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Young women access and use of contraception: the role of providers' restrictions in urban Senegal

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Abstract

CONTEXT—Gaps are observed in young women's use of family planning in sub-Saharan Africa. Greater depth is needed to understand barriers to young women's use, including barriers imposed by service delivery providers.

METHODS—Baseline data from the evaluation of the Urban Reproductive Health Initiative in Senegal were used to examine contraceptive use, method mix, levels of unmet need and the sources of contraceptive methods of 15–29-year-old urban women who are currently married or are unmarried but sexually active. The prevalence of eligibility restrictions based on age and marital status among family planning providers is also examined; as well as how these restrictions might affect young women's access to contraceptive methods.

RESULTS—The level of contraceptive use is about 20% among young married women and 27% among young sexually active unmarried women, and the level of unmet need (mostly spacing) is respectively 19% and 11%. The minimum ages required by providers to offer contraceptive methods in facilities show that young people are forgotten in service provision. Restrictions based on age are more prevalent for pills and injectables —the two most common methods used by young women in urban Senegal. Restrictions based on marital status are less prevalent than restrictions based on age.

CONCLUSIONS—Young women's success in avoiding/delaying pregnancy often depends on having access to contraceptive information, methods and services. Beyond initiatives aiming to improve the physical access to family planning services in Senegal, training and education of the medical staff should aim to remove unnecessary barriers to method access.

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Even though the concept of family planning (FP) was introduced in Senegal in the early 1960s at the Private Blue Cross Clinic (Dakar), it was only in 1981 that the Family Health Project was launched by the Government with the goals of developing an administrative structure capable of directing a national program, providing IEC support, and providing family planning services. A key barrier to the introduction of family planning more widely prior to 1981 was the 1920 French law that forbade the promotion of contraceptives¹ this law was repealed in the early 1980s. In 1988, the national population policy gave official and political approval of the family planning program and paved the way for progress in family planning in Senegal. But despite changes in Senegal's legal and regulatory environment for family planning, progress in contraceptive prevalence has been slow due to low demand for use as well as supply side barriers. For instance, decades after most African countries began providing oral contraceptives and injectables by matrons or community health agents through CBD programs, Senegal only pilot-tested such a program in the last 2 years, a delay caused by illogical restrictions on which cadres can provide oral contraceptives and injectables.²

Estimates from the 2010–2011 Senegalese Demographic and Health Survey (DHS) indicate that only 12% of currently married women use a modern contraceptive method, as compared to 10% in 2005 and 8% in 1997.³ Notably, 29.4% of currently married Senegalese women have an unmet need for family planning, that is, they want either to postpone their next birth by at least two years or do not want any (additional) children, but are not using a contraceptive method;³ a slight decline from 31.6% in 2005. The levels of unmet need, especially for spacing, are higher in Senegal (at 29.1% among currently married women) than in other West African countries including Nigeria, Mali, Burkina Faso, and Ghana.⁴

The reasons for the existence of unmet need for family planning in developing countries are considered to be various and include the lack of knowledge of contraceptives, the quality and access of family planning services, the cost of methods, health concerns about the side effects and objections from husbands or other family members.^{4,5} Descriptive analysis with the Urban Reproductive Health Initiative data reveals that in urban Senegal, beliefs and misconceptions, objections by husbands and the poor quality of services contribute greatly to deter women from using contraception.⁶

The young, who constitute a key target in reproductive health strategies, appear to have particularly low levels of contraceptive prevalence. For instance, only 1.9% of all women aged 15–19 years (5.0% among the currently married) and 6.0% of all women aged 20–24 years (8.4% among the currently married) reported using a modern method in 2010–2011.³ Access to reproductive health services remains an issue for the young in Senegal.^{7–9} Cultural, medical and financial barriers prevent access to family planning services and contraceptives by young women and men. Some evidence from simulated client studies suggests for instance that health providers tend to promote abstinence for young girls, and are also reluctant to provide pills to unmarried young women.^{7,9} Consequences of this failure of access are an increased risk of unplanned pregnancies, unsafe abortion, STDs and HIV/AIDS and early school dropout from pregnancies, by young women.⁷ Previous research has stressed the importance of helping young people in developing countries to be effective contraceptive users.^{10–12} As the medical mediators between clients' knowledge, fears of

contraceptives and their use, health providers are also key to ensuring access to, adoption and continued use of contraceptive methods among the young. Health providers' knowledge and training have been found to influence access to specific contraceptives^{13,14} In Tanzania, Speizer and colleagues¹³ demonstrated examples of obstacles that prevent women from using modern contraception such as inappropriate contraindications, eligibility restrictions, unnecessary process hurdles, overspecialization of providers, bias and unnecessary regulations.

The present study reports on the role that family planning providers' restrictions play in young women's access and use of contraception in urban Senegal. Norms and policies have been developed over the years in Senegal to ensure that all individuals receive family planning services without any discrimination based on age, sex, marital status, ethnic group, or religious affiliation.^{15–18} As regards to health services for young people in particular, the latest Senegal national health development plan (2009–2018)¹⁷ specifies that health professionals should be able to supervise adolescents' prevention of childbearing, as well as prevention and voluntary testing for STIs. This should be done without any stigmatization and clearly defined in training curricula for doctors, nurses, midwives and social workers. Yet, very few studies have been conducted to assess the extent to which providers' restrictions towards young people are prevalent in Senegal, using data collected from providers. The prevalence of providers' restrictions is examined in this study by type of facility, type of method, specialization, providers' gender and providers' age.

Data and Methods

The study draws upon baseline data collected by the Measurement, Learning & Evaluation project in Senegal as part of the evaluation of the Senegal Urban Reproductive Initiative (ISSU); ISSU is a five-year project (2010–2015) financed by the Bill & Melinda Gates Foundation. The ISSU's plan is to implement specific programs as part of a pilot project to show how using innovative approaches based on quality health care delivery in the public and private sectors, as well as demand creation and advocacy efforts, can significantly increase the use of modern family planning (FP) methods by the urban population in francophone Africa. Our study contributes to identifying and addressing barriers to contraceptive access and use among young women. The MLE project received ethical approval from the National Ethics Committee of Senegal and the Institutional Review Board of the University of North Carolina in Chapel Hill. Clear guidelines were considered to comply with the ethical considerations during data collection, and study participants were requested to sign a consent form. Participants had the right to abstain from participating in the study, or to withdraw from it at any time, without reprisal.

The women's data, collected as baseline data for a longitudinal evaluation, are used in this study to provide detailed background information about young women's modern contraceptive use, method choice and unmet need for contraception. Also examined is where young women source their contraceptive methods. This step of the analysis provides the context to apply the findings on providers' restrictions to determine how these restrictions could be detrimental for young women's access to contraceptive methods. The women's survey was conducted using a two-stage stratified area sampling procedure to obtain a

representative sample of women ages 15–49 in the 6 urban sites (Dakar, Guédiawaye, Kaolack, Mbao, Mbour and Pikine). In the first stage, 32–64 primary sampling units (PSU) were selected with probability proportional to population size of each site. In the second stage, in all selected PSUs, a random sample of 21 households and all identified women aged 15 to 49, habitual residents or visitors, were eligible for an individual interview. A total of 9,614 women were successfully interviewed; the response rate was 89%.¹⁹ Sample weights were applied to the analysis sample to adjust for the sample size at the different sites and non-response. The *svy* command in Stata was used for the analysis. Standard errors were adjusted for clustering. For the purposes of our analysis, we selected two weighted analysis samples of young women aged 15–29 years: 2,340 currently married and 237 sexually active currently unmarried. Analyses were performed separately for the currently married and sexually active currently unmarried young women to account for the differences in contraceptive demand among the two groups. The sexually active currently unmarried women are women who declared to have initiated sex and to have been sexually active during the 12 months preceding the survey, and who also declared to not be married or living with a man at the time of the survey.

The main results that are presented in the study are the provider level results, derived from data collected from health facilities and health providers serving in those facilities. Only the health facilities that supply reproductive health services were targeted. For the sampling procedure, a list of operational health facilities providing reproductive health services in survey sites (including hospitals, health centers, health posts, dispensaries, community health centers, private clinics and faith-based facilities) was first obtained. This list was updated using different sources including: Dakar Medical Region, Mbour Health District, Kaolack Health District, National Health Information System and IntraHealth's on the ground work. A total of 269 health facilities were listed, out of which 205 (i.e. 76%) were successfully found and surveyed. This included 153 public health facilities (including 8 hospitals, 22 health centers, 111 health posts, and 12 other public facilities such as dispensaries and community health centers) and 52 private health facilities (including 27 hospitals/clinics, 10 faith-based facilities, 5 NGO clinics, and 10 other private providers). For the purposes of these analyses, providers surveyed in faith-based and NGO facilities were grouped with the private sector facilities. Each facility was audited using a questionnaire on reproductive health services offered. In each facility, 2 to 4 providers involved in the provision of reproductive health services were randomly selected for interview from a list of active, permanent facility personnel on duty at the time interviewers visited each facility. The number of providers to select for each facility was determined by the number of providers involved in the provision of reproductive health services for that facility. Among the 205 health facilities surveyed, 637 providers were successfully interviewed: 516 providers from public health facilities (32 in hospitals, 81 in health centers, 364 in health posts, and 39 in other public facilities) and 121 providers from private health facilities. Since only 2 to 4 providers were interviewed per health facility, the information gathered does not necessarily characterize all providers at the facility level. Nonetheless, we view the MLE data collection procedure as more suitable for this study as all facilities in the sites were eligible for inclusion rather than just a random sample of facilities as it is often done in situation analyses.²⁰

This study provides estimates of the prevalence of providers' restrictions for two reasons most susceptible to affect young women' access to contraceptive methods: minimum age and marital status. These estimates are based on responses from health facility staff involved in reproductive health service provision, i.e. doctors, nurses, trained midwives, maternal and child health aides, medical assistants and auxiliary staff. The health provider questionnaire allows us to know the minimum age below which the health provider does not offer or does not advise each method, and whether the health provider offers a method to a woman who is unmarried. For each specific method, providers were asked: "What is the minimum age you would offer the method to anyone?" and "Would you offer this method to an unmarried person?" Providers who did not report any minimum age were considered as not restricting contraceptive methods by age. As regards the minimum age for offering each specific method, a median age and interquartile range was computed. Providers who reported that they would not offer the method to an unmarried person were considered to restrict specific methods based on marital status. Estimates are presented separately for public and health facilities. Although all staff involved in both types of health facilities receive the same training and are required to follow to same national guidelines of family planning service delivery, differences in the prevalence of restrictions could be observed due to differences in monitoring systems.

Results

Young Women's Use of Contraception and Sources of Contraceptives

Table 1 presents the percentage of young females aged 15–29 who reported current use (at the time of survey) of a modern method of family planning by age and sexual activity. The table further presents the percentage of users using each method and the rate of unmet need for family planning, computed as the percentage of sexually active women reporting non-use of a modern family planning method yet would wish to stop or delay pregnancy respectively. The table further presents the 95% confidence interval of the proportions.

The percentage of young women aged between 15 and 29 years using a modern method of contraception in urban Senegal is 20% among the currently married group and 27% among the sexually active unmarried group (Table 1). As regards to the method mix, most married young women use injectables (43%) and pills (33%), and this pattern is consistent among the different quinquennial age groups (15–19, 20–24, 25–29 years). Sexually active unmarried women commonly use condoms (56%), injectables (21%) and pills (14%). About 19% of the currently married young women want to postpone their next birth by at least two years but are not using a contraceptive method. The highest level of unmet need for spacing is among the currently married women aged 20 to 24 years (20%). The level of unmet need for spacing is also relatively important among the sexually active unmarried women (11%).

As regards to the sources of contraceptive methods, 67% of young women (married and sexually active unmarried women) who currently use a modern method source their method from the public formal sector: 2% from public hospitals, 17% from health centers, 43% from health posts, and 4% from other public facilities including dispensaries and other small public facilities (Table 2). The public facilities visited by young women for their pills (39%) and injectables (64%) are mostly health posts. Women who source their implants from the

public sector mostly turn to health centers (60%). The private sector contributes 26.1% in overall method provision among young women, and young women mostly turn to the private sector for condoms (61%). About 34% of young women using condoms also source those from NGOs, clinics at a workplace, youth centers, VCT centers or shops.

Levels of Providers' Restrictions by Minimum Age

Table 3 presents the percentage of providers who reported that they applied any form of restrictions when providing family planning methods and services to women based on minimum age and based on marital status. These percentages are presented as the number of providers applying specific restrictions as a proportion of all the providers who reported that they offered these specific methods at their current facilities of interview. Confidence intervals for all these indicators are also presented to show the level of different or similarity between comparison proportions. Against age, the table also presents the mean minimum age below which providers would not offer a specific method. Interquartile ranges are also presented, a measure of dispersion which is computed as the difference between the 75th percentile (Q3) and the 25th percentile (Q1) given as; $IQR = Q3 - Q1$.

It can be seen from the table that restrictions based on a minimum age are quite common in the public sector for pills and injectables, the two most common methods used by young women. For the pills for instance, a minimum age is required by 59% of providers interviewed in public hospitals, by 47% of providers in public health centers, by 46% of providers in public health posts, and by 47% of providers in other public facilities. As for the injectables, a minimum age is required by 52% of providers in public hospitals, 43% of providers in public health centers, 40% of providers in public health posts and 38% of providers in other public facilities. In private facilities, 49% of providers required a minimum age to offer pills, 41% to recommend injectables, 38% to offer implants, 20% to suggest condoms, and 21% to propose emergency contraception. About 25% of providers interviewed in public facilities and 20% of providers interviewed in private facilities restrict eligibility by minimum age for condoms; for emergency contraception 24% of providers in public facilities and 21% in private facilities follow age restrictions; and regarding implants, the percentage of providers restricting access by age are 45% in public facilities and 38% in private facilities.

The median minimum age required by the providers who apply restrictions below a minimum age in public facilities is 17 years for pills, and 18 years for injectables, implants, condom, and emergency contraception. Whereas in the private sector, the median minimum age required by providers is 18 years for all the specific methods mentioned.

Levels of Providers' Restrictions for Reason of Marital Status

Table 3 also shows the percentage of providers that impose a marital status restriction on specific methods. Overall, providers' restrictions based on marital status are less common than minimum age barriers for the majority of methods. Providers in private health facilities are the most likely to restrict methods to unmarried women. About 12% and 14% of providers in public health facilities require that a woman be married in order to receive pills and injectables. In private health facilities, higher percentages of providers impose

restrictions: about 21% of providers refuse to offer the pill, 28% refuse to recommend injectables, 30% refuse to propose implants and 22% the emergency contraception, to unmarried women. Providers also impose unnecessary restrictions by marital status for condoms; 8% of providers interviewed in public facilities and 12% of providers interviewed in private facilities do not offer condoms to unmarried women.

Levels of Providers' Restrictions by Providers' Gender, Age and Specialization

Additional analyses were conducted to assess the patterns of providers' restrictions by minimum age and marital status by providers' gender, age and specialization. The results presented here (Table 4 and Table 5) are restricted to the three methods mostly used by young women, i.e. pills, injectables and condoms. A remarkable point is made clear by Tables 4 and 5; service restrictions vary among and between providers depending on the gender, age and specialization (and probably other unobserved characteristics). Table 4 shows, for instance, that minimum age restrictions for offering pills, injectables or condoms are somewhat more common among male staff (58%) than female staff (45%) in public facilities. It is however important to note here that not many providers of pills, injectables or condoms are male in the public sector. The results also indicate that male staff (67%) is more likely to impose minimum age restrictions than female staff (51%) in the private sector. As regards minimum age restrictions by age of the provider, the results indicate non significant variations; age restrictions are as prevalent among young staff as among older staff in both public and private facilities. Our results also indicate that in the public sector, minimum age restrictions to offer pills are generally more common among nurses (62%) and midwives and other auxiliary staff (43%) as compared to doctors (33%)

Providers' restrictions based on marital status (Table 5) show that while female providers are less likely than male providers to impose barriers based on age, they are slightly more likely to require that a client should be married in order to receive pills, injectables or condoms. Female providers in private facilities are more restrictive (36% versus 19% among males) than their counterparts in public facilities (18% versus 13% among males). There is also an interesting pattern as regards to marital restrictions by providers' age; the older staff appeared to be more likely to not offer pills or injectables to unmarried clients in public facilities whereas the younger staff is to some extent more likely to not offer injectables to unmarried clients in private facilities. There are differences in level of restrictions for reason of marital status between nurses and midwives in both public and private facilities for the three methods. In private facilities, however, restrictions to offer pills based on marital status seem to be more common among nurses (28%) than among midwives (18%) whereas restrictions to offer injectables are slightly more common among midwives (31% versus 28% among nurses). It is worth mentioning here that since the proportions of providers restricting by marital status are relatively low, all these differences are not significant.

Discussion

As the levels of unmet needs remain high in Senegal, a challenge for family planning programs is to find solutions to key barriers to family planning access and use. The results from this study call for special attention to the young population in Senegal. Young people

have particularly low levels of contraceptive prevalence despite a wide knowledge of contraceptive methods. Our data show that only 20% of married young women and 27% of unmarried, sexually active women currently use a modern method of contraception in urban Senegal. The contraceptive use pattern among the married young women indicates higher levels of contraceptive use among women aged 20 to 24 (22%) and women aged 25–29 (22%) than among women aged 15 to 19 (8%). The DHS data at the national level indicate a similar pattern³; however, this study indicates even higher percentages of contraceptive use for the urban young women. On the other hand, 19% of married young women and 11% of unmarried sexually active young women have an unmet need for contraception. These levels of unmet need are indicative of gaps in services in these urban sites.

An important goal of this study was to investigate the role providers' restrictions play in young women's access and use of contraception in Senegal. As the medical mediators between clients' knowledge, fears of contraceptives and their use, health providers are key to ensuring access to, adoption and continued use of contraceptive methods among the young. But as we found in this study, provider biases and restrictions may also hamper young peoples' contraceptive access. The proportions of providers who restrict the provision of contraceptives by minimum age ranged from 24% for emergency contraception to 57% for pills in the public sector, and from 20% for condoms to 49% for pills in the private sector. The proportions of providers who restrict the provision of pills and injectables by minimum age are particularly troublesome since these are the two methods mostly used by young women. The minimum age restrictions for emergency contraception and condoms (around 20 to 24%) in both the private and the public sector, although relatively low, are problematic. Emergency contraception, in particular, may serve as an efficient way of avoiding unwanted pregnancies among the young after unprotected sexual intercourse. Looking at the minimum ages imposed, the medians are 18 years old for most of the methods in both the public and the private sectors; this presents an obstacle for access to a non negligible proportion of young women. Further analysis (results not shown here) indicates no high correlation between restrictions by minimum age and parity restrictions. Thus it does not appear that parity was considered by the providers interviewed when making decisions to restrict methods by minimum age. The findings confirm the patterns of restrictions also highlighted in the Miller et al.¹⁴ study: providers in Senegal are more likely to impose restrictions based on age than restrictions according to marital status. As regards the category of health provider, we found that in the public sector in particular, male staff is more likely to impose restrictions by minimum age than female staff for pills, injectables and condoms. We found that in the public sector too, nurses are more likely to impose restrictions by minimum age for pills, injectables and condoms as compared to midwives or doctors. These results have to be taken to account in the context however. Providers play different type of roles in service provision. As we mentioned for instance, not many providers of pills, injectables or condoms are male in the public sector in Senegal.

A number of previous studies have demonstrated that provider restrictions, as found in urban Senegal, reflect social norms and values of providers.^{21–23} As mentioned by Quesnel and Samuel²¹, health providers are intermediaries in the constitution of the family in developing societies and their advice or recommendations could be influenced by their own perceptions of social norms and values. Batieno²² also mentioned that by the choice of the prescription

that they give to their female patients, health providers may perpetuate norms and values of the society; they may prefer counseling young women about their behavior following a more paternalistic approach as found in Burkina Faso. A study conducted in Ghana reported that health providers may impose restrictions with the best of intentions to protect both the client and the society.²³ Consequences may be that young girls have unprotected sex or use inadequate contraceptives.

As for the Senegalese case, provider imposed restrictions would most likely be a reflection of both the Senegalese long history of restrictive family planning practices, requirements for medical professionals to offer hormonal methods, and a general social conservatism. Strong norms against premarital sexuality, especially for girls, exist and health providers may tend to promote abstinence for young girls, but also may avoid giving access to the pill to unmarried women.⁹ Providers may also be reluctant to offer contraceptives (including condoms) to young people because they perceive they will be vulnerable to attacks from parents or other community members.

It is expected that medical aspects should prevail over social norms in family planning service provision. These medical aspects should be defined by the state of medical knowledge and scientific advances. According to the World Health Organization²⁴ report on medical eligibility criteria, even the medical concerns expressed regarding the use of certain methods must be balanced against the advantages of avoiding unintended pregnancies, particularly when it comes to the young population. However, the approach to decision-making about the choice of contraceptives may vary according to individual social issues; such as frequency of intercourse of young adults for example, but also economic activities of women and their participation into the job market and their involvement into longer studies. In the absence of a clear regulatory framework for service provision to young people, health providers tend to refer to their own perspectives to determine how and when to offer services and methods to young people. Family planning programs should organize more regular follow-up and updates on contraception via forums and seminars. Proper provider training is also essential to prevent providers from limiting the options available for young women. In Kenya and Ethiopia for instance, Judge and colleagues²⁵ found that the counseling and provision of emergency contraceptives was positively associated with a greater level of knowledge of the provider of this particular method. Therefore, an increase in knowledge of the providers should allow the clients to have better access to contraception. It may be that health providers currently do not have enough knowledge of the methods, or of the consequences and secondary effects of contraceptives.

Limitations

We cannot fail to acknowledge the limitations of our study. One such limitation is the limited data on providers' characteristics. A multivariate analysis that includes providers' characteristics as predictors of reporting age or marital restrictions on specific methods, with meaningful results, was therefore not possible. Another limitation is that it is not clear here whether the restrictions imposed by providers selected for interview are representative of all providers in the facilities surveyed. Next, there were cases of reported age-heaping in our data on the service provider minimum age of method restriction, particularly at age 18 and

all other ages with “0” and “5” digits over 15 years. This would speak to the quality of data on age restrictions reported by service providers and forms a limitation and caution when interpreting the measures of central tendency reported in this study. Finally, the information gathered in the women’s data about the reasons for non-use (among women not using contraceptives) doesn’t fully allow capturing to what extent providers’ restrictions could have accounted for the non-use.

Conclusions

Despite these limitations, the study results have important programmatic implications. First, beyond initiatives aiming to improve the physical access to family planning services in Senegal, training and education of the medical staff should aim to remove unnecessary barriers to access the methods. Training programs aimed at reducing age restrictions in service provision among health providers should target all staff in both public and private facilities with particular attention to nurses. Training programs aimed at reducing restrictions based on marital status should also target all health providers but with a particular attention to older staff. These types of programs should lead to increased access and use of family planning among young women and thus reduce overall unmet need and lead to improved health outcomes in urban Senegal and beyond. Second, there is a need to add a clear mention of adolescents and young people as an eligible category for family planning services in all family planning service delivery protocols or policies. To be certain, the documents relative to the norms and protocols in Senegal specify no regulatory restrictions limiting access to family planning services to adolescents or young people, but these protocols and norms do not give a clear official statement designating adolescents and young people as an eligible category for family planning services either. One can assume that in the absence of a clear mention, providers in Senegal would have the liberty to define their restriction criteria based on their own cultural values as regards to sexuality and contraception among adolescents.

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References

1. Wilson E, Reproductive health case study, Senegal, Washington, D.C.: The Futures Group International, The POLICY Project, 1998 <http://www.policyproject.com/pubs/countryreports/sendbl.pdf>
2. FHI 360, Senegal: Community health workers successfully provide intramuscular injectable contraception, Dakar FHI 360, 2013 <http://www.fhi360.org/sites/default/files/media/documents/community-health-workers-intramuscular-depo-senegal.pdf>
3. Agence Nationale de la Statistique et de la Démographie (ANSD) [Sénégal], et al., Enquête Démographique et de Santé à Indicateurs Multiples au Sénégal (EDS-MICS) 2010–2011. Calverton, Maryland, USA: ANSD et ICF International, 2012.
4. Sedgh G, Hussain R, Bankole A and Singh S, Women with an unmet need for contraception in developing countries and their reasons for not using a method, Occasional Report, New York: Guttmacher Institute, 2007, No. 37.
5. Cleland John et al., Family planning: The unfinished agenda, *The Lancet* 2006, 368: 1810–1827.

6. Measurement, Learning & Evaluation (MLE) project, 2011 Baseline Survey for the Senegal Urban Health Initiative (ISSU) Service Delivery Site Survey: Final Report, 2012 http://www.urbanreproductivehealth.org/sites/mle/files/issu_service_delivery_site_baseline_survey_english.pdf.
7. Katz K and Naré C, Reproductive health knowledge and use of services among young adults in Dakar, Senegal, *Journal of Biosocial Science*, 2002; 34:215–31. [PubMed: 11926455]
8. Youth Map Senegal, Youth assessment: the road ahead, Volume 1: main report, IYF Library, 2011 http://www.iyfnet.org/sites/default/files/YouthMap_Senegal_Vol.1_Report.pdf
9. Naré C, Katz K and Tolley E, Adolescents' access to reproductive health and family planning services in Dakar (Senegal), *African Journal of Reproductive Health*, 1997, 1:15–25. [PubMed: 10214411]
10. Blanc AK, Tsui AO, Croft TN and Trevitt JL, Patterns and trends in adolescents' contraceptive use and discontinuation in developing countries and comparisons with adult women, *International Perspectives on Sexual and Reproductive Health*, 2009, 35(2): 63–71. [PubMed: 19620090]
11. Biddlecom A, Munthali A, Singh S and Woog V, Adolescents' views of and preferences for sexual and reproductive health services in Burkina Faso, Ghana, Malawi and Uganda, *African Journal of Reproductive Health*, 2007, 11(3): 99–110.
12. Bankole A, Ahmed FH, Neema S, Ouedraogo C and Konyani S, Knowledge of correct condom use and consistency of use among adolescents in four countries in Sub-Saharan Africa, *African Journal of Reproductive Health*, 2007, 11(3): 197–220. [PubMed: 18458741]
13. Speizer IS, Hotchkiss DR, Magnani RJ, Hubbard B and Nelson K, Do service providers in Tanzania unnecessarily restrict clients' access to contraceptive methods? *International Family Planning Perspectives*, 2000, 26(1): 13–20 & 42.
14. Miller K, Miller R, Fassihian G and Jones H, How providers restrict access to family planning methods: results from five African countries In, Miller K, Miller R, Askew I, Horn MC and Ndhlovu L (eds.) *Clinic-based family planning and reproductive health services in Africa: findings from situation analysis studies* (pp. 159–180), New-York: Population Council, 1998
15. République du Sénégal, Loi n° 2005–18, du 5 août 2005, relative à la santé de la reproduction, Chapitre IV, Article 10.
16. République du Sénégal, Ministère de la santé et de la prévention, Direction de la santé, Division de la santé de la reproduction, Politiques et normes de services de SR, Sénégal, 2007.
17. République du Sénégal, Ministère de la santé et de la prévention, Plan national du développement sanitaire du Sénégal (PNDS 2009–18), Sénégal, 2009.
18. République du Sénégal, Ministère de la santé et de l'action sociale, Direction de la santé, Division de la santé de la reproduction, Plan national de planification familiale 2012–2015, Sénégal, 2012.
19. Measurement, Learning & Evaluation (MLE) project, 2011 Baseline Survey for the Senegal Urban Health Initiative (ISSU) Service Delivery Site Survey: Final Report, 2012 http://www.urbanreproductivehealth.org/sites/mle/files/issu_service_delivery_site_baseline_survey_english.pdf.
20. Miller R, Fisher A, Miller K, Ndhlovu L, Maggwa BN, Askew I, Sanogo D, Tapsoba P, The situation analysis approach to assessing family planning and reproductive health services: A handbook. New York, USA: Population Council, 1997.
21. Quesnel A and Samuel O, Femmes entre mari et médecin (Mexique), *Pratiques de fécondité, Histoires de Développement*, 1993, 23: 30–33. http://horizon.documentation.ird.fr/exl-doc/pleins_textes/pleins_textes_6/b_fdi_33-34/38840.pdf
22. Bationo BF, Les relations entre les professionnels de santé et les jeunes filles au Burkina Faso, *Agora débats/jeunesses* 2/2012, 61: 21–33. www.cairn.info/revue-agora-debats-jeunesses-2012-2-page-21.htm
23. Stanback J and Twum-Baah K, Why Do Family Planning Providers Restrict Access to Services? An examination in Ghana, *International Family Planning Perspectives*, 2001, 27(1):37–41.
24. World Health Organization, Medical eligibility criteria for contraceptive use, Fourth edition 2009, Department of Reproductive Health, 121 p http://www.who.int/reproductivehealth/publications/family_planning/9789241563888/en/index.html

25. Judge S, Peterman A and Keesbury J, Provider determinants of emergency contraceptive counseling and provision in Kenya and Ethiopia, *Contraception*, 2011, 83(5): 486–90. [PubMed: 21477694]

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Among currently married and sexually active unmarried women aged 15–29, percentage who are currently using a modern method of contraception, percentage distribution of current users by type of methods, and percentage distribution of unmet need for contraception, Urban RH Initiative, Women data, Senegal, 2011.

TABLE 1.

	% distribution among users									
	% using modern method	Pill	Injec-tablets	Im-plants	IUD	Condom	Other method	Spacing	Limiting	Overall
<i>Currently married (N=2,340)</i>										
All	19.7 [18.0, 21.6]	32.7 [28.1, 37.6]	42.5 [37.6, 47.5]	6.9 [4.7, 10.0]	2.3 [1.3, 4.1]	15.2 [11.7, 19.3]	0.5 [0.1, 1.4]	18.9 [17.2, 20.8]	0.3 [0.1, 0.5]	19.2 [17.5, 21.1]
15–19	7.6 [5.1, 11.1]	30.5 [14.3, 53.5]	40.7 [23.6, 60.4]	3.7 [0.7, 17.1]	0.0	25.1 [12.0, 45.3]	0.0	15.3 [11.3, 20.4]	0.0	15.3 [11.3, 20.4]
20–24	21.6 [18.7, 24.7]	28.6 [22.1, 36.1]	44.6 [37.1, 52.4]	3.8 [1.9, 7.4]	2.8 [1.2, 6.3]	20.3 [14.2, 28.1]	0.0	20.3 [17.6, 23.3]	0.2 [0.1, 0.5]	20.5 [17.9, 23.5]
25–29	21.7 [19.1, 24.5]	36.3 [29.9, 43.3]	40.9 [34.2, 48.0]	9.7 [6.1, 15.2]	2.2 [1.0, 4.8]	10.0 [6.7, 14.6]	0.9 [0.3, 2.7]	18.8 [16.3, 21.7]	0.4 [0.2, 0.8]	19.2 [16.6, 22.0]
<i>Sexually active currently unmarried (N=237)</i>										
All	27.1 [20.7, 34.7]	14.1 [6.6, 27.4]	20.8 [11.9, 33.8]	7.3 [1.6, 27.3]	0.6 [0.1, 3.9]	55.8 [40.3, 70.2]	1.5 [0.2, 9.8]	10.6 [6.7, 16.5]	0.0	10.6 [6.7, 16.5]

Note: 95% Confidence intervals (CI) are displayed in brackets

TABLE 2.

Among currently married and sexually active unmarried women aged 15–29 using modern contraceptive methods, percent distribution by most recent source of method, according to method, Urban RH Initiative, Women data, Senegal, 2011

	Pills	Injectables	Implants	Condom	Total ^f
Public					
Hospital	2.3 [0.8, 6.2]	1.5 [0.6, 3.8]	10.4 [4.4, 22.5]	0.0	2.1
Health center	19.3 [13.1, 27.7]	13.3 [9.2, 18.9]	60.1 [41.1, 76.6]	1.2 [0.2, 8.1]	17.2
Health posts	39.3 [30.9, 48.4]	63.7 [55.9, 70.9]	24.1 [11.8, 43.0]	3.7 [1.0, 12.5]	42.8
Other public facilities [‡]	5.2 [2.3, 11.2]	5.3 [2.9, 9.6]	0.8 [0.1, 5.8]	0.2 [0.0, 1.7]	4.4
Total public	66.1 [57.3, 73.9]	83.8 [76.0, 89.4]	95.4 [83.3, 98.9]	5.2 [1.8, 13.7]	66.5
Private					
Hospital/Clinic	9.1 [4.9, 16.2]	11.3 [6.4, 19.3]	0.0	1.0 [0.1, 6.7]	8.2
Other private source	20.8 [14.8, 28.5]	3.3 [1.5, 7.2]	0.0	60.1 [45.8, 72.9]	17.9
Total private	29.9 [22.5, 38.5]	14.6 [9.2, 22.5]	0.0	61.1 [46.7, 73.8]	26.1
NGOs and other[#] sources	4.0 [1.6, 9.7]	1.6 [0.6, 4.1]	4.6 [1.1, 16.7]	33.7 [21.5, 48.5]	7.4
Number of women	166	239	36	77	536

Notes

Sources of family planning method are presented as a percentage of the number of users who reported a particular type of healthcare facility as the source of current method as a fraction of all current users of modern family planning method. The same is done for specific methods and table three presents these proportions and their 95% confidence intervals.

Percentages for IUDs and other methods are not displayed due to small numbers.

^fAmong all currently married and sexually active unmarried young women who are currently using a modern method.

[‡]Dispensaries and community health centers.

[#]Clinic at workplace, youth center, VCT center, shop, market, peer educator.

Proportion of FP providers who apply minimum age barriers, median minimum age, and percentage of FP providers who would not offer a method to an unmarried client, by method and according to type of facilities, Urban RH Initiative, Service Provider Survey, Senegal, 2011

TABLE 3.

Barrier and method	Public sector					Private sector	
	Hospitals	Health centers	Health posts	Other public facilities [‡]	Total public sector		
Percentage of providers who apply minimum age barriers							
Pills	59.3	47.3	46.0	46.9	57.0		48.8
Injectables	51.9	42.5	40.1	36.7	43.6		41.4
Implants	52.0	44.9	32.7	37.5	45.2		38.1
Condom	29.6	25.0	16.0	25.7	24.5		19.9
EC	26.9	22.2	18.1	34.8	24.2		21.1
Median minimum age (interquartile range)							
Pills	18 (4)	17 (3)	17 (3)	15 (2)	17 (3)		18 (3)
Injectables	19 (2)	18 (9)	18 (5)	18 (7)	18 (5)		18 (4)
Implants	20 (7)	20 (7)	18 (9)	18 (2)	18 (7)		18 (4)
Condom	18 (5)	17.5 (3)	18 (3)	18 (1)	18 (3)		18 (2)
EC	18 (5)	17.5 (5)	17.5 (3)	18 (2)	18 (3)		18 (3)
% not offering to unmarried clients							
Pills	12.5	18.5	9.6	23.1	12.2		20.7
Injectables	12.5	18.5	12.1	17.9	13.6		28.1
Implants	12.5	25.9	11.0	12.8	13.6		29.8
Condom	6.3	11.1	7.4	12.8	8.3		11.6
EC	6.3	13.6	7.7	10.3	8.7		21.5
Number of providers	32	81	364	39	516		121

[‡]Dispensaries and community health centers.

TABLE 4.

Percentage distribution of providers who restrict eligibility because of minimum age, by type of methods, according to providers' gender, age and specialization, Urban RH Initiative, Service Provider Survey, Senegal, 2011

Providers' characteristics	Public sector					Private sector				
	Pills	Injectables	Condoms	Any of the 3 methods	Number of providers	Pills	Injectables	Condoms	Any of the 3 methods	Number of providers
Provider's gender										
Male	65.2	54.1	32.0	58.1	86	66.7	63.2	30.0	66.5	21
Female	44.0	38.9	16.4	44.7	430	54.9	39.0	23.2	51.0	100
Provider's age										
<30 years	47.5	42.6	18.0	48.5	66	55.0	45.0	31.6	54.5	22
30–39 years	44.2	41.2	21.0	48.4	153	52.9	38.2	23.5	52.5	40
40+ years	48.5	40.5	18.0	45.8	297	60.9	46.8	22.4	54.2	59
Provider's specialization										
Doctor	33.3	45.5	33.3	38.5	13	52.9	44.4	16.7	57.9	19
Nurse	62.0	51.9	31.0	57.3	131	70.6	52.9	40.0	60.0	25
Midwife and others	42.8	37.5	14.2	43.5	372	54.5	40.9	21.9	50.6	77

Notes: Chi-square tests assessed differences between samples' distribution. Significant differences with P value less than 0.1 are displayed in bold. Not many providers of pills, injectables and condoms are male in the public sector

TABLE 5.

Percentage distribution of providers not offering FP methods to unmarried clients, by type of methods, according to providers' gender, age and specialization, Urban RH Initiative, Service Provider Survey, Senegal, 2011

Providers' characteristics	Public sector					Private sector				
	Pills	Injectables	Condoms	Any of the 3 methods	Number of providers	Pills	Injectables	Condoms	Any of the 3 methods	Number of providers
Provider's gender										
Male	9.3	9.3	8.1	12.8	86	19.0	14.3	14.3	19.0	21
Female	12.8	14.4	8.4	18.1	430	21.0	31.0	11.0	36.0	100
Provider's age										
30 years	4.5	6.1	6.1	7.6	66	31.8	40.9	9.1	45.5	22
30–39 years	9.2	11.8	5.9	17.0	153	20.0	35.0	10.0	37.5	40
40+ years	15.5	16.2	10.1	19.5	297	16.9	18.6	13.6	25.4	59
Provider's specialization										
Doctor	7.7	7.7	7.7	7.7	13	21.1	15.8	15.7	21.1	19
Nurse	14.5	13.9	9.2	17.5	131	28.0	28.0	16.0	32.0	25
Midwife and others	1.6	13.7	8.1	17.7	372	18.2	31.2	9.1	36.4	77

Notes: Chi-square tests assessed differences between samples' distribution. Significant differences with P value less than 0.1 are displayed in bold. Not many providers of pills, injectables and condoms are male in the public sector