Positive Relationships with Husband and In-Laws Linked to Women's Use of Maternal Health Services

Married women who have good relationships with their husband and in-laws are more likely than those with poorer relationships to obtain maternal health care, according to a study conducted in India.[1] Among women who lived in nuclear families, those who reported having few problems with their husband were more likely than those with many difficulties to have obtained antenatal care (odds ratio, 4.1) and delivered in a health facility (2.3). Among women who lived with their husband's family, those reporting very few difficulties with their in-laws were more likely to have received antenatal care than women who had some or many difficulties (1.5). Women's agency in controlling money and their own mobility accounted for much of the association between relationship quality and receipt of maternal health care services.

The data come from the 2002 Women's Reproductive Histories Survey, conducted in Madhya Pradesh, India. The randomly selected, household-based sample consisted of 2,444 married women aged 15–39 who had at least one child. Respondents provided information concerning their education, caste, parity and other factors that may affect health care use and relationship quality.

In addition, for each pregnancy interval in the past 15 years that had ended in a live birth, respondents were asked about the type of maternal health care they had received, as well as their degree of agency, wealth and relationship quality with their husband and in-laws. A pregnancy interval was defined as the period between marriage and the end of a woman's first pregnancy, or between the end of one pregnancy and the start of the next. Maternal health care services included in the analyses were antenatal care (having any checkups vs. none) and delivery in a formal health care facility. Two aspects of a woman's perceptions of her agency were assessed: the number of restrictions placed on her mobility (measured on a four-point scale ranging from too many to no restrictions) and how frequently she needed permission to spend money (ranging from always to never). Wealth was categorized according to how easily the household was able to meet expenses at the beginning of the pregnancy interval; the four response options ranged from easy to difficult. Finally, relationship quality was categorized according to whether the respondent reported having many, some or very few difficulties with her husband and in-laws at the start of the pregnancy interval.

Analyses were conducted separately according to whether women lived in a joint family (with their in-laws) or in a nuclear family (without in-laws) at the start of the pregnancy interval. In addition to tabulating descriptive data, the researcher created multivariate models to identify associations between health care use and other variables; the models of antenatal care excluded the 28% of pregnancies that occurred to women who believed such care is unnecessary.

Of the 7,031 pregnancies included in the sample, two-thirds (68%) occurred to women in joint families. Women received antenatal care during 34% of pregnancies, and delivered in a facility in 21%. In 56% of pregnancies to women with in-laws (regardless of whether they were living with them), women reported having very few difficulties with their husband's family; 36% had some difficulties and 7% many. Very few marital difficulties were reported during 74% of pregnancies, some difficulties for 22% and many difficulties for 4%. In the majority of pregnancies, women had no formal education (64%); the same was true for only 31% of husbands.

Women's agency was stronger in nuclear than joint families. During 75% of pregnancies to women in nuclear families, women reported few or no restrictions on their mobility, compared with 58% of pregnancies to women in joint families. Similarly, during 59% of pregnancies to women in nuclear families, women reported sometimes or never needing permission to spend money, compared with 42% of those to women who lived with in-laws.

In multivariate analyses, women in joint families had a higher likelihood of obtaining antenatal services if they reported very few, rather than some or many, difficulties with in-laws (odds ratio, 1.5). Among women in nuclear families, having no in-laws was associated with increased odds of hospital delivery (1.7); relationship quality with in-laws was not associated with facility births. Marital relationship quality was a predictor of maternal health care use only in nuclear families: Compared with women who reported many difficulties with their husband, those who reported very few were more likely to have obtained antenatal care (4.1) and delivered in a health facility (2.3); those with some difficulties also had elevated odds of a facility delivery (2.5).

In nuclear families, the odds that women had obtained antenatal care or delivered in a facility were higher when covering household expenses during pregnancy was easy rather than difficult (odds ratios, 3.6 and 2.3, respectively); in joint families, finding it easy to meet expenses was associated only with antenatal care (2.2). In both types of families, women with some education were more likely than those with no schooling to have used maternal health services; the odds were particularly high among those with 10 or more years of education (5.1–14.8). Having a husband with at least 10 years' education was associated with elevated odds of receiving services among women in joint families (1.7–2.1).

Many of the associations between relationship quality and maternal health care use disappeared when measures of women's agency were added to the model. In nuclear families, women without in-laws had elevated odds of hospital delivery in the expanded model (odds ratio, 1.8); however, the three other associations between relationship variables and maternal health care use were no longer significant once agency was taken into account. In joint families, the association between having a good relationship with in-laws and receiving antenatal care was reduced slightly after agency was accounted for (1.4).

The results, according to the author, suggest that the association between relationship quality and health care use may depend in

part on family structure. In nuclear families, where the husband tends to head the household, marital relationship quality is particularly important; in joint households, in-laws may have substantial decision-making power, so relationships with in-laws may have a vital impact on women's health. However, she points out that women's agency appears to be an important mediator: "High-quality family relationships bestow greater agency, which, in turn, helps women secure access to maternal health-care services."

The researcher also notes that research on the link between relationship quality and health outcomes has typically focused on whether domestic violence occurs in the relationship. While this research is very important, "focusing exclusively on domestic violence ... conceptualizes family relationships as varying in quality from negative to neutral," and thus may overlook the benefits of good relationships. She acknowledges, however, that this concern was only partially addressed in the current study: Because most women reported having very few problems in their relationships, the measure used was not able to distinguish between the very best relationships and those that were simply good.–*H. Ball*

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Parent-Child Discussions About Sexuality Are Uncommon in Vietnam

Although three-quarters of parents of Vietnamese youth say they sometimes or often talk with their child about romantic relationships, they rarely initiate discussions about sex.[1] In an analysis of baseline data from a reproductive health intervention study, three in five parents said they were uncomfortable or very uncomfortable discussing topics related to sexuality and relationships, and most of those whose child had had a girlfriend or boyfriend were not aware of the relationship. Parents with more education had spoken with their child about relationships and sex more frequently, and with less discomfort, than had parents who were not as highly educated.

Studies in developed countries have shown that adolescents who talk with their parents about sexuality are less likely than their peers to engage in sexual risk behaviors, and more likely to delay first intercourse. However, few studies in developing countries have examined parent-child communication about sex. In Vietnam, such communication, if it occurs at all, typically consists of parents telling their unmarried children not to have sex. Nonetheless, the prevalence of premarital sex may be rising in Vietnam; one recent study found that 24–33% of unmarried men aged 21–24 had had oral, vaginal or anal sex.

In the current study, researchers examined parent-child communication in a sample of Vietnamese youth who were taking part in a trial of three reproductive health interventions, one of which included a parental component. The study was conducted in 2006 in 12 communes (administrative subdivisions) in Hanoi (the capital), Nha Trang (a small city) and Ninh Hoa district (a primarily rural coastal area); these sites were chosen to provide diversity in location, population density and participants' socioeconomic status. Youth in these areas were randomly selected from census lists and were eligible for the trial if they were aged 15–20, unmarried (and not planning to marry in the next 12 months) and able to take part in the intervention for two hours per week for 10 weeks.

All youth completed baseline questionnaires that asked about demographic variables, social behavior and sexual activity. In the four communes that were randomized to the intervention with the parental component, parents who agreed to participate completed questionnaires that asked about their perceptions of their child's sexual behavior, their reproductive health knowledge and the frequency of (and their level of comfort with) their communication with their child about relationships, sex, pregnancy, contraceptives, standards of sexual behavior, and HIV/AIDS and other STIs. The researchers invited 359 parent-child dyads to take part in the study; 271 youth (76%) and 185 parents (52%) completed baseline questionnaires. In this analysis, which focused on the 185 parent-child dyads, researchers used chi-square tests to examine relationships between demographic variables and parents' knowledge of their child's relationships and sexual activity, and conducted linear regression analyses to identify associations between key variables and parent's reproductive health knowledge, frequency of communication about reproductive health and comfort level with such communication.

Forty-four percent of youth and 76% of parents were female. Youth had a mean age of 17; the vast majority (87%) were attending school, in most cases high school. About a third of both males (36%) and females (32%) reported having ever had a girlfriend or boyfriend. However, sexual activity was relatively uncommon: Just 19% of males and 4% of females reported having ever engaged in sexual touching, and only a few males (and no females) said they had had oral sex (2%) or vaginal sex (3%).

Parents were rarely aware of their child's relationships and sexual activity. Of the 36 parents whose son reported having had a girlfriend, only 10 (28%) knew about the relationship; similarly, of the 25 parents whose daughter had had a boyfriend, only five (20%) were aware. The proportions of sexually experienced adolescents whose parents knew or thought that their child had engaged in sexual touching was even lower (0–7%), although the sample sizes were very small (15 sons and three daughters).

Seventy-six percent of parents reported that they initiated conversations with their child about relationships "sometimes" or "often," but only 11% said the same about conversations concerning sexuality—and 76% had never had a discussion about the topic. Discussions about pregnancy and birth control were also uncommon: Nearly three in four parents (72%) had never broached these subjects. They were more willing, however, to discuss HIV, other STIs and standards of sexual behavior, as 57–74% of parents said they discussed these topics sometimes or often.

Most parents said they were "uncomfortable" or "very uncomfortable" discussing sexuality with their sons (62%) and daughters (61%). Far smaller proportions reported such discomfort when discussing pregnancy and birth control (46–51%), standards of sexual behavior (33–41%), relationships (23–32%) and HIV (19–30%). On average, parents rated their comfort level for talking about sexuality and relationships as 7.7 on an 18-point scale. Parents with more education spoke with their children about these topics more frequently, and with less discomfort, than less-educated parents; for example, compared with those who had no more than a primary education, parents who had attended college spoke about relationships and sexuality more frequently (9.3 vs. 5.2 on an 18-point scale) and reported higher levels of comfort (11.7 vs. 7.6). The most common barriers to talking about sexuality were concern that the child

would become more interested in sex (87%), parental embarrassment (65%), lack of time (65%) and feeling uninformed (63%).

Linear regression analyses that controlled for parental education found that parents with higher levels of knowledge about reproductive health issues were more comfortable talking about sex than other parents, and that greater comfort was associated with more frequent conversations. Frequency of conversations was unrelated to parents' knowledge of their child's romantic and sexual activity.

The authors note that although the study had limitations—notably the small sample sizes and low recruitment rate for parents—the findings underscore "a need for interventions that provide [reproductive health] knowledge and communication skills to parents of adolescents." Programs aimed at adolescents themselves are also important, they add, but for most youth "parents remain a key potential resource." Interventions "may be particularly important in rural areas and for parents with lower education" levels, given that Vietnam is largely rural and that less-educated parents tended to be less knowledgeable about reproductive health issues and less comfortable talking about these issues than were other parents.—*P. Doskoch*

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More Than Four in 10 Honduran Women Discontinue Their Contraceptive Method Within the First Year of Use

Both new adopters and continuing users of reversible family planning methods are at high risk for method discontinuation, according to a cohort study conducted in Honduras.[1] During the 12-month study—one of the few to simultaneously examine a comprehensive range of factors thought to be associated with method discontinuation—41% of women stopped using their method. Discontinuation was associated with parity and other demographic characteristics (odds ratios, 1.3–2.0), as well as with the experience of various side effects (1.6–2.1), but was not related to clinic service quality.

To examine method discontinuation patterns, the researchers interviewed women who were obtaining contraceptives from one of 13 public or private clinics in four urban areas in Honduras in 2006. Women were eligible for the study if they were aged 15–44 and were new or continuing users of the pill, injectable or IUD. They were interviewed after receiving their method and again 12–15 months later. At baseline, the women were asked about their demographic characteristics, previous use of contraceptives, birth history and motivation to avoid pregnancy; they also answered questions about their partner's involvement in family planning (e.g., the number of times the respondent had discussed family planning with her partner in the past year) and the quality of clinic services (e.g., whether all of the respondent's questions had been answered). At follow-up, the women updated their demographic information and reported their contraceptive use since baseline and their experiences of method side effects. If a woman stopped using her original method, she was classified as having discontinued use of the method; if she stopped using the method and did not switch to a new one, she was considered to have had an episode of contraceptive nonuse. Eight hundred women were interviewed at baseline, of whom 671 (84%) completed a follow-up interview. The researchers used life-table analysis to provide information on the pace of method discontinuation among new users; Cox proportional hazards models were used to assess whether there were associations between method discontinuation and individual characteristics, fertility motivation, experience of side effects, service quality and method characteristics for the full sample of women.

At baseline, most women were younger than 35 and were married or in a union (94% for each); 77% lived in an urban area. Only 3% of the women had no children. Thirty-four percent did not want any children in the future; the remainder wanted a child within two years (12%), wanted children in two or more years or at some undetermined point in the future (47%), or were undecided about whether to have children (6%). Seventy-two percent were using the injectable, while 21% were using the IUD and 7% the pill. Nearly half (48%) were new users, and 20% had been using their contraceptive method for a year or less.

Only 36% of the women reported that they had been told about the benefits and disadvantages of their method during their clinic visit. Forty-three percent said they had been told how to use their method effectively, and 58% felt that their provider had answered all of their questions. About one-third said that their provider had discussed at least two methods with them during the visit.

At follow-up, two-thirds of respondents reported having had at least one side effect from their method during the past 12 months; headaches and amenorrhea were most common, experienced by 27% and 22% of respondents, respectively. More than one-third of respondents, and half of those with contraceptive side effects, felt that side effects interfered with their daily lives or personal relationships, and 45% of all women had recently discussed their side effects or health concerns with friends or family. Seventy-nine percent had discussed family planning with their partner in the previous year.

During the follow-up period, 41% of the women discontinued their method. This rate was significantly higher among users of the pill (49%) and the injectable (44%) than among IUD users (28%). Forty-three percent of those who discontinued their method switched to a different method during the study period; method switching occurred among 18% of the total sample, and was almost equally common across methods (17–19%).

During the first six months, 12% of women who were using a method for the first time experienced a period of nonuse and 23% discontinued their method altogether. By 12 months, 30% had experienced a period of nonuse and 45% had discontinued use. Injectable users had the highest rates of nonuse and discontinuation; after 12 months, for example, 50% had discontinued the method, compared with 31% of IUD users and 44% of pill users.

In multivariate analyses, women 25 or older were more likely than those aged 15–24 to stop using their method (odds ratio, 1.3). In addition, the odds of discontinuation were higher among women with 0–1 children than among those with two or more (1.4), and higher among those who were not in a union than among those who were married or in a

union (2.0). Women who had experienced heavy bleeding, weight gain and dizziness while using contraceptives were more likely than those without any side effects to have discontinued their method (1.6–2.1). Those who felt these side effects interfered with their daily lives or personal relationships had elevated odds of method discontinuation (1.8), while women who had discussed their side effects or health concerns with friends or family had reduced odds of discontinuation (0.8). The only predictors of nonuse were not being in a union (2.3), wanting a child within two years (2.0) and having heavy bleeding (1.9). Measures of clinic service quality and length of method use at baseline were not related to discontinuation or nonuse.

The researchers acknowledge several limitations: Measures of quality of care may have been affected by courtesy bias; the respondents' ability to remember the timing of events may have influenced their reports of discontinuation; and contraceptive use patterns in the sample may have differed from those of women attending other types of clinics.

The investigators note that the high rate of discontinuation seen in the study "is to be expected" in countries such as Honduras, where reversible methods are most often used for child spacing, and "is not necessarily a negative outcome, so long as women who want to delay or limit childbearing are able to adopt an alternate method." Providers should "be prepared for discontinuation" and encourage women "to return to the provider if they have problems with a method." But although some discontinuation is likely, the researchers suggest that "programs that provide comprehensive services, including counseling concerning methods' side effects and approaches to switching methods, could improve continuation and lead to a reduction of unintended pregnancies and improved maternal and child health outcomes."
–L. Melhado

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In Swaziland, Closeness to Mother and Being in School Linked to Lower Risk of Sexual Violence Before Age 18

In Swaziland, young women have an elevated likelihood of having experienced sexual violence before age 18 if they lack a strong relationship with their mother or are not currently attending school, according to a national household survey.[1] Such young women are about twice as likely as those who are very close to their mother or are still attending school, respectively, to have been a victim of sexual violence (odds ratios, 2.0–2.3). In addition, the odds of having experienced sexual violence are elevated among young women who, by age 13, knew of a sexual relationship between a teacher and student (1.7) or knew of a child who had been sexually assaulted (1.5). Emotional abuse during childhood is also associated with having been a victim of sexual violence (2.2), but physical abuse is not.

While childhood sexual violence is an issue throughout the world, it may be of particular concern in Swaziland, where victims are not only at risk for such consequences as depression and unwanted pregnancy, but also face a high risk of becoming infected with HIV: In 2007, one in four 15–49-year-olds were HIV-positive. To assess risk factors for sexual victimization, the researchers analyzed data from a nationally representative 2007 survey of young women aged 13–24. Households were randomly selected via a two-stage cluster approach, and one young woman was randomly picked from each household. The response rate was 96%.

In face-to-face interviews conducted in private locations away from their homes, the 1,244 respondents provided information about their social and demographic characteristics, and answered questions about their home life, schooling and quality of relationships with their parents. They were also asked whether, by age 13, they had experienced physical or emotional abuse, had been told about or witnessed the sexual assault of a child, or had known of a student who had had sex with a teacher; and whether they themselves had ever been a victim of childhood sexual violence, defined as either undesired sex resulting from physical force or verbal pressure, attempted coerced sex or unwanted sexual contact (i.e., being forced to touch someone else or being touched against one's will) that occurred before age 18. The researchers used logistic regression to identify factors associated with sexual violence.

Slightly more than half of respondents were 18 or older; 36% were 16 or younger. The vast majority (84%) lived in rural areas, and slightly more than a third had lost at least one biological parent before age 18. Nearly all respondents had attended school, and 10% were married. Overall, 33% of the young women had experienced some form of sexual violence by age 18, and 5% had been forced to have sex. These proportions likely would have been higher, the authors noted, if all of the respondents had reached age 18.

In logistic regression analyses that adjusted for young women's age, socioeconomic status and residence, respondents had elevated odds of having been a victim of sexual violence as a child if, by age 13, they had experienced emotional abuse (odds ratio, 2.2), had known of a student who had had sex with a teacher (1.7) or had known about or seen the sexual assault of a child (1.5). Respondents who were not going to school at the time of the interview also had elevated odds of having been a victim of sexual violence (2.3), and those who had a "somewhat" or "not very" close relationship with their mother (2.0), or whose mother was dead or missing (2.3), were more likely than those who were "very" close to their mother to have been abused. Childhood physical abuse was not related to sexual victimization in the final model.

The investigators acknowledge several limitations of the study, particularly its cross-sectional design and the potential impact of recall bias, but also note its high response rate and nationally representative sample. They emphasize that some of the factors associated with sexual victimization, such as having a poor relationship with one's mother and not attending school, suggest that a lack of "adequate supervision and guidance" puts young women at risk of suffering sexual violence. To address this issue, the researchers advise providing young women with "greater educational opportunities," mentoring programs (because orphanhood is common in southern Africa) and initiatives that foster communication between young women and their parents.*–S. Ramashwar*

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Counseling on STI Referral Is Linked to Increase In Partner Testing Rate

Providing STI clinic attendees with a single brief counseling session on the importance of referring their partners increases by about 30% the likelihood that their partners will come to the clinic for STI testing.[1] In a quasi-randomized trial conducted at six STI clinics in Bangladesh, 37% of clients who underwent the counseling session referred their partners for treatment, compared with 27% of those who simply received a referral card. Clients who were aged 18–25, had lower incomes or reported having commercial sex partners were less likely than others to refer their partners for STI testing.

The trial was conducted in 2007 at three public hospitals and three nongovernmental organization (NGO) clinics in the districts of Dhaka and Chittagong. Clients aged 18 or older were eligible for the study if they had a newly diagnosed STI and had been sexually active in the previous three months. Those who agreed to participate received the facility's standard care, which included clinical consultation and prescriptions for free or subsidized medicine, as well as referral cards to be given to their partners. After treatment, participants provided information on their demographic and other characteristics and on their sexual behavior, and were instructed to tell their partners to bring the referral cards back to the clinic within one month so that the partners could be tested for STIs. Those assigned to the counseling group then received a 10–15 minute session on the importance of referring partners for STI testing; topics included the frequency of asymptomatic infections, the risk of developing complications from untreated infections and the possibility of reinfection if partners are not treated at the same time.

The researchers compared partner referral rates between clients who received counseling and those who did not. Univariate and multivariate regression analyses were conducted to examine the effect of counseling on referral rates. The researchers note that the study was a quasirandomized, rather than randomized, study, because clients were not randomly assigned to the counseled or noncounseled groups; instead, the first participant at each clinic was randomly assigned to one of the groups, the next participant was assigned to the other group, and subsequent assignments alternated accordingly.

In all, 1,339 clients accepted referral cards, and 675 received counseling. The counseled and noncounseled groups were similar in most respects: About 55% of participants were female, 74% were married, 95% were Muslim and 53% were attending an NGO clinic. In addition, the two groups had similar proportions of participants who cohabited with their partner (65%), had concurrent partners (44%), had had more than one partner in the previous three months (22%), had had a commercial sex partner in the previous three months (39%) and had used a condom at last sex (8%). However, a higher proportion of counseled than noncounseled clients accepted referral cards (84% vs. 79%); regardless of whether they received counseling, most of those who declined the cards were male (92%), were single (79%) and reported having had commercial sex partners (86%).

Thirty-two percent of participants referred their partner for treatment, but the proportion was significantly higher in the counseled than the noncounseled group (37% vs. 27%). In both groups, the rate of partner referral increased with clients' age and income, and was higher among participants using NGO clinics than among those using public hospitals, higher among those who had had one partner in the past three months than among those with multiple partners, and higher among those who had not had any commercial sex partners than among those who had. However, in each of these categories, referral rates were elevated among participants who received counseling. For example, among clients aged 30 or older, 42% of those in the counseled group referred their partner, compared with 33% of those in the noncounseled group.

These findings were mirrored in the multivariate analysis. Participants in the counseled group were more likely to refer their partners for STI testing than were those in the noncounseled group (prevalence ratio, 1.3). Clients aged 18–25 were less likely than those aged 30 or older to refer their partners (0.8). Those with lower incomes (0–5,000 or 5,001–10,000 taka) were less likely than those in the highest income category (10,001 taka or more) to refer their partners (0.7 and 0.5, respectively). Finally, those who reported having had at least one commercial sex partner in the past three months were less likely than those who did not to refer their partners for testing (0.5).

The researchers acknowledge some limitations of their study. Participants in the noncounseled group, like their counterparts in the counseled group, received referral cards; this may have increased partner referral rates for both groups and reduced any differences between them. In addition, because the interviewer who provided the counseling sessions also collected participant information from both groups, some "information contamination" concerning the importance of referrals may have occurred that diluted the effects of the counseling. Despite these limitations, the researchers believe that any differences between the groups can be attributed to the counseling session. They conclude that more research is needed to identify "the most effective counseling strategies to maximise partner referral, especially for low-income cases."
–L. Melhado

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South African Women's Childbearing Plans Are Unrelated to ART Use

Regardless of whether they are using antiretroviral therapy (ART), HIV-positive women in South Africa are less likely than their counterparts without HIV to intend to have children in the future.[1] In a study of HIV clinic clients, approximately one-third of 18–44-year-old HIV-positive women (31% of ART users and 29% of never-users) reported wanting to have children, compared with more than two-thirds (68%) of their HIV-negative counterparts. In multivariate analyses, HIV-positive ART users and women who were HIV-positive but had never used ART had lower odds than HIV-negative women of intending to have children (odds ratios, 0.4 each); the childbearing intentions of ART users did not differ from those of HIV-positive women who had never used ART.

To examine whether women's childbearing intentions vary by their HIV status and use of ART, researchers recruited 18–49-year-old women seeking services from several clinics within the Perinatal HIV Research Unit—a large hospital-based HIV research and clinical service facility in Soweto, South Africa. Of the

801 women screened between May and December 2007, a total of 751 agreed to participate in the study and completed a questionnaire on their social and demographic characteristics, HIV status, history of ART use and childbearing intentions; the researchers reviewed women's medical records to confirm HIV status and ART history. For analyses of childbearing intentions, the sample was restricted to the 674 nonsterilized women aged 18–44, of whom 217 were HIV-positive and had been using ART for at least one month, 215 were HIV-positive and had never used ART, and 242 were HIV-negative. Two sets of multivariate analyses were conducted to examine whether women's childbearing intentions were independently associated with ART use: one set comparing HIV-positive women with those who were HIV-negative, and another comparing ART users with HIV-positive women who had never used the drugs.

The mean age of women in the sample was 30. Although only 8% of respondents reported being married, more than three-fourths (78%) were currently in a sexual relationship; 25% of those with a regular sex partner said that their partner was HIV-positive. On average, women had 1.4 children; 35% had one living child and 41% two or more. Forty-four percent of women reported planning to have a child or another child in the future. The proportion of women who intended to have children was greater among HIV-negative women (68%) than among HIV-positive ART users (31%) and HIV-positive women who had never used ART (29%).

In multivariate analyses of the full sample, HIV-positive ART users and never-users were less likely than women who were HIV-negative to plan to have a child in the future (odds ratios, 0.4 each). Being in a sexual relationship was positively associated with intending to have children (3.1), whereas having one or more living children was negatively associated with such intentions (0.1–0.3, depending on parity). In analyses of HIV-positive women, the childbearing intentions of ART users did not differ from those of never-users; as in the overall analyses, being in a sexual relationship was positively associated with intending to have children (3.0), and having living children was negatively associated with such intentions (0.1–0.4, depending on parity). Further analyses restricted to women aged 18–30—the peak childbearing years among women in South Africa—found the same associations between ART use and childbearing intentions as in the other analyses.

The finding that the childbearing intentions of HIV-positive South African women did not differ by ART use contrasts with the results of studies conducted in other Sub-Saharan African countries, the investigators note; one possible explanation, they say, is that unlike their counterparts in some countries, HIV-positive South African women who are not yet receiving ART "can be confident that treatment is available once they are medically eligible, thereby minimizing differences between groups." The researchers add that given the high prevalence of intentions to have children among HIV-positive women, "it is critical that factual and nonstigmatizing information and support be incorporated into HIV treatment services to optimize healthy outcomes for mother, father, and baby."

–J. Rosenberg

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