

Adolescent health, nutrition, and sexual and reproductive health in Ethiopia

Nicola Jones, Elizabeth Presler-Marshall, Sarah Baird,
Joan Hicks, Nardos Chuta and Kiya Gezahegne

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Acronyms list

EAIDS	Acquired Immune Deficiency Syndrome
BMI	Body mass index
EDHS	Ethiopia Demographic and Health Survey
FAO	Food and Agriculture Organization of the United Nations
FIES	Food Insecurity Experience Scale
GAGE	Gender and Adolescence: Global Evidence
HAZ	Height-for-Age Z-Score
HEW	Health extension worker
HIV	Human Immunodeficiency Virus
NGO	Non-governmental organisation
PE	Physical education
PSNP	Productive Safety Net Programme
SRH	Sexual and reproductive health
STI	Sexually transmitted infection

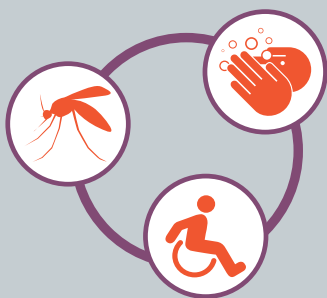
Glossary

Absuma	A marriage system in Afar between maternal cousins.
Geyed	An oral or written contract in which the groom and/or his parents guarantee to protect the girl from having a sexual relationship with her husband before maturity.
Injera	A kind of traditional bread made from teff which is a staple food in many parts of Ethiopia.
Kebele	Community or smallest administrative unit of Ethiopia.
Kemits	Concubines.
Khat	The leaves of an Arabian shrub, which are chewed (or drunk as an infusion) as a stimulant. The plant is grown as a cash crop.
Sadah	A form of traditional dancing in Afar.
Shegoye	A form of traditional dancing that adolescent girls and boys participate in without adult supervision in eastern Oromia.
Wat	A type of stew.
Woreda	District or third-level administrative division in Ethiopia (after zones and regions).
Yewer abeba	Amharic term for menstruation meaning 'monthly flower'.



Ethiopia: Health, nutrition and sexual and reproductive health

Recommendation: Support adolescents to access diverse diets, receive health care to prevent permanent disability, learn about their maturing bodies, and delay pregnancy until adulthood.



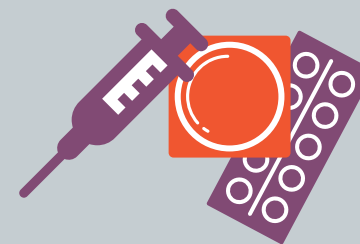
Nearly all adolescents consider themselves healthy but poverty-related illnesses remain common and treatable conditions can have permanent impacts.



The average GAGE adolescent lives in a moderately food-insecure household and has limited dietary diversity.



Only 1/2 young adolescents have a source of information about puberty – and many girls are afraid of the onset of menstruation.



Girls' knowledge of birth control varies widely; reported use among adolescents is increasing in some communities due to fear of rape.

“Because my mother-in-law has awareness about the health risks of delivering at an early age, she told me to take the contraceptives for one year. I told my husband but he refused.” 15-year-old married girl from Batu, Oromia, Ethiopia

Executive summary

Introduction

While Ethiopia is renowned for its cadre of health extension workers (HEWs) who provide community-based preventive care across the country, and the government has developed a National Adolescent and Youth Reproductive Health Strategy, we know relatively little about adolescents' access to and experiences with these health services. The evidence base on Ethiopian adolescents' physical health primarily focuses on nutrition and the sexual and reproductive health (SRH) behaviours of young people aged over 15. The health and nutritional needs of younger adolescents, as well as the broader health vulnerabilities of all adolescents, are rarely addressed. This narrow focus has largely been driven by concerns about the reproductive health needs of the significant number of adolescent girls subject to child marriage, over a quarter of whom are already pregnant or mothers by 19 years (CSA and ICF, 2017).

This report on adolescent health, nutrition and SRH in Ethiopia seeks to contribute to these knowledge gaps. It is one of a series of short reports presenting findings from baseline mixed-methods research as part of the Gender and Adolescence: Global Evidence (GAGE) longitudinal study (2015–2024). We focus on adolescents' perceptions of their health, nutrition and SRH and experiences of accessing related services, paying particular attention to gender and regional differences, as well as differences between adolescents with disabilities and those without. We also discuss the range of change strategies currently being implemented to fast-track social change, as well as the related gaps in the policy and programming landscape.

Research methodology

In Ethiopia, our research sample involves a survey with more than 6,800 adolescent girls and boys from two cohorts aged 10–12 years (younger adolescents) and 15–17 years (older adolescents), and more in-depth qualitative research with 240 adolescents and their families. The baseline data was collected in selected sites in Afar, Amhara and Oromia regional states and Dire Dawa city administration during 2017 and 2018. The sample includes some of the most disadvantaged

adolescents (adolescents with disabilities, married girls and adolescent mothers, adolescents from pastoralist and remote rural communities, adolescents from internally displaced households and child-headed households). Three subsequent rounds of data collection will be carried out in 2019/2020, 2020/21 and 2022/23 with the younger cohort when they reach 12–14 years, 13–15 years and 15–17 years, and with the older cohort at 17–19 years, 18–20 years and 20–22 years. The main qualitative research will happen at the same junctures, but we will also undertake peer-to-peer and participatory research from late 2018/early 2019 onwards on an annual basis to explore peer networks and the experiences of the most marginalised adolescents in more depth.

Key findings

- **General health:** While adolescents perceive their health to be good overall, poverty-related disease remains common and adolescents' exposure to modern health risks such as substance abuse is increasing. Overall girls report higher levels of ill-health than their male counterparts.
- **Nutrition:** The average adolescent in the GAGE sample lives in a moderately food-insecure household and is more likely to report poor diet quality than insufficient quantity. Rural adolescents are at greater risk of poor nutrition than urban adolescents, and adolescents in drought-prone areas remain at especially high risk.
- **Puberty and menstruation:** Young adolescents, especially those in rural areas, have limited access to timely information about puberty. Menstruation (often effectively a taboo topic) and menstrual management are sources of great anxiety for girls due to gendered social norms that conflate menstruation with female sexuality, thus making it a highly stigmatised bodily function.
- **Sexual and reproductive health:** Adolescents' access to and uptake of contraceptive information, supplies and services is highly variable. Adolescents in Amhara are in a relatively advantaged position, especially compared to their counterparts in Afar and Oromia,



Group with street food in Dire Dawa © Nathalie Bertrams / GAGE 2019

where gendered social norms leave unmarried and married girls – even those who are very young – at risk of pregnancy.

Change strategies

HEWs are playing a pivotal role in supporting improvements in health and SRH in rural areas, and in adolescent health services in urban areas. They are complemented by mainly school-based girls' clubs, which in communities where they are active are educating girls about puberty and can support them through menarche. In terms of nutrition, the Productive Safety Net Programme (PSNP) is helping to mitigate household-level food insecurity and, in some areas school feeding programmes are providing meals for school children.

Policy and programming implications

Our baseline research findings point to the following policy and programming implications:

- **Strengthen health awareness and outreach services for adolescents:** While HEWs have helped improve communities' access to basic health care, continued efforts are needed to raise parental awareness about common ailments in children that require timely interventions. There is also a need to improve access to basic medications, which are often out of reach for communities furthest away from district towns. Services could reach adolescents in those areas through scaling up school-based health clubs and through mobile vaccination clinics at rural schools.
- **Ensure that health awareness programmes and services are informed by an understanding of the specific gendered health risks and vulnerabilities that adolescents face,** including those of married and unmarried girls, to be able to better support their rights to health and sexual and reproductive health in particular.
- **Expand household and school-based nutritional support as a core pillar of social protection programming:** To prevent the longer-term developmental damage that results from prolonged malnutrition, there is an urgent need to provide nutritional support to families in drought-affected areas. This should include extending Productive Safety Net Programme (PSNP) support in Afar in particular, as well as school feeding that reliably delivers free, quality food to students in all food-insecure communities. Over time, we also recommend that nutrition education programmes address certain cultural beliefs about food and intergenerational food distribution that may impact children's nutrition.

- **Invest in educating children about puberty and engage communities to accept the need for such education:** Age-tailored puberty education classes that begin with younger children need to be provided in school-based and other community settings, alongside classes for parents that help them address children's questions and concerns (while also ensuring that their own knowledge is accurate). To reduce menstruation-related harassment, girls and boys alike need accurate information about puberty and the changes it involves for both sexes. Given the powerful role that community and religious leaders play in shaping gendered social norms, it is critical to secure parental and community buy-in to educating children about puberty.
- **Scale up accessible and affordable menstrual hygiene support:** Adolescent girls need access to sustainable and affordable menstrual hygiene products, as well as simple ways to help them track their menstrual cycle,

and separate latrines, water access and dedicated private spaces in schools so that they can change their sanitary products as necessary during the course of the school day.

- **Expand access to and improve the quality of adolescent-friendly SRH services:** To reduce adolescents' exposure to pregnancy and sexually transmitted infections (STIs), stakeholders should take a multi-pronged approach that includes delaying sexual debut (to allow for cognitive and emotional maturity), better access to condoms, improved education and services on STIs (especially HIV), and reducing the social barriers (e.g. stigma, shame, and restrictive gender norms) that reduce contraceptive uptake.

Introduction

While Ethiopia is renowned for its cadre of health extension workers (HEWs) who provide basic preventive health care at community level and has a National Adolescent and Youth Reproductive Health Strategy, our understanding of adolescents' access to and experiences with these health services is relatively limited. Evidence on Ethiopian adolescents' physical health primarily covers the nutrition and sexual and reproductive health (SRH) behaviours of those over the age of 15, with younger adolescents' needs and adolescent health care needs more generally rarely addressed – largely because older girls' SRH needs are more pressing. Driven primarily by high rates of child marriage, adolescent motherhood is common. According to the latest Ethiopia Demographic and Health Survey (EDHS), 13% of adolescent girls aged 17, 20% of girls aged 18 and 28% of girls aged 19 were already mothers or pregnant in 2016 (CSA and ICF, 2017).

In terms of broader health, we know even less about adolescents as a specific group. There is some evidence that substance use, especially alcohol and khat, are increasingly problematic for boys (Jones et al., 2017). There is also evidence that the nutritional status of adolescents is slowly improving over time (Pankhurst et al., 2018; Morrow et al., 2017; Woldehanna et al., 2017) – albeit from a low base, and that improvements are less marked for girls than boys (Brown, 2012; Roba et al., 2015; Belachew and Hadley, 2010; Mulugeta et al., 2009, 2015; Tamiru et al., 2015; Hadley, 2008). The country's cadre of HEWs is the main reason why adolescents (apart from those in the most remote rural communities) have relatively good overall access to basic preventive and SRH care and information. Access to school-based health education appears mixed. While the Ministry of Education (MoE, 2018) reports that 80% of the country's secondary schools include health education as part of the curriculum, Jones et al. (2017) found that adolescents in rural areas often had very limited access to puberty education and were not prepared for menstruation (see also Sommer et al., 2015).

This report begins by presenting our key findings on adolescent health, nutrition and sexual and reproductive health. We follow the GAGE conceptual framework which

defines capable adolescents as having: (1) access to age-appropriate information and services to keep themselves healthy; (2) access to information about nutrition and equitable access to nutritious food; (3) access to age-appropriate and stigma-free knowledge, supplies and support to manage menstruation; and (4) access to age-appropriate, gender-friendly and stigma-free SRH and puberty-related information, services, supplies and support (see Figure 1). Where relevant, sub-sections of this chapter explore differences by gender and differences between contexts (see text boxes). Similarly, where our findings underscore significant differences in experiences among adolescents with disabilities compared to those without disabilities, we also highlight these in a text box.

The second half of the report looks at our findings on the change strategies currently being used by different stakeholders, from the micro to the macro level. We discuss which interventions are perceived by our research respondents to be effective in supporting adolescent health and nutrition, as well as any shortcomings and key gaps. The report concludes by exploring policy implications of the baseline research.

Conceptual framework

GAGE's conceptual framework takes a holistic approach that pays careful attention to the interconnectedness of what we call 'the 3 Cs': Capabilities, Change strategies and Contexts' in order to understand what works to support adolescent girls' development and empowerment – now and in the future (see Figure 1). This framing draws on the three components of Pawson and Tilley's (1997) approach to evaluation, which highlights the importance of outcomes, causal mechanisms and contexts – but we tailor it to the specific challenges of understanding what works in improving adolescent girls' and boys' capabilities.

The first building block of our conceptual framework are capability outcomes. Championed originally by Amartya Sen (1984; 2004), and nuanced to better capture complex gender dynamics at intra-household and societal levels by Marta Nussbaum (2011) and Naila Kabeer (2003), the capabilities approach has evolved as a broad normative

Box 1: Overview of GAGE and our baseline report series

GAGE is a unique longitudinal mixed methods research and impact evaluation study focused on exploring what works to support the development of adolescents' capabilities over the course of the second decade of life (10–19 years) as children transition from early adolescence through puberty and into early adulthood.

The far-reaching physical, cognitive, psycho-emotional, social and sexual transformations take place during the adolescent years – and especially following the onset of puberty – are considered second only to those experienced in infancy and early childhood in terms of their scope and speed. Given these pivotal life changes – and with a global adolescent population of more than 1.2 billion, the overwhelming majority of whom reside in the Global South – it is increasingly recognised by the development community that adolescence offers a unique window to accelerate progress against the effects of poverty, inequality and discrimination. By investing in young people there is an opportunity to reap a triple dividend for adolescents now, for their adult trajectories and for those of their children.

GAGE's starting point is that adolescent transitions shape both girls' and boys' lives, but often in highly gendered ways, due to the norms of their socio-cultural environments. These norms – especially around sexuality – start to become more rigidly enforced and more consequential in early adolescence, which forces girls' and boys' trajectories to diverge as they approach adulthood. To fast track social change, understanding this divergence is key.

This report is one of a series of short baseline reports focused on emerging mixed methods findings from the GAGE baseline. Based on the GAGE Conceptual Framework (see Figure 1), there will be a total of six reports focused on our baseline findings about adolescent boys' and girls' capabilities. These include (1) education and learning, (2) health, nutrition and sexual and reproductive health, (3) bodily integrity and freedom from violence, (4) psychosocial well-being, (5) voice and agency and (6) economic empowerment.

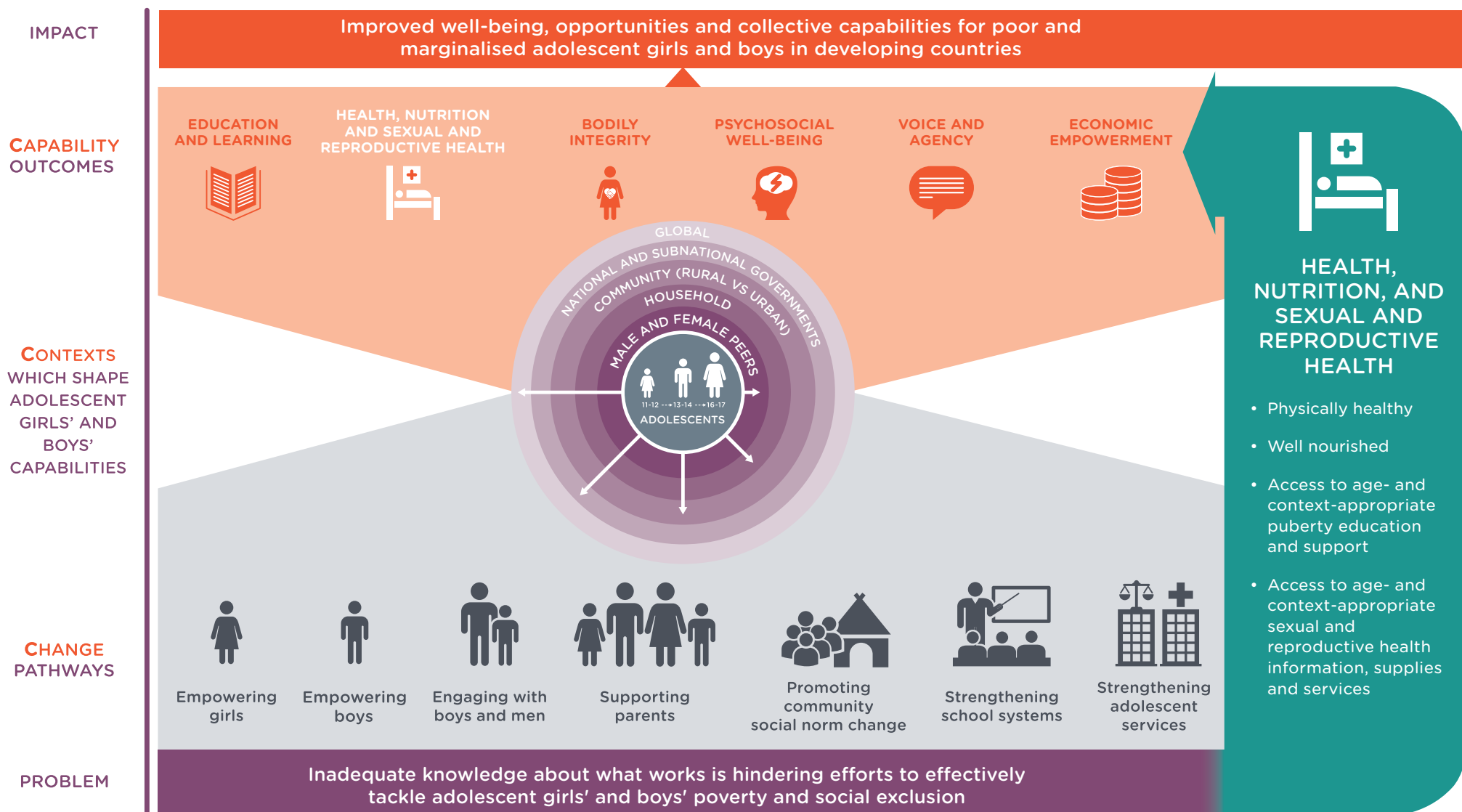
framework exploring the kinds of assets (economic, human, political, emotional and social) that expand the capacity of individuals to achieve valued ways of 'doing and being' (see Figure 1). Importantly, the approach can encompass relevant investments in girls and boys with diverse trajectories, including the most marginalised and 'hardest to reach' such as those who are disabled or are already mothers.

The second building block of our conceptual framework is context dependency. Our 3 Cs framework situates girls

and boys ecologically, and that their capability outcomes are highly dependent on family or household, community, state and global contexts.

The third and final building block of our conceptual framework acknowledges that girls' and boys' contextual realities can be mediated by a range of change strategies including: empowering individual adolescents, supporting parents, engaging with men and boys, sensitising community leader, enhancing adolescent-responsive services and addressing system level deficits.

Figure 1: GAGE conceptual framework



Source: GAGE Consortium, 2019 forthcoming

Research methodology

Research questions

Stemming from our conceptual framework there are three core sets of questions at the heart of research, focusing on (1) adolescent experiences and the ways in which these are gendered and also differ by adolescents' economic, social and geographical positioning, (2) the ways in which programmes and services address adolescent vulnerabilities and support the development of their full capabilities, and (3) strengths and weaknesses of programme design and implementation in terms of ensuring programme efficacy, scale and sustainability. At baseline we are focusing on the first two questions and will explore the third question in more detail at mid-line and end-line.

Mixed-methods approach

In order to explore these research questions GAGE is employing a longitudinal mixed-methods research approach. This baseline involved data collection in rural and urban sites in Ethiopia – totalling over 6,700 adolescent girls and boys, with a sub-sample of more in-depth qualitative research involving 220 adolescents, their families and communities. Our sample included two cohorts, the younger aged 10–12 years and the older aged 15–17 years (see more details in Tables 1–4) in Annex 2.

Our baseline quantitative and qualitative data was collected between late 2017 and early 2018. Going forward, the quantitative survey will entail two follow up rounds when the adolescents are 12–14 years and 14–16 years, and 17–19 years and 19–21 years, respectively. The main qualitative research will happen at the same junctures, but we are also undertaking annual peer-to-peer and participatory research annually (from late 2018/early 2019 onwards). See Annex 4 for more details on the research methodology.

Research sites

Our research sample in Ethiopia involves adolescents from rural, urban and pastoralist communities from three regions: Afar, Amhara and Oromia. The sample also includes adolescents from Dire Dawa City Administration (see Annex 3 on research sites). Rural sites were selected to reflect economic and social vulnerability, as well as being informed by programme implementer capacities

(see more details in Annex 1). Urban sites were selected to capture emerging economic opportunities, variation in urban size and history, as well as to provide a point of comparison to rural sites on the basis of geographical and cultural proximity (see more details in Annex 2).

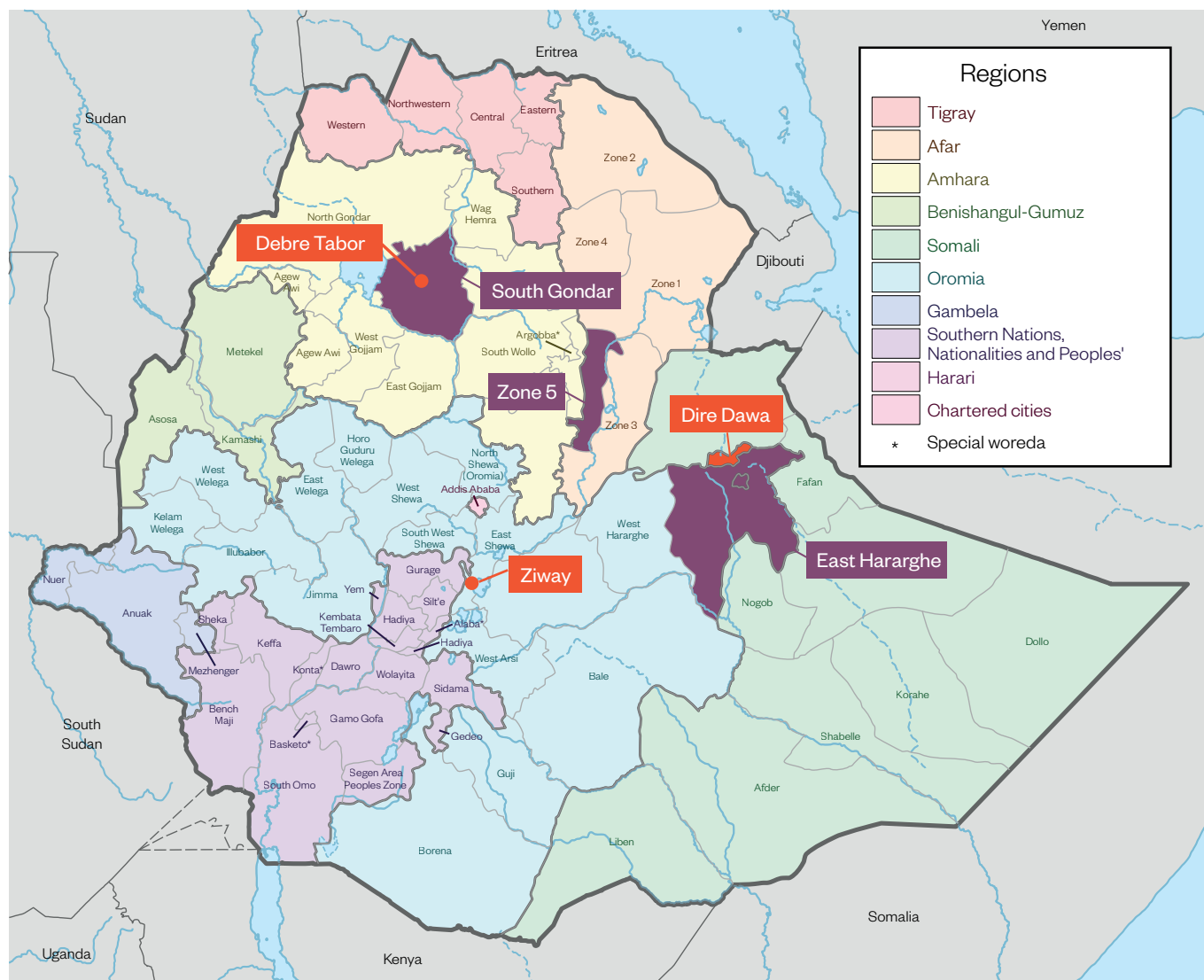
Given GAGE's strong focus on vulnerable cohorts of adolescents, in line with the 'leave no one behind' agenda, our sample includes adolescents who are especially disadvantaged, such as adolescents with disabilities, married, separated and divorced adolescent girls, adolescent mothers, and those from internally displaced communities. We included these adolescents in two ways: through a community listing process involving a random sample of adolescents of the requisite age, and through purposive sampling in an effort to overcome the stigma, discrimination and invisibility that such young people often face in their communities.

Mixed-methods analysis

We employed an iterative analysis process, with the qualitative team attempting to make sense of the quantitative findings based on the narratives generated in the field and from the transcripts, and then the quantitative team delving further into disaggregating data to explore emerging patterns within and across sites. This was particularly important in the case of discussions on violence and harmful traditional practices, which are often highly sensitive issues to discuss and probe about. We recognise that for any of the six capability domains there are multiple areas we will be able to explore in further depth going forward; what we present here are key emerging findings, which we hope will lead to fruitful discussions with key policy and practice stakeholders, and provide motivation for additional mixed-methods exploration.

For the purpose of this series of reports, and given the large volume of qualitative data generated, we have focused primarily on interviews with the nodal adolescents to ensure that young people's voices are profiled, but also turn to key informant interviews to contextualise these findings. Future articles will draw on the additional data to complement the findings presented in this report and the other reports in the series.

Figure 2: Map of Ethiopia with research sites highlighted



Source: Originally created from File:Ethiopia adm location map.svg by User:NordNordWest and modified to show GAGE research sites.

Baseline findings on adolescent health, nutrition, and sexual and reproductive health

General health

There is little evidence that speaks to the broader health status of Ethiopian adolescents – despite the fact that the ‘worst adolescent health profiles are in sub-Saharan Africa’ (Sawyer et al., 2012: 1665). Interestingly, our survey found that despite national challenges, most adolescents gave positive reports on their physical health. Of our younger adolescents, 88% reported that they were in ‘good’ or ‘very good’ health (see Table 1 in Annex 2). Of urban adolescents, across both age cohorts, younger adolescents were more likely to report (very) good health than their older peers (91% versus 86%) (see Table 4 in Annex 2). Our qualitative work suggests that this is partly because of the fairly simple ways that adolescents conceptualise good health (e.g. they do not think of it as including mental health), but also because of progress in eliminating illnesses (such as measles) that used to threaten the physical well-being of previous generations. As a man from Community I (East Hararghe) explained, *‘Some diseases are not there anymore. Our children grow up in a healthy way’*.

There is still, however, a great deal of minor illness among Ethiopian adolescents. Just over half (51%) of younger adolescents surveyed reported that they had experienced a common health symptom (e.g. vomiting, diarrhoea, coughing, fatigue, etc.) within the past month at the time of the survey (see Table 1 Annex 2). Our qualitative work found that most of these symptoms are poverty-related. As a 12-year-old boy from Community F (South Gondar) explained: *‘I was recently sick with my stomach. I got treatment and the health worker told me the sickness is because of unclean water so they told me to use the water after I boil it’*. A man from Community I (East Hararghe) confirmed that this is common, adding that *‘waterborne worms are killing people’*.

Significant accidents and illnesses also remain common. Over the course of the past year, 16% of the younger adolescents surveyed reported that they had had a serious illness or injury (see Table 1 Annex 2). Many of these injuries are related to the environmental risks

that children face. A 10-year-old boy from Community G (South Gondar), for example, reported that he often sustains injuries while collecting firewood, as he must *‘climb steep mountains’*, while others reported injuries or death related to snake bites. Some adolescents with disabilities explained that permanent impairments are often the result of accidents and untreated illnesses. A girl with a mobility impairment in Community B, Zone 5 (Afar), for example, was maimed by a crocodile. Another girl from Amhara was left blind by trachoma (a preventable and curable eye infection) that went untreated until it was too late because her parents did not heed her complaints about eye pain. Adolescents also reported experiencing major illnesses such as malaria, epilepsy, and kidney and heart disease – much of the latter possibly due to untreated strep infections (see Grady, 2018).

A key theme emerging from our qualitative research was the rising risk of substance abuse. A key informant in Dire Dawa City explained that, *‘These days, addictive behaviours are increasing and becoming a common practice by adolescents. It is really a serious problem and a major threat to the country at large’*. Indeed, adults in all three regions, across urban as well as rural locations, indicated that substance use is increasingly common – and beginning to involve even younger children. A non-governmental organisation (NGO) worker in Community I (East Hararghe) reported that, *‘The numbers of addicted individuals are increasing, children who are younger than 10 years old smoke cigarettes... It is increasing not going down’*. A teacher in Community C (South Gondar) added that, *‘Even children who are above the age of 7 drink “tella”*

► These days, addictive behaviours are increasing and becoming a common practice by adolescents. It is really a serious problem and a major threat to the country at large.


(A key informant, Dire Dawa, Ethiopia)

[local alcohol]'. Alcohol, tobacco, marijuana, khat, and glue were identified by adolescents as a 'serious health risk' in urban communities, with one adolescent in Batu (East Shewa) commenting that substance abuse is the 'most damaging factor for adolescents in our locality'. The drivers of increased substance use vary by location. In rural Amhara, a key informant in Community G (South Gondar) blamed seasonal poverty-related migration (see case study in Box 2) explaining that 'Young migrants are returning habituated with bad behaviours like addiction of drugs, khat, alcohol and cigarettes'. In urban areas, key informants largely blamed peer pressure. As a key informant in Dire Dawa noted, 'They grow up seeing others do it'.

Two other factors are also key to understanding how ill health shapes adolescents' lives: the continued high child mortality rate and the impact of parental illness on adolescents. Many of the adolescents in our qualitative work reported having siblings who had died. For example, a 12-year-old girl in Community E (South Gondar) noted that, 'My mother gave birth to seven children and out of these, five of them died'. The impact of these deaths is perhaps reflected in a continued preference for high fertility, which impacts the time that girls in particular must devote to care work. Parental illness (and death) also significantly shapes young lives, as it is a primary driver of economic and time poverty and a considerable source of emotional distress. A 10-year-old boy from Community B (Zone 5, Afar) reported that: 'I was learning last year; my mother died at the middle of the year. We lost everything'.

Gender differences in health

Our quantitative work found no differences in general health status between younger girls and boys. Both sexes were equally likely to report that their health was very good, to have had recent health symptoms, and to have had a serious illness or injury in the past year (see Table 1 in Annex 2). Of older, urban adolescents, girls reported more health symptoms (65% versus 56%) and less good health (83% versus 88%) than boys (see Table 3 in Annex 2). Our qualitative work nuanced these findings, as adults were able to identify gendered health risks. For example, they felt that girls were more likely than boys to be ill, 'since they [girls] have a high burden of household chores... and spend most of their time without rest and even when they are sick they do not focus on it' (man, Community E, South Gondar). Adults reported that girls were also more likely than boys to be taken out of school in order to take over domestic work when a parent became ill. Girls were also more likely to be exposed to STIs. Boys, on the other hand, were identified as being at much greater risk of substance use and injury from physical violence than girls. A key informant from Batu (East Shewa), for example, reported that: 'there are various behavioural changes that have been observed among adolescent boys. They tend to develop

 Since they [girls] have a high burden of household chores... and spend most of their time without rest and even when they are sick they do not focus on it.

(Man, Community E, South Gondar, Ethiopia)

Box 2: Abebe: 'The majority of them died'

Abebe is 12 years old and lives in a small town in a remote rural area in South Gondar with his parents. He has only recently joined 1st grade, because until he had an operation last year he was too ill to go to school. Abebe's family has faced considerable ill-health in recent years but has tended to rely on traditional medicine rather than seeking out modern care.

Abebe has been sick since infancy. His parents took him to 'different places for holy water, but I could not recover'. Finally, his parents took him to the health officer, who 'injected me twice with a medicine'. That too failed. 'I could recover for one year, but I could not recover permanently. I continued to suffer from the illness.' Eventually, he had surgery and has now recovered.

Abebe had five older brothers who were not so fortunate. The oldest 'died because he was sick'. The second born 'died because he sank into the river'. The third died when an 'animal bit him and he started to vomit'. The fourth 'had a problem in his bladder like me and he became sick and died'.

Despite the fact that the doctors in Bahir Dar were able to save Abebe's life, the family still struggles to know when to seek care. Recently, 'My sister's child died. He was five years old. He was sick for about two weeks. The child fell on the ground and was attacked by the bad spirits of the devil, and then he could not recover from it. People said that it was not good to take him to hospital.'

drinking habits and other addiction practices, especially as they reach the age of 13 and 14.'

Nutrition

Evidence on the nutritional status of Ethiopian young people is mixed. On the one hand, as Morrow et al. (2017: 1) observe, 'the overall picture of food security in Ethiopia has improved in the past decade'. In part due to the PSNP (Ethiopia's flagship social protection programme), the percentage of households included in the Young Lives longitudinal research study that were severely food insecure declined from 12% to 7% between 2009 and 2016, while the percentage that were moderately food insecure declined from 63% to 51% over the same

period (Woldehanna et al., 2017b). On the other hand, Ethiopia remains one of the world's poorest countries, and its poorest households remain disproportionately food insecure. Pankhurst et al. (2018) report that in 2016, only 16% of Young Lives households were food secure and that 27% of 15-year-olds were stunted (low height for age) (41% of boys and 12% of girls). Approximately 15% were both stunted and wasted (low weight for height).

Our survey, which used the Food Insecurity Experience Scale¹ (FIES) developed by the Food and Agriculture Organization of the United Nations (FAO), found that the average household is moderately food insecure.² It also found that rural households (especially those in Oromia, which is suffering from extreme drought) (see Box 3) are

Box 3: Differences in health by region

Both our quantitative and our qualitative research found that adolescents' health status and the health risks they face vary by location. For example, of younger adolescents, those living in urban areas were more likely than their rural peers to report that their health was (very) good (91% versus 88%) (see Table 2 Annex 2). They were also, however, more likely to have experienced recent health symptoms (57% versus 51%) and to have had a significant illness or injury in the past year (23% versus 15%) (see Table 2 in Annex 2). Our qualitative work identified two threats to the health of urban adolescents. First, adolescents living in cities were more likely to report being affected by traffic accidents. An 11-year-old girl in Debre Tabor (South Gondar) observed that, *'We don't play on asphalt road... in the past people used to care less and ignore car horns. Because of that there were many car accidents'*. Second, urban employment options also presented certain risks to adolescents' health. For example, those working in commercial flower factories are regularly exposed to chemicals that *'burned their face'* or injured *'their hands and legs while undertaking their activities'* (15-year-old boy, Batu, East Shewa). Similarly, key informants in rural Amhara reported that some boys who had migrated to cities to work in the construction sector had had fatal accidents.

Patterns of health and ill health also vary across regions. Adolescents living in South Gondar, for example, were markedly less likely to report good health than those in East Hararghe or Afar Zone 5 (Afar) (82% compared with 93%, and 90% for rural adolescents) (see Table 2 in Annex 2). They were accordingly more likely to report recent health symptoms (56% compared with 48% and 43%). Rural adolescents living in Afar were much less likely to report a significant illness or injury over the past year than those in Amhara or Oromia (5% compared with 15% and 18%) – perhaps because health centres are less common in Afar and thus people are less used to seeking health care. Differences are especially interesting, however, in light of the fact that only in Oromia was there any significant discussion of how illness is increasing. Specifically, several adults reported that malaria is an 'epidemic' and getting worse due to climate change. As one man from Community H, East Hararghe, noted, *'Earlier there were no malarial diseases but now it started to be seen in our village... The rainfall is becoming inadequate... The volume of water in the river is greatly reduced'*.

Our quantitative work also found interesting patterns around the interaction between context and gender. In Zone 5 (Afar), for example, of younger adolescents, boys reported less (very) good health than girls (88% versus 93%), likely due to the arduous pastoralist lifestyle of adolescent boys and young men. Boys were also more likely to have experienced a recent health symptom (48% versus 37%). Among younger urban adolescents, on the other hand, girls were disadvantaged. They were more likely than boys to have had a recent health symptom (63% versus 52%) – and less likely to have sought treatment (34% versus 49%), likely at least in part due to a greater domestic work burden and more limited free time.

¹ See www.fao.org/3/a-i7835e.pdf

² The data collection was carried out in January and February of 2018.

far more likely to be food insecure than those in urban areas (see Table 2, Annex 2). While both rural and urban adolescents on average have a height-for-age z-score (HAZ) below zero, rural adolescents are also more likely to be short for their age and have a lower body mass index (BMI) – indicators which both suggest longer-term malnutrition (see Table 2, Annex 2). Our survey also found that girls on average have a lower HAZ than boys (see Table 1, Annex 2) and that among urban adolescents, older adolescents have a lower HAZ than younger adolescents. This result could reflect recent improvements in food security, including through the PSNP (see Table 4, Annex 2).

Our qualitative findings also emphasise differences in adolescents' experiences of food insecurity, which is unsurprising in a country still largely dependent on subsistence agriculture and where *'production is different from one household to the other'* (teacher, Community I, East Hararghe). In South Gondar, most adolescents reported that they had enough to eat and that their diets

were relatively diverse. Many young people reported eating three meals a day, and some reported consuming foodstuffs ranging from *injera* (traditional bread) and *wat* (stew) to mangoes and collard greens, as well as eating food both from home production and from the market. Many of those in East Hararghe and Zone 5 (Afar), on the other hand – and some of those in South Gondar – reported going hungry. A 10-year-old girl in Community L (East Hararghe) noted, *'We don't eat anything until our parents get money and buy'*. Similarly, a 10-year-old boy in Community I (East Hararghe) added, *'The issue of food is the other thing that worries me as the sorghum we have on our farm is about to end. If it is over, we will get hungry as it is the only crop we have'*. Teachers and adolescents reported that many students are not able to pay attention in class because they are hungry. As a teacher in Community E (South Gondar) explained: *'There are many children who come to school without having breakfast'*. This impacts their ability to learn. A 12-year-old girl in Community I (East

Box 4: Regional differences shaping adolescents' food security

Agro-climatic differences are fundamental to understanding food security. Parts of Amhara, for example, have *'surplus food production... and there is no problem of crop production'* (HEW, Community F, South Gondar). In those areas, adolescents report eating not only grains, but also vegetables, fruits and proteins. Other parts of Amhara, however, have recently seen steep declines in agricultural yields. As one farmer from Community C explained: *'The land gets old like human beings. The quality of the soil deteriorates through time... A lot of people are sleeping with empty stomach... And we eat only injera, ... not barley, chick pea, bean, butter, milk'*. These declines have been exacerbated by the fact that landholdings are shrinking, as the population rises. Notably, this decline in agriculture has not been offset by more diversified livelihood strategies that would support better food security.

The lowlands of Oromia are in the midst of a drought that has radically reduced capacity to produce crops and also left livestock at risk. As a key informant from the woreda Agriculture Bureau commented, *'In this desert area the rains are only for a short period of time. Due to this, in the last five years we did not get any food crops production'*. A school principal from Community I added, *'There is scarcity of food in the area and people do not get balanced diet'*.

In Afar, where pastoralist livelihoods mean that adolescents are often travelling for days or weeks looking after livestock, our qualitative work found that young herders often had the least diverse diets and sometimes went hungry. A 12-year-old boy in Community A (Zone 5, Afar) explained:

I live only on drinking camels' milk and I don't get any other food. Since there is shortage of pasture in such dry season, the camels don't produce sufficient milk; thus it is difficult to milk the camels three times a day as can be done in the rainy season when there is sufficient pasture. As a result, I get milk from the camels only in the morning and evening times, while staying the daytime without having anything.

The impacts of this regional variation in adolescents' food security can also be seen in the results of our quantitative survey. Based on the FAO's FIES, younger adolescents living in Oromia are more likely to report current food insecurity than their peers living in Amhara or Afar (see Table 2 in Annex 2). The FAO FIES scale average scores across regions are 4.7, 3 and 1.4 respectively (range of 0–8, with higher numbers indicating greater food insecurity). However, adolescents living in Oromia are significantly less likely than those living in Amhara to have low height for age (-0.24 (boys) and -0.47 (girls) versus -1.40 (boys) and -1.58 (girls) for Afar and -1.12 (boys) and -1.33 (girls) for Amhara) or to have a BMI that is too low, which suggests that historically, adolescents' nutrition in these areas was better (see Table 1 in Annex 2).

The issue of food is the other thing that worries me as the sorghum we have on our farm is about to end. If it is over, we will get hungry as it is the only crop we have.

(A 10-year-old boy, Community I, East Hararghe, Ethiopia)

Hararghe) agreed: *'I don't think about anything else except the food. You lose interest in learning'*.

Food-insecure adolescents also reported poor diet diversity. Most talked about eating grains and potatoes but only rarely talked of eating proteins, fruits and vegetables. In most cases this appears related to poverty: families simply cannot afford to provide more diverse diets. In other cases, however, diets are shaped by culture. A HEW key informant in Community E (South Gondar), for example, explained that children's poor diets in that community are largely the result of *'inability to prepare and utilise the existing food items and poor home management'*. In Community A (Zone 5, Afar), adolescents explained that they do not eat meat except at ceremonies such as funerals and when they are ill, as parents *'say it is not good for you'*. A 12-year-old girl noted that eggs are not *'prepared for humans to eat'* but are instead sold at market for cash. Age-related norms also appear to impact adolescents' diets. A 12-year-old girl in Community D (South Gondar) reported that *'my brother and sister eat alone; our parents say that it is shame to eat with parents'*. A 10-year-old girl in Community A (Zone 5, Afar) observed that, *'My mother and father eat chicken, children do not eat meat'*.

I don't think about anything else except the food. You lose interest in learning.

(A 12-year-old girl, Community I, East Hararghe, Ethiopia)

Gender differences in nutrition

While the most recent Young Lives survey found that boys were more likely than girls to be persistently stunted (Pankhurst et al., 2018), the preponderance of research has found that girls are more likely to suffer from under-feeding than boys – largely because of gender norms that mean families consider boys' physical well-being as a more important asset (Brown, 2012; Roba et al., 2015; Belachew and Hadley, 2010; Mulugeta et al., 2009, 2015).

Our quantitative work concurs with the broader evidence: we found that younger rural girls have a lower HAZ than their male peers, which suggests that over the longer term, their nutrition has been poorer (see Table 1 in Annex 2). Key informants in our qualitative work explained that gender can impact intra-household food allocation and that girls are less likely to be adequately fed than boys. Although a few respondents believed that differences were in the past and *'now both males and females are eating equally'* (HEW, Community F, South Gondar), others emphasised that differences persist. A health officer in Debre Tabor (South Gondar), for example, explained that: *'In this locality parents give priority to their male children, especially in the provision of nutritious food'*.

Puberty education

Puberty education – and support for menstrual management – remains limited in Ethiopia (Sommer et al., 2015; Jones et al., 2016b, c, 2017). Classes, of which only 43% include classes on menstruation (MoE, 2018), are primarily offered at the upper-primary level, by which time some students will have already reached puberty and many will have already dropped out of school. In addition, only 40% of primary schools have access to water to support menstrual hygiene (and hand-washing), only 12% have a menstruation pad bin, and a mere 8% have a room that girls can use to change sanitary products in private (MoE, 2018). Overall, while there is evidence of recent change in urban areas, in much of Ethiopia menstruation remains a taboo topic; girls report fear of menarche (first occurrence of menstruation) because they believe their caregivers will see it as a sign of sexual activity or readiness for marriage (Jones et al., 2016b, c, 2017; Chane and Cherie, 2018; Tamiru, 2015; TCECA, 2014).

Of the younger adolescents taking part in GAGE research, only 50% of rural younger adolescents reported having a source of information about puberty, compared with 64% of their urban peers (see Table 2 in Annex 2). Of the older urban adolescents, on the other hand, 95% reported having a source of information on puberty (see Table 3 in Annex 2). The only difference between girls and boys was in the younger urban cohort, where 60% of girls and 70% of boys reported having a source of information on puberty (see Table 1 in Annex 2), the reasons for which will need further exploration in future data collection rounds. Our qualitative work found that as well as having limited access to sources of information on puberty, the information they do have tends to be non-specific. Most,



Adolescent girl from Afar © Nathalie Bertrams / GAGE 2019

for example, knew that girls will grow breasts and ‘move their backsides’ (young adolescent boy, Community C, South Gondar) and that boys will ‘wear their trousers below their waist, showing their underwear’ (younger girl, Batu, East Shewa). However, only a few of the younger and prepubescent adolescents, mostly in urban areas, could identify that ‘puberty in boys means growing a beard, having a rough voice’ and ‘puberty in females means getting a monthly period and growing hair under the armpit’ (11-year-old girl, Debre Tabor, South Gondar)

Gender differences in puberty education

Knowledge about menstruation is especially limited. Many younger girls, when asked what they knew about menarche, replied ‘I don’t know’, even after probing, likely due to the cultural sensitivity around the issue. Most younger girls knew that menstruation happens, but did not really understand what it is. A young adolescent girl in Batu (East Shewa) explained, ‘When I first heard the name “yewer abeba” [Amharic term for menstruation meaning monthly flower], I thought it was a type of flower’. A 12-year-old in Community K (East Hararghe) added, ‘I know the name, but they don’t tell us about that. I heard it from children in this neighbourhood. When they have headache, they say “I am on menstruation”. But I don’t know what it means.’

Where younger adolescent girls have some notion of what menstruation entails, it is often because they are

observant or are listening carefully to their older siblings and peers. An 11-year-old girl in Community G (South Gondar) observed that: ‘When some girls have their period, they leave a stain on the things they sit on’. A young adolescent in Community B (Zone 5, Afar) reported that: ‘We hear when people talk. They will see [it] for five days. They use pieces of cloth with shorts; then they will bath their body when it is done’. A 12-year-old in Community D (South Gondar) admitted, ‘I heard only when they [friends] discussed it, but no one has told me about such experiences’.

Younger girls in particular reported high levels of anxiety about the onset of menarche. Some believe it is a sign of serious illness. A young adolescent girl in Batu (East Shewa) recalled: ‘I saw the blood on my sister’s cloth, I thought it was HIV/AIDS!’ A mid-adolescent girl in Debre Tabor (South Gondar) explained that she spent the whole day vomiting and in bed: ‘I didn’t know it would be so painful and I was expecting another disease. I was concerned that I had been exposed to another disease’. Other girls, having heard that menstruation is a sign of sexual activity, are

▶ When I first heard the name “yewer abeba” [Amharic term for menstruation meaning monthly flower], I thought it was a type of flower.

(Young adolescent girl, Batu, East Shewa, Ethiopia)

terrified that they have been raped. A 12-year-old from Dire Dawa, who laughs about the experience now, explained: *'When my first menstruation came, I was screaming, holding my ears. My cousin said "What happened to you?" I said "I don't know when but they raped me". She laughed.'*

Mothers and other caregivers, even in urban areas, provide most girls with little information and little support, primarily due to an *'absence of awareness and lack of orientation'* (key informant, Batu, East Shewa), as well as an assumption that because they themselves survived menarche with no information, their daughters will do so too. As a 10-year-old in Community H (East Hararghe) noted: *'My mother has told me nothing about it.'* A 10-year-old in Community C (South Gondar), whose mother had unusually bought her *'some shorts'* [protective underwear] last year, added that she did not really understand what they were for, as her mother and sisters had *'never talked to me about menstruation'*. Even when girls do reach menarche, the stigma attached to menstruation is such that they often do not tell their mothers. *'I didn't tell my mother for two months,'* explained a young adolescent girl in Dire Dawa. A 14-year-old girl from Community C (South Gondar) recalled, *'I just kept it to myself. It's not a taboo per se but I was shy.'*

When caregivers do talk to girls about menstruation, much of what they have to say is aimed solely at reinforcing traditional gendered social norms. A 12-year-old divorcee in Community I (East Hararghe), for example, reported that her mother told her only *'You don't go to boys when you experience it.'* A married 11-year-old in Community A (Zone 5) was told only *'to obey whatever my husband asks'* and a 12-year-old adolescent girl in that same community was told by her mother *'not to go to the river'*. A 14-year-old in Community H (East Hararghe) explained that this is because *'Even if he is your husband, you don't tell him such things in this community.'* Mothers also reinforce stigma and silence around menstruation. A 12-year-old in Dire Dawa, who had asked her mother about menstruation, was told *'You better keep silent – there is no such thing!'* A young adolescent girl in Batu (East Shewa), who was

When my first menstruation came, I was screaming, holding my ears. My cousin said "What happened to you?" I said "I don't know when but they raped me". She laughed.

(A 12-year-old girl, Dire Dawa, Ethiopia)

There are no separate rooms to be used for this purpose [changing sanitary pads] due to shortage of classrooms in all schools.

(Principal, Debre Tabor, South Gondar, Ethiopia)

worried about her sister because she thought the blood on her sister's leg indicated an injury, was threatened with violence for asking questions. She explained that her mother *'warned me not to tell anyone. She said she would beat me if I talk about this.'*

For other girls, the information they receive about menstruation from caregivers is factually incorrect, because caregivers themselves do not have accurate information. For example, a 10-year-old from Debre Tabor (South Gondar) was told by her parents that *'if a girl doesn't start her menstruation cycle, she will die'*. A 12-year-old from Community D (South Gondar), who was told that menstruation is normal and that it happens to all girls, was also told that girls did not start to menstruate until they were 15. She was confused: *'I have a hard time believing this because my friend has her period and she's not 15 yet.'* In some cases, parents' lack of information is potentially dangerous. A young adolescent girl in Community B (Zone 5, Afar), for example, reported that she had heard that *'bathing the body while seeing blood is a sin'* – which could lead to increased risk of infection due to poor hygiene. An HEW in Community E (South Gondar) explained, *'There are parents who used to bring their daughters to the health post when the girl was menstruating, believing it had happened due to sexual intercourse. This resulted from being ignorant.'* It is worth noting that given that many girls are married off immediately if they are suspected of being sexually active, parents' lack of knowledge may, in some cases, be driving child marriage.

The stigma that surrounds menstruation also has negative educational impacts. As a girls' club leader in Community F (South Gondar) explained, *'Girls are absent from school during their menstrual cycle since male students laugh at them.'* Older adolescent girls in Community D (South Gondar) noted that physical education (PE) classes pose a particular issue (with the risk of blood leaking through their sanitary pad) and that many menstruating girls skip school on the days that PE is being taught. Key informants noted that while most schools have separate girls' toilets, even in urban schools *'there are no separate rooms to be used for this purpose [changing*

Box 5: Regional differences in puberty education

Both our quantitative survey and our qualitative work found that overall, urban adolescents have better access to puberty information. Nearly two-thirds of urban younger adolescents reported that they had a source of puberty education compared to only half of those living in rural areas (see Table 2 in Annex 2). Older urban adolescents were especially likely to have a source of information – 94% versus 64% of younger urban adolescents (see Table 4 in Annex 2). Based on our qualitative work, this difference primarily stems from information offered by the media and families. A 12-year-old in Debre Tabor (South Gondar) offered a very detailed account of a children's TV programme she had seen. It had shown a girl at school who, when she stood to answer a question, had left a 'blood-like fluid on the chair'. When the students in the class laughed at the girl, the teacher had 'said that it could happen to anybody and they shouldn't have laughed' and instead told students to 'try to protect the girl'. Of the girls who reported that their families had provided useful and accurate information on puberty, all were urban. As a 10-year-old in Debre Tabor (South Gondar) noted: 'Both my father and my mother, they say that I am old enough to start menstruation cycle. [We talked about it] when I turned 9 last year. They said they'll buy me sanitary pads.' A 12-year-old from the same city added, 'I have no problem when I am talking about menstruation... It is she (my stepmother) who is telling me about menstruation. She advises me to ask the teachers to call her if I start to menstruate while at school or to use my school uniform jacket as an apron and return home.' An 11-year-old, also from Debre Tabor (South Gondar), who noted that she has 'heard about the importance of open discussion, so there is no problem', reported that her brothers will buy her sanitary pads.

sanitary pads] due to shortage of classrooms in all schools' (principal, Debre Tabor, South Gondar). Adolescents added that even urban schools often lack running water.

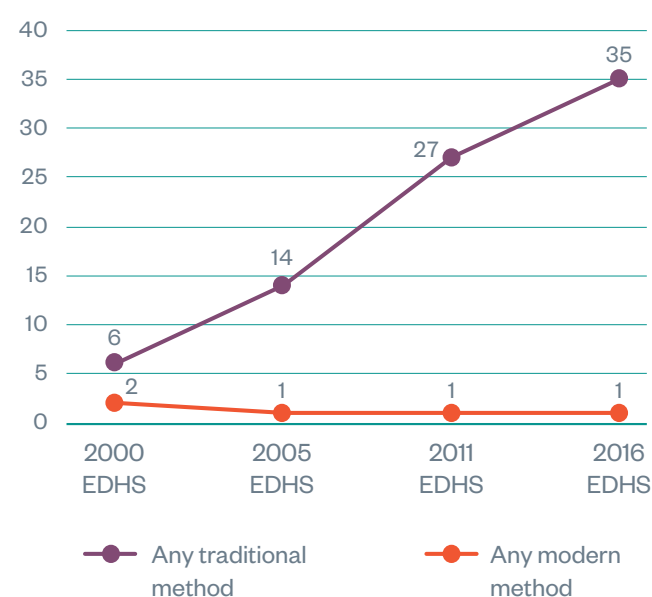
SRH information and supplies

At the national level and across age groups, contraceptive uptake has climbed rapidly – from only 6% in 2000 to 35% in 2016 (see Figure 3). However, access remains uneven; while the poorest women in Ethiopia are falling increasingly behind their better-off peers in terms of satisfied demand for contraception (UNFPA, 2017), adolescent girls remain less likely than older women to use contraception. This is largely because of the age-related social barriers that adolescents face: some girls feel pressured to demonstrate their fertility, while others are poorly served by providers who do not approve of girls engaging in sexual activity (Jones et al., 2014, 2016b; Abebe and Awoke, 2014; Bansal et al., 2012).

Understanding adolescents' contraceptive uptake – and the barriers that prevent it – requires taking into account that there are two very different groups of sexually active girls in Ethiopia: married girls, who are disproportionately likely to be poorer, more rural, and less well-educated; and unmarried girls, who are disproportionately better off, and more likely to be urban and better educated (Hounton et al., 2015). The most recent EDHS found that of married girls aged 15–19, only 32% use a modern contraceptive method

(compared to 41% of married women aged 35–29), whereas it is estimated that nearly 58% of their unmarried peers use a modern method. Contraceptive uptake is, however, improving for both groups of girls, and both are overwhelmingly likely to use long-acting methods such as injectables and implants (Hounton et al., 2015; CSA and ICF, 2017).

Figure 3: Percentage of currently married women using a modern contraceptive method, 2000 to 2016



Source: CSA and ICF, 2017

Understanding the relative size and dynamics of these two groups of girls is key to future progress on SRH. The most recent EDHS found that of unmarried girls and women aged 15–24, 93% reported never having had sex (95% in rural areas and 89% in urban areas) (CSA and ICF, 2017). Because the age at first marriage is climbing in most regions of the country, the data suggests that overall, adolescent girls are less likely to be sexually active now than they were in the past. Only 5.5% of girls aged 15–17 had had sex by the age of 15; this figure was 7.4% for girls aged 18–19 and 13.2% for young women aged 20–24. At the same time, however, adolescent girls are more likely to be sexually active outside of marriage. While the 2011 EDHS found that the median age at first marriage and the median age at first sex were nearly the same for women aged 25–49 (16.6 years and 16.5 years respectively), the 2016 EDHS found that women are now (on average) sexually active for six months before they are married. This has significant implications for adolescents' access to SRH information and services.

Our survey found that while younger rural adolescents were typically not able to correctly identify any method of birth control (only 25%, see Table 2 in Annex 2), older adolescents typically could. Among our urban respondents, 31% of younger and 83% of older adolescents could name a form of contraception (see Table 4 in Annex 2). Our qualitative work, however, suggests that while younger adolescents may not know the correct names, they are generally aware of options for family planning. As an out-of-school younger adolescent girl in Community H (East Hararghe) explained: *'I know pills, implants that are used for three or five months and an injection that is used for three months'*. Older girls also sometimes reported knowledge of emergency contraception.

Regional differences in contraceptive uptake, contraceptive decision-making, and fertility preferences are striking. The 2016 EDHS found that women in Amhara are most likely to use contraception, most likely to have control over their own use of contraception, and want the fewest children (see Figure 4). The pattern in Afar and Oromia was quite distinct, as we discuss below.

Amhara

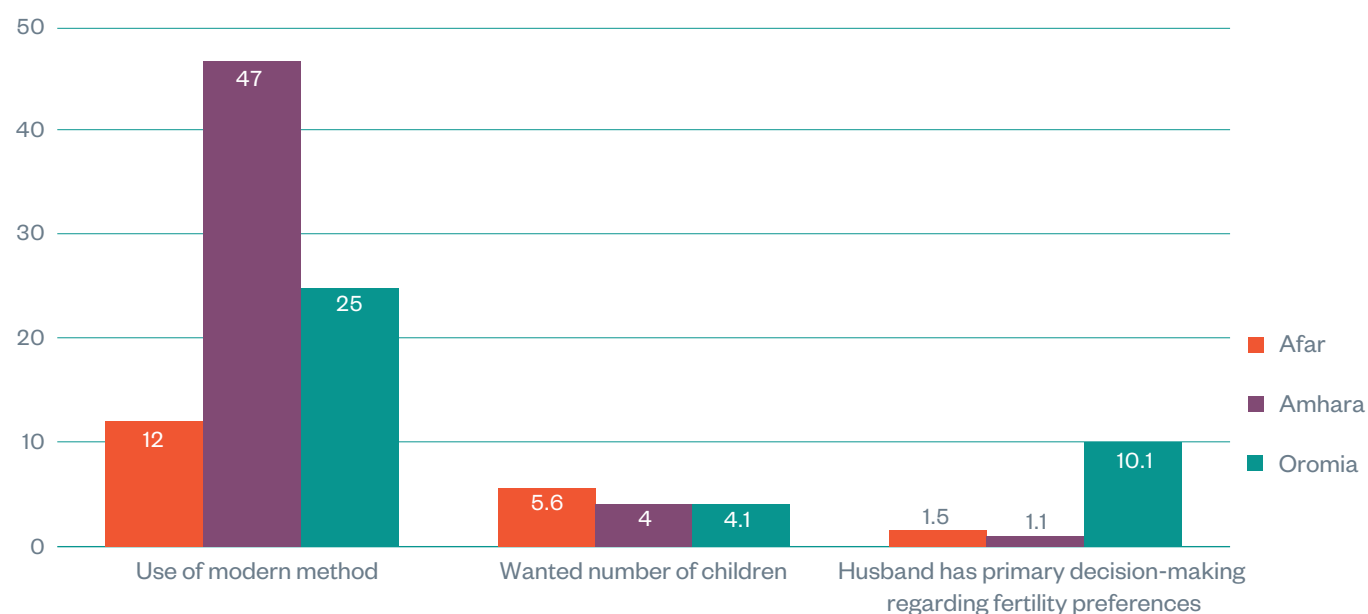
Our survey found that young adolescents living in rural Amhara were most likely to be able to correctly identify a form of family planning – 40% could do so (see Table 2 in Annex 2). Our qualitative work suggests that their better knowledge grows out of better regional uptake.

Contraception appears more openly discussed in Amhara, with even fathers talking about how they have taken their daughters to health clinics to get injections. This was largely driven by fears about family honour; contraception would ensure that should a girl be raped, she would not become pregnant, as pregnancy before marriage is widely seen as a fate too terrible to contemplate (see companion report on bodily integrity).

Amhara has historically had the country's lowest age at first marriage. Girls were often married in early childhood, typically to create ties between families and demonstrate social status. Sex before marriage was unlikely (given the low age at marriage), was culturally proscribed regardless, and many of the youngest girls were protected from sex within marriage by the custom of 'geyed' – an oral or written contract in which the groom and/or his parents guarantee to prevent the girl from having a sexual relationship before maturity (Jones et al., 2018).

Adults admitted that young married girls, while ostensibly still protected from sex by geayed, are often in reality quite vulnerable. A father in Community C (South Gondar) explained, *'Even if they were supposed to wait that long, that is not the actual practice'*. A 12-year-old girl from Community G (South Gondar), who was married and then raped by her husband at the age of 10, spoke disparagingly of the protection that her in-laws had provided: *'They will promise that nothing will happen, but then they didn't do anything'*. Indeed, we found that very young married girls are often extremely worried about becoming pregnant. With no protection from sex, but an understanding of the risks that early pregnancy entails, several reported they had begun using contraception even though they had not yet begun menstruating. As one 12-year-old girl from Community G explained, *'They told me that there is a chance of being pregnant even though you don't have your periods and I was scared. On the 26th of this month I take the injection so I won't get pregnant.'* A key informant at Community G's Office of Women's Affairs added that parents also encourage their daughters to use contraception to delay pregnancy after marriage: *'Both the father and the mother advise their daughter to follow the family planning methods'*.

The physical, social and economic risks of early pregnancy are well understood in rural Amhara – even by younger adolescents. A mid-adolescent boy from Community D (South Gondar) reported that it was important for girls to *'grow up before they are able to give birth'*. A married 14-year-old girl from the same community

Figure 4: Use of modern method, wanted fertility, and contraceptive decision-making, by region, 2016 EDHS

Source: CSA and ICF, 2017

added that later pregnancy is good for children, because girls are able to be better mothers: *'If they give birth while being a grown-up and know many things, they will also benefit the child'*. Given the growing importance of education in Amhara, no girl wants the neighbours to gossip about how *'she got pregnant before finishing school'* (12-year-old girl, Community D, South Gondar). Key informants added that many young husbands also prefer to delay first births, so they can better provide for their families.

However, key informants also made it clear that girls can only put off pregnancy for so long. As a key informant in Community F explained, *'Those who married at 9 or 10 years old give birth to a child at age 15.'* Girls themselves sometimes reported that their husbands were frustrated that they had not become pregnant. As a married 14-year-old girl from Community D (South Gondar) noted: *'My husband says "How am I any less than other men that you don't give me a child?"'* Another married girl from the same community added that, *'If he wants to have a child then you get the shots [contraceptive injection] secretly.'*

► If they give birth while being a grown-up and know many things, they will also benefit the child.

(A married 14-year-old girl, Community D, South Gondar, Ethiopia)

While sex outside of marriage has historically been strictly prohibited, and a girl's sexual purity a symbol of her family's honour, this is beginning to shift. As one older boy from Community C (South Gondar) noted, *'If they are above 15 years, they are not a virgin'*. Older adolescent girls from Community D (South Gondar) observed that change is due to adolescents being able to *'have the relationship they want at age 15–18 and above'* because they are away from their parents during the day. Younger girls in Community C added that boys and girls meet *'at the school or on the streets and their heart melts'*. Although a handful of respondents reported *'girls who are loyal to the family don't do this, only the whore does'* (Older-adolescent boys, Community D South Gondar) or that if an unmarried girl was to use contraception then her family would *'beat them or send them out of their home'* (mid-adolescent girl, Community C), the prevailing view is that it is becoming more acceptable for unmarried girls to use contraception. While a young adolescent girl in Community C (South Gondar) reported that parents *'can't do anything about it, they will just be sad'*, a father from Community G (South Gondar) was more matter of fact: *'The girls start to use contraceptives before they start sexual relationships with boys. They love each other when they start to have sex.'*

However, part of this social acceptance of contraception among unmarried girls is also driven by fear of sexual violence. Both adolescents and adults noted that unmarried girls increasingly use contraception



to ensure that if they are raped, they will not become pregnant. A mid-adolescent girl in Community C (South Gondar) explained that, *'Girls that don't have a lover get injected, fearing rape and getting pregnant'*. A father in Community G (South Gondar) explained that he made his daughter begin using contraception: *'We have to teach the young girls to use contraceptives in order to become safe. I took my daughter to the health centre and made her use contraceptives. She has no [boy]friends but I did it for safety.'*

Moreover, while girls – married and unmarried – appear to have markedly better access to contraception than older women in rural Amhara did when they were adolescents, or than their peers in other regions, cultural

▶ We have to teach the young girls to use contraceptives in order to become safe. I took my daughter to the health centre and made her use contraceptives. She has no [boy]friends but I did it for safety.

(A father, Community G, South Gondar, Ethiopia)

narratives that surround girls' sexuality have not shifted significantly. Girls are held almost solely to blame for shifting practices around pre-marital sex and are seen as at fault if they become pregnant. A man from Debre Tabor (South Gondar) explained, *'The behaviours of girls are extremely changed. Previously, girls did not have sexual intercourse before marriage, but now, girls start sexual intercourse at an early age. They are not protecting them from unwanted pregnancy.'* A young adolescent boy in Community C added that girls work together to deceive parents into allowing them the mobility that facilitates sexual activity: *'She calls him when she wants to bring wood to her parents. The parents think they are going with their girlfriends. Then the girlfriend walks with them a few roads and goes back to her home.'* If a girl in Amhara does become pregnant before marriage, girls explained that boys bear none of the responsibility and usually end the relationship.


Oromia

Our survey found that young adolescents living in rural Oromia had very little knowledge of contraception – though their knowledge was better than that of their Afar peers. Only 14% could correctly identify a contraceptive

method (see Table 2 in Annex 2). This lack of knowledge was also evident in our qualitative work, which found that adolescents in Oromia not only had less information about contraception than their peers in Amhara, but they also tended to have more concerns about its safety. A 14-year-old married girl from Community H (East Hararghe), when asked if she had learned anything about contraception, replied: *'There is nothing I know'*. Similarly, a 14-year-old divorced girl from the same community knew only that contraception *'is not to have many children'*. A number of adolescents also associated contraceptive use with illness. A key informant from Community L (East Hararghe) explained that it is not uncommon for girls to believe that if they use contraception, it will leave them permanently unable to have children.

Girls' lack of knowledge is shaped in part by Oromia's lower contraceptive uptake, which is largely related to cultural and religious norms. A public health officer in Community H (East Hararghe) explained, *'According to them, as per the doctrine of the religion, using family planning is a sin'. Indeed, married girls reported that they left 'all contraception to Allah'* (14-year-old, Community H, East Hararghe) and HEWs – frustrated by some women's refusal to use contraceptives even when they are medically necessary – reported that they sometimes deceive women with fistula about what injections they are receiving simply because they cannot bear to see those women undertake another pregnancy.

Girls' lack of knowledge is also shaped by norms that dictate that girls must prove their fertility soon after marriage. While a kebele official in Community K (East Hararghe) understood that child marriage and early pregnancy meant that *'sometimes they develop fistula'*, respondents overwhelmingly agreed that newly married girls *'can only stay this year but not next year without a baby'* (young adolescent girl, Community I). A 14-year-old married girl from Community H (East Hararghe) explained, *'I am not using [family planning] now – before I have one child. If you stay without a child for a longer time, they will tell you, you are barren.'* The informal rule that girls must prove their fertility was so ingrained in the kebeles in which we worked that an HEW in Community L – who interestingly observed that it was young wives and not husbands who believed they must have a child immediately – admitted that she does not even discuss contraception with girls until after they have given birth to their first child. *'I will not tell those who did not deliver about family planning. I tell them about family planning after they delivered.'* Proving one's fertility as soon

 **I am not using [family planning] now – before I have one child. If you stay without a child for a longer time, they will tell you, you are barren.**

(14-year-old married girl, Community H, East Hararghe, Ethiopia)

as possible after marriage was also the case in urban areas. A 15-year-old married girl from Batu reported, *'My mother-in-law has awareness about the health risks of delivering at an early age and she told me to take contraceptive for one year. I told my husband but he refused.'*

The picture surrounding unmarried girls' sexual activity is highly varied. Some respondents blame *shegoye*, a cultural dance similar to Afar's *sadah* for girls' marrying as children and entering into early child bearing. While a key informant from the Youth League in Community I reported that *'in urban areas it is shame to sleep with boys but here it is not considered as a shame, it is normal – since the parents also experienced the same thing when they were adolescents'*, other respondents felt that the 'rules' of the dance are shifting and contributing to recent increases in adolescent sexual activity. As a man from Community K (East Hararghe) explained, *'In the previous time, people did not allow them to spend the night'*. The only night-time dancing took place during weddings, when *'girls were accompanied'*. Now *shegoye* dancing has become commonplace in some communities and teachers in our research mentioned that students as young as 11 years are unable to pay attention in class because they are simply too tired following night after night of dancing. While some men in Community K believed that modern technology is changing the nature of *shegoye*, because adolescents now have access to tape players and therefore modern music, others blamed the drought, which has compelled families to pull their children out of school and thus *shegoye* has taken on added importance as one of the few spaces where adolescents can interact with peers. Many are reportedly starting to dance at earlier ages – and from the dances are then choosing to enter 'adolescent-driven' child marriages (see companion report on bodily integrity). Indeed, a teacher in Community K explained that he had been told by local adolescents that *'those of you who come from another area can do what you like and can get married when you like. Here, we cannot do what we like. It is "Haram". They have to get married and live together.'*


There were few reports of unmarried girls in Oromia using contraception. Indeed, a public health officer in Community H (East Hararghe) noted that, *'there are few who use family planning'*. Although in urban Batu a teacher reported that *'girl students have boyfriends while they are in school and so they use family planning methods since they know the impact on their education of getting pregnant'*, an adolescent girl in that same city explained that any girl seeking contraception would be *'stigmatised'* and *'left alone and be with no friends'*. In rural areas, adults mostly spoke of pregnant (albeit married) adolescents. As a father in Community H noted: *'Farmers' children have sexual intercourse with each other without any protection like condoms, and our girls are becoming pregnant'*.

Afar

Our survey found that young adolescents living in rural Zone 5 (Afar) had very little knowledge of contraception, with only 7% able to correctly identify a method (compared to 40% in Amhara and 14% in Oromia) (see Table 2 in Annex 2). This is perhaps not surprising given that contraceptive uptake in the region is extremely low, in large part because of Islamic proscriptions against its use which have taken on increased salience over the last decade in the GAGE study communities. Our qualitative work, however, found marked variation – in part driven by changing patterns of sexual activity that may be unique to the areas of Afar in which we worked.

As noted in the companion report on bodily integrity (Jones et al., 2019), Afar girls typically marry during mid-adolescence (13–15 years), under the *absuma* marriage custom, to a maternal cousin chosen by their parents. They have no say in who they marry or when. Adolescents in our research reported that while marriage patterns are not shifting, options for sexual partners are. A 10-year-old girl in Community B (Zone 5, Afar) emphasised that: *'Small girls like us do not have sex. Bigger girls are ok to have intercourse... Males ask for different thing, they ask for sexual intercourse. They beg us for sex'*.

Adolescents reported that with the availability of contraception, the form and importance of traditional local dances such as *sadah* may be changing. A 12-year-old boy from Community A (Zone 5, Afar) explained that *sadah* *'is a culture, which has existed in the community for many years... and is based on its convenience for boys and girls to spend their time together'*. A young adolescent boy from Community B reported that in his community, it is all but mandatory for adolescents to participate: *'If they do not*

 **Small girls like us do not have sex. Bigger girls are ok to have intercourse... Males ask for different thing, they ask for sexual intercourse. They beg us for sex.**

(A 10-year old girl in Community B, Zone 5, Afar, Ethiopia)

come, we will beat them. We will bring them from their home. Their parents do not say anything.' A young adolescent boy from Community A added that even if adolescents do not have permission to attend, it is common for young people to simply leave home and go to *sadah* after their parents go to bed. An older adolescent boy from Community A reported that while activities begin with *'playing and singing'*, they soon progress, given that contraception is available. *'Those who need each other would come closer for dancing... I give a sign to a girl whom I love most and persuade her to go to somewhere nearby.'*

To prevent premarital pregnancy, which can *'cause severe punishment'* for both the girl and the boy, adolescents in both our qualitative research communities appeared to increasingly use modern contraception (primarily the pill) – albeit largely in a *'top secret'* manner (young adolescent boy, Community A). An older girl in Community A reported that most girls use *'the contraceptive methods given with syringe that is used for three to six months'*, and younger boys added that adolescents – embarrassed to be seen at the local health post – go to the *'health facility in Kumame town, where they couldn't be identified... and use the night-time service [because] they are afraid [shy] of family, relatives, other Afars'*. Another older adolescent girl from Community A (Zone 5, Afar) explained that both unmarried and married girls are now using contraception:

The unmarried girl wants to use the contraceptive methods if she does not want to have a child from her boyfriend unexpectedly... [Married girls] may use contraceptive methods when they do not want a child from her husband whom they don't love.

Because of the *abino* marriage custom, sexually active adolescent boys in Afar have a great deal to lose if their girlfriend becomes pregnant before marriage. Financial costs are high and can take years to pay off, as an older adolescent boy explained:

If she got pregnant, he would be penalised to pay throughout her lifetime. He would pay separately for the victim and for the newborn baby. If the victim girl gave

birth, the person is expected to pay about 26 cattle. If she died while she was pregnant, it would be considered as loss of two persons and the penalty is severe.

Driven by this reality, boys and young men in Afar appear to be more engaged in contraceptive decision-making than boys in other areas. As a young adolescent boy in Community A (Zone 5, Afar) noted: *'There are boys that take their girlfriends to the town to take the family planning methods to prevent unwanted pregnancy'*. It is however important to note that contraceptives used are female pills rather than condoms with important implications for risk of HIV and other STIs.

However, once married, contraceptive use among adolescent girls is much lower given the importance of large families to the pastoralist way of life. One married girl from Community A (Zone 5, Afar) reported that she needed many children to reduce her own workload: *'I want to give birth early. I want to have children, since children help you in work. Parents who do not have children work a lot. I want to have 10 children.'* Another, from Community B (Zone 5, Afar), was more fatalistic: *'It is the mercy of Allah so we accept if he gives me 10 or 20 children without limit'*.

Contraceptive knowledge and uptake

While most adolescents, and especially adolescent girls, were generally aware of contraceptive options, the amount of misinformation identified in our qualitative work was striking. Many girls, for example, reported that contraception – often especially contraceptive implants – led to weight gain or weight loss, hair loss, illness or sterility. Several other girls also reported that while girls could take pills or injections to prevent pregnancy, boys and men could take pills or injections that would ensure a girl became pregnant. A 14-year-old married girl in Community D (South Gondar) explained, *'So when the woman is using either injection or pills, he will ask for the pill saying he wants to have a child.'* A 15-year-old girl in Community C (South Gondar) added, *'I think they go and get injected so the female can get pregnant. I don't know [if it is true] but that is what they say.'* Adolescent girls also reported taking antibiotics, which they believed would allow them to stretch the number of months they could go between contraceptive injections. *'If you take penicillin, then there's no problem,'* explained an older girl from Community D (South Gondar).

Box 6: How disability intersects with gender to affect health, nutrition and SRH

Our research found that disability has a wide range of impacts on health, nutrition, and SRH. For example, our survey found that young adolescents with disabilities were far less likely to report good health than their peers without disabilities (44% versus 89%) (see Table 1 in Annex 2). This pattern also held true among older, urban adolescents (46% versus 87%). Of younger adolescents, those with disabilities were more likely to report recent health symptoms than those without (70% versus 51%) and to have had a serious illness or injury in the past year (33% versus 16%). Adolescents with disabilities in our qualitative research reported that because transportation to health clinics can be challenging, and because specialist care is available only in urban areas and tends to be quite expensive, many adolescents do not have access to the care they need. A young adolescent girl with a physical disability in Batu (East Shewa) lamented that she wished that her parents *'could get me a medical service. I know they would do anything for me if they have any money'*. Adolescent girls in Community B (Zone 5, Afar), on the other hand, reported that fatalism and disability-related stigma prevents other children from receiving care, because parents simply say: *'it is Allah's will... if the child is born disabled'*.

Among the younger cohort, our survey found that adolescents with disabilities were more likely to be short for their age than their peers without disabilities (see Table 1 in Annex 2). Our qualitative work suggests that some young adolescents with disabilities are not well fed at home. A teacher in Batu (East Shewa) reported that, *'Students with disability often come to school without food and they become irritable and not happy to attend the class'*. A young adolescent boy from Community K (East Hararghe), who cannot feed himself, added that he has never been given any food other than injera. *'It is my siblings who give me injera. Even if I feel hungry, I am not able to eat by myself. I have never eaten food other than injera.'*

While our survey found only limited differences in adolescents' access to information about puberty, it did find that younger adolescents with disabilities are less likely to be able to correctly name a form of birth control than their peers without disabilities (14% versus 25%) (see Table 1 in Annex 2).



Young woman in a clinic in Ziway, Ethiopia © Nathalie Bertrams/GAGE 2019

Boys' and young men's access to contraceptive information and services is quite different from that of girls. Indeed, outside of rural Afar, they appear to have no access, reflected in the fact that several adolescent girl respondents were surprised when we asked about boys' access to clinics. An older girl from Community D (South Gondar) asked, *'What would they do there?'*, reflecting that SRH and family planning are typically considered to be a female responsibility. In Community L (East Hararghe), HEWs reported that boys and men did not attend contraceptive information sessions, as they were out in the fields working and, unlike girls and women, were not penalised by the kebele for non-attendance. Condom availability also remains an issue, which leaves boys and girls at risk of contracting STIs, as barrier contraceptives are uniquely able to prevent transmission of STIs.

Protection against sexually transmitted illnesses

Our research found that while rural areas of Ethiopia have historically had low rates of HIV, this appears to be changing – at least in Amhara and Oromia – due to increased internal and international migration and changing sexual norms. A key informant at the Women's Affairs Office in Community G (South Gondar) explained that many, even most, of the kebele's young men are now migrating to the lowlands for seasonal work – and where

exposure to commercial sex work is commonplace. *'I am sure we can't find a young man who didn't go to Metema in the name of work'*. These young men are contracting HIV and other STIs and spreading the infection when they return to their home towns. The bulk of the respondents in our qualitative work again blamed girls' rather than men's sexuality for this. Rather than focusing on the fact that migrant boys and men are having unprotected sex, they instead focus on the girls and women in those areas who are commercial sex workers or mistresses.

Rising rates of HIV among adolescents who were becoming involved as *'kemits'* (concubines) for men in small urban towns in South Gondar's Ebenat district were also raised as a concern by key informants. An official from the Bureau of Women and Children Affairs noted that: *'Both commercial sex workers and kemits [concubines] in this locality don't use condoms... The rate of HIV is increasing in Ebenat woreda in general'*. Indeed, several older adolescents in our research claimed that with greater availability of antiretrovirals to treat HIV, condom use – alongside fear of HIV – is declining.

I am sure we can't find a young man who didn't go to Metema in the name of work.

(A key informant, Women's Affairs Office, Community G, South Gondar, Ethiopia)

Both commercial sex workers and *kemits* [concubines] in this locality don't use condoms... The rate of HIV is increasing.

(An official, Bureau of Women and Children Affairs, South Gondar, Ethiopia)

While the key informant at the Bureau in Community G (South Gondar) mentioned trying *'to tell the girls that the current generation of boys have experience with women'* in town, and a small number of urban adolescents reported that they *'learn in the school that HIV/AIDS has been expanding in Ethiopia'* (11-year-old boy in Dire Dawa), our research suggests that efforts to prevent the spread of HIV and other STIs among adolescents are far from sufficient. Perhaps most importantly, condoms – which a woreda-level key informant in Community C (South Gondar) explained are *'taboo'* – appear to be only intermittently

available in urban areas and rarely available in rural areas. Indeed, an HEW in Debre Tabor (South Gondar) noted, *'There is a shortage of condoms in Debre Tabor town in particular and at the national level in general'*. An HEW in Community L (East Hararghe), while noting that *'all of them (unmarried adolescent boys) use condoms'*, observed that *'supply is not sufficient nowadays'*. She also added that while International Medical Corps was working in the region, *'adolescents did buy condoms freely without being afraid'*, but now that programming has discontinued, the situation is regressing. Key informants working in Afar also highlighted that rising rates of HIV are in part driven by the rise in sexual relationships among adolescents prior to marriage during *sadah* festivities. They highlighted that awareness of the importance of and use of condoms is very low, as is testing for HIV. They further noted that while testing sites are set up in markets, little is being done to follow up, even when people test positive.

Box 7: Tewabech: Living with HIV: 'what comes next?'

Tewabech is an older adolescent girl living in a remote kebele in South Gondar. Having contracted HIV from her ex-husband, she is living with her mother and her younger siblings, unsure what comes next in her life given the stigma directed at people who are HIV-positive.

'My mother is poor and there is no one that supports me to attend school.' Tewabech dropped out of school at age 17, in 6th grade, and soon after was *'ordered to get married'*. She did not know her husband; she knew only that he *'worked in Metema [a lowland area known for providing seasonal labour opportunities on sesame plantations] and was bringing in money'*.

Her married life was short – and tragic. *'We lived together for a short time. I become HIV-positive.'* While she now knows that her ex-husband *'was aware of his health condition/HIV when he married me'*, at the time of their marriage she did not know he was infected.

When Tewabech found out that she was HIV-positive she became *'very angry'*. Fortunately, *'Health professionals counsel me. They teach me well ... They told me I can live if I take my medicine.'* Now on antiretrovirals (ARTs), Tewabech is less worried about the health consequences of HIV and more worried about the social consequences. She explained that HIV-positive people are heavily *'insulted'* in her community. Because of this, *'here, everyone hides his/her health condition'*. While *'there are many people living with HIV in this area, no one tells anyone else about it. There is no association for people with HIV, they do not get together.'*

Tewabech has taken great care to ensure that no one knows she is HIV-positive. For example, she goes to the district town to collect her medication, despite the fact that it is available locally, because she is worried that if she picks up her medication near to home then *'someone from our area may meet me there and I'll experience discrimination ... Only my mother knows I am HIV-positive, not my siblings'*.

Tewabech is unclear about what comes next in life. Her mother advised her to remarry as she is still young and has her whole life in front of her. *'There is a man that is HIV-positive that asked me to get married but for now I want to have a shop ... I am not interested to have a relationship with a man I want to work living alone before making any new plans. I haven't decided yet.'*

Change strategies

Our findings point to highly uneven efforts in terms of the change pathways that programme implementers are targeting to enhance adolescent health, nutrition and SRH. We follow the GAGE conceptual framework's disaggregation of change pathways from the micro through to the meso and macro levels.



Empowering girls

Improvements in adolescent health are partly due to efforts to target adolescent girls (and boys) for health education. Adolescents explained that science teachers have emphasised the importance of building a *'latrine in order to prevent diseases that can be caused by open defecation'* (10-year-old girl, Community I, East Hararghe) and *'disposing of garbage in a proper manner'* (12-year-old girl, Dire Dawa). They also explained that school clubs have taught them that *'If we eat food using dirty hands, it exposes us to disease'* (11-year-old boy, Community E, South Gondar) while also teaching them about the risks of addiction to alcohol and drugs. These classes appear to be paying off. The 10-year-old girl in Community I (East Hararghe) (above) added that her father had promised her that he would build the family a latrine as soon as he was finished harvesting, and several younger adolescents in Community I swore they would never use khat or alcohol because of what they had learned in school.

Adolescent girls and boys are also targeted for nutrition education through science and health classes and, in rural areas, through school-based 1:5 groups.³ They are taught to use iodine in their diet (Nutrition Officer, Community C, South Gondar), *'that eating peanuts, beans, eggs, meat and table salt is important for good health'* (11-year-old girl, Debre Tabor, South Gondar), and that *'protein, carbohydrate, oil and water'* are all important to *'build our body'* (10-year-old girl, Dire Dawa).

Ethiopian schools also offer basic, sex-segregated classes on puberty education. Girls' clubs – which usually start in grade 5 or for girls who are 12 years old – also provide information and support on menstruation (and

▶ We also advise them not to worry if they see blood on their clothing at any time because it appears in all girls at this age. We educate the girls about what they should do when menstruating. We also show them how to use sanitary pads and protective underwear for girls.

(A teacher, Community A, Zone 5, Afar, Ethiopia)

encourage girls to support one another). As a teacher in Community A (Zone 5, Afar) explained:

We also advise them not to worry if they see blood on their clothing at any time because it appears in all girls at this age. We educate the girls about the age at which they start to see menstruation, when menstruation ends, and what they should do when menstruating. We also show them how to use sanitary pads and protective underwear for girls.

A girls' club leader in Batu (East Shewa) added that she works hard to emphasise that menstruation is normal and that it is manageable: *'We encourage them, saying "we are female, like you..." They share their problems with us and we look for solutions to those problems'*. These messages are resonating. As a young adolescent in Community H (East Hararghe) noted: *'Our teachers teach us to practice good personal hygiene... And that we do not have to panic'*.



Engaging with boys and young men

Our research identified no efforts to engage with boys and young men about health, nutrition and SRH other than distributing condoms (primarily in South Gondar) and including boys in health and nutrition education classes. This is noteworthy given that our findings suggested that adolescent boys have greater knowledge about puberty

³ The 1:5 groups are a structure through which the government organises communities in order to disseminate messages on a wide variety of development issues. Each group consists of one leader and five members, which are in turn federated into higher-level groups.



Adolescent boy with a hearing impairment in Amhara
© Nathalie Bertrams / GAGE 2019

and SRH than their female counterparts, and requires further exploration in future data collection rounds. Indeed, adolescent girls were sometimes frustrated that *'boys have not been educated about menstruation'* (10-year-old girl, Batu, East Shewa), because it means they are more likely to make jokes about it (younger boys) or resort to sexualised taunts and harassment (older boys). While key informants, including teachers and parents, mentioned that some schools have gender clubs rather than girls' clubs, so that boys can also participate, none of the boys we interviewed reported being a member of such a club. Finally, as already discussed, contraceptive information and services are typically not as available for boys as they are for girls.



Supporting parents

Our research identified no efforts to engage with parents of adolescents to provide support and guidance on health and nutrition issues. Where parents are targeted for awareness-raising, it is as members of the broader community or as parents more generally. This oversight was most keenly felt by adolescents in regard to puberty education, with some girls stating that there should be *'open discussion with the family about sexuality issues, including that of first-time menstruation'* (older girl, Dire Dawa).



Engaging with communities

As with efforts to engage adolescents, efforts to engage communities to improve adolescent health outcomes begin with education by HEWs and 1:5 groups. Adults explained that HEWs have played a key role in ensuring that communities understand what actions they can take to improve community health. These include messages that *'everybody eats on a separate plate'* (teacher, Community F, South Gondar) and that people should *'dry out the stagnant water in the boreholes and... use mosquito nets'* (man, Community E, South Gondar).

Lessons on the importance of balanced nutrition – given primarily to mothers of infants – have, over time, helped drive improvements in child and adolescent outcomes. Key informants reported that government efforts to improve parents' knowledge about diet and child feeding practices have been widespread: *'In the past, our community did not give much attention to food and a quality diet. In the past, food was eaten only to avoid starvation,'* explained a woreda-level health officer in East Hararghe. Now, according to an HEW in Community F (South Gondar), *'we educate mothers on how to prepare a balanced diet for their children from locally available crops and vegetables using the mother-to-mother group'.* Parents appear to have understood these messages, as a

We educate mothers on how to prepare a balanced diet for their children from locally available crops and vegetables using the mother-to-mother group.

(A HEW, Community F, South Gondar, Ethiopia)

father in Community K (East Hararghe) explained: *'We are taught by the government on the use of diverse food... and they (children) grow rapidly'*.

In terms of improving adolescent SRH outcomes, we found that efforts to prevent adolescent pregnancy begin, in some communities, not with improving access to contraception, but with communities' – and in some cases led by religious leaders – efforts to limit adolescent sexual activity. In East Hararghe, several adults reported that communities are beginning to crack down on shegoye and prevent adolescents from engaging in the early sexual activity that they report is driving child marriage and adolescent pregnancy. A man in Community K (East Hararghe) explained that shegoye is now prohibited, and a woreda-level key informant added that due to an *'awareness-creation activity done for the community'*, young people are no longer allowed to go *'to the forest to play music and dance'*.

In other communities in Oromia and Afar, local leaders and health care providers have been working with religious figures to build support for family planning. An HEW in Community I (East Hararghe), for example, explained that because imams (Islamic religious leaders) now see that *'families are able to feed their children after they started having space'*, there is *'to some extent'* a change in terms of supporting contraception as a birth-spacing mechanism (rather than in terms of curbing family size per se). Indeed, she added that some husbands have been listening carefully and *'advises her (the wife) to use family planning'*. However, overall this type of reframing has not benefited unmarried adolescents and seldom married adolescents who have pressure to produce a child quickly following marriage.



Strengthening school systems

In some areas, our qualitative work found that alongside puberty education, schools also provide girls with menstrual management products and private spaces in which to use them. Key informants reported that efforts are, however, uneven and reliant on project funding, as

supplies are often issued by NGOs such as Family Health International and Save the Children, which have limited budgets. Teachers in Aarf, for example, noted that their schools did not receive donations, whereas teachers in Amhara often reported that they had to ration the number of sanitary pads allocated to individual girls. In Community F (South Gondar), the girls' club leader noted that she was attempting to circumvent budget shortages by collecting money from members and non-members to buy rags and to teach girls how to make their own sanitary pads. In Batu (East Shewa), the girls' club leader similarly explained that: *'There are some girls that come from rural areas, they do not use pants/underwear. We have to provide them with pants and sanitary pads.'* The school also has a private room for girls *'to rest/sleep, water to wash and change sanitary pad or manage emergency menstruation'*.



Delivering adolescent-friendly services

Adolescents' improved access to and uptake of modern health care is driven almost entirely by the expansion of basic health care across the country and even into rural communities – though with the caveat that the extent to which these services are adolescent-friendly is variable. Noting that many adolescents reported delays in care-seeking, as families first try traditional and religious healing, adolescents in our qualitative work spoke of receiving treatment for relatively minor illnesses, such as communicable *'itching on my leg'* (10-year-old boy, Community D, South Gondar) and headaches (10-year-old girl, Community I, East Hararghe), as well as more complex conditions such as malaria and tuberculosis. Adults also mentioned the importance of vaccines, which are not only reducing childhood illnesses but also longer-term disability.

In terms of improving adolescent nutrition, school feeding could in principle help to fill an important gap in adolescent food security. In our research sites, however, it appears to have been limited in coverage and the food provided often often of poor quality. Adolescents in all three regions (though not all sites) mentioned porridge that is often over-salted, tastes *'not good'* (10-year-old girl, Community D, South Gondar), and is sometimes *'an obligation that we must eat'* (10-year-old boy, Community


It will be good if the government provides food at school.

(A younger adolescent boy, Community I, East Hararghe, Ethiopia)

A, Zone 5, Afar). Many also mentioned that such support is unpredictable: *'It stopped recently, two weeks ago'* (12-year-old girl, Community L, East Hararghe) and, when asked what the government should do to help ensure that adolescents had adequate nutrition, called for a return of school meals: *'It will be good if the government provides food at school'* (younger adolescent boy, Community I, East Hararghe).

Our research identified two other change strategies that appear to be improving adolescent nutrition. First, several respondents reported that NGOs such as CARE have provided both seeds (to improve agricultural yields) and nutritional supplements (to address micronutrient deficiency and severe malnutrition). Second (and as will be discussed in more detail in the companion report on economic empowerment), the PSNP has reduced household food insecurity; it has provided cash or food during the hunger season and improved agricultural productivity through the creation of irrigation systems that allow households to diversify what they can plant in South Gondar and East Hararghe, but not in pastoralist Zone 5 (Afar).

As the broader literature suggests, our research found that Ethiopia's health extension programme has been the largest driver of improvements in adolescents' – and adults' – knowledge about and access to contraception (though as noted earlier, TV plays a role in urban adolescents' knowledge about puberty). A key informant in Community F (South Gondar) reported that HEWs have used multi-pronged strategies to raise awareness about the benefits of contraception, especially for young wives. *'Health extension workers teach at church, through home-to-home visits, and in other traditional events and meetings. They use community 1:5 structures to communicate with women.'* An older adolescent boy in Debre Tabor (South Gondar) added that HEWs even come to school, to *'educate the students at the beginning of the academic year to protect them from unwanted pregnancy and early sexual relationships'*. In Community L (East Hararghe), an HEW explained that every few months she runs large contraception information sessions and also *'educates very young mothers separately during our school group meeting'*, so that younger mothers are better able to participate and understand the options they have for preventing a second pregnancy. HEWs have also helped in some communities – largely in Amhara – to improve people's knowledge about HIV, with the result that many young people, especially in Amhara and Batu (East Shewa), now take up testing before they are married.

 There are three health centres that provide youth-friendly reproductive health services. The health centres provide family planning services (short-term and long-acting methods), treatment of STIs, provision of safe abortion, and prenatal and postnatal care. There is also provision of HIV testing and other comprehensive medical health-care services for young people.

(A HEW, Debre Tabor, South Gondar, Ethiopia)

In urban areas, where many adults reported that adolescents engage in *'uncontrolled sexual relations'* (a maternal and child health official, Debre Tabor, South Gondar), Ethiopia has been rolling out a variety of 'youth-friendly' SRH services. These include not only the night-time clinics available in urban towns (including in Afar), which a Gender and Health Officer in Dire Dawa explained helps *'make them free from any kind of shame'*, but also adolescent-only clinics. An HEW in Debre Tabor (South Gondar) reported:

There are three health centres that provide youth-friendly reproductive health services. The health centres provide family planning services (short-term and long-acting methods), treatment of STIs, provision of safe abortion, and prenatal and postnatal care. There is also provision of HIV testing and other comprehensive medical health-care services for young people.

HEWs in Debre Tabor (South Gondar) are also providing home visits to girls who are harder to reach, offering *'family planning methods, for inaccessible or invisible groups of girls such as domestic servants and those who live in rented houses'*. In Oromia, where there are plans to scale up youth-friendly services from two to all five local clinics, a woreda-level health officer reported that the two clinics even have a NGO-supported 'tea and coffee programme' to make adolescents feel welcomed.

Policy and programming implications

Our mixed-methods research findings point to a number of priorities for policy, programming and practice.

- Strengthen health awareness and outreach services for adolescents:** While HEWs have made an important difference in improving communities' access to basic health care, continued efforts are needed to raise parental awareness about common ailments that require timely interventions (including ear and throat infections), alongside improvements in access to basic medications, which are often out of reach for communities furthest away from district towns. Adolescents could be accessed through school-based health clubs and through mobile vaccination clinics (including for HPV) that visit schools. There is also a need going forward to explore the extent to which the new community-based health insurance programme with subsidies for 'indigents' is reaching young people in the GAGE study communities.
 - Ensure that health awareness programmes and services are informed by an understanding of the specific gendered health risks and vulnerabilities that adolescents face,** including those of married and unmarried girls (e.g. access to menstrual hygiene products and services, male and female contraception, risks related to FGM/C and early child bearing) to be able to better support their rights to health and sexual and reproductive health, in particular.
 - Expand household and school-based nutritional support as a core pillar of social protection programming:** To prevent the longer-term damage that results from prolonged malnutrition, there is an immediate need to provide nutritional support to families in drought-affected areas. This should include expanding PSNP support in Afar in particular, as well as school feeding that reliably delivers free, quality (and where possible locally sourced) food to students in all food-insecure communities. Over time, we also recommend that nutrition education programmes address certain cultural beliefs about food and
- intergenerational food distribution that may impact children's nutrition.
 - Invest in puberty education and promote its social acceptance among adolescents, parents and communities:** Age-tailored puberty education classes that begin with younger children need to be provided in both school and community settings (to reach out-of-school adolescents e.g. through urban youth centres or youth associations in rural areas), alongside classes for parents (both mothers and fathers) that help them address children's questions and concerns (and ensure that their own knowledge is accurate), possibly by the emerging social worker cadre. To reduce menstruation-related harassment, girls and boys alike need accurate information about puberty and the changes it involves for both sexes. Given the powerful role that community and religious leaders play in shaping local gendered social norms, it is critical to secure parental and community buy-in to educating children about puberty in order to better prepare young people for the changes they will undergo and to link them to services that can support their healthy transition from childhood to adulthood.
 - Scale up accessible and affordable menstrual hygiene support:** Adolescent girls need access to sustainable and affordable menstrual hygiene products, as well as simple ways to help them track their menstrual cycle, and separate latrines, water supply and dedicated (private) spaces in schools so that girls can change sanitary products as needed during the course of the school day.
 - Expand access to and improve the quality of adolescent-friendly SRH services:** To reduce adolescents' exposure to pregnancy and STIs, efforts should take a multi-pronged approach that includes delaying sexual debut (to allow for cognitive and emotional maturity), improving availability of and acceptability of condoms and female contraceptives

(e.g. pills, IUDs), improving education and services (especially on HIV and other STIs), and reducing the social barriers (e.g. stigma, shame and restrictive gender norms) that reduce contraceptive – and especially condom – uptake. In addition to working directly with adolescent girls and boys, with teachers

in the provision of comprehensive sexuality education in schools and through health extension workers, it is essential to involve parents and also religious leaders to dismantle discriminatory gender norms, and focus on the health – and also economic – costs that inattention to adolescent SRH can incur.

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Annex 1: Policy implications

Health/ nutrition capability outcomes	HEALTH, NUTRITION AND SEXUAL AND REPRODUCTIVE HEALTH		
	SDG goals and targets	GoE policy goals	GAGE policy recommendations
Enhance adolescent health	<p>Goal 3: Good Health and Well-Being</p> <p>Target 3.3: End the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases</p> <p>Target 3.4: Reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.</p> <p>Target 3.5: Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.</p> <p>Target 3.8: Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all</p>	<ul style="list-style-type: none"> Expand primary health care service coverage from 98 percent in 2014/15 to 100 percent by 2019/20, ensuring universal coverage in primary health care. This would be achieved by improving access to quality health services and implementing preventive health policy and by strengthening implementation of nutrition program. Healthy environment. (GTP II, pp.190) Ensure equal access to medical service and immunization for children in rural and urban areas. (NCP, pp.16) Create favourable conditions for the construction and expansion of facilities of clean water, toilets and waste disposal in order to help children maintain their personal and environmental hygiene. (NCP, pp.17) Ensure orphanages, schools and other facilities that provide different social services to children have child-friendly playgrounds and recreational facilities. (NCP, pp.18) Help parents or guardians to have the necessary awareness on child rights and better parenting skills as well as family planning in order that they give the utmost care to children. (NCP, pp.16) Take measures to curb, control and eliminate harmful substances, shisha and khat selling places, illegal movie places, pornographic stalls and brothels, bars etc that affect children's proper development, in residential areas, schools and around other organizations providing services to children. (NCP, pp.20) Create an enabling environment for the protection of children from inadvertent exposure to harmful drugs, khat, alcohol, inhaling benzene and all sorts of addictions, as well as providing psycho-social support for those who have become victims. (NCP, pp.16) Creating an enabling environment for prevention and controlling of involvement of children in activities harmful to their physical and psychological development, such as armed conflict, drug production, trafficking and other similar illegal activities. (NCP, pp.19) Create favourable conditions for children who have become victims of natural and man-made disasters and children affected by recurrent droughts to get the necessary care, support and protection. (NCP, pp.19) Enhance awareness of the youth about reproductive health, communicable and non-communicable diseases and making health services more accessible to the youth—including pastoralist youth. (Youth Development Package, sections 3.3, 3.6) 	<ol style="list-style-type: none"> 1. Continue investing in in-person and mass-media health awareness programming for adolescents and parents that addresses prevention of illnesses common to local areas and encourages timely care-seeking. 2. Design and deliver campaigns to support adolescent awareness of the risks of substance use. 3. Step up provision of affordable medications—especially in rural areas. 4. Continue expanding HEW programming into emerging areas—going “door-to-door” where necessary. 5. Invest in awareness-raising messaging aimed at reducing the stigma that surrounds disability and chronic illness. 6. Continue developing a cadre of social workers able to coordinate care (medical, educational, psychosocial) for chronically ill and disabled children.

Health/ nutrition capability outcomes	HEALTH, NUTRITION AND SEXUAL AND REPRODUCTIVE HEALTH		
	SDG goals and targets	GoE policy goals	GAGE policy recommendations
Improve adolescent nutrition	<p>Goal 2: Zero hunger</p> <p>Target 2.1: End hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round</p> <p>Target 2.2: End all forms of malnutrition, including achieving by 2025 the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women, and older persons</p>	<ul style="list-style-type: none"> • Citizens by fulfilling their nutrition demand will be implemented with due consideration by the relevant stakeholders. In this regard, The national nutrition strategy which aims at producing healthy and productive special emphasis will be given to ensuring household food security, maternal and child care, render health services accessible and create healthy environment. (GTP II, pp.190) • Finalise and implement National School Feeding Strategy. (ESDP V, PP.114) • Sustain the productive safety net program in rural areas and to start urban productive safety net program to benefit low income people in urban areas. (GTP 2, pp. 113) • Increase the number of productive safety net program beneficiaries from 3.4 million in 2014/15 to 8.3 million; increase the number of male and female headed households who graduate from safety net program from 49,199 in 2014/15 to 1,000,223 or 5,001,116 graduates; increase the number of chronically food insecure household heads (male and female) who are able to build assets through household based credit package services from 161,698 in 2014/15 to 628,850. (GTO2, pp.126) • Investigate options to supply educational materials, school feeding and financial support for children from poor and low income family backgrounds. (ESDP V pp.114) • Implement the Sequota declaration of ending child under nutrition. (HSTP, pp.102) • Providing the necessary services for pregnant women so that children get adequate nutrition and medical attention and develop immunity beginning from the prenatal stage. (NCP, pp.16) • Taking the necessary measures to ensure nutritional adequacy for the healthy mental and physical growth of children. (NCP, pp.16) • Create favourable conditions for children who have become victims of natural and man-made disasters and children affected by recurrent droughts to get the necessary care, support and protection. (NCP, pp.19) • Help parents or guardians to have the necessary awareness on child rights and better parenting skills as well as family planning in order that they give the utmost care to children. (NCP, pp.16) 	<ol style="list-style-type: none"> 1. Expand the PNSP to all drought-affected areas—including emerging regions such as Afar– and ensure that the support provided to the poorest families is adequate to meet basic nutritional needs. 2. Ensure that school feeding is available in all drought affected areas—working to ensure that the food that is provided contains the nutrients that children are most likely to lack in particular areas given local diets. 3. Step up nutrition education programming for adolescents and adults—so that parents (and future parents) understand the importance of the first 1,000 days (and the links to mothers' nutrition). Over time, address age-based and gendered intra-household food allocation and age- and gender-related food taboos (especially during pregnancy and post-partum).

Health/ nutrition capability outcomes	HEALTH, NUTRITION AND SEXUAL AND REPRODUCTIVE HEALTH		
	SDG goals and targets	GoE policy goals	GAGE policy recommendations
Expand puberty education		<ul style="list-style-type: none"> • Support school conversation programmes on comprehensive sexuality education. (ESDP, pp. 27) • Revise the curriculum to address the needs of both males and females for life skills to increase awareness of issues such as HIV/AIDS, sexual education and DSA, and help all students to leads safe and healthy lives (ESDP, pp. 64) • Mobilize the public to give due attention to children's issues through the celebration of different child-related events and through child-focused programmes. (NCP, pp.22) • Help parents or guardians to have the necessary awareness on child rights and better parenting skills as well as family planning in order that they give the utmost care to children. (NCP, pp.16) • Provide friendly sexual health services which is not limited to reproductive health and family planning (ADaP, pp, 32) 	<ol style="list-style-type: none"> 1. Provide iterative puberty education for adolescents, beginning no later than 10 years, that covers both male and female puberty, and is available in both school-based and non-school based venues. This education must directly address taboos and stigma about menstruation. 2. Provide programming for parents of adolescents (at school through Parent/Teacher/Student committees, through HEWs, social workers or through 1:5's), to address parental mis-understandings, and position- and encourage and support- parents to be able to answer their children's questions. This education must directly address taboos and stigma about menstruation.
Strengthen menstrual management	<p>Goal 6: Clean water and sanitation</p> <p>Target 6.2: Achieve adequate and equitable sanitation and hygiene for all, ending open defecation and paying special attention to the needs of women and girls and people in vulnerable situations</p>	<ul style="list-style-type: none"> • Create favourable conditions for the construction and expansion of facilities of clean water, toilets and waste disposal in order to help children maintain their personal and environmental hygiene. (NCP, pp.17) 	<ol style="list-style-type: none"> 1. Provide girls with menstrual hygiene-related supplies (and where possible invest in free provision of reusable sanitary pads through schools). 2. Girls need access to WASH facilities at school, including water, toilets, and changing rooms. 3. Girls need simple products that help them track their cycles so they can better manage menstruation (and eventually prevent pregnancy) (e.g. pocket calendars or CycleBeads).

Health/ nutrition capability outcomes	HEALTH, NUTRITION AND SEXUAL AND REPRODUCTIVE HEALTH		
	SDG goals and targets	GoE policy goals	GAGE policy recommendations
Improve adolescent sexual and reproductive health	<p>Goal 3: Good Health and Well-Being</p> <p>Target 3.1: Reduce the global maternal mortality ratio to less than 70 per 100,000 live births.</p> <p>Target 3.7: Ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes</p> <p>Goal 5: Gender Equality</p> <p>Target 5.6: Ensure universal access to sexual and reproductive health as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences</p>	<ul style="list-style-type: none"> • Create awareness on restrictions of entertainment and media outputs that are prohibited for children under the age of 18. (NCP, pp.18) • Ensure that contents of media programmes give due attention to children's well-being and take precautions not to involve children in films, advertisements and other art-related engagements that have negative impact on their overall development. (NCP, pp.23) • Create favourable conditions for children to have awareness, access to information, counselling and related services on reproductive health. (NCP, pp.17) • Provide friendly sexual health services which is not limited to reproductive health and family planning (ADaP, pp. 32) • Ensure and encourage print and electronic media to incorporate issues that help children achieve full personal, social and cultural development. (NCP, pp.18) • Reduce adolescent/teen age pregnancy rate from 12% to 3%. (HSTP, pp.100) • Support school conversation programmes on comprehensive sexuality education. (ESDP, pp. 27) • Revise the curriculum to address the needs of both males and females for life skills to increase awareness of issues such as HIV/AIDS, sexual education and DSA, and help all students to leads safe and healthy lives (ESDP, pp. 64) • Universal access to Family Planning information and services. (HSTP, pp.102). • Recognize the diverse needs and vulnerabilities of adolescents and youth in Ethiopia and calls for tailored approach to services provision to those aged 10-14, 15-19 and 20-24 years of age (FMOH 2006 as cited in ADap, pp.20). • Deliver a minimum package of adolescent and youth sexual and reproductive health services to standardize service provision and quality at different levels and by different actors (FMOH 2008 as cited in ADap, pp.20). • Increase contraceptive prevalence rate from 42 percent in 2014/15 to 55 percent by 2019/20. (GTP II, pp.190) (HSTP, pp.100). • Reduce unmet need for family planning from 24% to 10%. (HSTP, pp.100). • Help parents or guardians to have the necessary awareness on child rights and better parenting skills as well as family planning in order that they give the utmost care to children. (NCP, pp.16) • Reduce maternal mortality rate (MMR) from 420/100,000 live births in 2014/15 to 199/100,000 live births by 2019/20. (GTP II, pp.190) 	<ol style="list-style-type: none"> 1. Provide iterative, age-appropriate, comprehensive CSE that covers reproductive biology, contraception, STD prevention, gender power relations, and communication. 2. Invest in stepped up awareness raising about the importance of delayed pregnancy—including delayed sexual debut and contraception—for girls, husbands, and adults (parents and parents'-in-law). 3. Continue messaging about birth spacing and family size—using messages and messengers tailored to local needs. 4. Invest in stepped-up awareness raising about STDs, including renewed attention to HIV/AIDs—targeting prevention, testing, and ARV uptake. 5. Invest in improved access to contraception (esp in remote areas and for home-bound girls and women), and including extended opening hours. 6. Provide consistent access to free condoms in public spaces in both urban and rural areas—making sure to include both health clinics as well as venues such as bars and hotels. 7. Scale up adolescent friendly SRH services—paying attention to hours (include evenings), location (to facilitate confidentiality), staffing (e.g. non-judgemental), and supply availability (information and contraception). Consider mobile clinics or school-based clinics.

Health/ nutrition capability outcomes	HEALTH, NUTRITION AND SEXUAL AND REPRODUCTIVE HEALTH		
	SDG goals and targets	GoE policy goals	GAGE policy recommendations
Improve adolescent sexual and reproductive health		<ul style="list-style-type: none"> • Increase deliveries attended by skilled health personnel from 60.7 percent in 2014/15 to 90 percent by 2019/20. healthy environment. (GTP II, pp.190) • Reduce prevalence of obstetric fistula to less than 1% of all obstructed labour. (HSTP, pp.101) • Increase deliveries attended by skilled health personnel from 60.7 percent in 2014/15 to 90 percent by 2019/20. healthy environment. (GTP II, pp.190) • Providing the necessary services for pregnant women so that children get adequate nutrition and medical attention and develop immunity beginning from the prenatal stage. (NCP, pp.16) • Reduce new HIV infections among young people (15-24) by 50% in 2014 (FHAPCO, 2009 as cited in ADaP, pp.20). • Intensify targeted HIV Prevention focusing on youth and Most at Risk Populations. (HSTP, pp.102) • Increasing health services to curb mother-to-child transmission of HIV/AIDS. (NCP, pp.16) • Ensure children living with HIV/AIDS have access to Anti-Retroviral Treatment (ART) and the necessary care and support to protect them from being exposed to health problems and psychological trauma (NCP, pp.17) • Enhance awareness of the youth about reproductive health, communicable and non-communicable diseases and making health services more accessible to the youth—including pastoralist youth. (Youth Development Package, sections 3.3, 3.6) 	

Annex 2: Quantitative data baseline results

Annex Table 1: Health, Nutrition, SRH (Young Cohort), Gender and Disability

	Overall				Gender				Disability Status			
	Sample Size	Mean	Min	Max	Male	Female	% Diff (F-M)	No Disability	Disability	% Diff (D-NoD)		
					Mean	Mean						
=1 if Self-Reported Health Is (Very) Good	5612	88%	0	1	88%	87%	-1%		89%	44%	-51%	X
=1 if Experienced One of 14 Common Health Symptoms in Past Four Weeks	5607	51%	0	1	51%	52%	2%		51%	70%	38%	X
=1 if Had a Serious Illness or Injury in Past 12 Months	5602	16%	0	1	16%	16%	2%		16%	33%	112%	X
=1 if Sought Treatment for Symptom (Past 4 Weeks) or Illness/Injury (Past 12 Months)	3123	32%	0	1	33%	31%	-7%		32%	39%	22%	
Household FAO Food Insecurity Experience Scale (0-8, higher is more insecurity)	5588	3.50	0	8	3.41	3.60	5%	X	3.48	3.94	13%	X
=1 if HH cut back quantities of food served to boys in HH in last 12 months	4948	26%	0	1	24%	28%	19%	X	26%	26%	4%	
=1 if HH cut back quantities of food served to girls in HH in last 12 months	5020	27%	0	1	24%	29%	22%	X	27%	25%	-5%	
Height for age z-score	5484	-0.80	-5	4.61	-0.69	-0.92	33%	X	-0.79	-1.28	63%	X
BMI for age z-score	5484	-1.15	-4.69	3.31	-1.17	-1.14	-3%		-1.15	-1.20	4%	
=1 if Had a Source of Information About Puberty	5244	52%	0	1	53%	51%	-4%		52%	44%	-15%	O
=1 if Normal Activities are Affected During Menstruation	65	26%	0	1	--	26%	--		25%	0%	-100%	X
=1 if Can Correctly Name a Method of Birth Control	5581	25%	0	1	23%	27%	14%	X	25%	14%	-47%	X
SRH Attitudes and Norms	5479	2.74	0	4	2.77	2.71	-2%	O	2.74	2.83	4%	

Notes: This table summarizes information from GAGE baseline data collection in Ethiopia (2017-2018). Means are weighted to make results representative of the study areas. Differences between subgroups that are statistically significant at $p < 0.05$ are denoted with an X, while those that are statistically significant at $p < 0.10$ are denoted with an O. Disability is A15 defined using questions from the Washington Group and includes difficulty in six core functional domains (seeing, hearing, walking, self-care, cognition, and communication). The common health symptoms asked about include: fever, persistent headaches, persistent cough, runny nose, difficulty breathing, difficulty swallowing / throat pain, difficulty seeing or other eye complaint, stomach pain / nausea / vomiting, diarrhea at least 3 times in one day, blood in stool, skin complaint such as rash / irritation / open sores, always feeling tired, constipation, and convulsions / seizures. The indicator for sought treatment for a symptom or illness is calculated only among those who reported a symptom or illness in the appropriate time period. The indicator for cutting back on quantities of food served to boys (girls) in the household is compared to usual quantities served, and is only available for households with at least one boy (girl) under age 20. The attitudes and norms index is a sum across several attitudes and norms statements, where for each statement respondents were assigned a '1' if they agreed or partially agreed and a '0' if they disagreed (in cases where agreement suggested a gendered response), and the reverse if agreement suggested a non-gendered response. Thus, higher values of the index indicator more gendered attitudes and norms.

Annex Table 2: Health, Nutrition, SRH (Young Cohort), Location

	Overall		Urban/Rural				Rural Location				Urban Location			
	Sample Size	Mean	Urban Mean	Rural Mean	% Diff (R-U)		South Gondar	East Hararghe	Afar	Sig Dif?	Debre Tabor	Dire Dawa	% Diff (DD-DT)	
							Mean				Mean			
=1 if Self-Reported Health Is (Very) Good	5612	88%	91%	87%	-4%	X	82%	92%	89%	X	85%	96%	12%	X
=1 if Experienced One of 14 Common Health Symptoms in Past Four Weeks	5607	51%	58%	50%	-12%	X	56%	47%	43%	X	62%	54%	-14%	O
=1 if Had a Serious Illness or Injury in Past 12 Months	5602	16%	23%	15%	-34%	X	15%	18%	5%	X	23%	24%	4%	
=1 if Sought Treatment for Symptom (Past 4 Weeks) or Illness/ Injury (Past 12 Months)	3123	32%	41%	31%	-25%	X	26%	38%	21%	X	32%	49%	52%	X
Household FAO Food Insecurity Experience Scale (0-8, higher is more insecurity)	5588	3.50	2.10	3.66	74%	X	3.00	4.70	1.41	X	1.86	2.31	24%	O
=1 if HH cut back quantities of food served to boys in HH in last 12 months	4948	26%	13%	27%	103%	X	22%	32%	19%	X	11%	15%	33%	
=1 if HH cut back quantities of food served to girls in HH in last 12 months	5020	27%	13%	28%	110%	X	24%	33%	19%	X	12%	14%	18%	
Height for age z-score	5484	-0.80	-0.47	-0.84	77%	X	-1.23	-0.34	-1.48	X	-0.88	-0.13	-85%	X
BMI for age z-score	5484	-1.15	-0.62	-1.21	95%	X	-1.37	-0.98	-1.63	X	-0.76	-0.51	-32%	X
=1 if Had a Source of Information About Puberty	5244	52%	64%	50%	-22%	X	45%	52%	65%	X	60%	68%	13%	O
=1 if Normal Activities are Affected During Menstruation	65	26%	35%	22%	-38%		23%	22%	--	X	31%	36%	16%	
=1 if Can Correctly Name a Method of Birth Control	5581	25%	31%	24%	-20%	X	40%	14%	7%	X	37%	25%	-31%	X
SRH Attitudes and Norms	5479	2.74	2.73	2.74	0%		2.64	2.75	3.14	X	2.66	2.79	5%	

See note in table 1

Annex Table 3: Health, Nutrition, SRH (Old Cohort), Urban Only

	Overall				Gender				Disability Status				Urban Location			
	Sample Size	Mean	Min	Max	Male	Female	% Diff (F-M)		No Disability	Disability	% Diff (D-NoD)		Debre Tabor	Dire Dawa	Adami Tulu/Batu	Sig Dif?
					Mean				Mean				Mean			
=1 if Self-Reported Health Is (Very) Good	1333	85%	0	1	88%	83%	-5%	X	87%	46%	-47%	X	81%	91%	85%	X
=1 if Experienced One of 14 Common Health Symptoms in Past Four Weeks	1333	61%	0	1	56%	65%	16%	X	61%	72%	18%	O	59%	54%	67%	X
=1 if Had a Serious Illness or Injury in Past 12 Months	1333	23%	0	1	22%	23%	1%		22%	35%	58%	O	21%	24%	22%	
=1 if Sought Treatment for Symptom (Past 4 Weeks) or Illness/Injury (Past 12 Months)	870	42%	0	1	45%	40%	-11%		41%	46%	11%		36%	51%	40%	X
Household FAO Food Insecurity Experience Scale (0-8, higher is more insecurity)	1327	2.59	0	8	2.79	2.44	-13%	O	2.55	3.53	38%	X	1.82	2.47	3.13	X
=1 if HH cut back quantities of food served to boys in HH in last 12 months	1031	16%	0	1	17%	14%	-18%		15%	22%	40%		14%	18%	15%	
=1 if HH cut back quantities of food served to girls in HH in last 12 months	1060	14%	0	1	15%	14%	-10%		14%	17%	22%		13%	20%	12%	O
Height for age z-score	1313	-0.87	-4.88	2.49	-0.88	-0.86	-3%		-0.86	-1.14	33%	X	-1.04	-0.80	-0.81	X
BMI for age z-score	1313	-0.64	-4.43	2.75	-1.12	-0.30	-73%	X	-0.64	-0.71	11%		-0.63	-0.59	-0.69	
=1 if Had a Source of Information About Puberty	1326	94%	0	1	95%	94%	-1%		95%	81%	-15%	X	93%	94%	96%	
=1 if Normal Activities are Affected During Menstruation	641	31%	0	1	--	31%	--		30%	54%	81%	X	28%	43%	25%	X
=1 if Can Correctly Name a Method of Birth Control	1330	85%	0	1	86%	85%	-2%		86%	71%	-17%	X	86%	80%	88%	X
=1 if Ever Been Pregnant (older cohort females only)	671	1%	0	1	--	1%	--		1%	2%	166%		1%	1%	0%	
SRH Attitudes and Norms	1324	2.93	0	4	2.96	2.91	-1%		2.93	2.86	-3%		2.79	2.89	3.04	X

See note in table 1

Annex Table 4: Health, Nutrition, SRH (Old Cohort vs. Young Cohort), Urban Only (Debre Tabor and Dire Dawa Only)

	Overall				Age				Gender							
	Sample Size	Mean	Min	Max	Old	Young	% Diff (Y-O)		Old Males	Old Females	% Diff (OF-OM)		Young Males	Young Females	% Diff (YF-YM)	
=1 if Self-Reported Health Is (Very) Good	1721	88%	0	1	86%	91%	5%	X	88%	85%	-3%		92%	89%	-4%	X
=1 if Experienced One of 14 Common Health Symptoms in Past Four Weeks	1721	57%	0	1	57%	58%	2%		51%	61%	18%	X	53%	62%	18%	X
=1 if Had a Serious Illness or Injury in Past 12 Months	1718	23%	0	1	23%	23%	2%		21%	24%	17%		24%	23%	-3%	
=1 if Sought Treatment for Symptom (Past 4 Weeks) or Illness/Injury (Past 12 Months)	1095	42%	0	1	43%	41%	-5%		45%	42%	-5%		49%	34%	-30%	X
Household FAO Food Insecurity Experience Scale (0-8, higher is more insecurity)	1708	2.12	0	8	2.15	2.10	-2%		2.27	2.06	-9%		2.19	2.01	-8%	
=1 if HH cut back quantities of food served to boys in HH in last 12 months	1326	15%	0	1	16%	13%	-17%		16%	15%	-6%		12%	15%	24%	
=1 if HH cut back quantities of food served to girls in HH in last 12 months	1365	15%	0	1	16%	13%	-18%		17%	16%	-4%		11%	15%	31%	
Height for age z-score	1693	-0.69	-5	3.50	-0.92	-0.47	-48%	X	-0.91	-0.93	2%		-0.41	-0.54	34%	
BMI for age z-score	1693	-0.62	-4.36	3.31	-0.61	-0.62	3%		-1.06	-0.28	-73%	X	-0.68	-0.57	-17%	
=1 if Had a Source of Information About Puberty	1657	79%	0	1	94%	64%	-31%	X	95%	92%	-3%		69%	60%	-14%	C
=1 if Normal Activities are Affected During Menstruation	435	36%	0	1	36%	35%	-2%		--	36%	--	X	--	35%	--	
=1 if Can Correctly Name a Method of Birth Control	1712	57%	0	1	83%	31%	-63%	X	83%	83%	0%		32%	29%	-8%	
=1 if Ever Been Pregnant (older cohort females only)	438	1%	0	1	1%	--	--		--	1%	--		--	--	--	
SRH Attitudes and Norms	1705	2.78	0	4	2.84	2.73	-4%	X	2.89	2.80	-3%		2.69	2.77	3%	

See note in table 1

Annex 3: GAGE Ethiopia research sites

Annex Table 5: Urban and rural sites

Regional State	Zone	Urban sites	Rural districts (woredas)				
		10-12 year old cohort	10-12 year old cohort	Communities (kebeles) in-depth sites		Communities (kebeles) light-touch sites	
		15-17 year old cohort		Close to district town	Remote	Close to district town	Remote
Afar ¹	Zone 5		Dalifage Dewe Hadelela Semurobi Telalak	A	B		
Amhara ²	South Gondar		Ebenat Lay Gayint Libo Kemkem Simada Tach Gayint Debre Tabor (zonal town)	C	D	E	F G
Dire Dawa City Administration		Dire Dawa (one of Ethiopia's largest cities)					
Oromia ³	East Hararghe		Babile Fedis Gursum Haramaya Jarso Adami Tulu Jido Kombulcha	H	I	J	K L
	East Shewa	Batu (district town)					

¹ An 'emerging' region which is largely pastoralist (nomadic and agro pastoralist); Afar ethnic group represents estimated 1.7% population. Note the quality of the data for Afar on age of marriage is believed to be problematic, in part at least due to limited numeracy among respondents.

² Amhara ethnic group represents estimated 27% of population

³ Oromo ethnic group represents estimated 34% of the population

Bold = sites where qualitative research was carried out.

Annex Table 6: GAGE research sites by economic and social vulnerability criteria

Regional State	Zone	Urban sites	Rural districts (woredas)	Food security hotspot ranking ⁴ (July 2016)	Child marriage for girls 10-14 ⁵	CM for girls 15-17 ⁶
		10-12 year old cohort 15-17 year old cohort	10-12 year old cohort			
Afar	Zone 5		Dalifage	1	4.3%	6.3%
			Dewe	1	7.9%	7.7%
			Hadelela	1	2.3%	4%
			Semurobi		3.6%	5.5%
			Telalak	1	6.7%	10.4%
Amhara	South Gondar				1.9%	5.2%
			Ebenat	1	9.8%	29.4%
			Lay Gayint	1	12.7%	36.9%
			Libo Kemkem	n/a	7.1%	25.4%
			Simada	1	10.3%	32%
			Tach Gayint	1	11.6%	33.8%
		Debre Tabor		n/a	7.1%	25.3%
Dire Dawa City Administration		Dire Dawa			8.9%	8.7%
Oromia	East Hararghe			1	12.6%	14.8%
			Babile	1	15.2%	32.3%
			Fedis	1	18.7%	41.7%
			Gursum	1	21.9%	53.1%
			Haramaya	1	15.1%	28.3%
			Jarso	1	21.6%	38.3%
	East Shewa	Batu	Adami Tulu Jido Kombulcha	1	15.1%	23.3%
					10.3%	14.7%

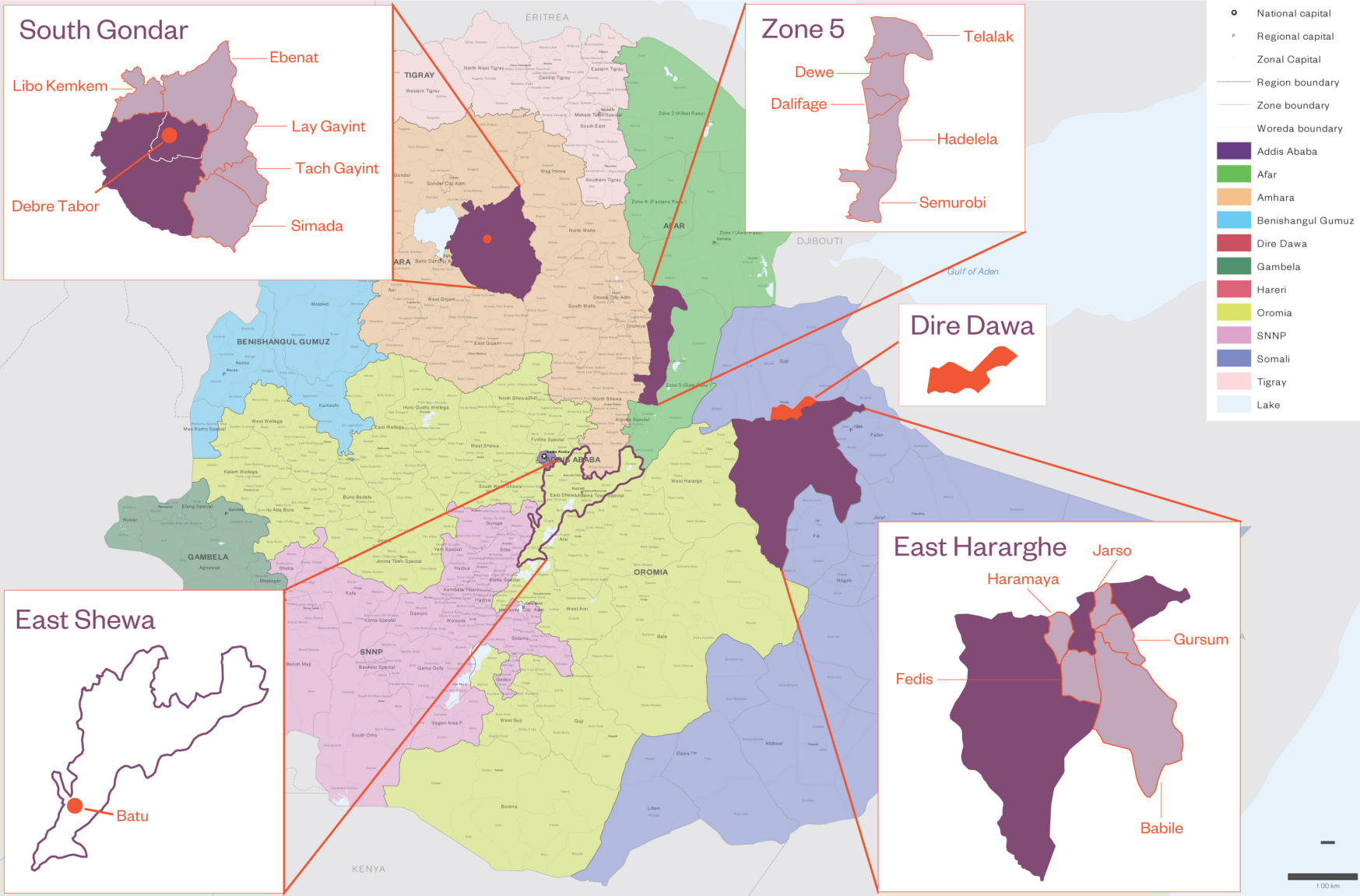
⁴ 434 woredas graded across multiple domains and then collapsed into a ranking 1–3 in terms of food (in)security – 1 is highest level of food insecurity (<https://data.world/ocha-ethiopia/76029294-3cbc-4bd0-8786-adcdb6475886>).

⁵ As reported by the 2007 census

⁶ As reported by the 2007 census

Bold = sites where qualitative research was carried out.

Figure 5: GAGE Ethiopia research sites broken down by region and woreda



Source: Based on the OCHA/ReliefWeb administrative map of Ethiopia (August 2017) and modified to show the GAGE research sites

Annex 4: Research ethics, sample and methods

The information below supplements the methodology section in the main text.

Research ethics

The key principles underpinning GAGE's approach to research ethics are as follows: (1) avoiding harm and protecting the rights of individuals and groups with whom we interact; (2) ensuring that participation in research and evaluation is voluntary and based on fully informed consent for adults and informed assent for adolescents 17 years ; (3) assuring the confidentiality of any information provided; and (4) having clear referral mechanisms in place for any adolescents identified by researchers as being at risk. Operationally, the Overseas Development Institute's Research Ethics Committee is the UK 'Institutional Review Board [IRB] of record' and George Washington University is the US 'IRB of record'. For Ethiopia, the study design was approved by the George Washington University Committee on Human Research, Institutional Review Board (071721), the ODI Research Ethics Committee (02438), the Ethiopian Development Research Institute (EDRI/DP/00689/10), and the Addis Ababa University College of Health Sciences Institutional Review Board (113/17/Ext). In addition, for the qualitative research we secured approval from regional government ethics committees in Afar, Amhara and Oromia Regional States.

Community level sampling approach

In the case of the qualitative research, which involved a sub-sample of the quantitative research sites, we selected one rural district from each region, one remote and one proximate community for in-depth exploration, as well as three other sites where we undertook more light-touch data collection, (i.e. focus group discussions with community members and adolescents, and a limited number of individual interviews with adolescents), to gain some insights about communities that will, over time, see the implementation of distinct components of Act with Her's multi-arm programme design. Finally, although most of the qualitative research sample was selected from the randomised quantitative sample lists to achieve a balance of adolescents of different ages (10, 11, 12, etc.) and gender

of the household head (approximately 20% were from female-headed households, which is approximately in line with the national average, 74% were male, and 6% were child-headed households), we also purposely selected especially disadvantaged adolescents.

Quantitative methodology

Data collection and research instruments

The baseline quantitative data collection activity was conducted by experienced survey enumerators with local language skills hired by the Ethiopian Development Research Institute (EDRI). In addition to the sampling at regional, zonal and district level described above, to select communities or kebeles, we adopted a 'leave no one behind lens' in line with the Sustainable Development Goals 2030 agenda and categorised kebeles in all selected districts according to their level of geographic remoteness: (1) close to a town so having better access to infrastructure and services; (2) middling access; and (3) remote communities. In the absence of online data at the federal level, we determined this through key informant interviews during scoping visits prior to fieldwork.

To generate the GAGE quantitative research sample, a door-to-door listing activity was undertaken in all urban and rural research sites, following a specific protocol to ensure that the sample was consistently drawn across sites and to minimise the risk of overlooking particularly disadvantaged adolescents (e.g. those not enrolled in school, married adolescents and adolescents with disabilities). The listing activity identified adolescents aged 10–12 and 15–17 (urban sites only) living in the research sites, and the GAGE quantitative research sample was drawn randomly from this population. With assistance from and in collaboration with the qualitative research team, the EDRI survey enumerators also identified other marginalised adolescents in the community, and included them in the research sample as purposely selected respondents.

Once the GAGE quantitative research sample had been identified, EDRI survey enumerators administered face-to-face surveys covering all six GAGE to selected adolescents (the core respondent module) and their adult female caregivers (the adult female module), as well as adult male

caregivers (the adult male module) in a representative subset of households. Female researchers interviewed female adolescents, and male researchers interviewed male adolescents so that young people were able to talk more freely, especially about more sensitive issues such as relationships, puberty, sexual and reproductive health, attitudes, violence, and harmful traditional practices. Enumerators were trained extensively in the wording of the questions, as well as how to appropriately interact with adolescents. Additional interviews were conducted with key community respondents (such as kebele officials, school administrators, and health centre staff) in order to collect additional information on the research sites (the community questionnaire). This process resulted in 6,752 surveys in Ethiopia.

Data analysis

Analysis of the quantitative survey data has focused on a set of indicators from each of the six capability areas identified by GAGE as pivotal for adolescents. Results are explored overall as well as across gender, age, geographic region, and disability status. The analysis uses sample weights that reflect the probability of being included in the study sample.

Qualitative methodology

Data collection and research instruments

The qualitative data collection was undertaken by a team of researchers with local language skills in each region; where local researchers were less experienced, more experienced researchers paired up with local language speakers. As with the quantitative data collection, female researchers interviewed female adolescents, male researchers interviewed male adolescents. We sampled a total of 240 nodal adolescents (approximately 15 per six main urban sites and 20 adolescents per six main rural sites, and the remainder in additional impact evaluation

programming sites) with the aim of reaching saturation.¹ The qualitative research team worked closely with local community facilitators to identify key informants and focus group respondents. This facilitated access as well as trust in the research process.

The nodal adolescent respondents were selected predominantly from the quantitative community lists described above, but purposive efforts were made to identify more adolescents with disabilities (approximately 15% of our sample), those who had been married as children (approximately 15% of our female sample) or out-of-school adolescents in communities where the random list did not yield adequate numbers of adolescents.

In terms of research instruments, we drew on interactive tools aimed at starting our conversation with the nodal adolescents by focusing on things they prioritise or deem meaningful in their lives. We also explored the services they access in their communities, and their family and social networks. Table 1 provides an overview of the tools and their purpose.

Data analysis

The data analysis process has followed multiple steps. Preliminary analysis took place during both daily and site-wide debriefings with the team where we explored emerging findings and probed any surprising findings or emerging patterns during the fieldwork process. This also helped to inform the development of the thematic code book.

Following data collection, all interviews were transcribed and translated by native speakers of the local language, and then coded using the qualitative software analysis package MAXQDA. The code book we developed was shaped around the GAGE 3 Cs conceptual framework (capabilities, contexts and change strategies) but given the breadth of the framework, still allowed for local specificities to be incorporated.

¹ Guest et al., 2006 suggests that six individuals of any one social group is typically enough to reach research saturation in a given community i.e. after which additional insights generated are increasingly limited. We used this heuristic in our sampling in each site, then added additional especially disadvantaged adolescents to make up our total sample size.

Annex Table 7: GAGE Ethiopia baseline qualitative research nodal sample

Nodal sample												
		Early adolescents (age 10-14)		Older adolescents (age 15-19)		Siblings		Caregiver		Grandparents		Sample total adolescent
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Location	Urban	16	18	27	30	7	10	29	39	0	2	91
	Rural	45	74	1	1	12	19	36	54	2	18	121
	Pastoralist	15	17	1	3	8	6	17	20	0	0	36
Sub-total		76	109	29	34	27	35	82	113	2	20	248
With a disability		9	10	9	9	(1)	(0)	(1)	(0)	(0)	(1)	37
Adolescent Household status	Male headed household	59	88	12	18							177
	Female headed household	12	20	8	6							46
	Child headed household	3	1	5	5							14
Sub-total		74	109	25	29							237
Marital status	Married	0	6	0	9	(3)	(7)	(76)	(80)	(2)	(7)	15
	Divorced	0	4	0	2	(0)	(2)	(1)	(20)	(0)	(2)	6
	Widowed	0	0	0	1	(0)	(0)	(1)	(12)	(0)	(10)	1
Sub-total		0	10	0	12	(3)	(9)	(78)	(112)	(2)	(19)	22

Annex Table 8: GAGE Ethiopia baseline instruments disaggregated by individual and group-based activities

Individual instruments		Girls	Boys	Parents	Community Leaders	Service providers
A few of my favourite things	To use objects that are meaningful in an individual adolescent's life as an entry point to explore his or her perceptions and experiences across the six GAGE capability domains	140	100			
Social support network quadrant	To systematically explore who adolescents are able to turn to within their families and social networks for support and advice and why, as well as who they tend to avoid spending time with and why					
Worries exercise	To understand what are the predominant concerns in adolescents' lives and how they cope/ the extent to which they are able to be resilient in the face of these concerns					
Parents' life histories	To understand the life trajectories of parents of nodal adolescents and the ways in which these have shaped their approach towards and experience of parenting an adolescent			200		
Key informant interviews	To explore regional/woreda/kebele government officials', community leaders' and service providers' understandings of adolescent vulnerabilities and needs, and the extent to which existent programming is addressing these					160
Group instruments	Objective	Girls	Boys	Parents	Community Leaders	Service providers
Social norm mapping discussions with parents	To explore norms and practices related to more culturally sensitive adolescent-related issues, including migration, sexual and reproductive health, and disability			16 groups (128)		
Community timelines	To establish a timeline of the village/town/city in order to situate the individual findings				14 groups (112)	
Body mapping	To explore with younger adolescents norms and attitudes that shape adolescent transitions	9 groups (72)	9 groups (72)			
Community mapping	To understand adolescents' access to mobility and safe spaces, in their communities and beyond, including following migration	15 groups (120)	15 groups (120)			
Vignettes exercises	To explore more culturally sensitive age- and gender-related norms, including migration, disability, SRH	10 groups (80)	10 groups (80)	15 groups (120)		
Total		784 adolescents			720 adults	



GAGE Programme Office
Overseas Development Institute
203 Blackfriars Road
London SE1 8NJ
United Kingdom
Email: gage@odi.org.uk
Web: www.gage.odi.org

About GAGE

Gender and Adolescence: Global Evidence (GAGE) is a nine-year longitudinal research programme generating evidence on what works to transform the lives of adolescent girls in the Global South. Visit www.gage.odi.org.uk for more information.

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