National Level Stakeholders’ Perceptions of Facilitators and Barriers in Utilization of World Health Organizations’ Preventing Early Pregnancy Guidelines in National Level Health Policy Creation

Sonjelle C Shilton

A thesis
Submitted in partial fulfillment of the requirements for the degree of Master in Public Health

University of Washington
2016

Committee:
Donna Denno
Venkatraman Chandra Mouli

Program Authorized to Offer Degree:
School of Public Health – Global Health
Abstract

National Level Stakeholders’ Perceptions of Facilitators and Barriers in Utilization of World Health Organizations’ Preventing Early Pregnancy Guidelines in National Level Health Policy Creation

Sonjelle C Shilton

Chair of the Supervisory Committee:
Dr. Donna Denno
School of Public Health - Global Health

Background: Each year 16 million girls aged 15-19 years give birth and 70,000 die due to complications. In response, the World Health Organization (WHO) developed the evidence-based Reducing Adolescent Pregnancy guidelines to inform policies and programs aimed at preventing early pregnancies. [1] However, little is known regarding their impact on country-level policy creation. This study aims to identify the facilitators and barriers to utilization of the guideline in Ethiopia in order to better understand how the WHO can more effectively produce and disseminate their guidelines.

Methods: This study consisted of: 1) an adolescent pregnancy legal, policy, and strategy document review to understand how well they align with WHO guidelines and 2) key informants interviews (KIs) with national-level stakeholders working in adolescent and/or reproductive health which were conducted via telephone and thematically analyzed.

Results: Laws, policies, and strategies predating the 2011 Preventing Early Pregnancy guideline were consistent across all its six domains. Key informants (KIs) reported that policies to address adolescent pregnancy are in place in Ethiopia. No KI could name the Reducing Adolescent
Pregnancy guideline before being specifically asked about it. Some KIs felt that upcoming strategies which will supersede sun setting strategies may cover adolescent health more broadly, but adolescent sexual and reproductive health in less depth. KI perceived barriers and facilitators emerged into five themes: knowledge, national agenda, laws, resources, and cooperation.

Conclusions: The Ethiopian government has created a strong policy framework that is consistent with WHO guidelines and that facilitates programs to prevent adolescent pregnancy. Vigilance is needed to insure that policies are not diluted over time. Systems issues are important barriers to creation of health strategies that adapt WHO guidelines, but there are opportunities for WHO to target guideline dissemination to influential decision makers which may help to overcome obstacles in national health strategy creation.
National Level Stakeholders’ Perceptions of Facilitators and Barriers in Utilization of World Health Organization’s Preventing Early Pregnancy Guidelines in National Level Health Policy Creation

Background

Each year 16 million girls aged 15-19 give birth and 70,000 die due to complications from pregnancy and childbirth. Of these deaths 95% occur in low and middle income countries (LMICs). In many LMICs, pregnancy-related complications are the leading cause of death among adolescent females. [1] In addition to the immediate negative health effects, there are multiple detrimental socioeconomic effects of adolescent pregnancy, including decreased educational and economic opportunities. [2]

Pregnancy and childbirth among adolescents (defined as 10-19 year olds) results in higher risk of maternal mortality and other poor health outcomes compared to women aged 20-24 and above. A multi-country study conducted by the World Health Organization (WHO) from 2010 to 2011 found that “adolescent mothers aged 10-19 years had higher risks of eclampsia, puerperal endometritis, systemic infections, low birthweight, preterm delivery and severe neonatal conditions.” The same WHO multi-country study showed that there are gaps in the provision of service delivery during pregnancy and childbirth to adolescent mothers compared to older cohorts. Adolescent mothers received significantly lower coverage of prophylactic uterotonics and prophylactic antibiotics for caesarean section as well as significantly lower coverage of antenatal corticosteroids for preterm delivery at 26 to 34 weeks. [3]

Adolescent pregnancy is a priority health issue that needs to be addressed given the limited rate of change in adolescent pregnancy prevalence in many of the regions with the highest burdens (Sub-Saharan Africa and South East Asia) coupled with fact that the demographic structure of the majority of these countries is heavily skewed towards a young and adolescent population. [2]

To inform national programs aimed at reducing adolescent pregnancy and its consequences, the WHO Department of Reproductive Health and Research (RHR) developed and published evidence based recommendations in 2011 entitled, “Preventing Early Pregnancy and Poor Reproductive Outcomes among Adolescents in Developing Countries.” [1] These widely disseminated guidelines (hereinafter referred to as “Preventing Early Pregnancy”) outlined 6 overarching domains that need to be addressed in order to create and implement successful interventions. These domains are: 1) reducing the number of girls who marry before 18, 2) creating understanding and support for preventing pregnancy before 20 years, 3) increasing the use of contraception among adolescents, 4) reducing coerced sex among adolescents, 5) reducing the incidence of unsafe abortion among adolescents, and 6) increasing the use of
skilled care during antenatal, childbirth and postnatal care among adolescents. Each domain is subdivided into a series of recommendations on how to impact the domain suggested on a policy, program and personal level. [1] [4]

There is little information available on how these normative policy guidelines impact country-level policy creation. Understanding the facilitators and barriers to utilization of these WHO guidelines at a national level can allow for better understanding of how WHO RHR, as well as WHO more broadly, can more effectively produce and disseminate their evidenced-based normative guidelines. As such, the following questions were addressed in this study:

- To what extent do national stakeholders in Ethiopia think that policies, strategies and guidelines to prevent adolescent pregnancy and its negative health outcomes have been adopted in their country?
- To what extent do these national stakeholders think these national policies, strategies and guidelines were influenced by WHO “Preventing Early Pregnancy and Poor Reproductive Outcomes”?
- What do the national stakeholders perceive as the critical factors that contributed to and limited/prohibited the adoption of WHO “Preventing Early Pregnancy and Poor Reproductive Outcomes” into policies, strategies and guidelines at the national level in Ethiopia?

The Federal Democratic of Ethiopia was selected as the country to examine because it fit the criteria of a LMIC which has a high burden of adolescent pregnancy and a large proportion of the population that is under the age of 15. [5] According to Gross National Income (GNI) per capita Ethiopia is considered a low income country and is ranked as the 11th poorest country in the world. [6] According to the most recent Demographic and Health Survey (DHS) conducted in 2011, 47% of the population was under 15 years of age and the pregnancy prevalence of women aged 15 to 19 was 12%, compared to the global average of 11%. [5] [7] The adolescent fertility rate in Ethiopia has decreased from 70 births per 1,000 women aged 15-19 in 2011, to 60 per 1,000 in 2015. [8] The maternal mortality rate (MMR) in Ethiopia was estimated at 353 women per 100,000 live births; age-disaggregated MMR data is not available. [9]

Ethiopia’s demographic composition is mostly rural with 84% of its 96.5 million people living in rural areas; 5% of that population are in the highest wealth quintile. [6] [5] Eighty-eight percent of the urban population is in the highest wealth quintile. The GINI coefficient for Ethiopia as a whole is 0.23 which indicates a relatively equal distribution of wealth in the country. [5] According to the mini DHS conducted in 2014, 17.3% of young women aged 15-19 reported being married and an additional 3.1% of women reported cohabitating with a partner. The total age specific fertility rate for young women aged 15-19 rate is 34 per 1,000 in urban areas as opposed to 74 per 1,000 in rural areas. Nine percent of never married sexually active 15 to 19
year olds report using any modern method of contraception while 39.6% of married 15 to 19 year olds report using any modern method of contraception. [10] Early marriage is a driver of adolescent pregnancy; globally 90% of women under the age of 18 who experienced first births were already married. [11] While Information on marriage and pregnancy rates for girls under the age of 15 was not reported in the 2014 mini DHS, the 2011 DHS reported the mean age of first marriage in Ethiopia among women aged 25-49 to be 16.5 years. Close to 30% of women were married before the age of 15 and 63% were married before the age of 18. [5]

Ethiopia is a federal republic consisting of 9 regional states and two chartered cities. These states are subdivided into zones, then woreda (districts), which are further subdivided into kebele, the smallest administrative units in Ethiopia. [12] [5] The health system is structured into several layers; the Federal Ministry of Health (FMOH) sets national health policies and strategies. The health system is fairly decentralized, with the FMOH and Regional Health Boards providing guidance and support to woreda health offices which have control over the health programs in the districts and kebele. [13] In 2004 the FMOH enacted the Health Extension Program which offers free primary health care at the kebele level primarily provided by health extension workers (HEW). HEWs come from the communities they serve and undergo one year of training, splitting their time between the health post and community outreach. [14]

Methods
This was a descriptive qualitative non-experimental study primarily using key informant interviews (KII s). This qualitative research design was selected because the research seeks to understand the perceptions of national level stakeholders as to if and how the WHO normative guidelines are utilized at a country level. [15] A policy documents review preceded the KII s in order to inform the interview questions and to understand the context of policies related to preventing adolescent pregnancy.

The project started with a background literature review from which an overview of the project was created, from that a logic model was created outlining factors that could affect the national level adaptation of WHO guidelines. The logic model guided the research as it outlines the various factors that have been hypothesized to be barriers or facilitators of adoption of policies, strategies and guidelines at the national level. The KII questions and data collection framework were subsequently developed from the logic model (see Figure). The data collection tool can be found in Appendix 1.
Policy, law, and health strategies or plans dealing with adolescents or adolescent sexual and reproductive health were reviewed to determine the extent to which the national level policy documents align with the WHO Preventing Early Pregnancy guidelines. The policy documents were identified through a Google search as well as based on suggestions from experts on adolescent sexual and reproductive health in the WHO Regional Office for Africa (AFRO) and the WHO Ethiopia Country Office. Documents that were not created by Ethiopian government bodies or could not be assumed to address the areas of interest as outlaid in the logic model were excluded from review.

Upon the completion of the policy documents review, the in-depth interview tool was created. The in-depth interview tool was pilot tested with a national level stakeholder with expertise in adolescent and sexual reproductive health in Burkina Faso. Changes to the interview tool were not apparently needed after pilot testing although adjustments were made after the first three interviews in order to allow for elicitation of richer responses. After pilot testing, the recruiting and interviewing of the key informants (KIs) began.
The sampling strategy for recruitment of KIs was purposeful and non-probabilistic. The inclusion criteria for the KIs was that they work on a national level in a government ministry, non-governmental organization (NGO), multilateral, or academic institution on adolescent health, maternal health, and/or reproductive health in Ethiopia. The exclusion criteria were: persons not working in Ethiopia, persons not working in areas relating to adolescent, maternal or reproductive health, or that the persons were not in a position that gave them an understanding of national trends in policy.

One expert in the adolescent health field from Ethiopia was contacted and asked if they would be willing to help identify potential KIs and provide their email addresses. Once the cooperation of the point person was secured and they were familiarized with the research project, the point person provided a list of potential KIs consistent with the inclusion criteria. Additional potential KIs were suggested by Dr Chandra-Mouli, a WHO scientist in the Adolescents and At Risk Populations team of WHO RHR.

Once the first round of potential KIs were identified they were sent an introductory email, the text of which can be found in Appendix 2, asking them if they would be willing to participate in the project. If a response was not received, follow-up emails were sent at one and two weeks after the initial email was sent; more detailed information regarding the contact schedule of potential KIs can be found in Appendix 3. Once KIs confirmed their willingness to participate, a time was scheduled for contact by Skype or telephone. In the first round of KII seven of the 13 potential KIs contacted responded to be interviewed. In the second round of outreach two of the six potential KIs contacted responded and one was interviewed.

The first round of KIs comprised of seven KIs who included a representative of the WHO Ethiopia Country Office (1), academia (2), FMOH (consultant) (1), UNICEF (1), and an international NGO (international and country level officers) (1 each). As no FMOH or United Nations Population Fund (UNFPA) personnel responded to the first outreach attempt and their input would be important, as the FMOH is directly responsible for the oversight of the creation of national level health policies and UNFPA works specifically on prevention of adolescent pregnancy, a second outreach attempt was made.

In the second round of outreach, the point person who identified the potential KIs was a scientist working in adolescent health at WHO AFRO Office. This second point person provided a list of six potential KIs that included FMOH and UNFPA officials as well as other experts in the field of adolescent sexual and reproductive health. The potential KIs, which were the same FMOH and UNFPA personnel suggested by the first point person, were again sent the introductory email, excluding the KIs who appeared both on the first and second list but had already been interviewed. Of the second round contacts only one new potential KI, a UNFPA representative, agreed to an interview and was successfully interviewed.
<table>
<thead>
<tr>
<th>Position</th>
<th>Interview date</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHO Ethiopia Country Office</td>
<td>November 9th 2015</td>
</tr>
<tr>
<td>Addis Continental Institute of Public Health</td>
<td>November 10th 2015</td>
</tr>
<tr>
<td>FMOH consultant</td>
<td>November 10th 2015 and November 27th 2015</td>
</tr>
<tr>
<td>UNICEF</td>
<td>November 13th 2015</td>
</tr>
<tr>
<td>Jimma University, Population and Family Health Department</td>
<td>November 16th 2015</td>
</tr>
<tr>
<td>Pathfinder Ethiopia (NGO)</td>
<td>November 24th 2015</td>
</tr>
<tr>
<td>Pathfinder International (NGO)</td>
<td>November 30th 2015</td>
</tr>
<tr>
<td>UNFPA</td>
<td>March 2nd 2016</td>
</tr>
</tbody>
</table>

The interviews were in-depth and semi-structured. After the first three interviews were conducted, the transcripts were reviewed by this researcher and the input of a WHO RHR qualitative research expert was sought to provide feedback on the interview tool. The in-depth interview tool was revised and can be found in appendix 4. The interviews were digitally recorded, with the exception of two which were carried out over Skype. The speaker phone that was used for recording interviews that took place over the telephone could not be used on Skype calls due to difficulty in interviewees hearing over speaker phone on Skype. However, extensive notes were taken on the in-depth interview tool sheet for all interviews in the case of any recording equipment mechanical failures. The interviews took between 28 to 42 minutes each to complete. Skype was used if the participant had functioning electricity and preferred to use Skype over a phone call. The interviews were conducted in English.

Interviews were transcribed by this researcher from the digital recordings and/or detailed notes. This researcher read all transcriptions in their entireties before starting coding. The initial read through of all transcripts was done to provide an overarching holistic picture of the perceptions of the KIs in regards to the situation of national level policy creation and the facilitators and barriers to integrating the Preventing Early Pregnancy guidelines in this process. After this reread a start list of codes was developed and comprised of provisional coding.
covering the overarching themes in the logic model. The start list can be found in appendix 5. Atlas.ti version 7 was used to facilitate the coding process. Coding was completed by this researcher; as such there was no need for intercoder reliability testing [15]. Both inductive and deductive coding was used to facilitate first cycle coding. Inductive codes were added to the start list during the coding process. The in-depth interviews were analyzed via a thematic approach to detail what the KIs believed were causal in the barriers to or facilitators for successful adoption of the Preventing Early Pregnancy guidelines on a national level [15].

**Ethics**

Human Subjects Exemption for the study was received from the University of Washington Institutional Review Board on August 10th 2015. Informed consent for participation in the interviews and to record the interviews for transcription purposes only was received verbally from each of the KIs.

**Results**

**Policy document analysis**

Ten documents relating to national policies, laws or strategies on adolescent rights, adolescent health and or sexual reproductive health were identified. Each of the ten policy documents addresses at least one of the domains in Preventing Early Pregnancy guidelines as outlined in Table 2. Two of these documents address all of the six domains. Furthermore, analysis of these documents reveals that there has been a move towards the inclusion of adolescent health as an explicit population in the policies of Ethiopia over the past ten years.

The laws in Ethiopia have been conducive to the prevention of early and unwanted pregnancies among adolescents in line with the domains outlined in the Preventing Early Pregnancy guidelines. Marriage before the age of 18 is illegal, abortion is legal within certain parameters, and there is no age restriction or marriage status restriction on the provision of contraceptive services. Article 7 of the 'The Revised Family Code’, enacted by the House of Representatives in 2000, clearly states that the legal age of marriage is 18 for both men and women. However, age limit waivers are allowed by the family code, the Ministers of Justice may grant dispensation for the marriage if the parents or guardians of one or both of the parties to be married petition, but the dispensation is only allowed if the persons are 16 years of age or older. This means that it is legally possible for a young woman to be married at the age of 16 in the case of “serious causes”, which the document leaves undefined. The penalty for early marriage is that the marriage of a man or woman before the age of 18 can be dissolved if there is an application to do so by any interested person or the public prosecutor. [16] There is no other criminal or civil penalty listed for engaging in marriage before the age of 18 in *The Revised Family Code*. 


Article 551 of Ethiopia’s penal code allows abortion without age restrictions in the case that the mother’s life is in danger, the pregnancy is the result of rape or incest, the fetus has an incurable or serious deformity, or the mother is not mentally able to care for the child. [17]

The health policies and strategies of Ethiopia have been also conducive to the prevention of early and unwanted pregnancies among adolescents as outlined in the Preventing Early Pregnancy guidelines. Provision of contraceptive services regardless of age has been supported by several documents, policies, and strategies. The National Adolescent and Youth Reproductive Health Strategy (AYRHS) (2006-2015) states that there are no medical reasons for denying contraceptive methods based on young age alone. [18] The National Guidelines for Family Planning Services in Ethiopia published in 2011 states “Any reproductive age person—male or female, regardless of marital status— is eligible for family planning services, including information, education, and counselling.” The document also explicitly states that contraceptives can be safely used by adolescents. [17]

<p>| Table 2. Alignment of policy documents with Preventing Early Pregnancy guideline domains |
|--------------------------------------------------|--|---|---|---|---|---|---|
| Document                                         | Domain                                                                 |
| The Revised Family Code                          | Year published / years active | X                                   |
| Health Sector Strategic Plan (HSDP-III)          | 2000 / current                | X                          | X | X | X | X |
| National Adolescent and Youth Reproductive Health Strategy (AYRHS) (to be superseded by AYHS which is under development) | 2006 / 2006-2015              | X | X | X | X | X |
| HSDP-IV (supersedes HSDP-III)                    | 2010 / 2010/11 - 2014/15     | X | X | X | X | X |</p>
<table>
<thead>
<tr>
<th>National Guideline for Family Planning Services in Ethiopia</th>
<th>2011 / current</th>
<th>X</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Sector Transformation Plan (HSTP) (supersedes HSDP-IV)</td>
<td>2015 / 2016-2020</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>National Guidelines for the Management of Sexually Transmitted Infections Using Syndromic Approach</td>
<td>2015 / current</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

The move toward the inclusion of adolescents as an explicit population to be addressed in Ethiopia is evidenced by the creation of the AYRHS in 2006, which was the first document to identify adolescents as a unique population separate from maternal and child populations, which was the group in which adolescent health had been addressed previously. It is further evidenced the development of a new strategy, the Adolescent and Youth Health Strategy (AYHS), which is intended to cover 2015-2020 and was in the process of creation during the time the KIIIs were conducted. The AYHS is designed to replace the AYRHS which was intended to cover 2006-2015. The AYHS has not been finalized nor operationalized at this point.

Adolescent health and adolescent pregnancy are emphasized as a health issue to be addressed by the government of Ethiopia in the Health Sector Transformation Plan (HSTP). Adolescent pregnancy is explicitly a priority in the HSTP, which states, “the highest unmet need for family planning in 2011 DHS was among late adolescent age group (15-19) indicating the need to further strengthen adolescent reproductive health programs.” A main priority of the HSTP is to scale up effective health interventions that improve access to quality health services for maternal, adolescent and reproductive health. A performance measure of the HSTP is to reduce the adolescent pregnancy rate from 12% to 3%. In addition, a strategic initiative of the HSTP is to strengthen adolescent access to family planning. [19] While adolescent health and pregnancy
are emphasized as health issues to be addressed in the HSTP, is it important to note that the earlier versions of the Health Sector Development plans were more inclusive in representing the domains that are in the Preventing Early Pregnancy guidelines. In each successive health sector development/transformation plan reviewed, a reduction in domain coverage is noted.

In-depth interviews

“Once the new WHO guidelines or new international guidelines comes out, we review it, we adapt it, and we integrate it into the system and so on, we are very proactive” –KI from a multilateral organization

Description of interview context and content

While not all of the KIs are currently directly engaged in national health strategy creation, they all have experience in or knowledge of national level health strategy creation. One KI is directly involved in the creation of health strategies and two others work for separate organizations that were asked to be part of the National Technical Working group that is responsible for creating the AYHS, however they themselves were not directly involved with providing input to the AYHS. The specific Ethiopian health strategies that the KIs identified as relating to addressing adolescent pregnancy were the AYRHS, the upcoming AYHS, and the National Guideline for Family Planning Services in Ethiopia. Other national health strategies were brought up over the course of the interviews, but they were provided as examples of health strategies in general in Ethiopia and the KIs did not specifically relate them to adolescent pregnancy prevention. Not all KIs identified specific health strategies created by the FMOH of Ethiopia, but some did refer to national health strategy creation in a general context.

In relation to the first research question, ‘To what extent do national stakeholders in Ethiopia think that policies, strategies and guidelines to prevent adolescent pregnancy and negative health outcomes have been adopted in this country,’ every KI reported that they feel policies, strategies and guidelines to prevent adolescent pregnancy have been adopted in Ethiopia, with many citing the AYRHS and upcoming AYHS as examples.

In relation to the second research question, ‘Do national stakeholders think national policies, strategies and guidelines are derived from WHO preventing Early Pregnancy guidelines,’ No KI was able to name the Preventing Early Pregnancy guidelines before being specifically asked about them. KIs reported mixed perceptions as to whether the Preventing Early Pregnancy guidelines, either in part or in whole, were used in the creation of the AYSRH and AYHS.

In relation to the third research question, ‘What do the national stakeholders perceive as the critical factors that contributed to and limited/prohibited adoption of WHO Preventing Early
Pregnancy into policies, strategies and guidelines adoption at the national level in Ethiopia’, KIs responded to this question in a more general sense regarding facilitators and barriers to creation of national level policy. The themes that encompass the perceived facilitators and barriers to creation of national health strategies consistent with WHO guidelines emerged from the open coding and subsequent thematic analysis. The themes are discussed in relation to the logic model from which five themes were identified: knowledge, national agenda, laws, culture, and resources. Cooperation emerged as an additional theme during open coding.

There are areas of overlap between the themes, as these themes were identified with the intent to provide a holistic and robust representation of the barriers and facilitators as perceived by the KIs. The themes are thus not intended to be mutually exclusive, as national level strategy creation is a complex process that is affected by multiple inputs and considerations and there are strong linkages between the various themes.

**Culture**
While KIs stated that culture/cultural norms did not affect national policy development, they consistently brought up the issue of child marriage as the primary driver of adolescent pregnancy and the prevailing cultural acceptance of child marriage as one of the biggest challenges to implementation of the national strategies. This was not explored further because implementation is outside of the scope of this study. Although this researcher attempted to return the conversations to discussion of the national health strategy creation, the theme of cultural acceptance of child marriage as an implementation barrier was repeatedly brought up by the KIs as an important factor to consider when addressing adolescent pregnancy prevention in Ethiopia. Because the view was so consistently expressed among all of the KIs, this researcher reports these findings even though this study did not seek to identify views on barriers or facilitators to implementation. The KIs reported that child marriage is more prevalent in the rural areas (which comprise 86% of the population) and that child marriage and adolescent pregnancy are perceived as the norm in many communities which is based on long standing religious beliefs.

**Knowledge among key stakeholders of global frameworks, guidelines and strategies**
KIs reported that high level international documents and frameworks influenced the shaping of national health policy. Examples such as the Millennium Development Goals (MDGs), specifically MDG 5 which is the goal to reduce maternal mortality, and the Cairo Convention/International Conference on Population and Development came up repeatedly when the KIs where asked to discuss international guidelines/policies/strategies in relation to national level health strategy creation regarding prevention of adolescent pregnancy. [20]
In relation to adolescent sexual and reproductive health strategy creation more broadly, KIs reported only one specific WHO document, Safe Abortion: Technical and Policy Guidance for Health Systems. In regards to general adolescent health strategy creation specific WHO guidelines that KIs were able to mention by name include the 4-S Framework for Strengthening Health Sector Responses to Adolescent Health and Development, the Framework on the Convention of Tobacco Control, and Preventing Injuries and Violence: A Guide for Ministries of Health.

No KI named the Preventing Early Pregnancy guidelines before being asked about them. Responses upon being asked to speak about the relation between Preventing Early Pregnancy guidelines and the creation of the AYHS ranged from “That I didn’t see” and “I know that document, however specific elements might not be in because there are many aspects to address, but somehow we will make sure to consider major aspects”. In relation to the use of Preventing Early Pregnancy guidelines in the creation of the AYRHS, one KI reported that “I cannot say whether it’s known or used at Ministry of Health level but I know that when policies are drafted the first thing, you know, the working team leader is interested in, one of the things is WHO documents… so there is a high chance that it has also been taken into consideration while drafting the adolescent reproductive health strategy.”

When KIs where asked what their thoughts were about the usability of WHO guidelines (specifically Preventing Early Pregnancy when they were familiar with them, or WHO guidelines more generally when they were not specifically familiar with the Preventing Early Pregnancy guidelines) they reported only general comments that the guidelines where good and easy to adopt to the context of Ethiopia, however KIs did not go into any greater depth as to what could be done to improve the usability of WHO guidelines.

National Agenda: knowledge among relevant stakeholders who are outside of the FMOH regarding the health issues and prioritization of adolescent health including adolescent pregnancy
KIs reported that adolescent health has gained increasing attention from the government as an important area over the years. “The government of Ethiopia is committing itself to adolescent health. Before the youth issue was lumped into one ministry--women, child and youth. Now recently the government reorganized adolescent needs into its own ministry. This indicated that the government is giving due attention to the situation.” “(The) strategy (AYHS) will make the government to increase the visibility of adolescent and youth and, as we said adolescent pregnancy, to forge commitment of resources, internal sources of funding.” However some KIs reported that there is a worry that the AYHS may detract from adolescent sexual and reproductive health issues and be a barrier to further development of robust adolescent sexual and reproductive health strategies as the AYHS is a very broad document that encompasses the
context of adolescent health more broadly. As such there is concern that adolescent sexual and reproductive health may not get the attention and funding that it needs. KIs who represent multilateral institutions reported that they are actively advocating for adolescent sexual and reproductive health to be well represented in the AYHS.

Every KI reported that issue of adolescent pregnancy is an important one in Ethiopia and for the FMOH; however, there was a range of perceptions as to how systemic the belief is held among legislators and leaders (such as Ministers) outside of the FMOH regarding importance of adolescent pregnancy as a health issue to be addressed. KIs reported perceptions ranging from “It (adolescent pregnancy) is at the rise and it’s one of the main priorities for...the government concerning reproductive health,” to “So you may encounter individuals from, you know, the most important places not understanding enough what needs to be done, that is as individual leaders, but when you look at as a country... it is very supportive of changing the adolescent health status including early marriage, you know, early pregnancy, early childbirth.”

Adolescent pregnancy was reported to be an important issue to address for the multilaterals such as UNFPA and NGOs who have a focus on reproductive and sexual health. “In Ethiopia one of the issues that we (UNFPA) are really focusing on with adolescent pregnancy, is prevention of adolescent pregnancy.”

All KIs who were not in upper level positions of power reported that there is a lack of understanding among political leaders outside the health sector regarding health issues facing adolescents, especially adolescent pregnancy. “Additionally also there is low awareness about adolescent pregnancies among policy makers, particularly parliamentarians and even ... some health professionals that ... are working with the health sector, and that is a general problem on issues relating to adolescent and youth.”

However, KIs reported that once the parliamentarian or other high level leader that is initially not familiar with the issues of adolescent health or adolescent pregnancy becomes aware and informed, they usually are in agreement with the development of policies and strategies that are informed by WHO guidelines. “… and once they understand that (situation regarding health), usually and in most cases they have no problem in understanding the approaches and the tools and guidelines that are developed by the WHO.” (emphasis KI)

**Laws: enabling legal environment**

While enforcement of laws and implementation of policies were not a focus of this research, these issues were strongly stated by the KIs as barriers to further policy development to mitigate the problem of adolescent pregnancy. KIs reported that there are existing laws and policies that support the creation of national level health strategies that are in line with the WHO Preventing Early Pregnancy guidelines. Every KI referenced the law that increased the age
of marriage to 18 years in relation to reducing adolescent pregnancy. Several KIs also spoke about the various laws, such as the revised abortion law, that allows for provision of safe abortion, and the fact that contraceptive access and use is legal for adolescents. However, while KIs reported that laws have been created that are conducive to preventing adolescent pregnancy and in line with the Preventing Early Pregnancy guidelines, KIs also reported that the laws pertaining to the prevention of child marriage and violence towards women and girls are not well enforced.

In addition to the lack of enforcement of laws that would facilitate a reduction of adolescent pregnancy, KIs expressed that past strategies and policies have also not been implemented. Examples that were mentioned included the HSTP, AYRHS, and the policy to adopt comprehensive sexuality education (CSE) in public schools. “Adolescent RH strategy it was there and a very nice document, well developed. But implementation, we cannot say it was implemented.” KIs also discussed how the current HSTP has not been fully implemented, and that this lack of implementation has negatively affected the development of the AYHS. The initial plan was to develop the AYHS to complement the systems put in place with the current HSTP, however during the development of the AYHS there were ongoing questions of the best way to finalize the AYHS in a way that would be useful given the lack of full implementation of the HSTP.

Resource Capacity: FMOH resources (fiscal and staffing), policy development technical capacity, capacity to obtain relevant data

Human resources within the FMOH

KIs perceived that there was a shortage of personnel with the requisite knowledge and skills regarding policy creation technical expertise. “There is a shortage of expertise actually. Both in number and in quality at all levels...particularly in the public health system. That is why actually WHO strategic support hires consultants... to support the ministry to develop these strategies and guidelines...bridging the gap that the ministry has currently in terms of resources, both human and financially, to develop strategies.” and “Individuals who do not have comprehensive knowledge all the time who are working on health.” These KIs perceive that policy creators lack the skills to use policy planning tools. “From my experience, the experience and expertise ... for costing and analysis of strategic plans ... is poor.” The KI from whom that quote is derived went on to state that they themselves knew how to use such tools and had the skills to do so because of previous experience and exposure to relevant methodologies through working with the WHO and other international organizations. “So these are one of the issues that should be brought to the attention of international organizations because we are in a new field of public health and international organizations such as WHO (need) to help focus on developing country capacity and experience in applying these tools not just for national policy
and planning but these tools need to be used routinely for planning and monitoring purposes even at the subnational level."

It was reported that the lack of trained personnel from the community level limits the input from ground level experiences and perspectives that should be taken into account during policy creation on the national level. “Ministry of Health might not have a focus person in a (specific geographic) region for adolescent health.” Without having a point person in all the regions, the ability to receive feedback from the regional levels on matters pertaining to the community needs regarding adolescent health is limited; the federal level policy creators may not have the information needed to create policies that accurately reflect the needs of various sections of the population.

KIs reported that due to limited capacity of person power and time, feedback and involvement in the National Technical Working groups, which are the bodies that creates health policies, is minimal. “Some people, very few, were able to provide useful comments (regarding policies in creation by the National Technical Working group) and we went (to sources outside the National Technical Working group) for additional review and updating our resources in our situational analysis.”

**Government capacity to handle multiple needs with limited resources (fiscal and personnel power)**

KIs reported that emergency situations and shifting health priorities can affect development of policies and programs. An example that was described was malaria taking precedence over adolescent health because “there is no stable economy”; therefore, the government is not able to allocate sufficient fiscal or person power support to all important health issues.

**Lack of national level research and data**

The KIs reported that a lack of data on adolescent populations hinders national policy creation. Furthermore, when adolescent indicators are available, they usually do not include young adolescents aged 10-14 years, or are not disaggregated. “Basically what the big problem here is number one is the data itself, number one we don’t have the data. Number two if we have the data itself then the possibility of you having informational data particularly for the first adolescent, for the young adolescent group that is 10-14 it will be very, very small. For your information most of the data begin with the age group 15 to 19.” KIs also reported that the Health Management Information System (HMIS) is weak and this contributes to a lack of sufficiently granular data to allow for creation of strategies that are responsive to different districts.

KIs perceived that there is a lack of national level research, results, and awareness and proper application of the results of research conducted in country. “More research and information on
how these issues... adolescents and adolescent pregnancy and child marriage...affect Ethiopia is needed
to show to those not yet convinced the importance of these issues of adolescents.” However, KIs
expressed some hope that a new research advisory council which is being formed will help to
facilitate in-country research, and results dissemination and usage, if the research advisory
council is well implemented. “But when it comes to local evidences there is still a challenge of
identifying what ... evidence are available, how to use them, how to evaluate the quality
evidences and so on. And ... the good news is currently FMOH has ... formed a research
advisory council which addresses all these issues.”

**Cooperation: across governmental levels and sectors and across agencies with-in technical
working groups, between various government ministries**
The theme of cooperation was discussed in terms of interactions among the various
stakeholders in the National Technical Working Group, the unit responsible for development of
the AYHS, as well as cooperation between the FMOH, NGOs and multilaterals and multisectoral
cooperation between various governmental ministries as well as across different levels of
government such as between the federal and district levels.

**Cooperation between governmental levels**
KIs reported that the lack of cooperation between the grassroots level and the federal level
leads to little incorporation of the feedback from the grassroots level to the federal level. They
perceived this as a barrier to national health strategy creation that adequately reflects the
needs of the community level. Some KIs perceived that the federal government uses health
outreach for political purposes and that this tactic misses the chance to gather feedback from
communities regarding their health wants and needs. “Provision that this communities would
reflect as to the valuable things that they need from the policy world, what the policy would
like to provide them. So there are views from many parts of the larger community (that) is
usually missed in developing policies and strategies in Ethiopia.” However some KIs reported
that the federal to kebele level health network, which utilizes the HEWs, does a good job of
connecting communities to the health sector and can be seen as a facilitating factor overall in
relation to addressing adolescent pregnancy.

**Multisectoral between branches of government**
Every KI that spoke of cross-ministry cooperation stressed that there needs to be a coming
together of the various ministries such as health, education, and employment to effectively
work to create policies to address the health of adolescents. The idea that the Ministry of
Education and FMOH do not work together was expressed either explicitly or implicitly by all KIs
who spoke about this theme and this was perceived as a large barrier to national level strategy
creation in line with the Preventing Early Pregnancy guidelines.

**Interagency cooperation within National Technical Working Group**
KIs reported that National Technical Working Groups are both a facilitator and barrier to both national level health strategy development and the adoption of WHO guidelines in this development process. The National Technical Working Groups are the working bodies that draft and creates national level health strategies. For each new policy a National Technical Working group is created. Each National Technical Working group is chaired by the FMOH and made up of members who are academics, advisers who are experts in the field that the policy under development is addressing, and NGO representatives. This working group brings together many different health sectors actors, some of which are supported by WHO either as seconded staff to the FMOH or hired as consultants with funding from the WHO to work on policy creation under the aegis of the National Technical Working groups. WHO supported personnel may bring the technical understanding of WHO frameworks, guidelines, or strategies and thus may be advocates for their use in national strategy creation.

Some KIs from multilateral organizations reported that the technical working groups are well run, expedient and efficient. “So any of the agencies (such as maternal, child, newborn, HIV) can work with the technical working groups, usually they integrate international practice ... and they are very proactive and very engaged at the national level in Ethiopia. But I think sometimes WHO and UNICEF and the other agencies and other partners don’t need to initiate, Ethiopia is very proactive.” The KIs from the academic sector stated more neutral perspectives about the level of cooperation and collaboration among the National Technical Working groups. The KI who reported participating directly in the National Technical Working groups indicated that cooperation and interest among technical working group members was largely lacking. “...even when your entire working group is ... summoned for a meeting on the specific deliverables ...you are not getting 10% of the audiences. Not even coming to meetings and beyond that many of them ... were not even able to ... make their inputs through emails despite repeated communications. This is one of the biggest challenges that we have working with ... the ministry and its stakeholders in Ethiopia.”

**Discussion**

**Key findings**

No KI was able to name the Preventing Early Pregnancy guidelines without prompting. The lack of familiarity with the Preventing Early Pregnancy guidelines by the target audience (key stakeholders who work in adolescent sexual and reproductive health or reproductive health or adolescent health more broadly) is a hindrance in national health strategies being informed by relevant WHO guidelines. The AYHS policy development, which was ongoing during the period of time that the KIs where being interviewed, was an excellent opportunity to assess the role of the Preventing Early Pregnancy guidelines in policy creation that deals with adolescent health in Ethiopia. The fact that there was no strong link that could be drawn by the KIs between the
Preventing Early Pregnancy guidelines and the AYHS suggests that those specific guidelines did not strongly directly influence the creation the AYHS which is intended to be an pivotal and inclusive document setting the adolescent health policy stage, including adolescent sexual and reproductive health for the upcoming policy period.

KIs where able to name other specific WHO guidelines, such as the Safe Abortion: Technical and Policy Guidance for Health Systems, the 4-S Framework for Strengthening Health Sector Responses to Adolescent Health and Development, the Framework on the Convention of Tobacco Control, and Preventing Injuries and Violence: A Guide for Ministries of Health. Different dissemination strategies may be more effective than others. The 4-S Framework for Strengthening Health Sector Responses to Adolescent Health and Development was introduced in a regional and country level workshops. While the Safe Abortion: Technical and Policy Guidance for Health Systems and the Preventing Injuries and Violence: A Guide for Ministries of Health were both launched in high profile events and were both actively disseminated. These dissemination strategies were not used in relation to the Preventing Early Pregnancy guidelines and may have contributed to the sharper recognition of the aforementioned documents. [21] It would be helpful to evaluate the impact of different dissemination strategies to inform WHO on how to best promulgate their guidelines.

That high level global frameworks such as the International Conference on Population and Development Cairo Convention, the Universal Declaration on Human Rights, and especially the MDGs that were created within the United Nations (UN) system were frequently referenced by the KIs is encouraging as these frameworks are consistent with guidance from WHO, which of course is part of the UN.

One reason for the widespread reference to the MDGs could be a result of the MDG Achievement Fund (MDGF), a UN interagency working collaborative, which was set up to keep “the spotlight on the MDGs and ensuring they remain high on the political agenda”. [21] The MDGF was active in disseminating the MDGs and created and enacted an Advocacy and Communications strategy to engage all levels of society in awareness of the MDGs as well as the work done to achieve them by 2015. [22] The frequent discussion of MDGs in the global health peer review literature, evidenced by the 1837 articles published from 2003-2011 dealing with the MDGs found in MEDLINE and Web of Science databases, could be another reason that national level stakeholders are so familiar with and so frequently referenced the MDGs specifically in relation to setting health strategy. [26]

Some KIs reported that not all stakeholders, for example parliamentarians, are aware of the importance in addressing adolescent health including adolescent pregnancy, this could be a barrier for the usage of Preventing Early Pregnancy guidelines as, if the stakeholders don’t perceive there to be a problem they will not be looking towards evidenced based, or any,
solutions. Lack of knowledge among high level government decision-makers about adolescent pregnancy being an important health issue leads to a lack of attention, action, and resources being allocated or mobilized to tackle adolescent pregnancy. However, KIs did perceive that once parliamentarians and other key leaders are made aware of the consequences of adolescent pregnancy, the importance of addressing it, and the existence of related WHO guidelines, they are often favorable to creating policy that is in line with WHO guidelines and recommendations.

To facilitate the understanding of the importance of and feasibility in addressing adolescent pregnancy with evidence-based recommendations, WHO RHR should include dissemination efforts of guidelines and informational material that target key non-health actors such as parliamentarians as well as mid-level managers who work in policy creation. In a systematic review of health policy-makers’ perception of their use of evidence in policy creation, one of the three key facilitators to the use of evidence in policy making was personal contact between the evidence generating body and the policy maker. [24] Personalized outreach to key government officials both in and outside of the FMOH could be considered by the RHR department in their dissemination strategies. In addition to this personalized outreach, WHO RHR could consider target outreach to mid-level managers that are involved in health policy creation, a group that may not often be specifically considered in dissemination strategies. A United Kingdom mixed methods study sought to identify the actors who most influence policy making decisions. They found that mid-level managers in the national and local government are key influencers in policy development because they are the ones who manage the selected experts and executives during the process of policy creation and serve as knowledge brokers as well as provide the selected experts and executives with policy content. [25] The effectiveness of using a strategy to target mid-level managers for WHO guideline dissemination in Ethiopia or other LMICs is worthy of further evaluation.

**Laws & Policies**

The existing legal and policy frameworks in place in Ethiopia are generally conducive to strategy creation that is in line with the Preventing Early Pregnancy guidelines. However, of only two of the policy documents reviewed in this study, the HSDP-III and the AYRHS, align with all 6 of the Preventing Early Pregnancy guidelines domains. These two documents were both created and implemented before 2011 when the Preventing Early Pregnancy guidelines where produced and the HSDP-III has since been replaced by two subsequent health sector plans, each of which sequentially covered fewer of the domains. The AYHS will replace the AYRHS as a much more broad based strategy, covering the entirety of adolescent health and not restricted to adolescent sexual and reproductive health. Based on the KII, it appears that the AYHS might not cover all six domains of the Preventing Early Pregnancy guidelines as its predecessor, the AYRHS, did. While it is a holistic approach to adolescent health within strategy development is
commendable, considerations are needed to maintain a robust approach to sexual reproductive health to prevent adolescent pregnancy and to address other adolescent sexual reproductive health outcomes.

Our qualitative assessment of barriers and facilitating factors to creation and adoption of policies did not seek to identify barriers and facilitators to enforcement of existing laws and implementation of existing policies. It was interesting and noteworthy that despite not being asked about enforcement and implementation, KIs uniformly raised issues around lack of enforcement of laws and barriers that impede implementation of policies and how this impacts on further health policy and strategy creation. KIs reported the lack of implementation of existing policies and laws as a barrier to further strategy creation as future strategy creation is designed to build on strategies that are in place. KIs reported that the AYHS, for example, relies on the structures and mechanisms that were created by previous health policies and strategies, including those that are currently supposed to be in place. If the key structures and mechanisms which were created in previous policy plans and strategies are not in place, many of the programs and projects outlined by the AYHS will not be able to function, or function properly.

In addition it could be that the lack of implementation of policies and enforcement of laws leads to a demotivating effect among national level policy creation stakeholders. This could feed directly into other themes addressed, such as lack of cooperation and capacity issues. The limited feedback and engagement with the National Technical Working group could be affected, at least in part, by the feeling that strategies will not get implemented; i.e. why should a stakeholder spend valuable time providing feedback on strategies that they feel might never be implemented. This is concept requires evaluation to determine if it is an important factor.

Resources
The impact of the human resource crisis, or “brain drain”, on health systems in LMICs has been extensively documented. [26] [27] [28] [29] The Ethiopian Federal Ministry of Health has developed a 12 year strategic document to promote training and development among health workers. [30]

Data and research
The availability of key indicator data that accurately reflects the status of adolescent health, including with sufficient texture to understand the context at subnational levels and among subpopulations such as younger and older adolescents, is critical for the formulation of relevant policies that will improve adolescent health. It is also important in order to monitor the effectiveness of policies. KIs in this study expressed a lack of availability of such data. However, there are existing and planned mechanisms in Ethiopia to promote the collection and availability of national and subnational data, such as through the HMIS and research advisory
These existing mechanisms could be leveraged to provide better quality data and enable dissemination and use on a national and sub-national level for a variety of functions including policy creation. However, in order to leverage the existing mechanisms for national and subnational data collection, such as the HMIS, improvements are needed. The current HMIS is not operating at full functionality nationally. There have not been many published reviews of the HMIS and those that are available are not favorable; a 2011 survey of the HMIS in the SNNPR State found that data accuracy of the HMIS ranged from 17% to 62%. The authors stated that “throughout the country the pace and training of health staff and scaling-up of the reformed HMIS was not encouraging.” [31]

Cooperation
Some barriers to adoption of WHO guidelines are harder to overcome than others, and are particularly outside the influence of the WHO. For example some KIs perceived a lack of participation and response among the stakeholders involved in the National Technical Working group which causes the group to not be as effective as it is designed to be. If the National Technical Working group is well functioning it can help coordinate collaboration among levels and ministries of government as well as between the various stakeholders.

If the needs and desires of the various strata of community are not represented in policy creation at a national level this could be a barrier to incorporating valuable input which could shape policy and push the National Technical Working group to seek out further WHO normative guidelines to shape approaches to address the reported community level health needs.

Improved engagement between various ministries of government such as Ministry of Education, Ministry of Youth, Sports & Culture, and the Ministry of Health could be particularly helpful for creating policies and strategies that are consistent with the Preventing Early Pregnancy guidelines. Domains 1, 2 and 4 within the guidelines especially require multisectoral support: 1) reducing the number of girls who marry before 18, 2) creating understanding and support for preventing pregnancy before 20 years, 4) reducing coerced sex among adolescents.

Child Marriage
All KIs spoke about child marriage, its cultural acceptance, and its effect on the prevalence of adolescent pregnancy in Ethiopia. KIs stated that while child marriage does not have a direct influence on policy creation, it is one of the largest barriers in terms of implementation of policies to reduce adolescent pregnancy. While implementation is out of the scope of this research, due to the fact that all KIs emphasized the issue, it is has been included in this paper. The concern raised by the KIs is consistent with a survey of parents conducted in 2007 in the Amhara region which found that 68% did not feel that 18 or younger was too early of an age for marriage [32]. A separate study in the same region during the same time period found that
caretakers perceived ‘early marriage’ to be before a mean of 15.9 years of age for girls and 19.9 years of age for boys. [33]

Limitations
This study has several limitations. Most importantly, there was a lack of involvement of FMOH officials despite repeated requests to interview them. The FMOH is the organization that is responsible for the oversight of the creation of national health policies in Ethiopia. Their input would likely have provided useful insights as to the barriers and facilitators the FMOH confronts in using the WHO Preventing Early Pregnancy guidelines. This research was originally planned to be conducted in Ethiopia and Burkina Faso to allow for a degree of cross comparison, however due to the attempted coup d’état in September 2015 and tragic terrorist attack in January 2016 in Burkina Faso, the research was not able to be conducted for Burkina Faso at this point in time.

While only 8 KIs were interviewed, the consistency and overlap of response indicates that thematic saturation was reached. [34] Other limitations are that the interviews were carried out, transcribed and coded by the same individual, introducing the possibility of researcher bias. Telephone interviews may have affected the understanding of the information given by the KIs to the interviewer since body language and other non-verbal cues were not observable. [35] Measures were taken to minimize this possible effect by making extensive preparations and following a framework outlined by experienced qualitative researchers. [36] Telephone interviews may have influenced the KIs’ responses; however, interviews by phone may provide interviewees with more of a sense of security and anonymity which may facilitate more open responses. [37]

The positionality of the researcher/interviewer as a student at a western institution that was carrying out the interviews as part of her internship at the WHO while trying to solicit perceptions from stakeholders regarding policy guidelines created by the WHO could have limited the candor of interviewee responses. Additionally this researcher was conducting interviews with stakeholders from a cultural background that she was not familiar with; this could have affected the way that the KIs responded to the interviewer, as well as to ways in which she interpreted their answers. Moreover, this project was the first time that this researcher had designed and implemented a qualitative study, as such the in-depth interview tools may not have been designed in a manner to fully excise and capture the perceptions of the KIs.

Implications
There are actions that can be taken to address the barriers and build upon the facilitators that were identified in this study. Increasing awareness among politicians, ministry officials in non-
health sectors, and among religious/cultural leaders to improve their understanding of the consequences of adolescent pregnancy and the importance of preventing adolescent pregnancy and facilitate effective policy development. Increasing awareness of Preventing Early Pregnancy guidelines could also address the barrier regarding multisectoral cooperation, if more decision makers outside the health sphere are aware of the issue and how their ministry could play an active role it may facilitate cross ministerial cooperation.

While all KIs described the importance of high level global frameworks such as the MDGs and the Cairo Convention/International Conference on Population and Development, none mentioned the WHO Preventing Early Pregnancy guidelines until asked specifically about it. The WHO RHR needs to identify ways to improve dissemination of their technical guidelines in order to insure that the evidence base that forms the basis of the WHO guidelines are used to drive effective national policies. Improving dissemination of technical guidelines includes increasing awareness of WHO guidelines among both health professionals as well as government officials and decision-makers outside of the health sphere.

Aspects outside the direct scope of the WHO such as addressing systems barriers and general health system strengthening should also be addressed to tackle further barriers to policy creation that adapts WHO guidelines. Examples of this are; encouraging multi-sectorial cooperation, increasing capacity on a country level in terms of person power and skills, and increasing awareness among the population of existing laws and their rights while strengthening enforcement mechanisms of existing laws and policies.

Increasing policy making capacity on a country level, for example through trainings on costing and policy analysis tools and their applications across levels (national to sub national), could help offset the human resources shortage, as it affects the creation of national strategies. Facilitation of improved cooperation and involvement in the policy creating body of the National Technical Working groups and encouraging interagency joint efforts could address the barrier of cooperation. Advocacy and heightened awareness of the critical importance of adolescent sexual reproductive health and the need for stable funding to address this health problem is needed to mitigate swings in priority setting.

Implementation of CSE could increase awareness of existing health laws that can enable adolescents, community members and service providers to advocate for their rights to be considered, respected and upheld in policy creation.

**Conclusion**

Adolescent pregnancy is a pressing issue in Ethiopia, one which the government has taken steps to address as evidenced by the strong legal and policy framework dating back to at least 2005 that creates a supportive environment to reduce adolescent pregnancy. The increasing
importance of adolescents to the FMOH as a population with unique health needs to be addressed is a promising development. While the more holistic approach toward strategies that address adolescent health more broadly is welcome, it is important that the specific actions needed to improve adolescent sexual and reproductive health and reduce early pregnancy are not diluted. Barriers to creation of preventing adolescent pregnancy policies largely deal with systems level issues that may be difficult to externally address. However, WHO RHR may be able to improve marketing and dissemination of their guidelines, especially to influential decision makers, including those outside of the health sector. This could potentially help to overcome obstacles that exist in national level health strategy creation that are aligned with WHO guidelines.
References


[38] A. Trier-Bieniek, "Framing the Telephone Interview as a Participant-centred Tool for Qualitative Research: a Methodological Discussion," *Qualitative Research*, vol. 12, no. 6, pp. 630-644, 2012.
# Appendix 1: Data Collection Framework

## Sources of Information

<table>
<thead>
<tr>
<th>Domain 1: National Agenda regarding adolescent pregnancy</th>
<th>Sample</th>
<th>Method</th>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevant government policy/strategy documents and reports</td>
<td>Multilateral, Government officials, NGOs (national and international)</td>
<td>Document review, In-depth interviews</td>
<td>Tool 1: Checklist for document review, Tool 2: IDI tool</td>
</tr>
<tr>
<td>Interview (all national level)</td>
<td>Multilateral, Government officials, NGOs (national and international)</td>
<td>Document review, In-depth interview</td>
<td>Tool 1: Checklist for document review, Tool 2: IDI tool</td>
</tr>
</tbody>
</table>

## Domain 2: Knowledge/Awareness of WHO guidelines on adolescent pregnancy

<table>
<thead>
<tr>
<th>Sample</th>
<th>Method</th>
<th>Tools</th>
</tr>
</thead>
</table>

## Domain 3: Law

<table>
<thead>
<tr>
<th>Sample</th>
<th>Method</th>
<th>Tools</th>
</tr>
</thead>
</table>

## Domain 4: Culture

<table>
<thead>
<tr>
<th>Sample</th>
<th>Method</th>
<th>Tools</th>
</tr>
</thead>
</table>

## Domain 5: Resources

<table>
<thead>
<tr>
<th>Sample</th>
<th>Method</th>
<th>Tools</th>
</tr>
</thead>
</table>
Appendix 2: Outreach email to potential KIs

Dear POTENTIAL KI,

Greetings! I was provided your contact information by [name of point person] as you are a professional that has in depth experience and understanding of adolescent and or reproductive health issues in Ethiopia. I am Sonjelle Shilton, a research intern at the World Health Organization (WHO) Headquarters in Geneva, Switzerland and an MPH student at the University of Washington, USA. I am working on a project with the WHO to better understand the factors that facilitate and hinder development and adoption of policies, strategies, and guidelines in various countries such as Ethiopia, including the ways that the WHO guidelines are helpful and not helpful in this process. Specifically, the project is focusing on the WHO Guidelines on Preventing Early Pregnancy and Poor Reproductive Outcomes among Adolescents in Developing Countries.

As part of this research I am interviewing key informants, professionals that have in depth experience and understanding of adolescent and or reproductive health issues in Ethiopia. Given your expertise in this area, your participation in this project would be very helpful. Would you be willing to allow me to interview you? The interviews are expected to take between 20 and 30 minutes and will be carried out over the phone. The interview will be recorded for transcription purposes only if you agree. Your name will not be attributed to your comments which will remain confidential.

Thank you very much for taking the time to read this email. If you are willing to participate in an interview, please email me with the best phone number and dates to reach you. Please do not hesitate to contact me with any questions or concerns.

Gratefully,

Sonjelle Shilton

Appendix 3: KI contact schedule

<table>
<thead>
<tr>
<th>Number</th>
<th>Organization</th>
<th>First Contacted</th>
<th>Second Contact</th>
<th>Third Contact</th>
<th>Scheduled Interview</th>
<th>Identified by</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FMOH</td>
<td>November 5th 2015</td>
<td>November 12th 2015</td>
<td>November 17th 2015</td>
<td>Never responded</td>
<td>WHO Ethiopia Staff contact person</td>
</tr>
<tr>
<td>2</td>
<td>FMOH</td>
<td>November 5th 2015</td>
<td>November 12th 2015</td>
<td>November 17th 2015</td>
<td>Never responded</td>
<td>WHO Ethiopia Staff contact person</td>
</tr>
<tr>
<td>3</td>
<td>WHO</td>
<td>November 5th 2015</td>
<td>November 12th 2015</td>
<td>November 17th 2015</td>
<td>Never responded</td>
<td>WHO Ethiopia Staff contact person</td>
</tr>
<tr>
<td>Number</td>
<td>Organization</td>
<td>First Contacted</td>
<td>Second Contact</td>
<td>Third Contact</td>
<td>Scheduled Interview</td>
<td>Identified by</td>
</tr>
<tr>
<td>--------</td>
<td>---------------------------------------------------</td>
<td>-----------------------</td>
<td>-------------------------</td>
<td>------------------------</td>
<td>---------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>4</td>
<td>UNICEF</td>
<td>November 5th 2015</td>
<td>November 12th 2015</td>
<td>November 17th 2015</td>
<td>November 13th 2015</td>
<td>WHO Ethiopia Staff contact person</td>
</tr>
<tr>
<td>5</td>
<td>UNFPA</td>
<td>November 5th 2015</td>
<td>November 12th 2015</td>
<td>November 17th 2015</td>
<td>Never responded</td>
<td>WHO Ethiopia Staff contact person</td>
</tr>
<tr>
<td>6</td>
<td>Pathfinder Ethiopia (NGO)</td>
<td>November 5th 2015</td>
<td>November 12th 2015</td>
<td>November 17th 2015</td>
<td>November 24th 2015</td>
<td>WHO Ethiopia Staff contact person</td>
</tr>
<tr>
<td>7</td>
<td>WHO Ethiopia</td>
<td>November 5th 2015</td>
<td>November 12th 2015</td>
<td>November 17th 2015</td>
<td>November 9th 2015</td>
<td>WHO Ethiopia Staff contact person</td>
</tr>
<tr>
<td>8</td>
<td>WHO Ethiopia</td>
<td>November 5th 2015</td>
<td>November 12th 2015</td>
<td>November 17th 2015</td>
<td>Never responded</td>
<td>WHO Ethiopia Staff contact person</td>
</tr>
<tr>
<td>9</td>
<td>FMOH consultant</td>
<td>November 5th 2015</td>
<td>November 12th 2015</td>
<td>November 17th 2015</td>
<td>November 10th 2015  and November 27th</td>
<td>WHO Ethiopia Staff contact person</td>
</tr>
<tr>
<td>10</td>
<td>Addis Continental Institute of Public Health</td>
<td>November 5th 2015</td>
<td>November 12th 2015</td>
<td>November 17th 2015</td>
<td>November 10th 2015</td>
<td>WHO Ethiopia Staff contact person</td>
</tr>
<tr>
<td>11</td>
<td>UNICEF</td>
<td>November 5th 2015</td>
<td>November 12th 2015</td>
<td>November 17th 2015</td>
<td>Never responded</td>
<td>KI #4</td>
</tr>
<tr>
<td>12</td>
<td>Pathfinder International (NGO)</td>
<td>November 12th 2015</td>
<td>November 17th 2015</td>
<td>Agreed to interview on November 17th 2015</td>
<td>November 30th 2015</td>
<td>WHO HQ Supervisor</td>
</tr>
<tr>
<td>13</td>
<td>Jimma University (National research university)</td>
<td>November 12th 2015</td>
<td>November 15th 2015</td>
<td>Agreed to interview on November 15th 2015</td>
<td>November 16th 2015</td>
<td>WHO HQ Supervisor</td>
</tr>
<tr>
<td></td>
<td>Organization</td>
<td>Date 1</td>
<td>Date 2</td>
<td>Outcome</td>
<td>Contact Person</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-----------------------------</td>
<td>------------------------</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>FMOH (same person as recommended by first point person)</td>
<td>February 24th 2016</td>
<td>February 29th 2016</td>
<td>Never responded</td>
<td>WHO AFRO point person</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>FMOH (same person as recommended by first point person)</td>
<td>February 24th 2016</td>
<td>February 29th 2016</td>
<td>Never responded</td>
<td>WHO AFRO point person</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>UNFPA (same person as recommended by first point person)</td>
<td>February 24th 2016</td>
<td>Agreed to interview on February 24th</td>
<td>March 2nd 2015</td>
<td>WHO AFRO point person</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Pathfinder Ethiopia (NGO) (same person as recommended by first point person)</td>
<td>N/A already interviewed</td>
<td></td>
<td></td>
<td>WHO AFRO point person</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>FMOH consultant (same person as recommended by first point person)</td>
<td>N/A already interviewed</td>
<td></td>
<td></td>
<td>WHO AFRO point person</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Packard Foundation</td>
<td>February 24th 2016</td>
<td>Agreed to be interviewed but was not able to be reached</td>
<td></td>
<td>WHO AFRO point person</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 4: Revised in depth interview tool response sheet

<table>
<thead>
<tr>
<th>Focus Group Participants</th>
<th>Date</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Focus Group Participant Position/Title</th>
</tr>
</thead>
</table>

Introduction: Good morning, thank you for taking the time to speak with me today. I am Sonjelle Shilton, an MPH student at the University of Washington conducting my thesis research at the WHO. I am working on a project to better understand how international guidelines are used at the country level in the creation of national strategies. Thank you for participating in this interview, the purpose of which is to gather your thoughts, opinions and comments on this topic, particularly within the context of Ethiopia.

Our discussion is being recorded for transcription purposes only. Your name will not be attributed to your comments which will remain confidential.

<table>
<thead>
<tr>
<th>Q#</th>
<th>QUESTION</th>
<th>RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>We will start with some broad questions about the extent to which adolescent pregnancy is an issue in _________________.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Please describe the current situation of AP in your country *Probe Why do you think adolescent pregnancy is/is not an important issue?* -

2. In that context (that they described above) can you talk about what {appropriate government agency/NGO/multilateral} role is in relation to AP?

*Probe Is it perceived as a priority in the {appropriate government agency/NGO/multilateral}(high, medium, low)? Why does adolescent pregnancy have that priority level?*

3. In your experience what national policy statements, strategy documents, or guidelines relating to adolescent pregnancy are most influential

Ethiopia probe: Are you involved in/aware of the Adolescent and youth health strategy that is currently being developed in Ethiopia? If yes ask -
them to walk you through the strategy creation process as they see it. If no, ask if they have worked on other health strategies development or if they have a general idea of the process and ask them to walk you through it.

4. **(If in answering number 3 they mention guidelines go on to second part of this question. If not ask)** Are there any international documents used in the national guideline creation?

If yes: what are the most important (can be in general or in relation to AP).

Why are these international guidelines used in the creation of national strategies?

- **a. If WHO Preventing Ado Pregnancy guidelines not mentioned**, Is the WHO Preventing Adolescent Pregnancy Guideline generally known about amongst stakeholders (policy makers and guideline and strategy developers) at the national level?
- **b. Tell me about how the Preventing AP WHO guidelines and how they are used.**
- **c. What could be done to make the Preventing Adolescent Pregnancy guideline more helpful for policy makers and guideline and strategy developers?**

Why do you think the international guidelines where used in (way they said above in number 3)?

**Probe** What effect do the laws of the country have on developing these strategies? Can bring up: child marriage, abortion, FP and adolescent access to these and other health services. **Probe** How does the political climate in {country} affect the development of policies, strategies and guidelines on adolescent pregnancy?

**Probe** What about social norms? How do they affect strategy development? Ask about community leaders, religious, parents, teachers, students

**Probe** Can you tell me about what the situation is with resources available to develop the national strategies? Probes: Funding/finances, Staffing, Training/skills in policy, strategy, guideline development, Supportive supervision, Tools (e.g. manuals), Time
<table>
<thead>
<tr>
<th><strong>Probe</strong></th>
<th>What are other factors that affect the development and adoption of adolescent pregnancy policies, strategies, and guidelines in {country}?</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Do you have any final thoughts or ideas regarding the development of adolescent pregnancy policies, strategies and guidelines in {country}?</td>
</tr>
</tbody>
</table>

**Appendix 5: Coding list. Codes marked with * were in the start list.**

- adolescent health
- ARHS
- AYHS
- Cairo convention
- capacity of workers
- child marriage*
- Cooperation
- CSE
- Culture*
- Dissemination*
- geographic area*
- Human Rights Declaration
- Implementation*
- importance of AP*
- information availability
- Laws*
- MDG 5
- MDGs
- multi-sectorial
- national culture of information
- National level data collection and research
- national technical working group
- political climate*
- politicization of health outreach work
- Preventing AP WHO guidelines*
- Religion*
- Resources*
- shifting priorities
- silos of focus
- transition of overall health plan
- WHO document unsafe abortion and its complications
- WHO documents*
Appendix 6: Questions regarding adolescent pregnancy guidelines derived from logic model

1. National Agenda regarding adolescent pregnancy
   a. Is adolescent pregnancy included in national health strategic plans/documents? If yes, to what extent is it prioritized in strategic plans?
   b. Is adolescent pregnancy included in strategic plans/mission/vision/programming of adolescent health/maternal health NGOs and international organizations working at the national level? If yes, to what extent is it prioritized in strategic plans?
   c. Is adolescent pregnancy a priority among national level adolescent health/maternal health FMOH, NGO and international organization stakeholders? I.e., to what extent do these stakeholders believe that adolescent pregnancy is a problem in their country (how prevalent is it and to what extent does it contribute to poor health and economic development outcomes)? Why do stakeholders believe that adolescent pregnancy is or is not a priority problem? (E.g., do not believe that it is prevalent, do not believe that it is an important contributor to overall health problems among adolescents and into adulthood, believe that there are competing health problems.

2. Knowledge/Awareness of WHO guidelines on adolescent pregnancy
   a. Are national level stakeholders aware of the WHO adolescent pregnancy guidelines? If so, how did stakeholders become aware of the guidelines?
   b. Do they find the guidelines useful? Why or why not? (e.g., not clear, too complicated, too general, not relevant to their setting).
   c. Are national level stakeholders using the WHO adolescent pregnancy guidelines? In what way are they being utilized? How influential was the WHO adolescent pregnancy guidelines in leading to discussion about change in policies, strategies and guidelines? Adopting policies, strategies and guidelines?

Questions related to barriers / facilitating factors:

3. Laws/policies
   a. Are there/what are the laws and policies that are barriers/facilitating factors to adopting the policies, strategies and guidelines?
      i. Is child marriage legal/illegal?
         1. Are the laws regarding child marriage flawed
         2. Are the laws regarding child marriage applied in a flawed manner
ii. Is abortion illegal/legal? If legal, are there restrictions for adolescents (e.g., parental permission)?

iii. Is emergency contraception illegal/legal? If legal, are there restrictions for adolescents (e.g., parental permission)?

iv. Do unmarried adolescents or those below a particular age require parental/adult consent for health services/sexual and reproductive health services?

v. Do laws and policies restrict the provision of contraception to unmarried adolescents or those below a particular age? If legal/allowed, are there restrictions (e.g., parental/adult permission)?

vi. Is condom use/purchase for adolescents illegal/legal? If legal, are there restrictions for adolescents (e.g., parental permission)

4. Culture
   a. Is the general climate and culture within the institution (e.g., NGO, FMOH, international organization) conducive to/supportive of adopting policies, strategies and guidelines on adolescent pregnancy? Why or why not?
   b. Is the general climate and culture within the political institutions (e.g., among politicians, legislature, courts) conducive to/supportive of adopting policies, strategies and guidelines on adolescent pregnancy? Why or why not?
   c. Is the general climate and culture within the society (e.g., community groups such as parent, teacher, student/adolescent organizations; religious organizations and leaders; traditional leaders) conducive to/supportive of adopting policies, strategies and guidelines on adolescent pregnancy? Why or why not? How is this support or lack thereof manifested? Is there a difference in terms of the perceived vs real level of support for addressing adolescent pregnancy?

5. Resources
   Are sufficient resources available to adopt policies, strategies, guidelines on adolescent pregnancy? If yes, to what extent are such resources needed for successful adoption? If no, what are the constraints in obtaining sufficient resources? Resources include:
   a. Funding/finances
   b. Staffing
   c. Training/skills in policy, strategy, guideline development
   d. Supportive supervision
   e. Tools (e.g. manuals)
   f. Time
Appendix 7: Document review checklist

Title of Document:
Country regarding:
Date published:
Authors:
Overview:

1. **National Agenda regarding adolescent pregnancy**
   1. National health Strategic policy/strategy documents and reports
      i. Is adolescent pregnancy included in national health strategic policy/strategy documents and/or reports (SP/SD/R)?
         1. If yes, to what extent is it prioritized in strategic plans?
      ii. Is adolescent pregnancy explicitly mentioned as a priority in SP/SD/R?
         1. If so, to what extent and what rationale is described/provided for the degree of prioritization (whether high, low or otherwise)?
      iii. Is there evidence that adolescent pregnancy is implicitly a priority in the SP/SD/Rs? If so, what evidence/description is provided?
      iv. To what extent are WHO’s adolescent pregnancy guidelines referenced in the strategic plan?
         1. What parts of WHO’s adolescent pregnancy guidelines are referenced?
         2. Even if not explicitly referenced, in what ways is the strategic plan consistent with WHO adolescent pregnancy guidelines?
   v. Dates of SP/SD/R introduced/enacted [note if there is documentation of a previous strategic plan that includes adolescent pregnancy, what rationale is provided for modifications/continuation]?

2. National level NGOs involved in adolescent and/or maternal health (national/international) strategic plans/mission/vision/projects
   i. Is the NGO national or international?
      1. What is the NGO’s overall mission statement?
   ii. To what extent is adolescent pregnancy included in the NGO’s strategic plans/mission/vision/projects?
      1. If so what rationale is described/provided for the degree of prioritization (whether high, low or otherwise)?
   iii. Is there evidence that adolescent pregnancy is implicitly a priority in the strategic plans/mission/vision/projects?
      1. If so, what evidence/description is provided?
   iv. To what extent are WHO’s adolescent pregnancy guidelines referenced in the plans/mission/vision/projects?
      1. What parts of WHO’s adolescent pregnancy guidelines are referenced?
2. Even if not explicitly referenced, in what ways are the plans/mission/vision/projects consistent with WHO adolescent pregnancy guidelines?
   v. Dates of strategic plans/mission/vision/project created/implemented [note if there is documentation of a previous strategic plans/mission/vision/projects that includes adolescent pregnancy, what rationale is provided for modifications/continuation]?

3. Multilaterals involved in adolescent and/or maternal health strategic plans/documents
   i. What is the multilateral’s overall topical sphere of influence?
   ii. Is adolescent pregnancy explicitly included in the multilateral’s strategic plans/documents?
      1. If so, to what extent and what rationale is described/provided for the degree of prioritization (whether high, low or otherwise)?
   iii. Is there evidence that adolescent pregnancy is implicitly a priority in the strategic plans/documents? If so, what evidence/description is provided?
   iv. To what extent are WHO’s adolescent pregnancy guidelines referenced in the strategic plans/documents?
      1. What parts of WHO’s adolescent pregnancy guidelines are referenced?
      2. Even if not explicitly referenced, in what ways are the strategic plans/documents consistent with WHO adolescent pregnancy guidelines?
   v. Dates of SP/SD/R s introduced/enacted [note if there is documentation of a previous plans/documents that includes adolescent pregnancy, what rationale is provided for modifications/continuation]?

2. **Laws/policies**
   1. What is the type of legal system (court/traditional/religious)
      i. What is the document/set of documents that defines what laws are in place and general enforcement procedures, such as a constitution/declaration of the rights of women etc.
      1. Has this document/set of documents undergone revisions, if so when?
   2. Are there/what are the laws and policies that are barriers/facilitating factors to adopting the policies, strategies and guidelines? Note what document is the laws/policy stated in (constitution/health policy document etc.)
      i. Is child marriage legal/illegal?
      1. What are the age limits on female/male marriage if any?
         a. Are waivers to the age limit permitted (e.g., parental approval)?)
b. What is the penalty for marriage before the legal age? Do these age limits apply only to official marriage or also traditional/religious marriage arrangements?

ii. Is abortion illegal/legal?
   1. Under what circumstances are abortions legal?
   2. If legal, are there restrictions for adolescents (e.g., parental permission)?
   3. If legal,
   4. Can health providers or organizations refuse to provide abortion services and/or post abortion care?

iii. Is contraception, including emergency contraception, illegal/legal?
   1. If legal, are there restrictions (e.g., for married women only)?
   2. If legal, are there restrictions for adolescents (e.g., parental permission)?

iv. If legal, Can health providers or organizations refuse to provide EC? Do unmarried adolescents or those below a particular age require parental/adult consent for health services/sexual and reproductive health services?

v. Do laws and policies restrict the provision of condoms, HIV testing, other STI testing to unmarried adolescents or those below a particular age? If legal/allowed, are there restrictions (e.g., parental/adult permission)?

3. Resources
   1. What resources are available to adopt policies, strategies, guidelines on adolescent pregnancy?
      i. Describe resource availability
         1. Funding/finances
         2. Staffing
         3. Training/skills in policy, strategy, guideline development
         4. Supportive supervision
         5. Tools (e.g. manuals)
         6. Time
      ii. Are there constraints on obtaining the resources needed?
         1. If so, why?