HEALTH COMMUNICATION CAPACITY COLLABORATIVE

Barriers to LARC Uptake Among Youth

Highlights from the Research

Introduction

Young people currently comprise a larger proportion of the world's population than ever before, including in low- and middle-income countries (LMICs). The World Health Organization defines young people as those between ages 10 and 24, and includes in its definition the sub-groups, adolescents (ages 10 to 19) and youth (ages 15 to 24). While the definitions sometimes vary between organizations and researchers, these age cohorts undeniably consist of heterogeneous subgroups with different socioeconomic, parity, employment, marital and education statuses, and unique sexual and reproductive health (SRH) behaviors and family planning (FP) needs.

Unplanned or unwanted pregnancy among adolescents is a worldwide public health issue (Ramos, 2011), and for unplanned pregnancies among younger women, unsafe abortions may become the recourse. Two-thirds of unsafe abortions occur among women between 15 and 30 years old, and almost 14 percent of unsafe abortions in developing countries occur among women 20 years or younger (WHO, 2005). Preventing unplanned pregnancies in youth is crucial, yet challenging. Many FP methods—especially long-acting reversible contraception (LARC) methods, like implants and intra-uterine devices (IUDs)—while highly effective, are scarcely accessed by or considered acceptable options for youth, especially for those who are unmarried or nulliparous. In the summer of 2014, the USAID-funded Health Communication Capacity Collaborative (HC3) conducted a literature scan to learn more about LARCs and youth (ages 15 to 24) in LMICs. This brief highlights the resulting findings.

> ***"There is a large and growing need in developing countries for effective contraception in general and for long-acting and permanent methods in particular, because the largest cohorts in history are entering their reproductive years."***
>
> ***(Jacobstein, 2007, p. 366).***

Key Findings

- *Factors at the policy, provider and user level all impact youth access to LARCs in LMICs.*
- *Research and interventions around LARCs and their use among youth is sparse, particularly for LMICs.*
- *Myths and lack of information about IUDs and implants, and their use by youth reduce LARC access and acceptability for youth.*
- *Lack of youth-friendly services impacts LARC uptake among women ages 15 to 24, particularly unmarried women.*
- *Provider bias and mistrust between youth and service providers impairs youth access to SRH services and therefore to LARCs.*

Context: Unmet Need and Demand for Family Planning Among Youth

According to an analysis of 61 countries' DHS data sets (MacQuarrie, 2014), an estimated 33 million female youth have an unmet need for FP.[1] Unmet need here refers to "the percentage of women who do not want to become pregnant, but are not using contraception" (ICF International, 2012a). While nearly two-thirds of this 33 million reside in South and Southeast Asia, rates of unmet need for FP are highest—and in some cases, increasing—in Africa. Among unmarried and married female youth in West and Central Africa, unmet need is 41.7 percent and 29.3 percent, respectively. In East and Southern Africa, 39.8 percent of unmarried and 25.5 percent of married female youth have an unmet need for FP (MacQuarrie, 2014).

[1]Including countries in Latin America and the Caribbean, Africa, the Middle East, Central Europe and Asia

Regarding current contraceptive and LARC use, disaggregated data on youth alone is sparse. However, some insights may be gained from data looking at women of reproductive age (WRA), that is, women between ages 15 and 49, as this includes the youth age group. With this said, research shows that LARC use is often low among WRA, but the methods' popularity does vary by geographic location. Among women using modern contraceptive methods in Africa and Europe, short-term and reversible methods (e.g., pill, injectable and male condom) are more commonly used than other methods. The IUD and sterilization, while still not universally popular, are more common in Asia and North America. A more balanced mix of contraceptives is used in Latin America and the Caribbean (UN, 2013a).

For WRA living in LMICs, contraceptive method choice and use can be influenced by a number of factors, including:

- **Donor aid, or the lack thereof.** Specifically, programs with access to donor aid may reflect donor preferences and programs lacking external aid may prioritize more cost-effective FP methods and have a more limited method mix (D'Arcangues, 2007).
- **Number and level of personnel trained to administer certain methods.** For example, in Ghana, IUD insertion training was limited to just a handful of midwife associations or schools and one nursing school, perhaps accounting for their low use (Osei et al, 2005).
- **Country-level policy and government practices.** For example, in Uzbekistan, "[a]necdotal evidence indicates a strong state-level preference for the IUD... such that the only contraceptive option for many women is the IUD." (Barrett & Buckley, 2007) Additionally, even if contraceptive methods are available to women nationally, laws and policies often prevent unmarried adolescents or those under a certain age from accessing them (Chandra-Mouli et al, 2014; Eke and Alabi-Isama, 2011).

LARC Methods: Contraceptive Implants and IUDs

LARC methods are highly effective, with pregnancy rates of less than one percent per year, and high rates of patient satisfaction and continuation (ACOG, 2012; WHO/RHR, 2011). With few exceptions, LARCs have been proven safe for use by all women after menarche, including young women (Chandra-Mouli et al, 2014; Jacobstein, 2007; Yen et al, 2010). According to WHO's 2010 Medical Eligibility Criteria (MEC) for Contraceptive Use, adolescents (those ages 10 to 19) can have more sporadic patterns of intercourse, which may make non-daily methods, such as LARCs, "more appropriate" for this group.

The following sections provide more information on two LARC methods—the IUD and the implant. Where information is provided for WRA or for women in general, it is because isolated data for youth was not available. The sections also include information on MEC for the implant and IUD. For reference, in WHO's MEC, a Category 2 ranking indicates the method may be used with limited clinical judgment, or that the benefits of using the method outweigh proven or theoretical risks. A Category 1 ranking denotes no restriction for method use and promotes its use in any circumstance unless specifically noted for other medical conditions.

Youth and the IUD

There is evidence that nulliparous and young women experience increased rates of IUD expulsion or removal (Allen et al, 2009; Alton et al, 2012; Gold and Johnson, 2008). Alton and colleagues (2012) specifically found that women under 18 were as much as 3.5 times more at risk for removal/expulsion than women 18 to 21 years old, and nulliparous women were 2.9 times more at risk than multiparous clients. However, IUDs have been found not to increase incidence of pelvic inflammatory disease, tubal infertility or ectopic pregnancies as once thought, and should be thought of as a first-line choice for both nulliparous and parous adolescents (Gold & Johnson, 2008).

WHO's MEC Supports the IUD's Safety for Young Women

According to MEC criteria, copper-bearing and levonorgestrel-releasing IUDs are category 2 for women from menarche to under 20 years and for nulliparous women. IUDs are upgraded to category 1 for women 20 years or older and for parous women. Both types of IUDs are category 1 for post-abortion (first-trimester) women, non-breastfeeding postpartum women and women who are up to 48 hours or four or more weeks postpartum. Depending on IUD type, the method may be more restricted for women who are newly postpartum, breastfeeding or experienced a later-term abortion.[2]

IUDs at the Country Level

IUD use in LMICs varies widely across geographic regions. For example, current use of IUDs by women ages

[2]Copper IUDs are category 1 for breastfeeding women, but levonorgestrel-releasing IUDs are category 3 for this group. IUDs are generally category 2 for women with elevated risk or confirmed STIs or HIV infections, but some circumstances and specific STIs earn the IUD a category 3 (risks may outweigh the benefits, requires clinical evaluation and follow-up) or category 4 (method not to be used) ranking.

15 to 49 hovers below one percent in most sub-Saharan Africa countries (ICF International, 2012b; UN, 2013b). In other LMICs and some Central European and Asian countries, however, the IUD is a leading contraceptive method among women of reproductive age, which includes youth. In Uzbekistan, China and Korea, the IUD accounts for 49.7, 40.6 and 42.8 percent of contraceptive use by WRA in a union, respectively. In Kazakhstan, Kyrgyzstan and Turkmenistan, the IUD makes up 32 to 39 percent of contraceptive use among WRA in a union (UN, 2013b). Studies in Nigeria have shown IUDs have a higher acceptance rate among older women than younger women, and that while a range of LARCs are available in the country, knowledge about them among younger populations is poor (Abasiattai et al, 2008; Eke & Alabi-Isama, 2011).

Youth and the Implant

Jacobstein and Stanley (2013) note that implant users of all ages have high rates of user satisfaction (79 percent) and continuation (around 84 percent at one year of use). Adolescents are strong candidates for implant eligibility as they are less likely to have certain medical conditions that preclude them from using the implant, such as deep vein thrombosis, liver tumors and breast cancer.

According to WHO's MEC, implants are safe for adolescents and young women to use.

WHO's 2010 MEC ranks levonorgestrel and etonogestrel (both progestogen-only) implants as category 1 commodities for women of all ages, including young people from menarche to age 18 and older. These implants are also ranked category 1 for nulliparous and parous women, postpartum[3] and post-abortion women, and women with high risk or confirmed infection with STIs and HIV (depending on antiretroviral therapy status).

Implants at the Country Level

While no information was found exclusively on trends on the implant and youth, the method's use has increased in a short time span in countries such as Ethiopia, Malawi, Rwanda and Tanzania among WRA. In recent years, use of implants has doubled in Malawi, quadrupled in Tanzania and increased more than 15-fold in Rwanda and 17-fold in Ethiopia. Jacobstein and Stanley (2013) cite the following factors for this increase:

1. An enabling environment with strong policy commitment, including support for task shifting.
2. Widespread training to increase providers' knowledge and skills.
3. Purchase of sufficient commodities.
4. Rise in knowledge about implants among women.

The trends in these four countries suggest that wider availability of implants could lead to increased use in other countries (Jacobstein & Stanley, 2013).

LARCs and Youth: Provider-Side Barriers

Providers play a key role in the success or failure of contraceptive method uptake and continuation. The literature revealed that generally, providers have limited confidence to insert/remove LARC methods and health systems in LMICs generally have low capacity for follow-up care. These facts impact LARC provision and continuation rates for all women, and perhaps more so for the nulliparous and young who may experience higher rates of IUD expulsion and therefore increased need for follow-up care and counseling.

Despite the proven safety and efficacy of methods like the IUD for all women, providers in LMICs often "overestimate" the potential risks of method provision. Providers fear that IUDs cause pelvic inflammatory disease and/or infertility, and believe the device unsuitable for HIV-infected women (Jacobstein, 2007).

Additionally, providers have low levels of knowledge about LARCs and their safety for youth, and often fail to counsel youth on the methods. These factors, combined with conservative socio-cultural expectations for young and nulliparous women, pose significant barriers to youth's LARC use. Providers' gender, position and sector (public or private, formal or informal) can also affect provision of contraceptive methods, including LARCs.

Country- and study-specific findings on how provider knowledge, attitudes and behaviors hinder youth access to LARCs are described below. Because of the very limited amount of evidence, findings are presented by country and/or study.

Lack of Provider Knowledge, Awareness and Skills

Uganda: A study on provider perspectives on factors influencing contraceptive use and service provision to youth in rural Uganda (Nalwadda et al, 2011) showed that, on average, providers did not feel competent enough to provide IUDs or implants to youth. There

[3]Implants retain the MEC category 1 ranking for breastfeeding women who are six weeks or more postpartum. Implants are not yet recommended by WHO for breastfeeding women less than six weeks postpartum, and here earn a category 3 ranking.

were significant differences in providers' self-rated competence by facility type; private for-profit providers' competence for delivering contraception to youth was limited for most methods. According to the study, this lack of knowledge suggests that providers limit youth's access to LARC methods because of their inability to insert/remove the methods. These providers also reported that in their clinics, IUDs and implants sometimes expire on the shelves because no one asks for them. However, the commodities' expiration may also be a consequence of providers not offering LARC methods to young potential users because of their inability to insert/remove the methods.

Kenya: A Kenyan study (Hubacher et al, 2011) examining implant uptake among 18- to 24-year-olds seeking combined oral contraceptives (COCs) or depot medroxyprogesterone acetate (DPMA) showed that after contraceptive counseling and ensuring informed choice, 24 percent of the young clients chose implants over the shorter-acting COCs or DPMA. The study also showed that among these young clients, characteristics, such as number of or desire for more children, and previous use of a contraceptive method were not associated with selecting the implant, suggesting the method's wide appeal among women of this age group. However, the article's authors caution, "when long-acting contraceptives, trained personnel and time to provide [LARCs] are in short supply, providers may overlook younger women and low-parity women as possible candidates for use of implants."

Pakistan: A study of private providers' attitudes and practices around IUD provision in Pakistan (Agha et al, 2011) found significant concerns among practitioners about medical safety, side effects and client satisfaction with the IUD, as well as their own skills with the device. Interestingly, clinical training was not found to have a consistent, positive effect on reducing the barriers to IUD recommendation among studied providers. Specifically, providers who had received clinical training in the last three years were more likely to consider women ages 25 to 29 and women with one delivery as candidates for the IUD, but were less likely to consider women 19 years and younger appropriate IUD candidates.

Lack of Youth-Friendly Reproductive Health Services and Communication Barriers

Lao: In a study on FP service delivery to unmarried youth in Lao (Sychareun, 2004), in-depth interviews with service providers in the formal and informal sectors revealed that 18 percent of all providers had reported to clients' parents when youth sought services from them. A "considerable minority" argued against giving contraceptives to youth in general, especially to unmarried young women, on the grounds that it was against Laotian culture and custom. There also seemed to be communication barriers between youth and providers in both formal and informal sectors. To differing extents, all providers complained about the following barriers to contraceptive counseling, laying the fault on the shoulders of their young clients—youths' shyness, lack of cooperation or listening skills, problems in understanding advice or information, unwillingness to engage in open discussion and failure to participate in follow-up. While this information is not specific to LARC use among youth, it points to the likelihood that providers are not uniformly discussing and providing LARCs to youth.

> ***"[H]ealth systems, especially in developing countries, are not well equipped to deal with certain issues related to adolescent sexual and reproductive health...Even where there are no [legal] restrictions on the use of services, adolescents may not always be able to use them for a variety of reasons, such as distant location, cost, inconvenient opening hours, perceived unfriendly and judgmental attitudes of service staff, and lack of confidentiality."***
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> ***(Eke & Alabi-Isama, 2011, pp. 164-165)***

Uganda: A Uganda study on provider perspectives around contraceptive use and service provision to youth (Nalwadda et al, 2011) found that when a client less than 18 years old requested contraceptives, 38 percent of providers requested consent from a parent, spouse or both—this despite that at the article's writing, no such consent was required by national guidelines. Nalwadda and colleagues also note that providers generally "did not respect young people's choices," and hence denied their access to contraceptives. Transport, time and method cost were also considered particular barriers to youth's contraceptive access.

Providers Impose Conservative Age, Marriage, Parity and Lifestyle Restrictions on Youth

Tanzania: A study examining barriers to FP at government service delivery sites in Tanzania (Speizer

et al, 2000) found that local providers often impose non-evidence-based age restrictions on provision of contraceptives to youth. For example, the study found that surveyed providers placed minimum age restrictions not supported by medical evidence on contraception provision. Minimum age limits averaged around 14 and 15 years old, which "limits young, sexually active women's access to most methods and puts them at risk of unwanted premarital births." The study also found that 35 percent of medical aides, 24 percent of maternal and child health aides and trained midwives, and 32 percent of auxiliary workers surveyed reported using parity to restrict the provision of injectable contraceptives to women in Tanzania.

> ***"[W]hen [health workers] do provide contraceptive methods, they often limit this to condoms, wrongly believing that long-acting hormonal methods and intrauterine devices are inappropriate for nulliparous women."***
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> ***(Chandra-Mouli et al, 2014, p. 4)***

Ghana: A study investigating a decline in IUD use in Ghana (Osei et al, 2005) found that health care personnel in Ghana discouraged IUD use among nulliparous clients and also deemed these clients ineligible. Despite believing the IUD was a safe, effective and cost-effective method, providers said they would prescribe an IUD only to parous women and to "faithfully married couples or clients with single partners."

Zimbabwe and South Africa: Morse and colleagues (2013) analyzed LARC provision and clinical training needs in HIV-prevalent settings in South Africa and Zimbabwe. They observed that while physicians were more likely to provide LARC methods than nurses, LARC provision overall remained low. Providers were presented with fictional client profiles of a nulliparous 16-year-old adolescent and a nulliparous 24-year-old young woman. For the adolescent patient, 2 percent and 7 percent of providers in South Africa and Zimbabwe, respectively, said they would offer a copper IUD and 21 percent of providers in Zimbabwe (where the implant is available) said they would offer an implant. For the young adult woman, 5 percent and 10 percent in South Africa and Zimbabwe, respectively, said they would offer the copper IUD and 25 percent of Zimbabwe providers said they would offer the implant. The numbers were lower than each of these tallies for a fictional HIV-positive young adult (2 percent and 5 percent in the two countries). More often, the methods were recommended for a married, parous young adult.

Nigeria: A study on IUD user characteristics at a Nigerian teaching hospital (Abasiattai et al, 2008) found that among IUD insertion patients between 2000 and 2005, only 8.3 percent and 18.9 percent were between the ages of 15 and 19, and 20 and 24, respectively. The low acceptance rate of IUDs among this age range was credited to the fact that government hospital-based FP clinics direct their services toward "mature females in stable relationships," which can exclude youth and adolescents. Additional contributing factors included social and religious norms restricting premarital sex and the association between contraception with sexual permissiveness.

Pakistan: A private facility-based survey of provider attitudes and practices toward the IUD in 54 districts of Pakistan (Agha et al, 2011) revealed that IUDs were seen as unsuitable for women who were nulliparous or under age 19. In the study, physicians were less likely than lady health visitors (independent, private female paramedics and physicians) to view both nulliparous and women 19 years or younger as suitable IUD candidates.

Lao: Despite the national policy dictating equal and cost-free provision of child-spacing services, a study on provider attitudes around FP service provision to unmarried youth in Lao (Sychareun, 2004) found providers in the country treat unmarried youth differently from married youth. While providers in formal and informal sectors were as likely to counsel unmarried young men on contraceptive use, formal sector providers were more likely to counsel unmarried young women than informal sector providers. Informal providers—especially female providers—were more likely than their formal sector counterparts to report providing contraceptives to unmarried young men and women. More than half of formal sector providers and most informal sector providers who said they would provide an unmarried youth with contraceptives also said they would charge a fee for methods.

LARCs and Youth: User-Side Barriers

Like providers, youth are also hesitant about using LARCs and other contraceptive methods for similar reasons: lack of knowledge about the methods, doubts about efficacy

and safety, fear of/misinformation about side effects and socio-cultural beliefs about use of FP. Themes of mistrust and poor communication between providers and youth also emerged, and are described throughout the country examples below.

Lack of Knowledge About Family Planning/LARCs, Socio-Cultural Beliefs and Fear of Side Effects

Nigeria: In a study on contraceptive use knowledge, perceptions and attitudes among young men and women ages 10-24 living in an established refugee camp in Nigeria (Okanlawon et al, 2010), about a third of participating females said they would not use a contraceptive method to avoid pregnancy in the future and nearly 80 percent of them mentioned this was because they feared side effects. A female participant spoke about mistrust of providers and referred to nurses as "wicked" for not telling young people about the perceived dangerous (even if false) side effects of contraceptives. Multiple participants thought modern methods like the IUD were dangerous to their health. Focus group discussions showed that young people believed condoms to be safer than other hormonal methods, including IUDs and implants. One male participant also said hormonal contraceptives were only for people who had children or were married, and saw condoms as more appropriate for him and his girlfriend, thus demonstrating how youth also act to reinforce socio-cultural beliefs around FP use.

One reason behind adolescents' hesitance to use contraception is "their often-expressed opinion, clearly derived from their society's norms, that girls who 'planned for' sexual activity by using contraception [are] promiscuous, unvirtuous or morally reprehensible."

(Tavrow et al, 2012, p. 857)

Nigeria: Eke and Alabi-Isama (2011) polled female secondary school students between the ages of 10 and 19 in Nnewi, Nigeria, to assess their LARC[4] knowledge, attitudes and use. Of the respondents, 34.5 percent reported being sexually active, 17.9 percent had heard of LARCs and 10.6 percent reported having used LARC methods. The leading reason for LARC non-use was conflict with religious or cultural beliefs. Other common reasons included no perceived need for a longer-acting method, fear of side effects, belief that longer-acting methods cause infertility, partner objection, lack of access and high cost. The most popular contraception information source for nearly half of the students was friends, and only one respondent named health workers as her information source. Of LARC users, 95.7 percent reported being satisfied with the methods. The same percentage said they would recommend LARCs to a colleague.

Kenya: A study in Kenya looked at contraceptive provision during post-abortion care at one clinic that had a wide range of methods available (Tavrow et al, 2012). Nearly three-quarters of the women (ages 10 to 46) stated they were unmarried. No young women aged 10 to 18 reported ever using a contraceptive method, while 4 percent of the 19-to-21 group and 22 percent of women aged 22 to 26 said they had used a method before. After the abortion and private counseling on multiple methods, 0.6 percent of 10- to 18-year-olds chose either the implant or the IUD. No 19- to 21-year-olds chose the IUD, but 1.2 percent chose the implant. Among women aged 22 to 26, 3.4 percent and 0.3 percent chose the implant and the IUD, respectively. The doctor at whose clinic the study was conducted noted that girls feared contraceptive use would impair their fertility and also feared being discovered with contraceptive methods in their possession.

Lack of Youth-Friendly Reproductive Health Services, Including Provider Bias toward Youth Seeking Contraceptives, High Cost of Contraceptives and Stock-Outs

Uganda: Qualitative research in Uganda (Nalwadda et al, 2010) assessed youth's perceived obstacles and enabling factors around contraceptive use. Youth in the study found contraceptive service providers to have paternalistic and judgmental views towards youth seeking contraception, and thought providers to demonstrate a lack of privacy and confidentiality. Youth noted multiple examples of providers reporting to parents or husbands if young men or women came to the health unit for contraceptives. In focus group discussions with youth about contraceptive use in Uganda, contraceptive stock-outs, high cost and lack of youth-friendly services also were noted as barriers to contraceptives for youth.

Nigeria: In a Nigerian study, young men and women (ages 10 to 24) in a refugee camp (Okanlawon et al, 2010) lamented the inconsistence or unavailability of contraceptives and lack of anonymity when seeking

[4]LARCs included in this article were implants, IUDs, intra-uterine systems and injectable methods

contraceptives. Among these youth, high cost of FP services was also a concern, particularly as many methods, including some LARCs, were no longer being provided for free in the camp.

Promising Program Approaches from the Literature

No interventions were found in the literature review that specifically addressed increasing LARC use among youth in LMICs. However, several interventions helped young women access LARCs, even when this was not an explicit goal of the programs.

Mobile Outreach Services

Malawi: Mobile outreach is seen as a key strategy in reaching Malawi's national health goals. The Family Planning Association of Malawi (FPAM) runs mobile outreach services in three districts that focus on reaching youth and young adults. The outreach teams reach approximately 60 clients per visit, and provide FP and HIV services and counseling. During FPAM mobile events, short-acting contraceptives are provided free of charge, and long-acting methods are provided on a sliding scale, often at rates 40 to 50 percent lower than in FPAM's static clinics (Wickstrom et al, 2013).

Nepal: In Nepal, mobile outreach is a cornerstone of the nation's approach to reaching underserved and economically disadvantaged populations, who often have limited access to FP services (particularly long-acting and permanent methods) due to harsh terrain, limited human resources and other considerations. Sunaulo Parivar Nepal, an NGO responsible for implementing a Marie Stopes International program, provides a wide range of services including mobile outreach services targeting underserved, marginalized, hard-to-reach populations and youth (Wickstrom et al, 2013).

Unfortunately, no youth-specific outcome statistics could be found for these mobile outreach programs.

Outreach through Dedicated Providers

Mali: Within its ProFam network of clinics, PSI-Mali trained a core group of midwives to counsel and provide FP, including LARCs, to all women attending routine immunization "event" days at community health centers. The training aimed to increase provider knowledge of LARCs, remove provider biases around LARCs (that were often passed on to clients), increase provider confidence in providing LARCs and equip providers to be LARC champions within the provider community. Outreach events consisted of:

1. A group session while women waited for immunization services for their children.
2. An individual counseling session with women who expressed an interest in obtaining contraception that day.

Here, providers focused on answering questions to help the woman determine which method best suits her needs. Although no specific youth campaigns were carried out, the program successfully reached young populations and saw an increase in LARC use among young women. Between 2010 and 2011, a majority of implant acceptors (48.4 percent) were women under the age of 25, while a growing number of IUD users (40.9 percent) were 29 or younger. While most acceptors had at least one living child, 13.6 percent were nulliparous women, the majority of whom (97 percent) selected an implant. Among implant clients, 26 percent were unmarried, compared to only 7 percent of IUD clients (PSI/ProFam, 2012).

Zambia: Eighteen midwives were placed at high-volume, public-sector Zambian facilities solely to provide LARCs. Integrated demand creation and service delivery were important aspects of the program; midwives gathered groups of women waiting for other types of services, emphasized the distinct advantages of LARCs and other modern methods, and offered same-day opportunity to receive their method of choice. All of the program elements worked synergistically to improve uptake of LARC—in a 14-month period, 33,609 clients chose either a subdermal implant (66 percent) or an intrauterine device (34 percent). The program reached a younger and lower parity population compared to nationally representative surveys of Zambian women using contraception (Neukom et al, 2011).

Community-Based Distribution and Task-Shifting

Ethiopia: Under the Ethiopian Integrated Family Health Program, health extension workers (HEWs) were trained to scale up community-based distribution of Implanon, one type of contraceptive implant. Asnake and colleagues (2013) investigated the uptake of Implanon in the country, particularly who accessed Implanon at the community level. Almost one-quarter of acceptors were new contraceptive users and on average, Implanon® acceptors were younger and had more years of education and fewer children as compared to

implant users nationally. The community HEW strategy in Ethiopia is reaching women with the highest levels of unmet need, particularly those aged 20 to 35 years old. The authors conclude that the provision of Implanon at the community level through task shifting to HEWs may be effective in reaching younger women who have fewer children with implants. In addition, the study found that providing contraceptive services through HEWs that are known to young women and their families may reduce some of the barriers that young women in Ethiopia face, including limited access to health services, approval from husbands, mothers-in-law or other family members to travel to health centers, and lack of privacy when at a health center.

Peer-Led Approach

Bangladesh: The 2009-2013 Mayer Hashi project in Bangladesh was designed to help young married couples reach their reproductive intentions (RESPOND Project, 2013). It used a peer-led approach to provide couples, in which the woman is 20 years old or younger, with better FP information and services, in particular for LARCs. As intended, more young women started using the more effective longer-acting methods, such as the implant (from 0 percent to 6 percent) and the IUD (from 0 percent to 1 percent). Use of the injectable, which is effective for three months, had the largest statistically significant increase, from 7 percent to 21 percent. There was no change in the intention to use an IUD (1 percent each) or the implant (5 percent in both surveys; RESPOND Project, 2013).

Conclusions and Recommendations

Factors at the government, provider/facility and young end-user levels impact the acceptance of LARCs for youth. At the **government level,** while many countries might encourage FP service accessibility for all in principle, LMIC health systems frequently neglect unmarried and nulliparous youth's needs. In some regions, policy and donor funding availability steer what contraceptive methods are available to citizens. Stock-outs and high prices reduce LARC availability to all women, sometimes disproportionately impacting youth.

To overcome these hurdles, governments should consider:

- Enacting policies that advocate for youth's contraceptive needs, including systematically supporting their eligibility for LARCs.
- Devoting resources to the provision of youth-friendly services and continual provider FP and LARC education and technical training.
- Addressing logistics and stock-outs to ensure that youth have both easier physical access to LARCs.
- Subsidizing prices to increase LARC accessibility for younger users as cost is often a deterrent.

At the **provider and facility level,** fundamental gaps exist in clinical knowledge and capacity for LARC provision, and in appropriate communication with youth. Clinically, providers lack knowledge about LARCs and perpetuate misinformation on youth eligibility for LARCs, LARC safety and LARC side effects. Providers also lack confidence in LARC insertion and removal skills, which limits LARCs' access and use among youth. Additionally, providers are generally ill-prepared to counsel youth on LARCs, and allow cultural and social norms and personal beliefs to guide their FP service delivery to youth. Providers are frequently unwilling to provide consistent, confidential, low-cost or free FP services to youth, even when facility or country policies mandate this.

Recommendations specific to providers include:

- Increasing opportunities for hands-on training and experience on LARC insertion and removal techniques.
- Sensitize providers to the FP needs of youth and improve their counseling abilities for this group. A provider's approach should take into account and focus on a young person's developmental stage, their decision-making process and ability, the type(s) of relationships in which they are engaged and emotional factors—specifically as these factors differ from adults. The counseling should assure youth clients that providers are trustworthy, accessible, respectful of confidentiality and can help educate them about FP. Providers should also address method choice including LARCs, switching and discontinuation of methods, correct use and side effects, and should help young people choose a method that is right for them based on their lifestyle and specific risk factors (Jaccard & Levitz, 2013).

At the **individual youth level,** youth also demonstrate a low level of knowledge about LARC methods. Young men and women between ages 15 and 24 are unable to name LARC methods, or are deterred from using LARCs by fear of side-effects or other method misconceptions. Additionally, youth echo many cultural and societal biases around LARCs expressed by providers, such as the belief that IUDs and implants are for older,

married women and/or mothers. Youth, too, are often uncomfortable discussing sexual topics with providers, and demonstrate distrust and dislike of facilities and providers that are not youth-friendly. Other factors, such as high cost, also limit youth uptake of many FP methods, including LARCs.

While implementation between providers and youth may differ, recommendations for the groups overlap. For example, to surmount the challenges among providers and youth, program managers should consider programs that:

- Address misinformation around LARCs for youth and confront non-medical biases (such as marital status) and perpetuation of myths around LARCs for youth.
- Reinforce the importance of dual protection (e.g., condom use in addition to implants or IUDs) and address biases against LARC use by youth subgroups, such as HIV-positive or those at a higher risk for STIs.
- Emphasize open and thorough client-provider communication to support youth's education and voluntary uptake of LARC. This may include additional outreach activities on the part of the providers, as well as direct outreach by projects to create demand for services and LARCs among youth. Strong, clear communication between provider and client is crucial, and can increase the uptake in all contraceptive methods, including LARCs, among youth (Cornet, 2013; Hillard, 2013; Jaccard & Levitz, 2013).

Additionally, among youth, the following approaches are recommended:

- Increased, comprehensive sexual education that starts early for young people (Eke & Alabi-Isma, 2011; Mbizvo & Phillips, 2014). Included in this education should be facts about methods, including LARCs. This may help young people feel prepared to approach contraceptives and start conversations between each other and with family or partners, rather than have their contraceptive choices be left to others. Increased knowledge about LARCs and other FP methods may help increase acceptance rates and gradually start to change social norms around these methods.
- Approaches that stimulate discussion and demand among youth about LARCs. LARCs will stay an uncommon choice for younger populations as long as young people remain afraid to openly access or discuss their experiences with the commodities. Positive deviants or youth willing to adopt LARC use despite restrictive social norms, will be key pioneers in advancing the acceptance of LARCs among young users. Of course, this requires an enabling environment at the service delivery and the policy level.

As research findings around LARCs and youth ages 15-24 were so limited, a final recommendation applying to all levels is for the generation of more relevant and specific research on LARCS and youth in LMICs. As LARCs and youth take center stage in many global FP agendas, close monitoring and evaluation of these efforts will be particularly crucial to expanding the LARC and youth evidence base, and increasing implant and IUD use among this priority population.

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