Session: 103. Adolescent Fertility and Contraceptive Use

Session 2: 102. Adolescent Sexual and Reproductive Health

Title: Understanding sources and quality of contraceptive care among adolescents: A global analysis

Long Abstract (2-4 Pages)

Background and research question

The unique contraceptive needs of adolescents are increasingly recognized in the global family planning community (United Nations, 2015; Chandra-Mouli et al., 2018; Biddlecom et al., 2018). Despite recent progress to meet these needs, approximately half of all adolescent pregnancies in low-income areas are unintended (Darroch et al., 2016). Enhanced policies and programs are needed to ensure that all adolescents who want to use contraception have access to an array of method choices and can obtain high quality services and counseling (Biddlecom et al., 2018; Ali et al., 2018).

Recent policy reports and calls to action on adolescent contraception emphasize the need for high-quality data to inform policies and programs that aim to increase contraceptive use, access, and choice among adolescents (Biddlecom et al., 2018; Chandra-Mouli et al., 2017). In particular, there is limited data on sources of family planning among adolescents and how these sources vary with respect to contraceptive method and other key demographic factors (Biddlecom et al., 2018; Radovich et al., 2018).

To address that gap, we conducted a secondary analysis of Demographic and Health Survey (DHS) data in 28 countries to examine sources of contraception and to illuminate the important role of the private sector among youth. The private sector—including commercial clinical providers, pharmacies, shops, NGOs, and social marketing organizations—is dynamic and diverse, offering benefits to users such as enhanced privacy and convenience that may not exist in the public sector. The private sector is sometimes forgotten in efforts to expand contraceptive access and meet growing family planning demand, but it represents a critical and necessary opportunity to provide effective contraceptive choices to a wide range of users, including adolescents.

Given high dependence on private sector sources among adolescents, assessing the quality of care provided by these sources is of utmost importance (Weinberger and Callahan, 2017). There are varying reports on family planning quality of care in both the public and private sectors, as the family planning research community struggles to identify a gold standard for measuring quality of contraceptive services and counseling (Shah et al., 2011; Agha and Do, 2009; Leisher et al., 2016). The method information index (MII) is a three-indicator proxy that is increasingly used to assess quality of contraceptive counseling (Jain et al., 2018; FP2020, 2016, Chang et al., *nd*). A forthcoming analysis shows the MII to be positively associated with method continuation in two private sector facilities in Uganda and Pakistan (Chakraborty et al., *nd*). We were unable to find any previous studies that analyzed differences in MII by age or sector. In this paper, we use the MII to examine quality of care received by adolescents across sources used, highlighting differences in counseling quality reported by adolescents compared to older contraceptive users and between adolescents who use public vs. private sector sources.

Our analysis of 28 Demographic and Health Surveys (DHS) seeks to answer the following research questions:

1. Where do adolescents (age 15-19) obtain their modern contraceptive methods?
2. How do these source patterns vary in relation to older women and across countries, methods, and socioeconomic statuses?
3. How does quality of care differ between 1) adolescents and older women and 2) adolescents who use the public sector versus those who use the private sector?

Data and research methods

We conducted a secondary analysis of DHS data in 28 of USAID's priority Population and Reproductive Health and Ouagadougou Partnership countries to answer the research questions above. We re-classified sources of family planning into public, private, and other sectors as depicted in *Table 1*. We disaggregate private sector use into three categories: 1) hospitals and clinics, 2) faith-based and nongovernmental organizations (FBOs and NGOs), and 3) pharmacies and shops, following the classifications used in Campbell et al., 2015. Public sector use was not further disaggregated due to limitations in the DHS data in some surveys that precluded the ability to distinguish between clinical and non-clinical public sector sources.

Table 1: Categorization of Family Planning Sources

Sector	Source Categories
Public	Hospitals, clinics, health centers, health posts, nursing/maternity homes, doctors, nurses, midwives, and community health workers
Private	1. Private hospitals and clinics: Hospitals, clinics health centers, health posts, doctors, nurses, and midwives 2. Faith-based and nongovernmental organizations: NGOs, mission/religious hospitals or clinics, churches, mosques, mobile clinics, and private community-based distributors 3. Pharmacies and shops: Pharmacies, shops, chemists, dispensaries, bars, and grocery stores
Other	Friends, relatives, neighbors, partners

We further disaggregated sources of care used by adolescents (15-19 years) and older women (25-49 years) by method, short-acting methods (SAM) versus long-acting reversible and permanent methods (LARCs and PMs), socioeconomic status (SES), and marital status. We excluded lactational amenorrhea method and the DHS's generic category for "other modern methods" from our analysis, as users of these methods were not consistently asked about their method's source in survey questionnaires. We used the method information index (MII) to assess differences in quality of care between adolescents and older women as well as between adolescents who use the public sector and those who use the private sector. All MII analyses were disaggregated by contraceptive method. The MII includes data on 1) if the client was informed about other contraceptive methods, 2) if the client was informed about possible side effects, and 3) if the client was told what to do if she experienced side effects.

All analysis was conducted in Stata 14. To produce global averages across all 28 countries analyzed, all countries were weighted equally.

Expected Findings

Preliminary findings show that, across countries, 45% of adolescent (15-19 years) modern contraceptive users obtain their method from the private sector (see *Table 2*). This private sector reliance is

substantially higher than that of older (25-49 years) modern contraceptive users (32%). Private sector reliance among adolescent users varies by country, ranging from just 9% in Rwanda to more than 66% in Benin, Bangladesh, Burkina Faso, the DRC, and Nigeria. Among youth who go to private sector sources, the majority go to non-clinical sources such as pharmacies or shops. In addition, nearly one in ten adolescents obtain their contraceptive method from an "other" source, such as a relative or friend, compared to just 4% of older users. This high reliance on private sector non-clinical and other informal sources of care suggests that these young women may not receive high quality contraceptive services, such as comprehensive counseling (Radovich et al., 2018).

The method mix among adolescent users compared to users older than 25 years is also quite different (see *Table 3*). In line with previous studies, we find that adolescents are more likely to use short-acting methods (89%) than women age 25-49 (72%) (Radovich et al., 2018; Weinberger and Callahan, 2017). Eleven percent of adolescents use long-acting and reversible methods. This raises questions as to whether adolescent users are seeking out SAMs such as condoms, which leads them to the private sector, or if they are seeking out the private sector for particular benefits such as privacy and convenience, where SAMs happen to be more available.

Our analysis will also explore whether and the degree to which quality of care, using the MII as a proxy, differs between adolescents and older women as well as between adolescents who use the public sector versus those who use the private sector. We hypothesize that there will be a disparity between quality received among adolescent contraceptive users compared to older users, given the stigma against youth using family planning in many countries. Given that many adolescent contraceptive users obtain their method from private, non-clinical sources such as pharmacies and shops, assessing the quality of care received from these sources is paramount and will have implications on policies and programs moving forward.

Our results illuminate the necessity of integrating youth-friendly and quality improvement interventions into both public and private sources. Such interventions typically focus on the public sector, but our results elucidate the important role that the private sector plays, as well, in helping adolescents across the world meet their reproductive intentions (HIPs, 2015; Chandra-Mouli et al., 2017; Gonsalves, 2017). Policymakers, program implementers, and other family planning actors must consider both sectors– including non-clinical private sector sources and the quality of care provided through such sources—as they strive to meet contraceptive demand and increase access and choice among youth.

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Table 2: Source of contraception among modern method users by age in 28 countries

Country	DHS Survey Year	Age	Public	Private	Other	Total	Unweighted N
Afghanistan	2015	15-19	36.51	63.49	0.00	100	88
Afghanistan	2015	25-49	48.92	47.86	3.22	100	4,011
Bangladesh	2014	15-19	28.67	67.19	4.14	100	931
Bangladesh	2014	25-49	53.72	43.60	2.68	100	6,486
Benin	2011-12	15-19	21.70	66.71	11.58	100	223
Benin	2011-12	25-49	51.15	42.06	6.79	100	812
Burkina Faso	2010	15-19	26.18	71.34	2.48	100	212
Burkina Faso	2010	25-49	83.62	13.46	2.93	100	1,719
Cote d'Ivoire	2011-12	15-19	9.70	63.15	27.15	100	227
Cote d'Ivoire	2011-12	25-49	33.59	50.66	15.75	100	779
DRC	2013-14	15-19	10.94	73.40	15.66	100	173
DRC	2013-14	25-49	38.96	54.20	6.84	100	769
Ethiopia	2016	15-19	78.53	21.44	0.03	100	207
Ethiopia	2016	25-49	87.59	11.88	0.53	100	2,310
Ghana	2014	15-19	38.06	61.23	0.71	100	112
Ghana	2014	25-49	68.33	29.68	1.99	100	1,261
Guinea	2012	15-19	13.77	56.91	29.33	100	85
Guinea	2012	25-49	36.68	51.07	12.26	100	296
Haiti	2016-17	15-19	23.77	52.79	23.44	100	267
Haiti	2016-17	25-49	50.35	45.29	4.36	100	2,214
India	2015-16	15-19	32.00	51.19	16.81	100	1,554
India	2015-16	25-49	71.37	24.87	3.76	100	211,546
Kenya	2014	15-19	50.76	42.70	6.54	100	473
Kenya	2014	25-49	61.17	37.58	1.25	100	8,638
Liberia	2013	15-19	63.94	34.53	1.53	100	291
Liberia	2013	25-49	66.13	30.86	3.01	100	1,113
Madagascar	2008-09	15-19	68.54	29.04	2.43	100	279
Madagascar	2008-09	25-49	73.39	25.06	1.55	100	2,823
Malawi	2015-16	15-19	77.09	21.14	1.77	100	802
Malawi	2015-16	25-49	78.27	21.39	0.35	100	7,827
Mali	2012-13	15-19	72.54	26.44	1.01	100	114
Mali	2012-13	25-49	71.19	26.39	2.42	100	719
Mozambique	2011	15-19	50.19	31.22	18.60	100	323
Mozambique	2011	25-49	84.88	12.52	2.60	100	1,256
Nepal	2016	15-19	59.32	39.74	0.94	100	113
Nepal	2016	25-49	70.60	24.03	5.37	100	3,759
Niger	2012	15-19	81.50	15.05	3.45	100	46
Niger	2012	25-49	86.11	11.53	2.36	100	765
Nigeria	2013	15-19	4.48	75.22	20.31	100	397
Nigeria	2013	25-49	36.08	56.23	7.69	100	2,879
Pakistan	2012-13	15-19	15.73	55.86	28.42	100	40
Pakistan	2012-13	25-49	47.00	44.73	8.28	100	3,051

Philippines	2013	15-19	39.81	57.75	2.44	100	72
Philippines	2013	25-49	49.00	49.89	1.11	100	3,231
Rwanda	2014-15	15-19	89.31	9.20	1.50	100	53
Rwanda	2014-15	25-49	89.46	6.58	3.97	100	3,180
Senegal	2016	15-19	83.38	8.71	7.91	100	46
Senegal	2016	25-49	88.72	7.72	3.56	100	1,097
Tanzania	2015-16	15-19	43.30	50.19	6.52	100	211
Tanzania	2015-16	25-49	63.04	35.35	1.62	100	2,353
Togo	2013-14	15-19	11.23	62.96	25.81	100	169
Togo	2013-14	25-49	65.61	28.66	5.73	100	1,086
Uganda	2016	15-19	48.26	47.54	4.20	100	369
Uganda	2016	25-49	61.93	36.97	1.10	100	3,408
Zambia	2013-14	15-19	82.60	15.14	2.27	100	367
Zambia	2013-14	25-49	80.04	19.17	0.79	100	3,789
TOTAL 15-19	-	15-19	45.06	45.40	9.53	100	8244
TOTAL 25-49	-	25-49	64.17	32.23	4.19	100	279166

Table 3: Use of short-acting methods (SAMs) and long-acting reversible and permanent methods (LAPM) among modern method users by age in 28 countries

Country	DHS Survey Year	Age	SAM	LAPM	Total	Unweighted N
Afghanistan	2015	15-19	87.06	12.94	100	88
Afghanistan	2015	25-49	79.74	20.26	100	4,011
Bangladesh	2014	15-19	97.54	2.46	100	931
Bangladesh	2014	25-49	80.91	19.09	100	6,486
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Benin	2011-12	25-49	77.16	22.84	100	812
Burkina Faso	2010	15-19	96.37	3.63	100	212
Burkina Faso	2010	25-49	72.19	27.81	100	1,719
Cote d'Ivoire	2011-12	15-19	99.43	0.57	100	227
Cote d'Ivoire	2011-12	25-49	97.08	2.91	100	779
DRC	2013-14	15-19	97.26	2.74	100	173
DRC	2013-14	25-49	76.89	23.1	100	769
Ethiopia	2016	15-19	77.89	22.11	100	207
Ethiopia	2016	25-49	67.93	32.07	100	2,310
Ghana	2014	15-19	79.13	20.87	100	112
Ghana	2014	25-49	64.24	35.76	100	1,261
Guinea	2012	15-19	96.21	3.79	100	85
Guinea	2012	25-49	91.91	8.09	100	296
Haiti	2016-17	15-19	99.14	0.86	100	267
Haiti	2016-17	25-49	87.7	12.3	100	2,214
India	2015-16	15-19	86.9	13.11	100	1,554
India	2015-16	25-49	16.71	83.27	100	211,546
Kenya	2014	15-19	86.4	13.59	100	473
Kenya	2014	25-49	67.17	32.84	100	8,638
Liberia	2013	15-19	84.91	15.09	100	291
Liberia	2013	25-49	87.54	12.47	100	1,113
Madagascar	2008-09	15-19	96.67	3.32	100	279
Madagascar	2008-09	25-49	86.95	13.06	100	2,823
Malawi	2015-16	15-19	87.01	12.99	100	802
Malawi	2015-16	25-49	52.41	47.6	100	7,827
Mali	2012-13	15-19	72.37	27.63	100	114
Mali	2012-13	25-49	69.86	30.14	100	719
Mozambique	2011	15-19	99.54	0.46	100	323
Mozambique	2011	25-49	95.82	4.18	100	1,256
Nepal	2016	15-19	83.65	16.36	100	113
Nepal	2016	25-49	36.61	63.4	100	3,759
Niger	2012	15-19	99.79	0.21	100	46
Niger	2012	25-49	93.51	6.48	100	765
Nigeria	2013	15-19	99.19	0.81	100	397
Nigeria	2013	25-49	81.93	18.06	100	2,879
Pakistan	2012-13	15-19	87.15	12.85	100	40
Pakistan	2012-13	25-49	50.46	49.53	100	3,051

Philippines	2013	15-19	92.75	7.26	100	72
Philippines	2013	25-49	63.4	36.59	100	3,231
Rwanda	2014-15	15-19	76.11	23.89	100	53
Rwanda	2014-15	25-49	76.03	23.96	100	3,180
Senegal	2016	15-19	51.49	48.5	100	46
Senegal	2016	25-49	58.09	41.92	100	1,097
Tanzania	2015-16	15-19	82.06	17.95	100	211
Tanzania	2015-16	25-49	64.13	35.87	100	2,353
Togo	2013-14	15-19	94.83	5.17	100	169
Togo	2013-14	25-49	67.1	32.9	100	1,086
Uganda	2016	15-19	88.48	11.51	100	369
Uganda	2016	25-49	66.07	33.94	100	3,408
Zambia	2013-14	15-19	89.14	10.87	100	367
Zambia	2013-14	25-49	77.44	22.56	100	3,789
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TOTAL 25-49	-	25-49	71.68	28.32	100	279166