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Adolescent Adoption and Continuation of Contraception and Reasons for Discontinuation in the Developing Country Setting

Short Abstract

Family planning has been shown to save the lives of women and children living in developing countries [1]. Despite the overwhelming success of family planning programs in many world regions, contraceptive prevalence in much of the developing world remains low [2]. Future success of family planning programs in these countries will depend not only on improved rates of contraceptive uptake but also on improvements in contraceptive continuation [3]. Given the predominantly young age structure of many developing countries, contraceptive continuation among adolescents warrants increased attention [4, 5]. A better understanding of the factors influencing adolescent contraceptive behavior could dramatically impact global rates of maternal, infant, and child mortality. The goals of this study are to identify trends in contraceptive behavior among women ages 15 to 24 living in select countries and to better understand the factors contributing to adolescent contraceptive discontinuation.

Long Abstract

The ability to adhere to a contraceptive method and achieve desired fertility goals is important for all women but may be especially important for adolescent women in developing countries who face more dire consequences of unintended pregnancy including loss of educational attainment and increased exposure to sub-optimal peri-natal services. In addition, as young people increasing dominate the age-structure of developing country populations while simultaneously experiencing an increased age at marriage, the necessity of meeting the unique sexual and reproductive needs of unmarried youth in these countries becomes more urgent [4]. A recent study using nationally representative data from more than 20 developing countries in Africa, Asia and Latin America found that 12 month discontinuation rates among women ages 15 to 19 years of age ranged from 28 to 64 percent and were *consistently higher* than discontinuation rates among women 20 to 49 years of age [5]. This same study called for further examination of adolescent contraceptive trends and a need for studies that take a closer look at adolescent uptake and discontinuation of specific methods as well as their reasons for discontinuation [5].

The prevalence of contraceptive use is a function of both contraceptive uptake *and* continuation such that even high numbers of contractive acceptors could result in low contraceptive prevalence if discontinuation rates are also high. Therefore contraception discontinuation is an important factor for programs and policies intended to increase contraceptive prevalence. The most commonly cited reasons for contraceptive discontinuation among all women are similar to reasons for non-use but reflect women's experience with methods. The main reasons are health

concerns, including side effects, and method failure [6-15]. Discontinuation is an especially critical concern for adolescents who often experience age-related barriers to contraceptive information and commodities. Given that adolescent use of contraception has been shown to be more inconsistent than non-adolescent use, a greater understanding of existing barriers may help ensure less unintended pregnancy among this critical demographic group [5].

Methods & Analysis Plan

The Demographic and Health Survey (DHS) contains, for select countries, an individual level survey instrument that collects month-by-month retrospective histories of contraceptive use in the five years preceding the survey. This reproductive calendar also collects women's reasons for any episode of discontinuation. Using data from 12 developing countries that included the reproductive calendar in a DHS survey since 2002, a multi-state life table analysis of adolescent contraceptive trends will be conducted, documenting rates of adoption and continuation of specific methods and factors contributing to discontinuation. In addition, this analysis will assess the relationship between patterns of contraceptive use and marital status.

A total of 89 countries have ever participated in DHS surveys and of these, 42 countries have included a reproductive calendar in their most recent survey for which a report is currently available. Of the 42 countries with a reproductive calendar, 15 countries employed a calendar that collected data on contraceptive use, contraceptive discontinuation, and marital status, all of which will be required for this analysis. Of these remaining 15 countries, only those with data collected since 2002 are included in the analysis. Using these criteria, a total of 12 countries were selected for inclusion in this analysis. The 12 countries to be included in this analysis, along with statistics on sample size and method mix among women ages 20 to 24, are shown in Table 1.

Table 1. Countries participating in a DHS reproductive calendar survey since 2002

		Sample size & percent married						Method mix, percent currently using, women ages 20-24									
Country name	Year of most recent DHS	Total DHS sample size	Percent married in sample	Youth sample size		Percent of youth that are married		Any method	Any modern method	Female Sterilization	Pill	IUD	Inj	Male condom	LAM	Other	Any traditional method
				15-19	20-24	15-19	20-24										
Armenia	2005	6,566	62%	1,136	1,067	7%	44%	19	8	0	0	4	0	3	1	0	11
Egypt	2008	16,527	93%	4,618	4,806	13%	53%	45	41	0	11	25	5	0	0	0	4
Ethiopia	2005	14,070	60%	3,266	2,547	22%	62%	11	10	0	2	0	7	1	0	0	1
India	2005-06	124,385	75%	24,811	22,779	27%	74%	33	26	13	4	2	0	6	0	0	7
Indonesia	2007	32,895	94%	845	4,094	96%	97%	60	58	0	12	1	42	1	0	2	2
Malawi	2004	11,698	67%	2,392	2,870	33%	80%	26	23	0	1	0	18	3	0	1	3
Moldova	2005	7,440	61%	1,417	1,124	10%	56%	45	30	0	4	10	0	13	2	1	15
Peru	2004-08	6,107	28%	1,162	1,087	10%	35%	34	23	0	5	3	7	6	1	1	11
Tanzania	2004-05	10,329	58%	2,245	2,007	26%	70%	24	19	0	5	0	8	6	0	1	5
Turkey	2003	8,075	95%	238	1,045	100%	98%	59	31	0	5	16	1	9	0	0	28
Vietnam	2002	8,330	64%	1,630	1,155	4%	46%	58	45	0	9	31	0	4	0	0	13
Zimbabwe	2005-06	8,907	56%	2,152	1,952	21%	61%	44	43	0	33	0	7	2	0	1	1

Conclusion

Family planning has been shown to save the lives of women and children living in developing countries [1]. The success of family planning programs depends not only their ability to attract new contraceptive users but also on their ability to retain those users over time [3, 16]. As such, there has been growing interest in the factors that contribute to a woman's decision to discontinue her contraceptive method in the absence of changes in pregnancy intention.

Contraceptive discontinuation is an especially critical concern for programs targeting adolescents. Understanding the factors contributing to adoption and discontinuation among adolescents is a critical step towards designing effective interventions to increase contraceptive prevalence as well as safeguarding the ability of young women and their families to safely determine the number and spacing of their children.

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