

Improving contraceptive prevalence rate in Ethiopia: An evidence-based policy brief

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Abstract

Introduction: Societies in both the developing and developed world suffer from unacceptably high rates of unintended and unwanted pregnancies, despite the availability of safe and effective forms of contraception.

Objective: To synthesize the best available evidence describing low contraceptive prevalence rate in women of reproductive age (15-49 years) in Ethiopia and give potential policy options to improve this rate.

Methods: The policy brief brings together global research evidence from systematic reviews and local evidence to inform deliberations about improving contraceptive prevalence rate in Ethiopia.

Results: Ethiopia's contraceptive prevalence rate is 42% for married women. Lack of knowledge or awareness, socio-cultural factors, health concerns and fear of side effects, service access and quality of care and economic factors are found to be the major incriminated factors for the low rate. Potential policy options for improving this rate in Ethiopia include (i) Behavior Change Communication (ii) Mobile phone-based information and (iii) Community-based contraceptive counseling and referral.

Conclusions: There are evidences indicating the potential benefit of Behavior Change Communication, mobile phone-based information and Community-based contraceptive counseling and referral for improving contraceptive prevalence rate in low and middle income countries like Ethiopia.

Keywords: Contraceptive prevalence rate, behavior change communication, mobile phone-based information, community-based contraceptive counseling and referral, policy brief, Ethiopia.

Introduction

Family planning is unique among development initiatives in its range of potential benefits, encompassing economic development, maternal and child health, educational advances and empowerment of women. It allows individuals and couples to anticipate and attain the desired number, spacing, and timing of children (WHO 2011). Societies in both the developing and developed world suffer from unacceptably high rates of unintended and unwanted pregnancies, despite the availability of safe and effective forms of contraception. Unintended pregnancy has been a major public health issue due to its adverse consequences to the mother, child and the health sector's resources (WHO 2009). Globally, of all maternal deaths, 7.9% is due to abortion and sub-Saharan Africa holds the higher proportion (Lale, et al. 2014). Reducing the number of unintended pregnancies could avert 60% of maternal deaths and 57% of child deaths (WHO 2014). In developing regions, around 225 million women had an unmet need for modern contraception (Singh et al. 2014).

The Sustainable Development Goals (SDGs) include the target of universal access to sexual and reproductive healthcare services, including family planning, information and education, and the integration of reproductive health into national strategies and programmes. To track the progress of this target, a measure (demand for family planning met with modern contraceptive methods) and a

benchmark (at least 75% by 2030 in all countries) have been suggested and have received positive feedback from the international family planning community and beyond (Global Health Action 2015). If the 75% benchmark would be achieved, 334 million women across the low and middle income countries (LMICs) would use a modern contraceptive method by 2030, compared to 226 million women in 2014. In Ethiopia, Contraceptive Prevalence Rate (CPR) among married women is 42% (EMDHS 2014). The objective of this policy brief is therefore to synthesize the best available evidence describing CPR in women of reproductive age (15-49 years) in Ethiopia and give policy options to improve CPR in Ethiopia.

Size of the problem: According to Ethiopian Mini Demographic Health Survey (2014), Ethiopia's contraceptive prevalence rate (CPR) is 42% for married women which is very low compared to the average of contraceptive use of developing countries which is 62.5% (World Development Indicator 2015).

Causes of the problem: Several factors are incriminated for the low contraceptive prevalence rate in Ethiopia. Lack of knowledge or awareness, socio-cultural factors, health concerns and fear of side effects, poor service access and quality of care

and economic factors are found to be the major causes for the low prevalence of contraceptive use.

1. Lack of Knowledge or Awareness: Women's knowledge of family planning methods provides a measure of the level of awareness of contraception in the population and indicates the success of existing information, education, and communication program (EMDHS 2014). In depth analysis of EDHS 2000-2011 indicated that contraceptive use among women with primary education is one and half times more and secondary or higher education is two times more than those women with no education. Husband's education is also among the predictors of contraceptive use. Compared to women with uneducated husbands, those whose husbands have a minimum of primary education were more likely to use contraception (UNFPA 2012).

2. Socio-cultural factors: Most women's contraceptive knowledge and practice was influenced by socio-cultural norms. The dominance of the husband and his opposition to contraceptives, in conjunction with the woman's low social status, were reported to be limiting factors for African women (Beekle and McCabe 2006). In addition to directly influencing contraceptive use decisions, male attitudes toward family planning can strongly affect contraceptive use indirectly. In the absence of explicit communication, women often incorrectly perceive that their partners are opposed to family planning and therefore engage in covert use or do not use contraception at all (Miller and Pasta 2004).

In south western Ethiopia, the main reasons for not using contraceptives included a desire to have more children and opposition from husband (Kebadnew and Wubegzier 2016). Similarly, in Amhara regional state, the main reason for low contraceptive use is perceived low risk of pregnancy due to breast feeding, partner opposition and religious beliefs (Genet et al. 2015). Religious beliefs and their effect on contraceptive methods and attitudes are key factors in contraceptive use. In Ethiopia highest contraceptive use is reported among the Orthodox Christians (35.1%) followed by Protestants (29.9%), Moslem (19.7%) and 16.9% in other religion groups (UNFPA 2012).

3. Health concerns and fear of Side effects: Health concerns and fear of side effects are two of the most commonly expressed reasons for non-use and for discontinued use of contraception. Physiological effects of contraceptive methods (e.g., nausea, headache, weight gain, menstrual changes) can influence women's choices (Bongaarts et al. 2012). Tsedeke et al. 2006 indicated that 31.8% of women in

Amhara regional state, 15% in south Ethiopia are not using contraceptive due to fear of side effects.

4. Economic factors: Association of socio-economic inequality with family planning is profound. Poorest women have less access and use family planning services less than wealthier women (Gillespie et al. 2007). Seeking care at a health facility has additional financial implications for a household in terms of travel costs and their companions' time (Somanathan, 2005). In Ethiopia, EMDHS (2014), reported that married women in the wealthiest household are twice (60%) as likely as women in the poorest household (27%) to use any contraceptive method.

5. Service access and Quality of care Ethiopia is a country with a very unequal distribution of health services (Barros, et al. 2012). Coverage for family planning is 22% (Onarheim, et al. 2015). In Ethiopia married women in urban areas are more likely (56%) to use any modern method than their rural counterparts (38%) (EMDHS, 2014). Clients' satisfaction with family planning service is very low in the country (Tsegaye et al. 2015). The frequency of visit, waiting time, cleanness of health facility, history of side effects, history of unintended pregnancy, and information on how to use the method, privacy during examination, procedure and convenience of opening hour were the predictors of client satisfaction.

A cross-sectional study was conducted in Northwest Ethiopia health facilities to assess quality of family planning services provision in terms of clients' perspectives, technical competence and interpersonal relations of providers and resources indicated that there was no adequate privacy in service provision sessions. It was difficult to understand the service provider, communication and privacy was worse in government institutions compared to the NGO clinics and deficiencies were also noted in the information provision for clients concerning infection prevention procedures and adequacy of service giving facilities (Mesganaw 2005).

Policy options

Although the contributions of contraceptive use in reducing maternal, infant and child mortality are known (Bongaarts et al. 2012), the utilization is still very low. The Ethiopian Federal Ministry of Health has planned to raise contraceptive use to 55% by the end of 2020 (FMOH 2016). Achieving this target requires integrated approaches. Behavior Change communication (BCC), mobile phone-based information and community-based contraceptive counseling and referral are the three proposed options to address knowledge and awareness, socio cultural,

economic and service access and quality of care barriers on improving CPR.

Policy option 1: Behavior Change Communication (BCC): BCC programs are the most widely used means of disseminating family planning messages in developing countries (Bongaarts et al. 2012). BCC

comprises four main channels of communication: mass media, community-level events (often grouped under the heading of community mobilization), interpersonal communication/counseling, and electronic media (Salem, et al. 2008). Comprehensive community-based interventions appear to have limited long-term effects on contraceptive use among unmarried youth in suburban Shanghai. It is necessary to provide sex and reproductive health education and services to all unmarried young people on a regular basis (Tu et al. 2008).

Impacts of Behavior change communication: A systematic review evaluated the impact of enhanced Family Planning services to women with need of family planning in a clinic setting (Lopez et al. 2016). A behavioral intervention which includes contraceptive counseling, education, or information dissemination probably improves contraceptive use.

Policy option 2: Mobile phone-based information

More than 93% of the world's population is covered by mobile phone networks, and more than 87% of people living in the developing world are mobile phone subscribers (The World Bank, 2012). The use of mobile phones to improve health behaviors and services is a promising approach in global health that is increasingly applied to link young people to health information and services. Global reproductive health programs are leveraging mobile phones (including all mobile phones, and not just limited to smart phones) to support adolescents' health in rural and urban communities, through diverse communication formats that link young people to information and services on a wide-range of sexual and reproductive health topics (Ippoliti and L'Engle 2017).

Impacts of Mobile phone-based information: A systematic review evaluated mobile phone interventions to improve contraception (Smith et al. 2015). The review provides limited evidence that interventions delivered by mobile phone can improve contraception use. Daily educational text messages can improve oral contraceptive adherence. Further high-quality trials are required to robustly establish the effects of interventions delivered by mobile phone to improve contraception use.

Policy option 3: Community-based contraceptive counseling and referral: To assist countries in optimizing health worker performance, WHO developed a comprehensive set of evidence-based

recommendations to facilitate task sharing for key, effective maternal and newborn interventions, including contraceptive provision (WHO 2012). While most community health workers (CHW) provide condoms and pills within their communities, evidence shows that these workers are also highly effective at providing and referring for other methods (Perry et al. 2014). Based on evidence from several projects in multiple countries, experts found that the autonomous provision of injectable contraception by trained and supported CHWs was safe, effective, and acceptable to clients (Abdul-Hadi et al. 2013; WHO et al. 2010). Community health worker programs have emerged as one of the most effective strategies to address human resources for health shortages while improving access to and quality of primary healthcare (Liu et al. 2011).

Impact of Community-based contraceptive counseling and referral: A systematic review evaluated community-based contraceptive counseling and referral in improving copper contraception (Arrowsmith, et al. 2012). Contraceptive counseling and referral by community workers probably improves uptake of copper IUD contraception.

Implementation considerations: Behavior Change Communication, mobile phone-based information and community-based contraceptive counseling and referral are the three potential solutions to improve contraceptive prevalence rate in Ethiopia. Implementing these options requires other changes, including policy changes. Strategies for implementing the options should take advantage of factors that enable their implementation as well as addressing barriers.

Enablers of improving contraceptive prevalence rate in Ethiopia include:

- Political commitment to family planning
- Major funding opportunities and public-private sector collaboration globally.
- An increased number of HEW working on family planning.
- Advanced technological innovations and rising of the mobile penetration rate in the country
- Improvements in public health infrastructure in both rural and urban areas. Barriers to the three options and implementation strategies that address those barriers are summarized in Table 1 to 3.

Table 1: Barriers and implementation strategies for all options

Barriers	Descriptions	Implementation strategies
Traditional, cultural and religious beliefs	There is a well accepted belief in some parts of Ethiopia that religion prohibits the use of modern FP methods. This belief creates an impediment to demand.	Enhancing women's knowledge about the positive impacts of family planning at individual and other levels.
Gender inequalities	Gender inequalities commonly affect women's ability to make decisions in the household. This power dynamic often limits a woman's ability to choose to use contraceptives, leading to lower FP uptake in households where there are negative socio-cultural sentiments about women's decision-making abilities	- Enhancing women's voice in decision-making, leadership and peace-building - Promoting women's economic empowerment - Ending violence against women and girls
Availability of and access to a range of family planning methods and counseling	The majority of FP users still depend on short-acting methods, particularly injectables, and the use of long-acting reversible and permanent methods remains extremely low.	Providing a choice of FP methods to meet the changing needs of clients throughout their reproductive lives increases overall levels of use and enables individuals and couples to meet their reproductive goals and safeguard their human rights.
Monitoring and coordination	There may be weak monitoring system and lack of coordination while implementing the options.	Improve multisectoral coordination in the planning, implementation, and monitoring of FP program at all levels.
Finance	There may be insufficient financial resources to implement all the options.	Increase the budget allocation for family planning both at the federal and regional levels to ensure reproductive health commodity security

Table 2: Barriers and implementation strategies for option 1: Behavioral change communications

Barriers	Descriptions	Implementation strategies
Social and economic status derived from cultural expectations about women and motherhood	Women's lives and experiences differ according to the ethnicity of the woman; women of different ethnicities may face various types of discrimination.	Engage and mobilize communities in group dialogue and action to promote healthy sexual relationships
Fear of social and health consequences inhibit contraceptive use	Health concerns and fear of side effects are major reasons for not using contraceptives or discontinuing	Provide access to contraceptive information, services, and supplies
Social and family power dynamics constrain effective action to address fertility desires	Husband dominance in decision making on fertility desire	Decision-making autonomy and ready access to or control over cash is critical to accessing contraceptive services

Table 3: Barriers and implementation strategies for option 2: Mobile phone-based information

Barriers	Descriptions	Implementation strategies
National health priorities	The health policy might not be supported by mobile technology	Alignment of m-Health initiatives with broader health system goals
Data rights and governance	There may not be data confidentiality and ownership	Maintaining integrity of data collected using m-Health initiatives
ICT rights and regulations	There may not be any regulations regarding ICT or limitations in use of applications	- Social priorities for use of ICT's - Broader guidelines defining identification, security, confidentiality

Table 4: Barriers and implementation strategies for option 3: Community-based contraceptive counseling and referral

Barriers	Descriptions	Implementation strategies
Shortages in contraceptive commodities and inequitable distribution of health workforce	Clients are often unable to access counseling and receive commodities due to geographical distances and lack of supplies or equipment at facilities	Scale up the delivery of services for the hardest-to-reach groups. Improving supply chains, systems, and service delivery models.

Discussion

A systematic review evaluated the impact of enhanced family planning services to women with need of family planning in a clinic setting. A behavioral interventions like contraceptive counseling, education, or information dissemination which are applicable in the clinic or community, conducted through single or multiple sessions, and targeted to women probably improves contraceptive use (Lopez et al. 2016). The factors that influence the behavior of one group of people are not always the

same as those that influence another group; for this reason, communication interventions should be tailored to meet the needs of particular subgroups (USAID 2012). BCC programs using mass media, even if the percentage change is small, the base to which it is applied can be in the hundreds of thousands, if not millions, making the cost per person reached and the cost per unit of change relatively low (Kincaid et al. 2006). Updated research on multi-channel family planning communication programs is needed (Mwaikambo et al. 2011). Health communication (BCC) objectives should be realistic,

measurable, and specific, with clear linkages between short-term objectives and long-term behavior change goals that often require significant time and resources to achieve (USAID 2012). A systematic review by Aranda-Jan et al. (2014) indicated that as accessibility to mobile phones increases, the potential of m-Health to improve healthcare delivery in Africa is also increasing remarkably fast; however, there are weaknesses and challenges that must be considered and addressed for m-Health to fulfill this potential. m-Health approaches may hold the potential to strengthen family planning programming, including reaching underserved populations and addressing critical health-systems issues in areas such as human resources, health management information systems, and financing (Lemaire 2011; van Heerden 2012; Labrique, et al. 2013). Telecommunication technologies reduce time, distance and cost of information delivery, and support health providers to offer cost-effective services (Aranda-Jan et al. 2014).

Conclusions

There are evidences indicating the potential benefit of behavioral change communication, mobile phone-based information and community-based contraceptive counseling and referral for improving CPR in low and middle income countries like Ethiopia.

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