Addressing adolescent anaemia in Afghanistan through a school-based programme

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Introduction
In Afghanistan there are about 7.7 million adolescents in the 10-19 year age group, half of whom are girls. Adolescence provides a second window of opportunity for growth after the first 1,000 days, but early marriage and pregnancy in this age group, which occurs mainly in low- and middle-income countries such as Afghanistan, can lead to malnutrition. Anaemia among adolescent girls is 30.9%, while thinness in this age group (based on body mass index (BMI)) is 8%.

It is estimated that 3.7 million children aged 7–17, of whom 2.2 million are girls, do not attend school in Afghanistan. Over 80% of these children are in the seven provinces that are the most conflict-prone and insecure (Uruzgan, Zabul, Hilmand, Kandahar, Paktika, Logan and Wardak); Uruzgan also has the highest percentage (97.9%) of girls out of school. However, children attending school has increased ninefold since 2001 to over 9.2 million children in 2015, of whom 39% are girls.

A school-based programme
The life-cycle approach calls for addressing anaemia in children and adolescents. Since 2015 the Ministry of Public Health (MoPH) and Ministry of Education (MoE) have jointly started provision of a weekly iron folic acid supplementation (WIFS) programme to school-going adolescent girls (aged 10-19 years) to improve their school performance and boost pre-pregnancy stores of iron for a healthy reproductive life. The programme also has a deworming component for all school-going adolescent girls in order to increase iron absorption and general health.

A memorandum of understanding specifies clear roles and responsibilities for each ministry. This was initially signed for three years (2015-2017), but has now been renewed until 2023. By December 2018 the programme had reached 1.16 million school-going adolescent girls (10-19) with iron and folic acid (IFA) supplementation in all 34 provinces.

Training for teachers
Training for focal point teachers and academic supervisors was required as this was a new nutrition programme in Afghanistan to be delivered through schools. Some schools in the country operate in two to three shifts per day to accommodate all students in their catchment area and each shift has its own management team; therefore, two focal point teachers from each shift were nominated and trained on WIFS who are responsible for programme coordination.

The WIFS programme delivery involves a ‘fixed day’, once-a-week approach for teacher-supervised IFA administration and a counselling and communication component. The distribution of supplements is accompanied by messages on the benefits of adequate iron intake, including increased mental and physical productivity and the long-term risks.

of anaemia in adolescents, including maternal mortality and morbidity. Focal point teachers are trained to deliver relevant dietary advice, such as iron-rich food sources and iron-absorption inhibitors, including avoiding taking tea with a meal. The programme also provides an opportunity for counselling on reproductive health and the risks of teenage pregnancy. Moreover, WIFS of adolescent girls has been integrated with the National School Health Policy, along with other initiatives such as Menstrual Hygiene Management, which aims to improve school retention and quality of learning for adolescent girls and to provide the continuum of care between adolescent and maternal nutrition.

Measuring programme performance
Both government ministries have been supported in developing annual monitoring plans, including setting up a national WIFS database.

A study in 2018 measured programme performance from interviews with 1,600 students from 40 schools in four provinces to identify lessons learned for WIFS. The study found increased awareness of anaemia and its definition (i.e. low levels of haemoglobin (Hb) in the blood) among school-going adolescent girls (92% of students). A knowledge of symptoms associated with anaemia, such as low energy and shortness of breath, was demonstrated by 69% of girls, but knowledge of how to prevent anaemia was not widely noted. The presence of a higher mean Hb level among respondents who had been exposed to the WIFS programme longer than respondents with recent exposure suggests WIFS may have contributed to improved health outcomes for adolescent female students.

Addressing challenges
The programme was first rolled out in 10 provinces and focused on the use of interpersonal communication (IPC) for community mobilisation. One of the main challenges is adherence to IFA supplementation, with problems of negative social media that had associated the supplements with female infertility (the IFA tablets were thought to be contraceptive pills).

In response, a national media campaign was conducted to support community acceptance at the second stage of the programme, when WIFS was scaled up to all provinces. Programme assessment confirmed that messages through TV and other media platforms had contributed to increased knowledge and information of students and teachers on anemia. Monitoring reports also confirmed that the media campaign had played a critical role in increasing awareness and demystifying the programme. To further address the issue, a set of IPC materials was developed and disseminated targeting different audiences such as parents, teachers, students, religious leaders and other community stakeholders.

Supply-chain management also needs further improvement of data discrepancy between the central education management information system and provincial data. To address this issue, supply levels have been included in the revised WIFS database to capture provincial data, which will help to provide more accurate forecasting and distribution.

IFA supplementation to adolescent girls is also facing sustainability challenges, since all components of the programme (training, monitoring and reporting, supply of IFA and deworming tablets) are currently financed by UNICEF through different funding sources as the government does not have sufficient resources to provide full support, including procurement of IFA tablets. In addition, reaching all adolescent girls, especially those who are out of school, is a significant challenge. Even for those in school, frequent closures due to insecurity, natural disasters and weather conditions cause gaps in supplementation.

Lessons learned
Sufficient time is needed to create an enabling environment; a longer period during the start-up phase may have helped to better coordinate organisations involved and provided an opportunity to conduct a baseline assessment to have data for comparison. By the time the assessment began, the programme was already underway in some provinces, so the study compares students in provinces with long-term implementation against provinces that had started the programme less than a month previously.

Experiences of the WIFS programme from the initial roll-out in Afghanistan highlights the need for raising awareness and increasing knowledge among all stakeholders, such as parents, teachers and community members (including religious leaders and other decision-makers), prior to the actual supplementation. Programme adherence significantly improved after the media campaign. However, implementing such national campaigns is expensive and resource-intensive.

Next steps
There are plans to expand WIFS to out-of-school adolescent girls, beginning with the Accelerated Learning Centres in 2019. These centres are attended by girls who have missed school for different reasons and are therefore older than their classmates. To increase WIFS awareness at community level, a perception study is planned towards end of 2019 to find creative ways for increased adherence.

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