early pregnancy prevention and raising awareness among students about abstinence and secondarily contraception for those who are sexually active. It also discusses gender-based violence (GBV), HIV, and other topics. UNFPA and UNESCO are currently working with the National Ministry of Education to update the school CSE curriculum. AIBEF, with the financial and technical support of IPPF, has a reference manual, facilitator's guide and a participant's booklet in CSE. There is also a module in development for all teachers about CSE that will be integrated in modules at teacher training schools with the financial and technical support of UNFPA and CS4FP. In the current study, participants referenced teachers as an important source of contraceptive information; it is critical that the information they receive from these teachers is comprehensive.

The reliance on the school system to convey contraceptive information to youth in schools raises important questions about the best way to transmit information to out-of-school youth. Currently, the Ministry of Youth is working to adapt the school curriculum for out-of-school youth, which is an important step. AIBEF works with adolescent and youth groups and women's associations to target out-of-school adolescents and youth to raise awareness about CSE through educational conversation and peer education by adapting the content of the CSE manual. Outreach is a critical component of reaching out-of-school youth for CSE, given that they are not readily accessible by the school system. Support for outreach is essential to ensure access to the CSW programming for out-of-school youth.

Creating a roadmap from the study results

A roadmap for implementing the proposed recommendations and/or creating additional activities and actions should be developed in collaboration with other organizations and ministries dedicated to youth and adolescent sexual health.

References

Ghanem KG, H. H. (2005). Audio computer assisted self interview and face to face interview modes in assessing response bias among STD clinic patients. *Sexually transmitted infections*, 421-5.

Johnston LG, M. M. (2008). Implementation challenges to using respondent-driven sampling methodology for HIV biological and behavioral surveillance: field experiences in international settings. AIDS and behavior. *AIDS & Behavior*, S131-41.

Johnston LG, W. S.-L. (2010). Formative research to optimize respondent-driven sampling surveys among hard-to-reach populations in HIV behavioral and biological surveillance: lessons learned from four case studies. *AIDS Care*, 784-92.

Magnani R, S. K. (2005). Review of sampling hard-to-reach and hidden populations for HIV surveillance. AIDS, S67-72.

Performance Monitoring and Accountability 2020 (PMA2020). (2017, Sep-Oct). Côte d'Ivoire-Round 1. Baltimore, MD: PMA2020, Bill & Melinda Gates Institute for Population and Reproductive Health, Johns Hopkins Bloomberg School of Public Health.

UNFPA. (2018, November 16). Adolescents and Youth Dashboard - Côte d'Ivoire. Retrieved from https://www.unfpa.org/data/adolescent-youth/Cl

Appendix 1: The Challenge Initiative (TCI) Indicators Compiled

Indicator	Ove	erall	Ma	les	Females		
	N	W%	N	W%	N	W%	
	(N=2	.068)	(N=1	033)	(N=1	035)	
			N =All pa	rticipants			
Do you think there are some people in your	1202	55.5%	611	54.1%	591	56.6%	
community who will praise, encourage, or talk							
favorably about you if they knew that you were							
using a contraceptive method?							
TCI indicator: Respondents who report favorable							
community attitudes toward contraception							
Report exposure to contraceptive messages on	1852	90.6%	906	88.3%	946	92.4%	
the radio, television, print, by text, or on social							
networks in the last few months							
In the last 12 months, have you recommended	803	37.2%	423	41.9%	380	33.5%	
any contraceptive method to your friends and/or							
Current user (modern method)	810	33.7%	425	37.7%	385	30.1%	
Current user (IABC method)	61	2.4%	72	1.8%	38	2.8%	
	(N=	267)	(N=)	L 22)	(N=)	(N=145)	
	N = Non-users who have had sex in the last 3 months					,	
"Do you think you will use a contraceptive method	186	83.7%	83	70.7%	103	89.6%	
to delay or avoid getting pregnant at any time in							
the future?" among non-users who have had sex in							
the last 3 months							
TCI indicator: Non-users who have had sex in the last							
3 months, who intend to use any modern method in next							
12 months							
	(N=	839)	(N=4	142)	(N=	397)	
		N	= Current con	traceptive use	rs	·	
Current method (all selected)							
Implant	55	6.0%	19	3.9%	36	8.1%	
IUD	15	1.4%	11	1.7%	4	1.2%	
Injectables	31	3.6%	13	1.5%	18	5.6%	
Pill	137	16.7%	86	18.8%	51	14.6%	
Emergency contraception	185	19.0%	63	5.8%	123	31.8%	
Male condom	622	72.4%	363	85.0%	259	60.1%	
Female condom	124	17.5%	90	26.6%	34	8.6%	
Standard days/cycle beads	135	7.1%	61	5.5%	74	8.8%	
LAM/breastfeeding	7	0.6%	7	1.2%	0	0.0%	
Withdrawal	83	5.4%	52	8.9%	31	1.9%	
Other	29	2.9%	17	5.5%	12	0.4%	

	(N=406)		(N=	(N=233)		173)
	N = Current facility/clir	users who c nic/hospital	btain their r	nethod then	nselves from	a health
Would recommend relative/friend to provider/ facility where they obtained method	332	82.5%	192	92.0%	140	71.5%
	(N=	492)	(N=	296)	(N=	196)
	N = Current method the	users who r emselves	eported that	they obtain	their contra	ceptive
Current users reporting they obtained their method of choice at visit	382	76.7%	227	85.6%	155	65.2%
Current users reporting they were informed about side effects	217	45.1%	132	52.1%	85	32.9%
	(N=	217)	(N=	132)	(N=	:85)
	N = Current users who were told about side effects					
Current users who were informed of what to do if they experienced side effects	139	63.0%	85	62.9%	54	63.2%
	(N=1	.104)	(N=	549)	(N=555)	
	N = Sexuall	y active resp	ondents wit	n a current p	artner	
Confident using contraception with partner						
Very confident	565	43.5%	290	55.1%	275	34.0%
Confident	356	28.2%	176	32.5%	180	24.7%
Somewhat confident	104	15.5%	52	6.2%	52	23.2%
Not at all confident	25	5.1%	10	1.9%	15	7.6%
Don't know/No response	54	7.7%	21	4.3%	33	10.4%

Appendix 2: List of key results and recommendations from the validation meeting

The YRDSS study validation meeting took place on Monday-Tuesday, March 11-12, 2019 at the AIBEF main office in Abidjan, Côte d'Ivoire. Participants reviewed the study report and were asked to identify elements that they considered to be the key study results. They were then asked to create recommendations and identify key actors who could implement the recommendation for each highlighted result.

For the participant list, please see Appendix 3.

REPEATED THEMES:

- Comprehensive sexual education (CSE) that target all different populations of youth
- Raising awareness among youth with mass communication strategies
- Expanding the range of methods offered/accessible to youth (condoms for dual protection, but also long-acting methods)
- Training/coaching for providers on family planning provision for adolescents and young people

1.1. The median age at first sex among the youth surveyed is 17 years.

- Reinforce the implementation of comprehensive sexual education (CSE) for in-school adolescents and youth
- Adapt the CSE program to adolescents who have dropped out of school or who have never attended school
- Adapt the CSE program to adolescents and youth who are working in the informal sector
- Implement the CSE program for parents and guardians
- Make contraception accessible to all sexually active adolescents and youth

Key stakeholders: Ministère en charge de la jeunesse – Direction de la Protection de la Jeunesse (DPJ); Ministère en charge de l'éducation – Direction de la Mutualité et des Œuvres Sociales en milieu Scolaire (DMOSS), Direction de la Pédagogie et de la Formation Continue (DPFC), Direction de la Vie Scolaire (DVS); Ministère en charge de la famille – Direction de l'Autonomisation de la Femme (DPAF); Ministère en charge de la santé – Programme National de la Santé de la Mère et de l'Enfant (PNSME), Programme National de Santé Scolaire et Universitaire – Santé des Adolescents et Jeunes (PNSSU-SAJ); Technical and financial partners (TFP); Office National de la Population (ONP); NGOs 2.1 The majority of young people want to wait 4-6 (for the girls) or \geq 10 years to have a child

- Make long-acting methods accessible to young women
- Conduct on-site coaching of providers on the provision of FP services adapted to adolescents and young people
- Provide equipment and inputs specific to the provision of FP services to adolescents and young people
- Ensure the supply of free modern contraceptive products to health centres for adolescents and young people

Key stakeholders: PNSME; PNSSU-SAJ; TFP; NGOs

3.1Although nearly all respondents had heard of at least one method of contraception, a lower percentage of them (68.7%) know a place to obtain a contraceptive method

• Implement a multimedia communication model for adolescents and young people (Facebook, Twitter, Radio, Television, Posters, ...) to disseminate information about access to FP services

Key stakeholders: DPJ; DMOSS; DPFC; DVS; DPAF; PNSME; PNSSU-SAJ; TFP; NGOs; ONP

3.2 The most important sources of information on contraception are teachers (23.4%), friends (17.5%), and mothers (14.3%)

- 1.1 (CSE)
- 3.2 (Communication strategies)

Key stakeholders: DPJ; DMOSS; DPFC; DVS; DPAF; PNSME; PNSSU-SAJ; TFP; NGOs; ONP

4.1 Low modern contraceptive prevalence rate (33.2%) - there is also a disparity among municipalities in the study // 4.2 Modern contraceptive prevalence by municipality is very disparate. The 3 lowest are Marcory: 18.5%; Treichville: 21.8%; Port-Bouët: 21.2%.

- 1.1 (CSE)
- Promote the use of modern contraception through youth associations (peer educators) that can work at the municipal level

Key stakeholders: Associations de jeunesse

4.3 The most commonly used current methods are short-term methods (Male condom: 72.4%; female condom: 17.5%; emergency contraception: 19%; pill: 16.7%)

- Promote dual protection against STI/HIV and unwanted pregnancy.
- Promote responsible behavior among young people to combat the misuse of emergency contraception
- Promote counseling on contraceptive methods in pharmacies

Key stakeholders: DPJ; DMOSS; DPFC; DVS; DPAF; PNSME; PNSSU-SAJ; TFP; NGOs; ONP; Ordre National des Pharmaciens de Côte d'Ivoire (ONPCI); Programme National de Développement de l'Activité Pharmaceutique (PNDAP)

4.4 The most important sources for current methods are pharmacies (55.4%) and general hospitals (11.4%)

- Feasibility study on implementing counselling in pharmacies on the provision of contraceptive products.
- Promote counseling on contraceptive methods in pharmacies.
- Conduct on-site coaching of providers on the provision of FP services adapted to adolescents and young people

Key stakeholders: PNSME; PNSSU-SAJ; TFP; NGOS; ONPCI; PNDAP

4.5 More than a quarter of participants depend on their partner (26.5%) for their current method, and this rate is higher for girls (38.3%)

• Implement interventions that involve unmarried adolescents and young men in FP

Key stakeholders: DPJ; DMOSS; DPFC; DVS; DPAF; PNSME; PNSSU-SAJ; TFP; NGOs; ONP

4.6 25.3% of participants are somewhat dependent and 23.3% are entirely dependent on others to get their current method // 4.7 The reasons for relying on the man to obtain the method are: it is the responsibility of my partner (65.4%) and it is easier/more practical (15.2%)

• Strengthen the skills of adolescent girls and young women in self-esteem and decision-making regarding the use of modern contraception.

Key stakeholders: DPJ; DMOSS; DPFC; DVS; DPAF; PNSME; PNSSU-SAJ; TFP; NGOs; ONP; ONPCI; PNDAP

5.1 EC is a popular method among out-of-school girls

 Intensify awareness campaigns on alternative contraceptive methods among the out-of-school population

Key stakeholders: PNSME; PNSSU-SAJ; AIBEF; Other NGOs; ONPCI; Development partners

5.2 In cases of dual use (EC + other method), the male condom is the most commonly used method among the young population

- Promote correct use of the male condom
- Promote the female condom

Key stakeholders: PNSME; PNSSU-SAJ; AIBEF; ONPCI; Development partners

6.1 Within the youth population, pills and EC are the most widely used methods in addition to condoms

- Promote long-acting contraceptive methods among young people
- Raise awareness about dual protection among young people

Key stakeholders: PNSME; PNSSU-SAJ; AIBEF; Other NGOs; Ministère de l'éducation nationale de l'enseignement technique et de la formation professionnelle (MENETFP); Development partners 7.1 Many young people (43.4%) do not have the ability to negotiate sexual relations with their partner /7.2 More than one-third of girls (41.3%) do not feel confident using contraception with their partner

- Promote CSE
- Promote youth empowerment

Key stakeholders: PNSME; PNSSU-SAJ; AIBEF; Other NGOs; MENETFP; Development partners

8.1 Young people (males) do not use condoms correctly during sexual intercourse (especially young people aged 15 to 17)

- Raise awareness among young people about the importance of dual protection (from pregnancy and STIs)
- Conduct a qualitative study on condom misuse among young people

Key stakeholders: PNSME; PNSSU-SAJ; AIBEF; Other NGOs; MENETFP; ONP; Development partners

8.2 Young people are vulnerable, especially those aged 15 to 17, to be in a position of exchanging things for sex

- Promote CSE
- Promote youth empowerment
- Carry out a study on the phenomenon of these types of sexual relations

Key stakeholders: AIBEF / MAJ; Youth associations; ONP; MENETFP; Development partners

9.1 The media is an important source of information on contraception for young people, who report high exposure to contraceptive messages (90.6%)

- Increase awareness of contraception among young people through information and communication technologies
- Popularize and share the multimedia resources available (apps, social network pages, websites, etc.) that relate to contraception

Key stakeholders: AIBEF / MAJ; Youth NGOs; Bloggers; Development partners

9.2 The community supports the use of contraceptive methods by young people; more than half of the participants report a positive attitude (55.5%)

• Intensify community awareness campaigns for contraceptive use by young people

Key stakeholders: PNSME; PNSSU-SAJ; AIBEF; Ministère de la promotion de la jeunesse et de l'emploi des jeunes (MPJEJ); Development partners

9.3 Young people are information channels for their peers on contraception (37.2% of young people recommended a family planning method to friends and/or relatives in the last 12 months)

Intensify the actions of peer educators in CSE

Key stakeholders: PNSME; PNSSU-SAJ; AIBEF; MPJEJ; MENETFP; Development partners

9.4 Nearly one-quarter of youth did not receive the method of their choice at the time of their visit

- Make available the full range of contraceptive methods in health facilities
- Systematically refer patients if a method is unavailable
- Secure contraceptive products

Key stakeholders: PNSME; PNSSU-SAJ; AIBEF; ONPCI

9.5 More than half of young people are not informed about the possible adverse effects of contraceptive methods of their choice

• Improve the quality of the provision of family planning services for youth (strengthen youth-friendly services)

Key stakeholders: PNSME; PNSSU-SAJ; AIBEF; ONPCI

Appendix 3: Validation meeting participant list

NAME	ROLE	ORGANIZATION
AFFI Yves Constant	Doctor / Charge de suivi-évaluation de la PF	PNSME
BAMSSIE Roger	ConseillerTechnique	ONP
BONI-GNANIEN Marie-Claire	Chef service prévention	PNSSU-BAJ
KONE Mananza	Country Coordinator I	TCI / Intrahealth
SANOU Salimata E.	National President – MAJ	AIBEF
TETCHI Moise	Doctor	Pathfinder
ALLO Richard	Executive Director	AIBEF
KOFFI Adjoua Hortense épse AKROMAN	Program Officer / Point focal HIV/ jeunes	AIBEF
TIA Yaké Stéphane	Youth Activities Coordinator	AIBEF
YAO-N'DRY Nathalie	Director of Programs / YRDSS project Principal Investigator	AIBEF
YEKANNI Poégnon Francis Alain	MAJ / YRDSS Interviewer	AIBEF
ZION D. Constant	M&E Officer	AIBEF
KOFFIAlain	Professor / Researcher	PMAAgile/JHU
BYRNE Meagan	Program Specialist	PMAAgile / JHU