#### **ORIGINAL RESEARCH ARTICLE**

# Addressing the Sexual and Reproductive Health Needs of Young People in Ethiopia: An Analysis of the Current Situation

## Nigina Muntean<sup>1\*</sup>, Worknesh Kereta<sup>2</sup> and Kirstin R Mitchell<sup>3</sup>

SRH consultant; Indevelop, Addis Ababa, Ethiopia<sup>1</sup>; Adolescent and Youth Senior advisor, Pathfinder International Ethiopia, Addis Ababa, Ethiopia<sup>2</sup>; Lecturer in Sexual and Reproductive Health, Dept of Social and Environmental Health Research, Faculty of Public Health & Policy, London School of Hygiene and Tropical Medicine, London, UK<sup>3</sup>

\*For Correspondence: Email: niginamuntean@gmail.com; Phone: +90 549 748 62 28

#### Abstract

Young people in Ethiopia face a number of risks to their sexual and reproductive health, including adolescent pregnancy, sexual violence, and unmet need for family planning. This study explores the extent to which current service provision addresses the SRH needs of young Ethiopians . Methods included a comprehensive review of the academic and policy literature on young people's SRH and service provision in Ethiopia; and 14 semi-structured Key Informant Interviews. Factors affecting utilization of sexual and reproductive services by young people include: limited SRH knowledge, lack of open discussion of sexual matters, low status of women, cultural and logistical barriers, competing priorities among community health professionals, limited resources for health facilities, and negative attitudes of providers towards unmarried youth. While the antenatal needs of young married women are somewhat addressed, gaps exist in terms of services for unmarried youth, young men, rural youth and vulnerable groups. The national policy platform has created an enabling environment for addressing youth SRH needs but challenges to implementing these policies still persist. The way forward requires a focus on reducing barriers to utilization of services, and attention to underserved groups. It also requires resource mobilization, strong leadership and effective coordination between stakeholders and donors. (*Afr J Reprod Health 2015; 19[3]: 87-99*).

Keywords: Ethiopia, young people, sexual and reproductive health, service provision

#### Résumé

Les jeunes gens en Ethiopie sont confrontés à un certain nombre de risques par rapport à leur santé sexuelle et de la reproduction, y compris la grossesse chez les adolescentes, la violence sexuelle, et les besoins non satisfaits de planification familiale. Cette étude explore la mesure dans laquelle la prestation de services actuelle aborde les besoins de la SSR des jeunes Ethiopiens. Les méthodes comprennent un examen complet de la documentation académique et politique sur la SSR des jeunes et la prestation de services en Ethiopie; et 14 entrevues semi-structurées auprès des informateurs clés. Les facteurs influant sur l'utilisation des services sexuels et de la reproduction par les jeunes gens comprennent: une connaissance limitée de la SSR, le manque de discussion ouverte sur les questions sexuelles, situation inférieure des femmes, les barrières culturelles et logistiques, des priorités concurrentes entre les professionnels de santé communautaire, des ressources limitées pour les établissements de santé, et les attitudes négatives des prestataires envers les jeunes non mariés. Alors que les besoins de soins prénatals de jeunes femmes mariées sont peu abordés, il existe des lacunes en matière de services pour les jeunes célibataires, les jeunes hommes, les jeunes ruraux et les groupes vulnérables. La plate-forme de politique nationale a créé un environnement favorable pour répondre aux besoins de santé sexuelle et de la reproduction des jeunes gens mais il existe encore des défis à la mise en œuvre de ces politiques. La voie à suivre exige un accent sur la réduction des obstacles à l'utilisation des services, et l'attention aux groupes mal desservis. Elle exige également la mobilisation des ressources, un leadership fort et une coordination efficace entre les parties prenantes et les donateurs. (*Afr J Reprod Health 2015; 19[3]: 87-99*).

Mots-clés: Ethiopie, jeunes gens, santé sexuelle et de reproduction, prestation de services

## Introduction

"Youth is Africa's main resource. Young people are not only the key to the future; they are also the ones constructing the present<sup>1</sup>."

The rationale for a focus on young peoples' sexual and reproductive health can be made on demographic and public health grounds. Demographically, young people (aged 10 to 24) are a key group, comprising a third of Ethiopia's 82.8 million population<sup>2,3</sup>. In

African Journal of Reproductive Health September 2015; 19(3):87

addition, early marriage and low utilization of sexual and reproductive health (SRH) services – both of which have been identified as issues in Ethiopia – tend to contribute to population growth, which in turn impedes poverty reduction and development<sup>3,4,5</sup>.

From a public health perspective, high quality sexual and reproductive services for young people are a priority because young people are at particular risk of adverse sexual health outcomes. They have an elevated risk of experiencing sexually transmitted infections (STI), unplanned pregnancy and sexual violence<sup>6,7</sup>. The transition to adulthood also represents a window of opportunity to equip young people with the knowledge and skills to attain lifelong sexual health<sup>8</sup>.

Sexual health concerns "the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence". It implies a positive, respectful approach to sexuality and sexual relationships<sup>9</sup>. Reproductive health implies the right, capability and freedom to reproduce: "to be informed of and to have access to safe, effective, affordable and acceptable methods of fertility regulation" and appropriate health care services during pregnancy and childbirth<sup>10</sup>. Comprehensive sexual and reproductive health services ideally address a broad range of issues: STI prevention and treatment (including Human Immunodeficiency Virus (HIV), family planning (FP), sexual violence and sexual function/well-being<sup>9,10,11</sup>. Sexual and reproductive health services should aim to be of high quality, that is: effective, efficient, accessible, acceptable/patient-centered, equitable and safe<sup>12</sup>.

The Federal Ministry of Health of Ethiopia (FMOH) recently suggested that a disparity exists between the sexual and reproductive health needs of young Ethiopian people (YSRH) and the services that are currently available to them<sup>13</sup>. We undertook a comprehensive situational analysis in order to examine this suggested disparity.

Our aim was to explore the extent to which YSRH needs in Ethiopia are addressed via quality service provision. We sought to map contextual, community and individual factors influencing availability, accessibility and utilization, and to identify gaps and limitations in existing provision. Finally we sought to make recommendations for the future.

## Methods

We adapted a thematic framework designed by the University of North Carolina<sup>14,15</sup>, (Figure 1) to structure our review. Adapted from the University of North Carolina's "Handbook of Indicators for Family Planning"<sup>14</sup> and the University of North Carolina Population Center's "MEASURE Evaluation Population and Reproductive Health (PRH). Conceptual framework"<sup>15</sup>.

This Framework was selected because it adequately captures the influence of context, demand and supply factors shaping sexual and reproductive health outcomes.

We undertook a review of secondary data sources, as well as interviews with Key Informants. For the review, we searched for relevant reports,

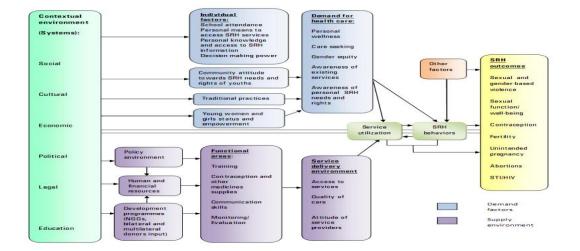


Figure 1: Thematic framework

evaluations, policy documents and academic articles from electronic libraries and we obtained further documents from Key Informants.

The following databases were searched: PubMed, Popline, ELDIS, libraries of the Ministry of Health, Pathfinder International publications, United States Agency for International Development (USAID), Family health International (FHI), Population Health and Environment Ethiopia Consortium, Population Council, United Nations Population Fund (UNFPA), Measure Demographic Health Survey (DHS) and Reproductive Health library of the World Health Organization (RH WHO). Bibliographies of identified sources were hand-searched for further relevant references.

For the database search, the following search terms were combined using Boolean combinations AND, OR: \*Sub-Saharan Africa\*, Ethiopia, \*sexual health\*, \*reproductive health\*, \*young people\*, adolescents, youth, \*health service utilization\*, \*health service demand\*, \*youth friendly service\*, \*community support\*, \*SRH needs\*, \*quality SRH service\*, barriers, preferences, policy, strategy, assessment, study, survey, \*situation(al) analysis\*. The search was limited to relevant full text articles in English, available for public use, fulfilling the quality assessment criteria<sup>16,17</sup> and published between 2005 and 2013, to reflect the recent and current situation. This paper is a condensed version of a scoping review report; hence not all articles identified in the search are discussed in the results section.

The sources we identified employ a range of categories for the target group and we have tried to remain consistent with terms used by each study. The term 'young people' refers to 10 to 24 year olds, while 'adolescents' refers to 10 to 19 year olds, and 'youth' refers to 15 to 24 year olds<sup>18</sup>.

Key informant interviews were conducted with professionals involved in YSRH in Ethiopia. The first author identified relevant professionals using personal networks as well as "snowball" recommendations from one professional to another. Fourteen participants were selected to represent a range of organizations and experience of SRH programming. The key informants comprised Ethiopians (n=10)and ex-patriates (n=4); multilateral/bilateral from representatives international organizations (n=7), international nongovernment organisations (NGOs) (n=6), and

Federal Ministry of Health of Ethiopia (n=1). Eight key informants had recently worked for the Ethiopian government either as service providers or policy makers. All were based in the capital Addis Ababa, but were involved in SRH work across the country.

Interviews were conducted in English at a venue convenient to the Key Informant, usually their workplace. The discussion was framed by a topic guide, designed to address the study aims and probe issues arising from the review of secondary data. All interviews were recorded and transcribed. The topic guide is summarized in Table 1.

**Table 1:** Topics Covered in Key Informant Interviews.

	Key topics
1	Knowledge of, and views on, current service provision
2	Key needs of youth for YSRH services and sources of
	data on key needs
3	Demand for YSRH services from youth (explanations
	for current level of demand)
4	Extent to which current SRH service provision
~	addresses need. Sources of data to back up this view.
5	Current gaps in service provision and why these exist
6	Extent to which needs assessments and services reach
7	all sub-groups of young people. Barriers to service utilization among young people
/	(demand and supply side)
8	Recommendations for improved service provision
9	Sources of data and recommendations for further key
·	informants
тı	ne heterogeneous nature of data from the
	-
	condary sources did not permit quantitative
	nthesis. Instead we synthesised the data
qu	alitatively <sup>19,20</sup> . We rated the quality of each
source, extracted key relevant data, coded and	
charted the data according to themes outlined in th	
thematic framework. We then undertook mapping	
and interpretation to explore the range of data	
10	entify patterns and themes, and compare acros

sources. At the point of recruitment, Key Informants were provided with an information sheet, and written consent was obtained prior to participation. Anonymity was safeguarded by removing all individual identifiers from quotes. Data were separated from personal details and both were stored in a password protected computer.

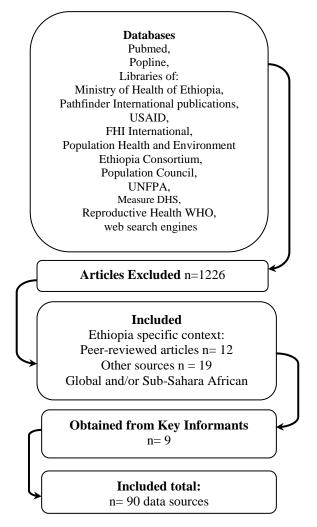
Ethical approval was received from the Ethiopian Ministry of Science and Technology Ethics Committee (REF 3.10/458/05) and the London School of Hygiene and Tropical Medicine Ethics Committee (REF 012-035).

# **Results**

The original search identified 1316 documents, including 9 obtained from the Key Informants, of which 90 were included in the final review (Figure 2). In this condensed version of the review, we make reference to 68 of these. Articles with no full text available, published not in English, published before year 2005, disqualified due to the poor quality<sup>16,17</sup> and not relevant were excluded.

We describe the YSRH situation in Ethiopia according to the components of the thematic framework.

Figure 2: Review of Literature on Young People and Sexual Health in Ethiopia: Search Flow Chart



Sexual behavior of young people in Ethiopia

The median age of sexual debut in Ethiopia is 18.8 years for young women and 21.8 years for young men<sup>21</sup>. Young women (though not young men) who

live in urban areas and who are more educated, tend to begin having sex later than young women who live in rural areas and women with lower levels of education<sup>21</sup>. In most surveys, including the DHS, the median age for sexual debut coincides with the age at first marriage; young women report sexual debut at age 18.8 years and young men - at age 21.8 years old<sup>21-25</sup>. This consistency may be partly due to social pressure to report first intercourse within marriage. Several less robust surveys report premarital sexual activity among in-school students, urban domestic workers and slum-area adolescents<sup>26-29</sup>. Also, according to some smaller surveys, young men are over a third more likely than young women to report initiating sexual activity before marriage, reflecting differences in gendered rules and expectations of sexual behavior, and possibly, under-reporting premarital sexual activity among young women<sup>25</sup>.

On average, women get married seven years earlier than men<sup>21</sup>. Over 20% of rural adolescent girls report being married before the age of  $15^{25}$ ; marriage under age 18 is reported almost twice as often among rural girls (75.9%) compared with urban (40.2%)<sup>30</sup>. Adolescents from urban lowincome/slum areas report rates of early marriage and divorce that are much higher than the national average<sup>23,27</sup> and as one key informant observed, "the earlier the marriage, the more chance the girl has of becoming a single mother" (Key Informant, International NGO, talking about a recent high quality survey s/he co-authored<sup>25</sup>). Multiple partners (2 or more sexual partners during last 12 months) and extramarital sexual contacts are uncommon; they are reported by less than 1% of sexually active vouth<sup>4,21,25</sup>.

### Sexual and reproductive health outcomes

Sexuality is not generally viewed as an acceptable topic of discussion. A high quality study in Amhara region reported that nearly half the rural male adolescents in the sample believed that people should not talk about sex<sup>24</sup>. However, a less robust study elsewhere found that sex and sexuality were discussed quite openly among adolescents, suggesting possible geographical variation in willingness to discuss sexual matters<sup>28</sup>.

Data on sexual function and well-being are scarce. Decreased sexual feeling and painful intercourse among women following sexual abuse were reported by two studies with relatively small sample size<sup>31,32</sup>. Given the strong link between

obstetric fistula and sexual dysfunction<sup>33,35</sup>, it seems likely that many of the 2% of adolescent girls, who experience genital fistula following child birth, will experience sexual problems, even after the repair<sup>33-</sup>

Intimate partner violence and sexual abuse appear common, particularly in rural areas; over 12% of 15-19 year olds report a lifetime prevalence of sexual partner violence<sup>24,25</sup>. Several surveys – both robust and less robust – report a relatively high rate of lifetime sexual abuse among young females<sup>5</sup>, <sup>23,25,31,32</sup>. Various studies have found that around one-third of sexually experienced young women were coerced during their sexual debut<sup>5,24,25,30</sup>. Migrant girls and female domestic workers have been identified as particularly vulnerable to sexual abuse and exploitation<sup>35,36,37</sup>. One Key Informant, working as researcher for an international NGO and involved in studies on marginalized youth<sup>23,27,36</sup>, observed:

> "They [urban domestic workers] are all very young girls, migrants, with no rights, no ID, they don't go to school. They are a target for sexual abuse inside the house, at street gatherings and at brokers' offices"

Although the total contraceptive prevalence rate (CPR) in Ethiopia tripled over the last decade, it remains low among adolescents, particularly in rural areas and among married young women<sup>5,21,23,25,30,38, and 39</sup>. The 2011 DHS suggested that over 80% of all sexually active youth had not used contraception and had never discussed family planning with a health worker<sup>21</sup>. A third of 15-19 year old married women and 22% of 20-24 year old married women report unmet need for family planning<sup>21</sup>.

One Key Informant, working as a specialist in SRH interventions in government, argued that the problem of unmet need stems partly from lack of awareness about family planning and available services among young people:

> "From our observations, they [youth] do need family planning, they do want to use family planning, they do want to postpone their first pregnancy, but they don't know how to do it and where to go to get the service."

Although not popular among married young people, condom use was reported by almost 50% of sexually active unmarried youth<sup>21,25</sup>. Condom use was higher than average among sexually active university students and urban youth, and it was very high among young sex workers (99% reported using condom during last intercourse) and street boys (91% reported using condom during last intercourse), perhaps reflecting the efforts of condom promotion campaigns among high risk groups<sup>23,40</sup>.

Adolescent pregnancy comprises 12% of all births<sup>21</sup>. The birth rate among rural youth aged 20-24 is two times that of urban (236 versus 123 births per 1000 women) and among women aged 15-19, three times (27 births for 1000 urban versus 99 for 1000 rural adolescent women), corresponding with higher contraceptive use among urban vouth<sup>5,21,22,30</sup>. Nearly three times more births occur among women aged 15-19 compared with women aged 20 to 24 years<sup>21</sup>. The difference is likely explained by cultural and family pressure to have a child soon after marriage, as well as reduced decision-making power among younger women. Adolescent pregnancy is associated with higher antenatal and perinatal mortality, and twice the risk of obstetric fistula<sup>5, 21,22</sup>. Maternal mortality comprises one-fifth of all deaths for adolescents' girls<sup>21</sup>. Over half of all pregnancies to very young adolescents (aged 11-14), and over a third among women aged 15-19 and 20-24, are unplanned<sup>5,41</sup>. Available non age-segregated data indicates 13 abortions per 100 live births, with only 23% of all abortions performed in health facilities<sup>42</sup>.

The prevalence of HIV among young people is low, at 0.6%, but because young people comprise a high proportion of the population, infected youth represent half of all HIV infected Ethiopians<sup>21,41</sup>. Young women aged 15-19 are seven times more likely to be HIV infected than males<sup>5</sup>. This is partially due to earlier initiation of sexual activity among young women, but may also be due to the fact that they tend to have older more sexually experienced partners and the fact that they lack power to negotiate condom use<sup>5,22,23,30</sup>.

Among sexually active youth, 3.4% self-reported having an STI<sup>21</sup> in the preceding year with higher than average rates reported by university students<sup>43</sup>.

 Table 2: Summary of Selected Ethiopian Legislation.
 prevent pre

POLICY	Selected relevant issue(s) addressed		
National	Emphasizes young people's right to have		
Adolescents and	full access to and utilization of tailored,		
Youth RH	quality RH programmes and services.		
Strategy and			
standards on			
YSRH health			
services			
"Standards on	Provide practical standards and tools for		
Youth Friendly	provision of quality YSRHS.		
Reproductive			
Health Services"			
Constitution of	Article 35 emphasize gender quality,		
Ethiopia	prohibits harmful and oppressive laws,		
	customs and practices towards women body and mental status, states the		
	women's right for family planning		
	information, education and capacity.		
Family Law	States the legal age of marriage as 18		
	years, and states that marriage can only		
	take place with full consent of the		
	marrying partners.		
New Criminal	Criminalized Harmful Traditional		
Code	Practices; allows terminating pregnancy		
	under special conditions.		
Policy on	Acknowledges increased vulnerability of		
HIV/AIDS	adolescents engaged in transactional sex,		
	includes such objective as to strengthen		
	youth empowerment to enable them to		
	protect themselves against HIV infection.		
National	Outlined all the main requirements for		
guidelines for FP	SRH services for married and unmarried		
in Ethiopia	youth consistent with WHO dimensions		
	of quality health services.		
National	Management of victims of sexual assault		
Guideline for the	for all age groups of population,		
Management of	including young people.		
Survivors of			
Sexual Assault in			
Ethiopia			
Growth	Includes YSRH package, health policies		
Transformation	and strategies among priority areas.		
Plan			

Polices and Strategies, Addressing YSRH Issues<sup>5,13,46,47</sup>.

## YSRH contextual environment

The Government of Ethiopia has demonstrated its commitment to improving population health via increasing health expenditures<sup>44</sup>. In particular, the Federal Ministry of Health of Ethiopia (FMOH) has prioritized decentralized community health care via the innovative Health Extension Programme (HEP)<sup>5,43,45</sup>. Ethiopia has an excellent legal and policy framework regarding sexual health rights. It is a signatory to all major international conventions and frameworks addressing children's and women's rights, and population and development issues. The Ethiopian constitution states a woman's right to

prevent pregnancy-related harm and have access to family planning information<sup>46</sup>. Family law prohibits marriage under 18; and the Criminal Code criminalizes harmful traditional practices and permits abortions under certain circumstances<sup>5,43</sup>. There are many well-designed policies and strategies developed in Ethiopia which address **YSRH** issues<sup>5,43</sup>. These are summarized in Table 2.

Education plays a key role in improving YSRH<sup>18,25</sup>. Primary school enrolment in Ethiopia tripled over the last two decades; however, enrolment in secondary school among young women continues to trail behind that of young men and there is significant geographical variation; only 5% of pastoral youth [youth belonging to the pastoralist communities, whose livelihood involves migration, herding livestock around open areas of land] are currently enrolled at school<sup>21,25,30,39</sup>.

In 1996, the Ministry of Education introduced Population and Family Life Education (POP/FLE), with the aim of integrating SRH topics into the school curricula from the seventh grade (13-14 year olds)<sup>5,43</sup>.

### Factors affecting demand for services

Both young men and women have limited knowledge of sexual health and limited access to such information<sup>21,25</sup>. The exception is HIV, where levels of knowledge about risk factors are high, although this knowledge does not necessarily translate into condom use<sup>5,21,22 and 25</sup>.

Elevated risk of poor sexual health outcomes, such as higher vulnerability to HIV, adolescent pregnancy, sexual violence and exploitation, is associated with living without parents, and being marginalized (for example, urban adolescents from low income/slum areas)<sup>23,27,30,36,37</sup>. Education is important; out-of-school sexually active adolescents more commonly report having had unprotected sex than those in-school, and young women with education are four times less likely to have children during adolescence than non-educated adolescent girls<sup>25,28</sup>. The view of Key Informants concurred with these findings:

> "We need to give our girls the chance to finish school. It is not only for their benefit, it's for their kids' benefit as well... Everybody would like to have their girls successful. So far most comfortable success is having family and baby, but we can frame it

*differently* ... as success in terms of development and a better future for generations." (Advisor to government; working for a multilateral international organization)

Another factor, significantly associated with risky sexual behavior, is use of addictive substances, like chat [a plant, containing addictive drug substance - amphetamine-like stimulants] and alcohol, which are reportedly used by at least one in ten young men<sup>21,30,41,48,49</sup>. The Key Informants, as well as a number of studies, highlighted community-related factors that influenced YSRH service utilization<sup>22,50</sup>. Open discussion of sexual matters, between parents and their children, within classrooms and at community gatherings, is not culturally acceptable<sup>22,25,50</sup>. As one Key Informant commented:

"In my view, ... there is really a need for young people to be informed about sexual and reproductive health. They should know about their body... Nobody will tell them about [SRH] issues ... If at all they [parents] discuss it with their children, they talk about virginity... Other issues – are taboo." (Technical advisor on SRH; multilateral international organization)

There is evidence of change however, with increasing support within communities for utilization of SRH services and delaying pregnancy in young people so they can complete their education<sup>43</sup>.

In a traditionally religious Ethiopian society, community members are highly influenced by religious leaders, looking for their guidance in all aspects of life, including health<sup>51,52,53</sup>. Over 80% of urban and rural youth report being exposed to religious institutions, which is much higher than exposure to any health interventions<sup>25</sup>. Religious leaders provide advice and form the opinion of communities on SRH issues such as family planning and family size, Female Genital Mutilation, early marriage and unsafe abortions<sup>52-54</sup>. Many Key Informants highlighted the important role of religious leaders:

"Work with church [on providing information on SRH issues to young people] is crucial. When we realized that young people visit religious organizations much more often than any youth centers, youth programmes or Health Centers, we started to work on incorporating relevant messages [on SRH] in "Bible everyday message". (Policy specialist; multilateral international organization)

Despite the potential significance of the religious institutions in influencing sexual behaviour, this review, however, found no studies evaluating their impact. Where young women have low status compared with men, this directly affects their sexual health<sup>5,41</sup>. The age gap at marriage, societal pressure towards childbearing, harmful traditional practices, lack of control of household resources and exposure to violence, all contribute to vulnerability<sup>4,13,21,22,30, 41,55,56</sup>. As one Key Informant observed:

"The problem of adolescent health is mainly about gender. If you solve gender issues, you can solve many other issues as well." (SRH Specialist; multilateral international organization)

It was suggested by various sources (survey data as well as Key Informants) that young people are often unaware of their sexual health needs and of existing services<sup>25</sup>. Several Key Informants described a cultural reluctance to seeking medical care for anything other than severe illness, and this reluctance was thought to extend to the use of preventive SRH services. This may partially explain why young people feel uncomfortable accessing family planning, for instance<sup>50</sup>. Young sexually active women report a higher rate of HIV testing than men, probably because the HIV test is routinely offered to young women during antenatal visits<sup>21,30</sup>. Various sources have identified multiple barriers to visiting health care facilities even when available, including lack of funds, long distance to the health facility, the need to get permission to attend, fear of going alone and fear of not finding a female health provider<sup>4,21,30</sup>.

### Supply Environment

Ethiopia has many well-designed policies and strategies (see YSRH context above). However, implementation of these policies has been inhibited by lack of funding and inadequate resources<sup>5,43</sup>. In addition, as one Key Informant observed, YSRH must compete against other urgent health issues.

Another Key Informant questioned whether it was justifiable to allocate separate resources to YSRH at present, given that many adolescents are married when they begin childbearing, and therefore have access to services for married adults:

> "Be careful with definition – most Ethiopian youth are already married... And for those who are in this group ... the health sector does cater for them, it does provide health care. Dedicating resources separately for them does not make sense. They can be treated as adults" (Specialist on SRH interventions, Government Official)

There was also a view by Key Informants, that youth already received sufficient attention from the government in relation to their sexual and reproductive health, and that their needs will be addressed even more widely in the near future. In recent years the FMOH has invested heavily in Health Extension Workers (HEWs), who bring health services to the doorstep<sup>5</sup>. Strongly supported by key stakeholders, including communities and religious leaders, the efforts of HEWs are widely believed to be largely responsible for the increase in contraceptive use and the decrease in maternal mortality over the last decade<sup>57</sup>. HEWs are expected to deliver YSRH services as well. Many are in a good position to do so because of their young age:

> "HEWs are youth themselves, they are trained on how to approach youth and how to talk about SRH issues ... Young girls feel more comfortable to discuss their SRH issues with young HEWs, rather than with older health providers." (Specialist on SRH interventions, Government Official)

However, another Key Informant disagreed:

"There is trust issue between community and HEWs, they [HEWs] are young, trust is not built yet." (Technical adviser on SRH, multilateral international organization)

Some authors suggest that HEWs find it difficult to focus specifically on young people, because of competing time demands<sup>58</sup>. Indeed, surveys suggest that only 15% of adolescents have ever interacted

with an HEW<sup>5,25</sup>. In particular, there were concerns about school-based interventions led by HEWs:

"HEWs are expected to have a school based programmes, where they can reach very young adolescents and prepare them. We know it is not working." (Policy specialist, multilateral international organization)

Various international and national organizations have assisted in the implementation of YSRH interventions, among them UN agencies, bilateral organizations, local and international Non Governmental Organizations and community-based organizations<sup>4,43,59</sup>. Some Key Informants felt that donors do not invest enough in YSRH programmes, and identified lack of co-ordination between sectoral stakeholders, donors and non-governmental organizations as a problem<sup>41,43,59</sup>. A few Key Informants highlighted the fact that few of the many actors involved in SRH are actually focused on youth. According to a recent FMOH assessment, all health centers provide condoms, contraceptive pills and injectable contraceptives<sup>58</sup>. However, reports suggest that in some centres, resource limitations affect the infrastructure of facilities and availability of services, including medicines<sup>41,43</sup>. Furthermore, health facilities do not usually have designated spaces for young people<sup>43</sup>.

Over 700 youth centers were created in Ethiopia in the last decade, as the main place for youth, in particular out-of-school youth, to recreate, receive counseling on HIV and testing, reproductive health education and services<sup>60,61</sup>. However only 6% of girls and 12% of boys across Ethiopia have ever visited a youth center and only 20% of urban youth have talked about sexual health matters with a peer educator from a youth centre<sup>5,25,37</sup>. Evaluations of youth centers have been quite critical, suggesting an inadequate range of activities, inconsistent services, and limited participation of youth in the design and implementation of the Youth Centres programme<sup>25,43</sup>.

Absence of designated space and health providers for youth in health centers is reported by health care providers as the main barrier for integration of YSRH services into existing facilities<sup>43</sup>. Large numbers of health care providers are in need of additional training on provision of YSRH services<sup>41,58</sup>. As one key informant and parent said:

"We invested so much in those youth centers. But are they doing what is expected? I don't think so. They are empty... I mean, even me, I will never let my adolescent daughter to go to youth center, it is seen as a bad place" (Adviser to Government, multilateral international organization).

There is relatively good provision of antenatal services for young pregnant women at most facilities, but other types of service are less common<sup>4,5,62</sup>. Health services for unmarried adolescents are offered mostly within the child-care system; once adolescents are married, they fall into the category of adult SRH care, with a main focus on Mother and Child Care<sup>22</sup>. However, pregnant adolescents are thought to be less well served compared with older women.

Current service configuration appears to be influenced by the assumption that married youth will start childbearing immediately, and that unmarried youth are not sexually active. Young people who do not meet these assumptions – such as sexually active unmarried young women - are less well served. Other groups are also underserved, including the youngest adolescents (aged 10-15), marginalized youth in slum areas, and out of school youth<sup>27,36,37,41</sup>. Family planning interventions and provision of other than antenatal SRH services with rural youth are generally not supported by the community, who view them as unnecessary<sup>5</sup>. There have been some successful pilot SRH interventions for marginalized urban girls and boys via creating safety nets through mentor and peers support and networking, and there have been improvements in services to university students<sup>63,64</sup>. This situation analysis found limited data on SRH needs and service provision for boys and young men, pastoral youth, very young adolescents and certain marginalized groups.

A significant proportion of health care providers believe that FP services should not be provided to unmarried youth<sup>65</sup>. Over one-third of service providers say they would require the partner's consent before issuing contraceptives to unmarried adolescents, reflecting community attitudes towards pre-marital sex<sup>58</sup>. The judgmental attitude of service providers is reported as one of the main barriers to provision of quality YSRH services<sup>5,58,65</sup>. However, one Key Informant noted that HEWs are thought to be less judgmental than others, and many Key Informants believe there is increasing acceptance of young peoples' SRH needs and friendlier attitude of health care providers towards YSRH service provision:

> "Service providers' mentality and attitudes are changing; they have much more open become and supportive nowadays. Before, I was myself the service provider ... I would be angry if a young girl came and asked for the pill [contraceptive], and you would find [that attitude] in most of the places. But now they are trained much better and their attitude is changing." (Former Service Provider, International NGO)

A number of supply-side barriers to utilization of services have been identified, including: inconvenient location of facilities, inconvenient hours, unsupportive attitude of service providers, lack of privacy and confidentiality, and the inadequate qualifications of HEWs<sup>21,41,43,66</sup>. The majority of young people report being afraid to be seen by people they know, and say they feel embarrassed asking for SRH services; and unmarried adolescents often do not want their families to be aware of their SRH needs<sup>29,41,43,50</sup>. Thus barriers arise both from the demand and supply side.

# Discussion

This situational analysis has identified several key sexual and reproductive health issues pertinent to young people in Ethiopia, principally: lack of awareness and knowledge about sexual health issues, unmet need for family planning, adolescent pregnancy, and sexual violence. The review has shown that while the antenatal needs of married young women are somewhat addressed within adult maternal health services, other sexual and reproductive health needs are not yet fully met. Gaps in service exist in a number of areas including: tailored and acceptable services for youth regardless of marital status, trained youth-friendly staff, and services for marginalized and underserved and hardto-reach groups. The review suggests that in order to address these needs, young people need to be considered a distinct target group, rather than being

treated as either children or adults.

The review was limited by the availability of documentation and data on specific topics, particularly sexual function and well being. Some sources were reviewed despite the uncertain quality and small sample size (as indicated when cited), and other topics were only superficially reviewed because of lack of data. The review relied heavily on data extracted from DHS, which has its own methodological limitations<sup>67</sup>.

The Key Informant interviews provided data derived from individual opinions, which in turn are shaped by personal involvement in, and experience of, youth sexual and reproductive health services in Ethiopia. Since the sample is small, these opinions cannot be generalized to represent the views of all experts in Ethiopia; however, since the Key Informants represented a wide range of organizations and programmes they provide good indication of the range of opinions<sup>68</sup>.

The FMOH, working with limited resources, has made commendable progress in reducing infant and maternal mortality<sup>21,38,39</sup> and over the last decade these issues have taken priority. Sexual and reproductive services for youth compete with other urgent health issues, and have yet to find a place among government priorities. However, this review has highlighted a favourable legal and policy environment. The FMOH is in a strong position to lead and coordinate YSRH policy implementation, although this review highlighted some uncertainty about how to make these systems and polices fully operational. The evidence suggests that integration of YSRH services into the existing system is the most cost-effective approach<sup>52</sup>. In rural settings, increasing the number of HEW and training them on young peoples' sexual health issues, have been suggested as ways of improving quality service provision. However the optimal approach to increasing utilization among urban and semi-urban young people, in particular out-of-school and marginalized adolescents, is less clear. Creating social safety nets and providing relevant SRH information to domestic workers in urban areas has showed significant success in pilot projects, and might be scaled up. More research is required to identify the most effective way to tailor services to specific underserved and vulnerable groups.

Some gaps remain in terms of knowledge about specific issues and groups. The sexual health needs of young men are studied much less than those of young women, for instance, and there is inadequate information about risk behaviour among young men. Topics such as sexual function and well-being are also under-researched.

Barriers to open discussion of sexual matters needs to be addressed at all level of interventions, from families through schools to communities. A possible approach is to involve religious institutions, although care would be required in navigating potential conflict between religious and traditional values and effective public health strategies such as making condoms available to unmarried youth. Given that community attitudes towards YSRHS utilization are partly rooted in conservative cultural attitudes toward visiting health facilities, promoting a culture of routine preventive health care for any person, regardless of age, marital or sexual activity status, might help to increase utilization of services. The HEWs have already done much to create awareness of the importance of preventive behaviors among communities, and this work should be supported.

This review identified a need for greater coordination between key actors both at national and local level. Stakeholders such as the Ministry of Women, Children and Youth Affairs, and the Ministry of Education can support the Ministry of Health in ensuring that implementation addresses links between sexual health and both gender and education. Civil society organizations have a role to play in a multi-faceted approach through coordinated and harmonized implementation.

In conclusion, the policy platform, developed by the government of Ethiopia, creates an enabling environment for addressing gaps in need via the implementation of effective and quality YSRH interventions. The way forward requires recognition of young people as a specific target group, a focus on reducing barriers to utilization of services, and attention to underserved groups. It will also require resource mobilization, strong leadership and effective coordination between stakeholders and donors.

# **Contribution of Authors**

NM and KM conceived and designed the study. NM undertook data collection and analysis, supervised by KM and facilitated by WK. NM wrote the first draft with further contributions from WK and KM. All authors interpreted data, reviewed successive drafts and approved the final version of the article.

## Acknowledgment

I would like to express my sincere appreciation and gratitude to Kirstin Mitchell, Ann Foss, Rebecca French and Claire Duddy for their continuous support and gratitude. I would also like to extend my gratitude to all Key Informants, who generously agreed to dedicate their time and shared their experience freely with me.

Finally, I would like to thank my family for their support and encouragement.

# References

- UNESCO. UNESCO Office in Dakar. Youth is Africa's main asset, says UNESCO Director-General. [Online]. UNESCO: Paris, France; 2012. [viewed 2013 Jun 20]. Available from: http://www.unesco. org/new/en/dakar/about-this-office/singleview/news /youth\_is\_africas\_main\_asset\_says\_unesco\_director \_general/.
- 2. United Nations Population Fund. By choice, not by chance:Family planning, human rights and development. State of world population 2012. New York, USA: UNFPA; 2012.
- Word Bank. World Bank. Ethiopia [Online]. Washington DC, USA: World Bank; 2012. [viewed 2012 Dec 28. Available from:http://data.worldbank.org /country/Ethiopia.
- Moore Z, Govindasamy P, DaVanzo J, Bizuneh G, Themme A. Trends in Youth Reproductive Health, 2002 and 2005. [online]. Calverton, USA: MEASURE DHS Demographic and Health Surveys; 2008 [viewed 2012 Aug 23]. Available from: URL: http://www.measuredhs.com/pubs/pdf/OD46/OD46. pdf.
- Ministry of Health of Federal Democratic Republic of Ethiopia. National Adolescents and Youth Reproductive Health Strategy 2006-2015. [online]. Population Health and Environment Ethiopia Consortium; Addis Ababa, Ethiopia: Ministry of Health of Federal Democratic Republic of Ethiopia; 2006. [viewed 23 August 2012]. Available from: URL:http://phe-ethiopia.org/resadmin/uploads/ attachment-60-ARH\_stratagy\_final[1].pdf.
- United Nations Population Fund. UNFPA framework for action on adolescents and youth. Opening doors with young people: 4 keys. [online]. NY, USA: UNFPA; 2007. [viewed 2012 Aug 28]. Available from: URL: http://www.unfpa.org/upload /lib\_pub \_file/715\_filename\_adolescent.pdf.
- Mitchell K, Wellings K, Zuurmond M. Young people. In: Wellings K, Mitchell K, Collumbien M, editors. Sexual health. Maidenhead, UK: Open University Press; 2012. p. 73-83.
- 8. UNFPA. Comprehensive sexuality education: advancing human rights, gender equality and improved sexual and reproductive health. [Internet]. UNFPA: NY,

USA; 2010 [cited 2012 Dec 30]. Available from: http://www.unfpa.org/webdav/site/global/groups/yo uth/public/Comprehensive Sexuality Education Advancing Human Rights Gender Equality and Improved SRH-1.pdf.

- World Health Organization. Sexual and reproductive health [Online]. World Health Organization: Geneva, Switzerland; 2013 [viewed 2013 Aug 16]. Available from: http://www.who.int/ reproductivee health /topics/ sexual\_health/sh\_definitions /en/inde x.html.
- World Health Organization. Reproductive health [Online]. World Health Organization: Geneva, Switzerland; 2013 [viewed 2013 Aug 16]. Available from: http://www.who.int/topics/reproductive\_health/en/.
- Wellings K, Aral SO, Leichliter J, Peterman T, Glasier A, Garcia-Moreno C, et al. Sexual health. In: Wellings K, Mitchell K, Collumbien M, editors. Sexual health. Maidenhead, UK: Open University Press; 2012. p. 17–59.
- World Health Organization. Quality of care: A process of making strategic choices in health systems. [Online]. Geneva, Switzerland: World Health Organization; 2006. [viewed 2013 Feb 19]. Available from: http://www.who.int/managemen t/quality/assurance/QualityCare\_B.Def.pdf.
- 13. \_Ministry of Health of Federal Democratic Republic of Ethiopia. Standards on Youth Friendly Reproductive Health Services: Service Delivery guideline. Minimum Service Delivery Package on YFRH Services. [online].Addis Ababa, Ethiopia: Publication, health and environment Ethiopia Consortium; 2007.[viewed 2012 Dec 14]. Available from:URL:http://phe-ethiopia.org/resadmin/uploads /attachment-159-Stds\_&\_Serv\_GL\_YFRH.pdf.
- Magnani RJ, Rutenberg N. Handbook of Indicators for Family Planning. [Online]. University of North Carolina/EVALUATION Project; Chapel Hill, USA; 1994 [viewed 2013 Mar 11]. Available from: http://www.cpc.unc.edu/measure/publications/ms-94-01.
- 15. MEASURE Evaluation population and reproductive health (PRH). Conceptual framework [Online]. University of North Carolina Population Center; Chapel Hill, USA; 2012 [viewed 2013 Mar 11]. Available from: http://www.cpc.unc.edu/measure /prh/rh\_indicators/overview/conceptualframework.h tml.
- Spencer L, Ritchie J, Lewis J, Dillon L. Quality in qualitative evaluation: a framework for assessing research evidence. [Online]. Government Chief Social Researcher's Office; London, UK; 2003. viewed 2013 Mar 26]. Available from: www. strategy.gov.uk/downloads/su/qual/downloads/qqe\_r ep.pdf.
- Public Health Resource Unit . Critical Appraisal Skills Programme (CASP) – making sense of evidence: 10 questions to help you make sense of qualitative research . [Online]. Solutions for Public Health: Cowley, UK; 2006. [viewed 2013 Mar 26]. Available from: www.phru.nhs.uk/Doc\_Links /Qualitative Appraisal Tool.pdf.
- 18. World Health Organization. Child and Adolescents

Health. [online] World Health Organization; Geneva, Switzerland;2009 [viewed 2012 August 28] Availablefrom: http://www.who.int/reproductive health/publications/adolescence/ en/index.html.

- Clarke A. Situational Analysis—Grounded Theory After the Postmodern Turn. California, USA: Thousands Oaks; 2005.
- Mathar T. Making a mess with situational analysis? Forum Qual Soc Res [Online]. 2008;9(2). [viewed 2013 Feb 10] Available from:http://www. qualitative-research.net/index.php/fqs/article/view/ 432/934.
- Central Statistical Agency of Ethiopia, ICF International. Ethiopia Demographic and Health Survey 2011. Calverton, USA: MEASURE DHS Demographic and Health Surveys; 2012. [viewed 2012 Aug 28]. Available from: URL:http://measuredhs.com/pubs /pdf/FR255/FR255.pdf.
- Holley C. Helpdesk Report: Adolescent Reproductive Health in Ethiopia. London, UK: UKAID of Department of International Development;2011 p. 1–21.
- 23. Ferede A, Erulkar A. Adolescent girls in urban Ethiopia: Vulnerability and opportunities. Addis Ababa, Ethiopia: Population Council; 2009.
- Gage AJ. Coverage and effects on child marriage prevention activities in Amhara region, Ethiopia. Addis Ababa, Ethiopia; 2009.
- 25. Erulkar AS, Ferede A, Ambelu W, Girma W, Amdemikael H, Gebremedhin B, Legesse B, Tameru A, Teferi M. Ethiopia young adult survey: a study in seven regions. [online]. New York, USA: Population Council; 2010. [viewed 20 August 2012].Available from:URL:http://www.popcouncil. org/pdfs /2010PGY\_EthiopiaYASurvey.pdf.
- Oljira L, Berhane Y, Worku A. Pre-marital sexual debut and its associated factors among in-school adolescents in eastern Ethiopia. BMC Public Health 2012;12:375.
- Erulkar A, Ferede A. Social exclusion and early or unwanted sexual initiation among poor urban females in Ethiopia. Int Perspect Sex Reprod Health 2009;35(4):186–93.
- Tadele G. Bleak prospects: young men, sexuality and HIV/AIDS in an Ethiopian town [Online]. University of Amsterdam;2005.[viewed 2013 July 01]Available from:http://dare.uva.nl/document/780 57.
- 29. Tautz S. The Youth to Youth initiative: Assessment of Results in Ethiopia and Kenya. Heidelberg, Holland: Deutsche Stiftung Weltbevoelkerung; 2011.
- Erulkar A, Ferede A, Ambelu W, Girma W, Amdemikael H, Gebremehdin B, et al. Ethiopia gender survey: A study in seven regions. Addis Ababa, Ethiopia: Population Council; 2010.
- Worku D, Gebremariam A, Jayalakshmi S. Child sexual abuse and its outcomes among high school students in southwest Ethiopia. Trop doct 2006;July 36(3):137–40. [viewed 2013 Junly 02] Available from: http://www.ncbi.nlm.nih.gov /pubmed/ 1688 4614.
- 32. Gessessew A, Mesfin M. Rape and related health

#### SRH Services for Ethiopian Youth

problems in Adigrta Zonal Hospital, Tigray region, Ethiopia. Ethiop. J. Health Dev. 2005;18(3):140–4.

- Zheng AX, Anderson FWJ. Obstetric fistula in lowincome countries. Int J Gynecol Obstet 2009; 104:85–89.
- El-Gazzaz G, Hull TL, Mignanelli E, Hammel J, Gurland B,Zutshi M. Obstetric and cryptoglandular rectovaginal fistulas: long-term surgical outcome; quality of life; and sexual function. J Gastrointest Surg. 2010 Nov;14(11):1758-63
- Garcia-Moreno C, Guedes A, Knerr W. Understanding and addressing violence against women Sexual violence. Geneva, Switzerland: World Health Organization; 2012.
- Erulkar A, Ab Mekbib T. Invisible and vulnerable: adolescent domestic workers in Addis Ababa, Ethiopia. Vulnerable Child Youth Stud 2007;2(3): 246–56.
- Erulkar AS, Mekbib T-A, Simie N, Gulema T. Differential use of adolescent reproductive health programmes in Addis Ababa, Ethiopia. J Adolesc Health 2006;38:253–60.
- Central Statistical Agency of Ethiopia. ICF International, Ababa A. Ethiopia Demographic and Health Survey 2005. [Online]. Calverton, USA: MEASURE DHS Demographic and Health Surveys; 2006 [viewed 2013 Feb 10]. Available from: http://www .measuredhs.com/pubs/pdf/FR179/FR179[23June20 11].pdf.
- United Nations Population Fund. State of World Population reports. [Online]. NY, USA: UNFPA; 2013. [viewed 2013 Feb 10]. Available from: http://www.unfpa.org/public/cache/bypass/home/pu blications/swps.
- Girma W, Erulkar A. Commercial sex workers in five Ethiopian cities: a baseline survey for USAID targeted HIV prevention programme for most-atrisk population. Addis Ababa, Ethiopia: Population Council; 2009.
- Ministry of Health of Federal Democratic Republic of Ethiopia. National Reproductive Health Strategy 2006-2015: Revision of August 2011. Addis Ababa, Ethiopia: Ministry of Health of Federal Democratic Republic of Ethiopia; 2011.
- Singh S, Fetters T, Gebreselassie H, Abdella A, Gebrehiwot Y, Kumbi S, et al. The estimated incidence of induced abortion in Ethiopia, 2008. Int Perspect Sex Reprod Health 2010;36(1):16–25. [viewed 2013 April 17] Available from: http://www .ncbi.nlm.nih.gov/pubmed/20403802.
- 43. Geressu T, Berhane F, Wube M, Dibaba Y, Admassu T. # Family planning, comprehensive abortion care and adolescent reproductive health services in Ethiopia. Addis Ababa, Ethiopia: The David and Lucile Packard Foundation; 2012.
- 44. World Health Organization. WHO African Region: Ethiopia [Online]. World Health Organization: Geneva, Switzerland; 2013 [viewed 2013 Jul 21]. Available from:http://www.who.int/countries/eth/en
- 45. Kloos H. Primary health care in Ethiopia under three political systems: community participation in a war-

torn society. Soc Sci Med 1998;46(4-5):502–22. [viewed 2013 March 08] Available from: http:// www.ncbi.nlm.nih.gov/pubmed/9460830.

- Ministry of Health of Federal Democratic Republic of Ethiopia. National guideline for family planning services in Ethiopia. Addis Ababa, Ethiopia: Ministry of Health of Federal Democratic Republic of Ethiopia; 2011.
- Federal Ministry of Health of Ethiopia. National Guideline for the Management of Survivors o Sexual Assault in Ethiopia. Addis Ababa, Ethiopia: Federal Ministry of Health of Ethiopia; 2009.
- Kebede D, Alem A, Mitike G, Enquselassie F, Berhane F, Abebe Y, et al. Khat and alcohol use and risky sex behaviour among in-school and out-of-school youth in Ethiopia. BMC Public Health 2005;5:109. [viewed 2013 April 05] Available from: http://www .ncbi.nlm.nih.gov/pubmed/16225665.
- 49. World Health Organization. Risks and protective factors affecting adolescent reproductive health in developing countries. Geneva, Switzerland: World Health Organization; 2004.
- Berhane F, Berhane Y, Fantahun M. Adolescents' health service utilization pattern and preferences. Ethiop J Health Dev 2005;19(1):29–36.
- 51. United Nations Educational Scientific and Cultural Organization (UNESCO). International Technical Guidance on Sexuality Education. [Internet]. UNAIDS; Geneva, Switzerland; 2009 [cited 2012 Dec 30]. Available from: http://data.unaids.org/pub/ ExternalDocument/2009/20091210\_international\_g uidance\_sexuality\_education\_vol\_2\_en.pdf.
- Burket M. Advancing Reproductive Health and Family Planning through Religious Leaders and Faith-Based Organizations. Watertown, USA; 2006.
- 53. Institute for Reproductive Health. Faith based organizations as partners in family planning: working together to improve family well-being. Georgetown, USA;; 2011.
- CCIH. Family planning critical to church role in health care. Voices from the Global South Series. [Internet]. USA, McLean; CCIH. 2012 [cited 2014 Jan 12]. Available from: http://www.ccih.org /family-planning- critical-to-church-role-in-healthcare.html.
- 55. Renju J, Makokha M, Kato C, Medard L, Andrew B, Remes P, et al. Partnering to proceed: scaling up adolescent sexual reproductive health programmes in Tanzania. Operational research into the factors that influenced local government uptake and implementation. Health Res Policy Syst 2010;8:12.
- 56. Baxter S, Blank L, Guillaume L, Squires H, Payne N. Views of contraceptive service delivery to young people in the UK: a systematic review and thematic synthesis. J Fam Plann Reprod Health Care 2011;37:71–84.
- 57. US Agency for International Development/Africa Bureau. Three successful Sub-Saharan Africa Family Planning programs: Lessons for meeting the MDGs. Washington, USA: USAID/Africa Bureau; 2012.
- 58. Ministry of Health of Federal Democratic Republic of

#### SRH Services for Ethiopian Youth

Ethiopia. A situation analysis of family planning in Ethiopia. Addis Ababa, Ethiopia: Ministry of Health of Federal Democratic Republic of Ethiopia; 2012.

- Hailegiorgis S, Harlan S, Sullivan T, Wagnew S. Ethiopia Family PLanning/Reproductive Health Information Needs Assessment and Network Mapping [Online]. Addis Ababa, Ethiopia; 2012. [viewed 2013 April 15] Available from: http://www.k4health.org/sites/ default/files/Ethiopia\_FPRH\_Net-Map\_FINAL\_ May\_21\_2012.pdf.
- Ministry of Finance and Economic Development of Ethiopia. Evaluation of the UNICEF/MOWCYA adolescent/youth development programme in Ethiopia (2007-2011). Addis Ababa, Ethiopia; 2012.
- 61. Zeleke M, Kebede D, Husein A, Hailu M. Assessing the Quality of Youth Center Services in Ethiopia. Addis Ababa, Ethiopia; 2007.
- African Medical and Research Foundation (AMREF). HIV/AIDS and pastoralist communities. Assisting deliveries in the villages. [online]. Nairobi, Kenya: AMREF; 2010. [viewed 28 Aug 2012]. Available from: URL:http://www.amref.org/silo/files/repro ductive-health-journal-december-2010.pdf.
- 63. Girma W, Rubino D, Erulkar AS, Ambelu W, Kerie A. Addis Birhan Wendoch ("New Light Boys"): working with boys and young men to create healthier futures. Addis Ababa, Ethiopia: USAID, The Federal Democratic Republic of Ethiopia, Ministry of Women's, Children's and Youth Affairs, Population Council; 2013.
- 64. Erulkar A, Ferede A, Girma W, Ambelu W. Evaluation of "Biruh Tesfa" (Bright Future) program for vulnerable girls in Ethiopia. Vulnerable Children and Youth Studies. 2012;iFirst Art:1–11.
- 65. Tilahun M, Mengistie B, Egata G, Reda AA. Health workers' attitudes toward sexual and reproductive health services for unmarried adolescents in Ethiopia. Reprod Health 2012;Sep 3(9):19. [viewed 2013 May 12] Available from: http://www.ncbi.nlm. nih.gov/pubmed/22943476.
- 66. Ministry of Health of Federal Democratic Republic of Ethiopia, Ethiopian Society of Obstetrician and Gynecologists, John Snow Inc. Ethiopia. Addressing community maternal and neonatal health in Ethiopia: Report from national scoping exercise and national workshop to increase demand, access and use of community maternal and neonatal health services. Addis Ababa, Ethiopia: Ministry of Health of Federal Democratic Republic of Ethiopia; 2009.
- 67. Boerma JT, Sommerfelt AE. Boerma JT, Sommerleft AE. Demographic and health surveys (DHS): contributions and limitations. World Health Stat Q. 1993;46(4):222-6.
- Smit JA, Church K, Milford C, Harrison AD, Beksinska ]]ME. Key informant perspectives on policy- and service-level challenges and opportunities for delivering integrated sexual and reproductive health and HIV care in South Africa. BMC Health Serv Res 2012;12:48. [viewed 2013 Mar 13] Available from: http://europepmc.org/articles/PMC3311559.