



## Adolescent health, nutrition, and sexual and reproductive health in Chittagong, Bangladesh

Policy and programming implications from the GAGE baseline findings<sup>1</sup>

Authors: Khadija Mitu, Muhammed Ala Uddin, Laura Camfield and Jennifer Muz

### Introduction

Bangladesh has experienced major advances in terms of increasing immunisation rates and reducing the rates of under-nutrition, infant and under-five mortality, maternal mortality and communicable diseases. It now aims to achieve universal health coverage by 2032 (World Bank, 2018). Provision of antenatal care by medically trained providers almost doubled between 1999–2000 and 2014, and deliveries in healthcare facilities rose from 8% to 37% during the same period. The government, in conjunction with other agencies, has implemented an effective Family Planning Programme associated with a decline in the total fertility rate from 6.3 births per woman in 1975 to 2.3 in 2014 (ibid.).

The latest Multiple Indicator Cluster Survey (MICS) (2012–2013) reports an adolescent fertility rate of 83 births per 1,000 adolescents, with lower rates in urban areas (76 per 1,000). Fertility is higher in Chittagong but declining. Between the 2011 Bangladesh Demographic Health Survey (BDHS) and the 2014 BDHS, the total fertility rate in Chittagong declined from 2.8 to 2.5 births per woman (NIPORT et al., 2016). Gradual improvements of basic health and nutrition services have also contributed to substantial reductions in under-five mortality – from 94 deaths per 1,000 live births in 1999–2000 to 46 per 1,000 in 2014 (ibid.). Despite this progress, maternal and neonatal mortality is still relatively high (WHO et al., 2016). The maternal mortality ratio for those aged 10–14 is the highest of all age groups (Rahman et al., 2012).

This brief draws on evidence from GAGE (Gender and Adolescence: Global Evidence) – a unique longitudinal mixed-methods research and impact evaluation study focused on what works to support the development of adolescents' capabilities during the second decade of life (10–19 years) (GAGE Consortium, 2019 forthcoming).

### Research methodology

GAGE employs a mixed-methods research approach in order to explore its research questions. In Chittagong, the quantitative sample focused primarily on in-school adolescents in Grade 6, making the sample almost entirely adolescents

<sup>1</sup> Suggested citation: Mitu, K., Ala Uddin, M., Camfield, L. and Muz, J. (2019) 'Adolescent health, nutrition, and sexual and reproductive health in Dhaka, Bangladesh.' Policy Note. London: Gender and Adolescence: Global Evidence.

aged 10–12. A small sample of out-of-school adolescents and adolescents with disabilities were also surveyed. Overall, 1,769 quantitative interviews were conducted, alongside qualitative interviews with 36 adolescents and their families (parents and older siblings, to capture age-related differences) and communities. Baseline data collection took place in March to June 2018.

## Research sites

Quantitative research sites in Chittagong were based on the locations of 39 government schools that were selected for inclusion in the approved World Bank/government of Bangladesh Health Support Project, and covered the districts of Brahmanbaria, Chandpur, Chittagong, Cox’s Bazar and Rangamati.

In Chittagong division, Chittagong, Cox’s Bazar and Rangamati districts were selected for the conduct of surveys at private schools and *madrasas* nearby the targeted government schools, to enable a comparative study of school types. In addition, three sites were chosen for the qualitative research: one in Cox’s Bazar district (Community A), one in Chittagong district (Community B, in the district capital) and the other in Rangamati Hill district (Community C, also in the district capital). These were chosen to capture different kinds of locations (urban/peri-urban), school types and access to services and NGO programming.

## Health status, access to information and access to primary healthcare/health services

Adolescents reported in interviews that they had experienced what they described as ‘common diseases’, such as common colds, fevers, headaches and stomach aches. Other health problems frequently mentioned were jaundice, eye-related (vision) problems, dental problems, menstruation-related problems, migraines and urinary tract infections. Adolescent girls talked about experiencing menstrual cramps. This aligns well with the quantitative data: 80% of adolescents reported experiencing at least one ill-health symptom in the previous four weeks.

At the same time, 91% of respondents reported their levels of health as good or very good. There were no

significant differences in self-reported health by gender, disability or type of school. However, respondents from Rangamati reported significantly better health (97%) than those from other regions (they were also significantly less likely to report having experienced health symptoms in the previous four weeks – 67% versus a mean of 80%), and girls were significantly more likely than boys to report having experienced health symptoms in the previous four weeks (84% versus 75%). One possible reason for a high share of respondents reporting good health despite experiencing symptoms is that they did not consider these symptoms serious.

Only one-sixth of respondents said they had experienced serious illness or injury in the previous year. Females were 58% less likely than males to have experienced a serious illness in the previous 12 months. Adolescents with a disability were 130% more likely to report experiencing a serious illness or injury in the previous 12 months than those without a disability.

Of adolescents who reported any symptom or serious illness or injury, 6% had sought treatment (84% of adolescent with disabilities had sought treatment). Females were 20% less likely to have sought treatment for any symptom or serious illness than boys, if they experienced any.

One barrier to seeking treatment that all participants in qualitative interviews raised, whether talking about their own or a family member’s health, was medical expenses and how financially constraining these were for them. Adolescents also talked about being worried about their parents’ illnesses and the impact of these on the family.

Another barrier cited is access to healthcare facilities and quality of care. Although respondents in all qualitative sites have access to healthcare, the quality and number of facilities differs. Respondents go to government hospitals, private clinics, NGO-run health centres and private practitioners’ chambers. In a community mapping with older adolescent girls in Community B, respondents generally reported that, ‘*There are lots of health services here and facilities too*’ and ‘*Service quality is good*’. Going to government hospitals and health centres was more frequently mentioned in in Community B as adolescent respondents tended to be

**Table 1: Research sites**

Name	Location	Households	Social and physical infrastructure	Access to services
Community A	Cox’s Bazar, peri-urban	88,391	48 km from division capital, vulnerable to cyclones and tidal bores, some migrants	Reasonable access to educational and health institutions, NGO services
Community B	Chittagong urban centre	65,671	District capital	Excellent access to educational and health institutions, NGO services
Community C	Rangamati, peri-urban	26,872	District headquarters, mixed Bengali settlers and indigenous people (Chakma, Marma, Tripura, Tanchangya, Pangkhua, Lushai)	Good access to educational and health institutions, NGO services

from more affluent families and can afford to go to private practitioners. Even so respondents reported that sometimes doctors were not available in these facilities.

In all three sites, adolescents complained about the services in government hospitals. In Community B, a group of older adolescent girls said that *'Patients do not get proper treatments and doctors do not attend them'* at the government hospital. However, they also mentioned that, if patients and their family members knew people inside the hospital, they received good treatment. *'They don't treat free. They treat them well whom they know well'* (older girls in Community A) i.e. non-clinical staff take bribes for services and patients need to buy medicines from outside). They also said that the *'hospital's environment is not good and very dirty'*. During the community mapping, an adolescent girl in Community C said that they usually went to the Community C general hospital (government hospital) but *'The environment is not good. Lots of trash there. It is not clean.'*

In the qualitative interviews, some respondents talked about doctors' behaviour and the quality of treatment. Four adolescents, mostly from Community B, reported that the doctors they had visited had impressed them and this had inspired them to become doctors in the future.

During a community mapping session in Community B, adolescent girls aged 15–17 told us they had received information on various health issues by attending several events at their school run by different organisations. For example, several doctors came to their school from an NGO as part of a programme called Healthy Bangladesh and conducted informative sessions on healthcare services available for the students. One older adolescent girl said, *'If any student from our school has any health-related problem then they will be available for us and after a specific time gap they will come for the overall students check up.'* An NGO organised an event for girls at this school on breast cancer. Also in Community B, marketing campaigns run by commercial organisations had provided health information to adolescents at school. For example, some people came from a sanitary napkin company called Senora and gave a presentation on menstrual hygiene management.

They made us aware about our periods. They showed us some videos, that was related to this time, how girls manage, or what is the view of people about it and what do people think about period time especially in rural areas. They trained us what should we do if we faced any problem or we must talk about it to our intimate ones.

Teachers across the three study sites also reported hosting government and NGO health-related programmes at their schools. For example, Red Crescent organised a first aid training camp. The Civil Surgeon Office (under the Ministry of Health) in every district organises awareness-building activities at different schools, in some cases drawing

on NGOs. These organise events to provide immunisation, supply medication for intestinal worms and disseminate information regarding adolescent health issues, especially physical and psychological changes during puberty, menstrual hygiene management, HIV, early marriage and nutrition. The head of the government boys' school in Community A talked to us about receiving funds from a collaborative programme between the United Nations Population Fund (UNFPA) and the *upazila* administration (an administrative region in Bangladesh which functions as a sub-unit of a district). Teachers and students received training and the school received funding to organise events:

At first they train some students and then those students train children of their age. Because sometimes children feel shy to share everything with their teachers or elders, but they can share with their same age student.

A teacher from the same school described the UNFPA programme on life skills-based reproductive health in secondary education:

*Today not only the physical changes of girls (e.g. menstruation) are discussed, but also the changes for boys are discussed and explained. Moreover, because of the government's education policy in 2010, all these topics related to puberty that once used to be an aim of our programme are now included as the syllabus of Social Science following the curriculum of 2012. Thus now students and teachers are studying these subject matters... both mental and physical are now being discussed in detail ... This programme brought very effective results. At the end of the day, it was found that the adolescents could easily arrange their lives [during menstruation].*

The girls told us their parents were also included in the event so they could help their daughters. More generally, however, our findings highlighted that adolescent boys and girls have different kinds of relationships with their parents in terms of sharing their experiences. Mothers usually talk to their daughters about menstruation and physical changes but they do not talk to their sons about puberty. Similarly, a few fathers said they talk to their adolescent sons about puberty and physical changes but they do not talk to their daughters. Girls have support systems like sister-in-laws, grandmothers, female relatives and mothers to talk about experiences such as menstruation when these occur. However, adolescent boys did not mention anyone with whom they could share their experiences of puberty.

### **Nutritional status, access to information and equitable access to nutritious food**

Adolescent girls and women in Bangladesh face particular challenges in relation to food insecurity and malnutrition

(HKI, 2016), evidenced by low Body Mass Index (BMI) and high levels of stunting (Ahmed et al., 2012). Thirty-one percent of married girls aged 15–19 are undernourished, and anaemia is a common problem that affects one in five urban adolescent girls (ibid.). Obesity is an emerging health problem among women in Bangladesh (Stavropoulou et al., 2017), with the 2014 BDHS finding that 7% of married girls aged 15–19 are overweight or obese (NIPORT et al., 2016).

Malnutrition is a common problem in Bangladesh, and thinness and stunting among adolescent girls are widespread and persistent (Stavropoulou et al., 2017). Data from the 2014 BDHS shows that 31% of married girls aged 15–19 are undernourished (NIPORT et al., 2016). Chittagong has the second highest rates of stunting and underweight rates at division level, following Sylhet (UNICEF, 2015). Females in Chittagong have lower height-for-age z-scores than males in both government and private schools but higher BMI for age in private schools.

The scores on the Food Insecurity Access Scale (FIAS) emerging from the quantitative surveys do not point to severe food insecurity in Chittagong. Likewise, none of the respondents reported food shortages in their household during qualitative interviews. An 11-year-old female *madrassa* student in Community A told us that even if her mother did not have the money for her desired food, the mother would borrow money from her aunt to provide that food. Parents said during interviews that they provided all the necessary food to their children according to their means. During an individual interview with a young adolescent girl attending the government high school in Community C, the respondent's mother reported that her daughter had been suffering from malnutrition. The family planning officer at the Community A hospital told us '*malnutrition is still a problem in this area*' and that adolescent boys and girls suffered from malnutrition.

One in 10 households reported having cut back on the food served to girls and boys in the previous 12 months (there were no significant differences by gender). There were no differences across districts; however, those in rural households are significantly more likely to experience food insecurity and have significantly lower height-for-age and BMI-for-age z-scores. Households with adolescents with disabilities are also more vulnerable and were about 150% more likely to report cutting back on food to girls and boys in the previous 12 months, and adolescents with disabilities have significantly lower BMI-for-age z-scores. Although average FIAS scores are still low, out-of-school adolescents in Chittagong come from households that experience significantly higher levels of food insecurity. These households are over three times as likely to report cutting back on food to girls and boys, and adolescents have significantly lower height-for-age and BMI-for-age z-scores.

## Malnutrition is still a problem in this area

(A family planning officer at the Community A hospital)

Key informants across all three sites said adolescents from poor families generally experienced malnutrition.

Adolescents in Chittagong who attend government schools experience less food insecurity than those who attend private schools and *madrassas* and, consequently, have higher height-for-age and BMI-for-age z scores. The qualitative interviews provide some insight into this, as a general perception was identified in the key informant interviews across all the sites that *madrassa* students come mostly from poor families. The head of a *madrassa* in Community B and another teacher from a *madrassa* in Community C said parents of students were unable to prioritise health and nutrition due to economic constraints.

Contrary to national trends (NIPORT et al., 2016), boys in private schools and *madrassas* in Chittagong had a significantly lower BMI than girls. This may reflect the socioeconomic status of the study sites, where boys are more likely to have entered the workforce, as well as the greater restrictions placed on girls' mobility. In the qualitative interviews, key informants provide context for this finding. A teacher from the Community A government boys' school mentioned that when boys go through puberty and physical changes, they need to take care of their health, but very often they are careless about their food. This teacher also reported that they had worked successfully with adolescent boys to motivate them to follow a healthy lifestyle through the school-based life skills development programme described earlier.

During qualitative interviews, most adolescents said they felt they had a well-balanced diet and had learnt about this in their schoolbooks, from their teachers or from the television. However, the quantitative data tells a somewhat different story. Although over 90% of adolescents had heard of vitamins C and A, only 48% had heard of iron, 78% of carbohydrates and 86% of protein. Moreover, on average, adolescents could correctly classify only 1.7 out of seven foods as high iron, 3.3 out of eight as high carbohydrate and 3.7 out of seven as high protein. This aligns with the findings of Alam et al. (2010), in which over half the sample (rural girls aged 13–18) could not name food sources of carbohydrates and protein. A 15-year-old student at the girls' government high school in Community B talked about the need to eat nutritious food and take care of her health during puberty. Another adolescent girl at a private school in Community C said they learned about nutrition from school-based health information programmes. According to the head of the government girls' school in Community B, adolescents are more aware about health and nutrition now as they can get information easily on their mobile phones – but they do

not follow a healthy diet. She said: *'Health consciousness is better than before. But their health condition is not good. Because they take fast food. They do not drink water in the morning ... They don't eat balanced diet.'*

Adults in all three sites said that food quality and adolescents' food habits had worsened over time. The health officer at the Civil Surgeon Office in Chittagong said, *'In our time, there were no chemicals in food.'* During a community norm discussion with men in Community A, one man commented, *'Now, sickness is increasing. Someone has diabetes, someone has high [blood] pressure and many things.'* The head of the government boys' school in Community B said, *'We did not see fast food. We used to eat peanuts [as snacks] ... we did not even see chips.'* Mothers and community women expressed concern about adolescents' unhealthy food habits. During a community norms discussion with women in Community B, a number of respondents commented on adolescents' preference for eating fast food: *'Now girls like those boys who can provide them a lot of fast food... They become addicted to fast food.'* Similarly, a participant in a female focus group in Community C said, *'Adolescents nowadays do not like to eat vegetables, they want meat, fish and potatoes. They do not find vegetables tasty, this is not good for their health.'*

Adolescents also talked during interviews about liking fast food. During a community mapping in Community B, a group of older adolescent girls talked about different restaurants and fast food shops as their favourite places. Adolescents in Community B had the strongest preference for fast food and eating out, as the community is located at the heart of the Chittagong metropolitan city, with many restaurants and fast food shops. The phenomenon is also common in Community C but not in Community A, which is less urbanised.

In a few interviews, adolescent girls and mothers talked about appropriate food during menstruation. One mother in Community B said, *'At the first period time [menarche], I give [my older daughter] boiled egg to eat. There is a taboo that, at the first time she can't take fish or meat. So I give her boiled egg for seven days.'* An 11-year-old girl in Community B said that girls had to eat nutritious food and take care of themselves during their periods. An older adolescent girl in Community C said that during her period she did not do any household chores and she received good food.

## Access to sexual and reproductive health information, supplies and services

Our qualitative data suggests that the information female and male adolescents receive in lessons concerning sexual and reproductive health is limited to menstruation and puberty.

Other topics, such as family planning, safe sex, sexually transmitted diseases/illnesses, menstrual regulation,<sup>2</sup> etc., are not covered. Consequently, while 99% of survey respondents said they had information on puberty, this was significantly lower for respondents from Rangamati division (93.5%), and only 3% of adolescents could correctly name a method of contraception. Ninety-six percent of students reported having had knowledge about menstruation before reaching menarche and the majority used sanitary pads, except in Rangamati division, where reusable cloths were preferred (Muhit and Chowdhury, 2013). Changing menstrual pads is a source of stress for young girls because of the lack of gender-segregated toilets. Our quantitative survey shows that while in Chittagong and Cox's Bazar 60% of adolescents attend schools that have facilities/resources for menstruation, only 24% in Rangamati attend schools with these resources. Government and private schools are 28% more likely than *madrasas* to have facilities for menstruation.

There are service providers specifically focused on providing information to adolescent girls about menstruation and personal hygiene (e.g. Terre des Hommes). However, most girls said they had learnt about menstruation through personal experience, which could be frightening. Adolescents' and young people's knowledge regarding sexual and reproductive health is limited and there are few programmes exclusively focused on adolescents (Sigma et al., 2016). According to the 2014 BDHS, over 20% of births to girls aged under 20 are unplanned (NIPORT et al., 2016). Chittagong has the second lowest contraception use rate (55%) in all divisions. (ibid.).

Nationally, there is a significant difference between when adolescent boys and girls have their first sexual experience, as a result of early marriage practices. In the 2014 BDHS, 33% of women aged 20–49 reported having first had sexual intercourse by age 15 (NIPORT et al., 2016). Moreover, a recent survey of 3,500 urban adolescents found that 5% of boys had experienced sex before 15, compared with 10% of girls. This is related to age at marriage, which is much lower for girls than for boys (Amin, 2015).

Studies of adolescent girls in southern Bangladesh have linked early pregnancy with early marriage, as young girls have reduced agency and power over decisions regarding their own bodies (Amin and Ainul, 2012). According to Amin et al. (2014), 50% of married adolescents aged 12–19 were pregnant and 22% gave birth before they were 15. By comparison, the median age at first birth in Chittagong is around 18 years, and 26.4% of 15–19-year-olds have started childbearing (NIPORT et al., 2016). According to the BDHS 2014, adolescents aged 15–19 contribute up to a quarter of total fertility.

2 Menstrual regulation (MR) has been part of Bangladesh's national family planning programme since 1979. MR uses manual vacuum aspiration or a combination of mifepristone and misoprostol to 'regulate the menstrual cycle when menstruation is absent for a short duration' during the first trimester. .

 No, I didn't tell [my daughters] before [their first menstruation]. When my second daughter faced it, she told her sister. And her sister told her everything.

(A mother in Community B)

While overall 52% of women aged 15–49 use modern contraceptives, the percentage drops to 42% among adolescents aged 15–19 (NIPORT et al., 2016). This is probably because of a lack of information and access (Kamal, 2012). Although induced abortion is illegal in Bangladesh, menstrual regulation is permitted up to 8–10 weeks from a woman's last menstrual period (Guttmacher Institute, 2012). Knowledge of sexually transmitted disease prevention is also low: only 28.2% of women in Chittagong report knowing that using condoms and limiting sexual intercourse to one uninfected partner can prevent HIV (NIPORT et al., 2016).

Information on safe sex, sexually transmitted diseases/illnesses, contraceptives and menstrual regulation is neither covered in lessons nor discussed in the information sessions organised at schools by government or NGOs. Adolescent boys and girls reported learning about puberty and physical changes from their textbooks. Adolescent boys did not talk about their sexual and reproductive health at all and girls talked about menstruation and other physical changes only. Adolescent girls across the sites said their mother or older sister had taught them about managing menstruation when they experienced menarche. Mothers also mentioned that they taught their girls what to do to manage menstruation. In one case, a mother in Community B said that she did not discuss menstruation with her daughters who were studying at the *madrassa*: *'No, I didn't tell them before. When my second daughter faced it, she told her sister. And her sister told her everything. Then she told me. And my elder daughter's time, her grandmother told her everything.'*

In all three sites, teachers of all different types of schools reported that female teachers helped adolescent girls when they needed support in managing menstruation at school. Female teachers discuss menstrual hygiene and menstrual management in classrooms. The head of the government girls' school in Community A told us he kept sanitary napkins in his office for girls to. However, in most cases, adolescent girls and teachers reported that schools did not have separate toilets for girls, and girls often feel shy to use common toilets during menstruation. Teachers across all sites and types of school also told us that girls sometimes missed school during menstruation, but this trend had decreased significantly.

While talking about menstruation with adolescent girls, parents and teachers not only teach menstrual hygiene and management but also warn girls about their mobility.

Adolescent girls are advised by their family members not to go outside during period as they consider menstruation a special state of the body and want girls to be at home. In different interviews, two younger adolescent girls in Community B told us separately that they should not go outside during their period as they might be affected by the '*evil eye*' (this is another reason girls are prohibited from going outside at the evening or at night, especially in rural areas, where this belief is common). However, both said they did not have any problem going to school during their period.

Adults across all three sites expressed their worries about premarital romantic relationships between girls and boys. They always warn girls about not getting involved with boys. During individual and group interviews, parents, teachers and community members mentioned that young girls and boys became involved in romantic relationships and often made '*mistakes*'. They fear girls will get pregnant through premarital sex. The divisional organiser of Red Crescent in Chittagong told us that young girls might not even know how they get pregnant. He also said that romantic relationships were responsible for early marriage. However, adolescents do not receive adequate information regarding their sexual and reproductive health, contraception and safe sex. When he was asked whether they provided information on birth control and premarital sexual relationships and pregnancy, he said, *'No, this is not allowed to us from the schools. And this is not in our rules. This is also about ethics. Suppose they are having an affair at this time. We don't work with these.'* The government health education officer at the civil Surgeon Office was asked where a girl could go if she got pregnant accidentally. He said, *'In the case of accident she should take treatment, she must. But yes, she should be apologetic. Doctors should maintain her privacy and ... not tell her parents without her permission.'*

In qualitative interviews, a number of mothers from Community C told us that they did not know about sexual relationships, contraception and conception before marriage. After marriage, female family members talked to them about sex and pregnancy. Older adolescent boys and girls in all sites talked about romantic relationships and dating but not about having any information regarding sexual and reproductive health. It was noticeable that adolescents did not admit to being involved in romantic relationships. Instead, they talked about other adolescents engaged in such relationships.

Interviews with adults emphasised the views of parents and community members on educating adolescents on sexual and reproductive health issues. While they expressed concern about adolescents getting involved in premarital romantic and sexual relationships as well as about addiction to porn, they did not talk about the need for sex education.

### Case study: Abeer's story – an inspiring doctor

Abeer is a 17-year-old boy who lives in Community B with his parents and two siblings. When he was very young he became very sick and had to go through major surgery. The chances of his survival were slim but a very good doctor saved him through a successful operation. Abeer does not remember the doctor as he was very young; however, his parents keep telling him about it. As a result, he is very impressed by the doctor and motivated to become a doctor himself. In his words, *'A feeling of love towards him raised in my mind. That's why, I thought my destination that I would be a doctor.'* The adolescents in the community generally reported that, *'There are lots of health services here and facilities too'* and *'Service quality is good.'* However, they also reported that, *'Patients do not get proper treatments and doctors do not attend them'* at the government hospital. They also said that the government hospital gave good treatment only to those they knew well, and that the hospital was not clean. These are the reasons people often go to private clinics and to doctors' private offices for treatment and consultations. If a doctor provides good treatment and conducts him or herself well with his/her patients, the patients and their family feel very obliged to him/her.

A teacher in Community C government school told us that, *'Most of the girls don't have any knowledge about it. So something dangerous can happen because of this. ... A programme must be held at school for them.'* He criticised advertisements for contraceptive methods such as condoms and the pill:

*The adverts are very bad ... They say that if they use it in pre-marital or extramarital sex they won't have kids. There are some advertisements on TV on birth control pills that say if you want to do something illicit, this pill will keep you safe. But, they do not say to refrain from illicit activities... You do whatever you want, but stay safe. There is certainly a need for training in it.*

The government family planning officer at the Community A upazila health complex made a similar comment with regard to adolescents' knowledge about contraceptives. He said that they provided contraceptive supplies to married couples and field workers regularly followed up with them regarding family planning. However, they do not provide information about contraceptive supplies to unmarried adolescents. He commented, *'If we tell them directly that, "If you do it then do it like this," it will be like encouraging them.'*

### Drug and alcohol use

Across all the sites, adolescent and adult respondents felt drug and alcohol use was a big problem for young males. Few studies on adolescents' use of alcohol and drugs in Bangladesh exist (Stavropoulou et al., 2017); however, Uddin et al. (2014) suggest regular drug use is common among children and adolescents in Dhaka who live or work on the streets.

A number of older adolescent boys across the sites said that they smoked cigarettes. During a community mapping exercise with older adolescent boys in Community C, respondents identified some places in their community where drugs were sold and consumed. Similarly, boys in Communities A and B marked these places as unsafe; girls

never mentioned drugs. Parents are especially worried about their sons. In a community norms discussion with women in Community B, some mothers said they could not even tell if their sons were addicted to drugs or not. They also said that children nowadays have privacy at home and go straight to their room after coming in. This makes it difficult for mothers to track whether their sons are taking drugs or not. Women in a community norms discussion in Community A reported that boys who took drugs were involved in stealing and pick-pocketing to get money to buy them. Although drug abuse is more prevalent among boys, some adults expressed concerns about girls getting involved in taking drugs, too. While levels of concern were high, our researchers did not find anyone in the sample who admitted to taking drugs.

## Key actions to accelerate progress

In order to address the health and nutrition capability deficits discussed above, our findings suggest the following priority actions to accelerate progress for adolescents:

### 1. Increase access to quality healthcare

Respondents use allopathic medicine but cost is a common concern. They said they received poor-quality treatment from government-run medical institutions, which suggests a need for strict supervision and monitoring to ensure provision is pro-poor. Earlier access to quality healthcare in government and NGO services would reduce expenditure on health in the long term.

### 2. Improve sexual and reproductive health knowledge among adolescents

Improving both boys' and girls' knowledge on sexual and reproductive health is necessary through education (an improved curriculum and teaching methods), health services and community interventions. Education on safe sex and contraception along with access to contraceptives for adolescents should be promoted. The role of teachers in

educating adolescents needs to be strengthened, and their teaching of these subjects should be monitored to ensure they are using the training they have received.

### 3. Expand existing information to target adolescent boys as well as girls

Existing information is limited to menstrual hygiene and puberty and focuses mainly on girls. A greater focus on boys is needed. The government and NGOs need to incorporate young and adult males in reproductive health and reproductive rights interventions and encourage parents to educate their adolescent girls and boys equally.

### 4. Establish adolescent-friendly clinics and menstrual hygiene management facilities

Although a few NGOs provide information to adolescent girls about menstruation and personal hygiene, most girls are not well informed and said they found out about menstruation after menarche. Better services for adolescents and access to such services are critical if the government is to meet targets in its National Adolescent Health Strategy 2017–2030. Improved menstrual hygiene management facilities in community latrines should also be introduced.

### 5. Implement community mechanisms to combat drug and alcohol abuse

Drug and solvent abuse was identified as a problem in all the communities. Community mobilisation to restrict the sale and purchase of drugs should be encouraged. Some informants emphasised the need to give adolescents alternative recreational facilities.

## References

Ahmed, T., Mahfuz, M., Ireen, S., Ahmed, A.M., Rahman, S., Islam, M.M., Alam, N., Hossain, I., Rahman, M., Choudhury, F.P. and Cravioto, A. (2012) 'Nutrition of children and women in Bangladesh: trends and directions for the future' *Journal of Health, Population and Nutrition* 30: 1–11

Alam, N., Roy, S.K., Ahmed, T. and Ahmed, A.S. (2010) 'Nutritional status, dietary intake, and relevant knowledge of adolescent girls in rural Bangladesh' *Journal of Health, Population, and Nutrition* 28(1): 86–94

Amin, S. (2015) 'Urban adolescents needs assessment survey in Bangladesh'. New York: Population Council

Amin, S. and Ainul, S. (2012) 'Early marriage as a risk factor for mistimed pregnancy among married adolescents in Bangladesh' *Asia-Pacific Population Journal* 30(1): 7–34

Amin, S., Ainula, S., Akter, F., Alam, M. M., Hossain, M.I., Ahmed, J. and Rob, U. (2014) 'From evidence to action: results from the 2013 baseline survey for the Balika Project'. New York: Population Council

BBS – Bangladesh Bureau of Statistics (2012–2013) 'Bangladesh multiple indicator cluster survey'. BGD\_2012\_MICS\_v01\_M dataset

GAGE Consortium (2019 forthcoming) 'GAGE conceptual framework'. 2nd Ed. London: GAGE

Guttmacher Institute (2012) 'Menstrual regulation and induced abortion in Bangladesh'. Fact Sheet, September

HKI – Helen Keller International (2016) 'Annual report'. New York: HKI

Kamal, M. (2012) 'Childbearing and the use of contraceptive methods among married adolescents in Bangladesh' *The European Journal of Contraception and Reproductive Healthcare* 17(2): 144–154

MCEE – Maternal and Child Epidemiology Estimation and WHO – World Health Organization (2016) 'MCEE-WHO methods and data sources for child causes of death 2000–2015'. Geneva: WHO

NIPORT – National Institute of Population Research and Training, Mitra and Associates and ICF International (2016) 'Bangladesh demographic and health survey 2014'. Dhaka and Calverton MD: NIPORT, Mitra and Associates and ICF International

Rahman, M. N., Kamal, G. M., Rahman, M. M., Rahman, M. M., Sultana, S., Abdullah, H. P., Parvin, A., Mondal, S. R. and Alam, M. D. (2012) 'Population and housing census 2011: socio-economic and demographic report'. Dhaka: Bangladesh Bureau of Statistics

Sigma, A., Bajrachrya, A. and Reichenbach, L. (2016) 'Adolescents in Bangladesh: programmatic approaches to sexual and reproductive health education and services'. Situation Analysis Brief. Dhaka: Population Council, Evidence Project

Stavropoulou, M., Marcus, R., Rezel, E., Gupta-Archer, N. and Noland, C. (2017) Adolescent girls' capabilities in Bangladesh: the state of the evidence on programme effectiveness. London, UK: Gender and Adolescence: Global Evidence

Uddin, M. J., Sarma, H., Wahed, T., Ali, M. W., Koehlmoos, T. P., Nahar, Q. and Azim, T. (2014) 'Vulnerability of Bangladeshi street-children to HIV/AIDS: a qualitative study' *BMC Public Health* 14(1): 1151

UNICEF – United Nations Children's Fund (2015) Analysis of the situation of children and women in Bangladesh 2015. Dhaka: UNICEF

World Bank (2018) Bangladesh development update: building on resilience. Dhaka: World Bank