PMA2020 ABORTION SURVEY RESULTS:
COTE D'IVOIRE

July–August, 2018

KEY FINDINGS

- In 2017, the annual incidence of likely abortions in Cote d'Ivoire was 36.9 per 1,000 women age 15 to 49 when asking women directly – nearly 210,000 abortions. However, when using information related to the experience of respondents' closest confidantes, the number of abortions rose to more than 288,000, equivalent to a rate of 50.8 per 1,000 women of reproductive age.

- More than 6 out of 10 abortions were considered least safe and 10% of women experienced complications for which they sought postabortion care at a health facility. Women living in rural areas, women with no education, and the poorest women were the most likely to have the least safe abortions.*

- Most hospitals in the Cote d'Ivoire facility sample provided postabortion care (94%) and safe abortion services to save a woman's life (88%); lower level public facilities and private facilities were much less likely to do so.

Least safe abortions defined on next page

An estimated **4 to 5%** of women of reproductive age had a likely abortion in the 12-months prior to this study, which is **210,000 to 288,000** annual abortions in Cote d'Ivoire.

Context of Abortion in Cote d'Ivoire

Although Cote d'Ivoire ratified the Maputo Protocol[1], an agreement among African Union countries that protects women's and girls' reproductive rights, abortion is only legal to save a woman's life. National abortion rate estimates do not exist in Cote d'Ivoire, but limited empirical evidence suggests that women's use of abortion to control their fertility in the event of an unintended pregnancy has long been common. One national survey of women age 15 to 49 found that 43% of respondents who had ever been pregnant reported a prior induced abortion, the majority of which would be considered unsafe.[2] The maternal mortality ratio in the country is high at 944 deaths per 100,000 live births, approximately 18% of which are likely due to unsafe abortion based on estimates of the causes of maternal death in Western Africa.[3,4]

In 2018, Performance Monitoring and Accountability 2020 (PMA2020) conducted a survey to produce updated and expanded estimates of abortion-related indicators. Results provide new insights on the characteristics of women who have an abortion and the pathways leading to abortion within or outside the healthcare system.

PMA2020 Measurement of Abortion Incidence

Direct and indirect incidence measures

Prior research demonstrates that asking women directly about their experience with abortion results in significant underestimation of this stigmatized behavior. To generate more valid data, interviewers asked respondents about their closest confidante's experience with abortion prior to asking the respondent about her own experience. The responses were used to produce a direct estimate of abortion incidence (self-report) and an indirect estimate (confidante). This latter approach draws on the Guttmacher Institute's proposed adaptations of existing social network-based methodologies for abortion measurement.[5,6,7]

In this survey, interviewers asked 2,738 women 15 to 49 years old two sets of questions on abortion for themselves and their closest confidante: one asked about "pregnancy removal" and the other about "regulating a period when you were worried you were pregnant".

CONFIDANTE:

A confidante is a respondent's closest female friend or relative. A respondent and confidante share very personal information with each other, and similar to the respondent, the confidante lives in Cote d'Ivoire and is between the ages of 15 and 49.

[1] Adopted by the African Union in the form of a protocol to the African Charter on Human and Peoples' Rights, Relating to the Rights of Women (http://www.achpr.org/files/instruments/women-protocol/achpr_instr_proto_women_eng.pdf)
[2] Vroh, J. B., et al. (2012). "[Epidemiology of induced abortion in Cote d'Ivoire]." Sante Publique 24 Spec No: 67-76.
[3] Hogan, M. C., et al. (2010). "Maternal mortality for 181 countries, 1980–2008: a systematic analysis of progress towards Millennium Development Goal 5." The Lancet 375(9726): 1609-1623.
[4] Kassebaum, N. J., et al. (2014). "Global, regional, and national levels and causes of maternal mortality during 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013." Lancet 384(9947): 980-1004.
[5] Rossier, C., et al. (2006). "Estimating clandestine abortion with the confidants method--results from Ouagadougou, Burkina Faso." Social science & medicine 62(1): 254-266.
[6] Yeatman, S. and J. Trinitapoli (2011). "Best-friend reports: A tool for measuring the prevalence of sensitive behaviors." Am J Public Health 101(9): 1666-1667.
[7] Sedgh, G. and S. Keogh (forthcoming). "Novel approaches to estimating abortion incidence."

One-year likely abortion incidence (per 1,000 women) for female respondents and their closest female confidantes

	Respondent	Confidante
Pregnancy removal	18.8	31.7
Period regulation	20.6	21.4
Combined*	36.9	50.8
Annual number of likely abortions	209,380	288,252

The combined rate is not equal to the sum of the pregnancy removal and period regulation rates as some women reported both a pregnancy removal and a period regulation in the prior year.


"I was scared, but I wasn't ready… to keep the baby. I didn't go to the hospital… I went to the midwife. I didn't tell her I wanted to remove it – I didn't tell her about the pregnancy… I asked about the medicine. She said if you don't want the surgery, we call it "curettage" at the hospital to remove the pregnancy, there are medications you can take."

— 22-YEAR OLD UNMARRIED WOMAN

Abortion incidence was highest among women in their twenties (and possibly teens) and women with at least some schooling.
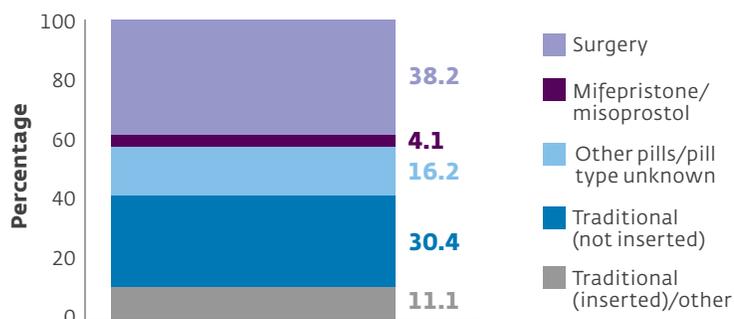

One-year likely abortion incidence among female respondents and their closest female confidantes in Côte d'Ivoire by background characteristics

■ Respondent ■ Confidante

AGE
EDUCATION
RESIDENCE
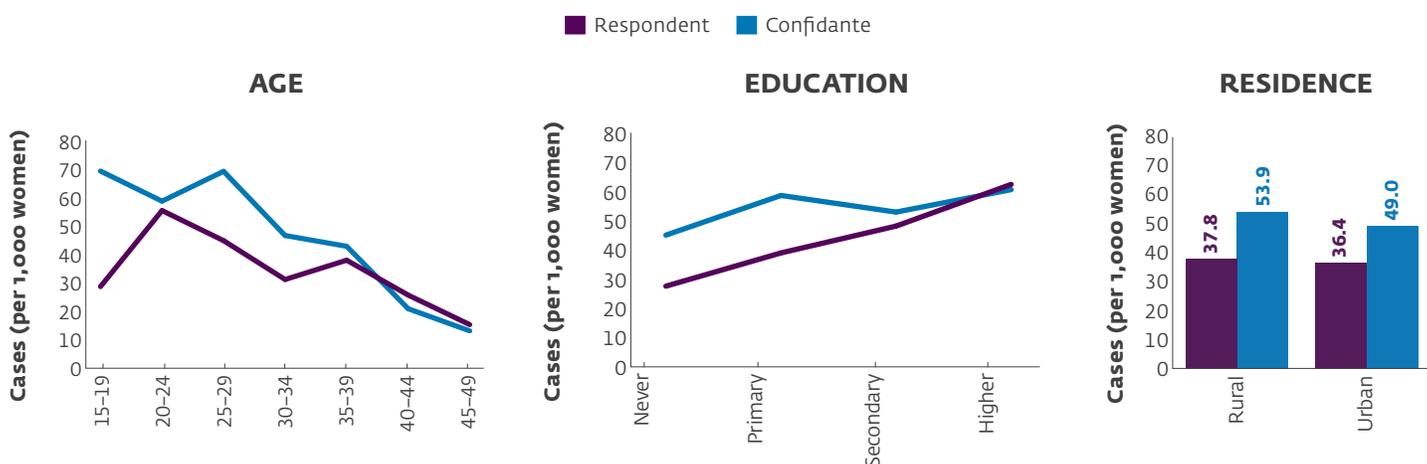
Pathways to Abortion and Abortion Safety

Based on self-reported abortion data, 19% of women indicated they did multiple things to terminate their pregnancy. Altogether, 38% underwent surgery to ultimately terminate their pregnancy and 4% used mifepristone/misoprostol; the remaining 58% used other or unspecified medications or traditional methods for their abortion.

Respondents' likely abortion final method
whether one or more methods was used

- Surgery — 38.2
- Mifepristone/misoprostol — 4.1
- Other pills/pill type unknown — 16.2
- Traditional (not inserted) — 30.4
- Traditional (inserted)/other — 11.1

"[Upon finding out I was pregnant] I was scared, because right now I don't have the means, the means to care for a child. My own life isn't stable to have a child right now."

— 22-YEAR OLD UNMARRIED WOMAN

> More than **6 out of 10** abortions were considered least safe and **10%** of women experienced complications for which they sought postabortion care at a health facility.

Safety of respondents' likely abortions
pregnancy removals and period regulations combined

Women in rural areas (75%), women with no education (73%), and women in the lowest wealth quintile (80%) were the most likely to have an abortion that is considered least safe.

Legend: ■ Safe ■ Less Safe ■ Least Safe

30.8%
5.5%
63.7%
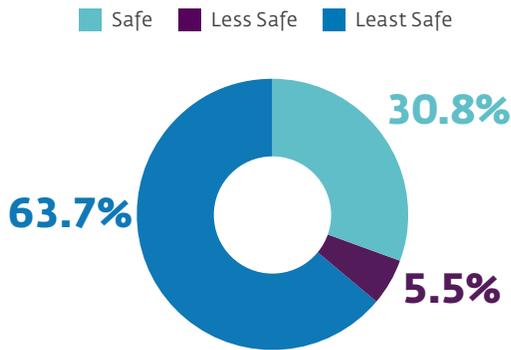
PMA2020 DEFINITIONS OF ABORTION SAFETY

Based on the new World Health Organization abortion safety framework[8], researchers divided abortions into three categories:

Safe: surgical procedures and mifepristone/misoprostol abortions conducted in appropriate public and private health facilities
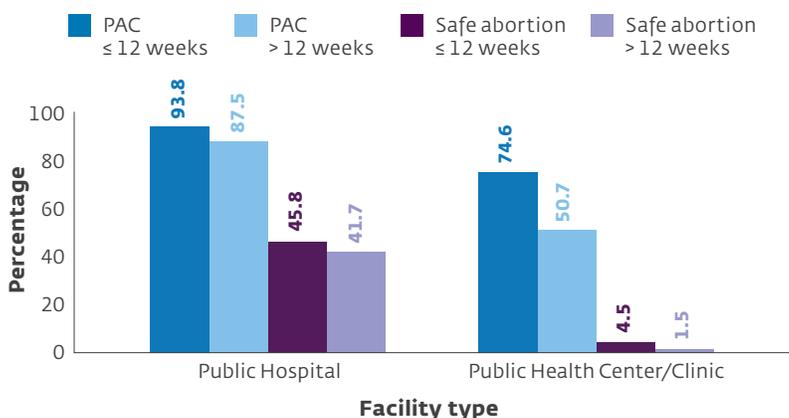
Less safe: abortions that involved mifepristone/misoprostol used outside of appropriate health facilities

Least safe: all other situations not included in safe and less safe abortions

Service Delivery: Postabortion Care (PAC) and Safe Abortion Care (SAC) Availability

Most public hospitals provided PAC services (94%), but only 79% had the necessary equipment, medicines, and other services (i.e. signal functions) to provide basic PAC. Primary public facilities were less likely to provide any PAC services (75%) and even fewer had all components of basic PAC (40%).

Percentage of facilities offering post-abortion care (PAC) and safe abortion services at 12 weeks or less and more than 12 weeks gestation by facility type (N=115)*

Legend: ■ PAC ≤ 12 weeks ■ PAC > 12 weeks ■ Safe abortion ≤ 12 weeks ■ Safe abortion > 12 weeks

Public Hospital: 93.8, 87.5, 45.8, 41.7
Public Health Center/Clinic: 74.6, 50.7, 4.5, 1.5

*Only 14 private facilities surveyed, which we excluded from results presented here

Percentage of facilities that have all basic and comprehensive postabortion care (PAC) signal functions by facility type (N=115)*

	Basic	Comprehensive
Facility type		
Public Hospital	79.2	27.1
Public Health Center/Clinic	40.3	0.0

* Basic PAC signal functions include ≤12 weeks gestation removal of retained products, antibiotics, oxytocis, intravenous replacement fluids, and provision of any contraception; comprehensive PAC signal functions include basic PAC signal functions plus >12 weeks removal of retained products, blood transfusion, laparotomy, 24/7 PAC service availability, and provision of long-acting reversible contraception.

"On the one hand, I wanted to keep [the pregnancy], and on the other hand, because of my future, I wanted to remove it."
— 28-YEAR OLD UNMARRIED WOMAN

8 Ganatra, B., et al. (2017). Global, regional, and subregional classification of abortions by safety, 2010-14: Estimates from a Bayesian hierarchical model. The Lancet, 390(10110), 2372-2381.
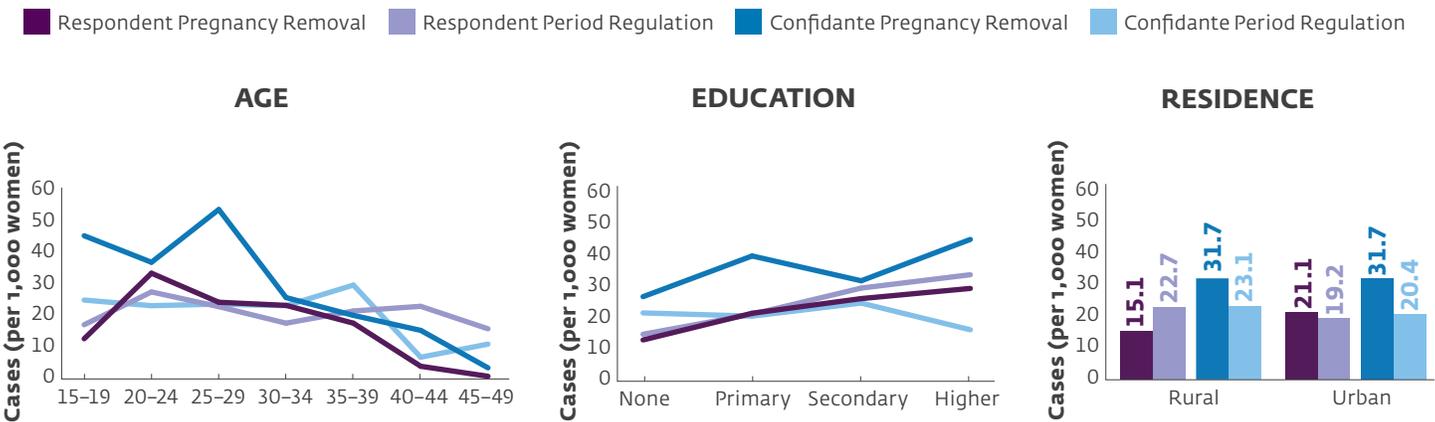
Direct versus Indirect Estimation of Abortion

Prior to this PMA2020 survey, researchers had last conducted a national abortion study in Cote d'Ivoire in 2007. Investigators produced country-wide estimates of the lifetime prevalence of abortion and provided characteristics associated with abortion reporting, but these estimates were only among women who had ever been pregnant and were generated from self-reported data.[2] Additionally, no annual incidence estimates were calculated. Recent estimates of induced abortion prevalence and incidence that rely on direct and indirect reports would produce more valid data that can be used to help inform current policies and programs. PMA2020's community-based data on respondents' and confidantes' abortions seeks to address these data deficiencies.
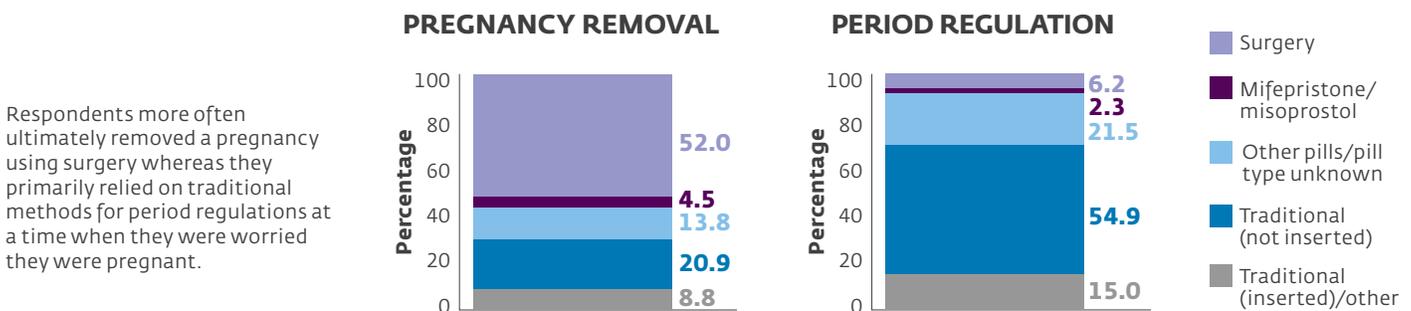
Pregnancy Removal versus Period Regulation

Pregnancy removal and period regulation incidences generally follow similar trends by age, education, and residence. However, asking separately about period regulation captures additional likely abortions that would otherwise be missed if asking only about pregnancy termination.

One-year incidence of pregnancy removal and period regulation for respondents and their closest female confidantes by characteristics

- Respondent Pregnancy Removal
- Respondent Period Regulation
- Confidante Pregnancy Removal
- Confidante Period Regulation

AGE

EDUCATION

RESIDENCE

Cases (per 1,000 women)

Residence values:
Rural: 15.1, 22.7, 31.7, 23.1
Urban: 21.1, 19.2, 31.7, 20.4

Respondent abortion final method
whether did one or more things

Respondents more often ultimately removed a pregnancy using surgery whereas they primarily relied on traditional methods for period regulations at a time when they were worried they were pregnant.

PREGNANCY REMOVAL

Percentage

- 52.0
- 4.5
- 13.8
- 20.9
- 8.8

PERIOD REGULATION

Percentage

- 6.2
- 2.3
- 21.5
- 54.9
- 15.0

- Surgery
- Mifepristone/ misoprostol
- Other pills/pill type unknown
- Traditional (not inserted)
- Traditional (inserted)/other

SAMPLE DESIGN

The PMA2018/Cote d'Ivoire survey used a stratified cluster design. A sample of 73 enumeration areas (EAs) was selected by the National Statistics Institute from a sampling frame provided by the Fourth General Census of Population and Housing in 2014 using probability proportional to size. In each EA, data collectors listed and mapped households and private health facilities; supervisors randomly selected 35 households from each EA sampling list. Interviewers surveyed households and invited all eligible females age 15 to 49 to consent for the female survey. The final completed sample included 2,425 households (97.6% response rate), 2,738 de facto females (98.1% response rate), and 129 advanced facilities (97.0% response rate). Among the female respondents who reported a recent abortion, data collectors followed-up with and conducted in-depth qualitative interviews with 30. The advanced health facilities interviewed included: 48 public hospitals, 67 public health centers and clinics, and 14 private health centers and clinics. Data collection occurred from June through August 2018. The female estimates in this brief reflect weighted values; facility estimates are unweighted.

The PMA2020 project is implemented by local universities and research organizations in 11 countries, deploying a cadre of female interviewers trained in mobile-assisted data collection. The Institut National de la Statistique de la Cote d'Ivoire (INS-Cote d'Ivoire) and the Coordination du Programme National de Sante de la Mere et de l'Enfant (DC-PNSME) within the Ministry of Health implemented the PMA2020/Cote d'Ivoire project with overall direction and support provided by the Bill & Melinda Gates Institute for Population and Reproductive Health at the Johns Hopkins Bloomberg School of Public Health. An Anonymous Donor provided funding for the abortion module development, implementation, and analysis.

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