Breaking the cycle of malnutrition: Designing an adolescent programme in Nepal

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Introduction
Adolescence is a period of rapid physical growth, second only to infancy in terms of growth velocity. Approximately 25% of adult height and up to 50% of adult ideal weight is attained during this period, and inadequate diet during adolescence can compromise growth2. Adolescence includes current parents and younger adolescents who may be future mothers and fathers; hence their health and nutritional wellbeing influences not only their own lives but also the health and nutritional status of their children, who are the future human capital of the country. Reducing adolescent malnutrition can help to break the intergenerational cycle of malnutrition and, in the short term, improve the physical, mental, social, and emotional wellbeing of adolescents.

Adolescent nutrition and health in Nepal
In Nepal, adolescents make up almost a quarter of the total population3. Malnutrition is a major public health problem. Among adolescent girls aged 15-19 years, the prevalence of anaemia is 44%, being short (height below 145 cm) is 10%, and being thin (based on adolescent girls’ body mass index (BMI)) is 30%4. Dietary diversity is an important determinant of nutritional wellbeing; meeting minimum adequate diversity requires that an individual eats food from at least five of 10 food groups. Dietary diversity is low in Nepal; the recent Demographic Health Survey (DHS) shows that older married adolescent girls (aged 15-19 years) eat foods from an average of four out of 10 of the recommended groups5.

Over 1,000 health facilities throughout the country have been designated adolescent-friendly service (AFS) centres by the Ministry of Health and Population (MoHP). Services adapted for the needs of adolescents include health facilities open at convenient hours and offering privacy and confidentiality for counselling by health-service providers with appropriate training for this age group. However, these services are limited and face a number of barriers, such as adolescents’ low awareness of AFS centres, shyness and negative socio-cultural norms and attitudes around adolescents’ sexual and reproductive health6.

A school-based intervention package
Suaahara II, a multi-sector nutrition programme implemented in 42 of Nepal’s 77 districts, primarily targets households in the 1,000-day period between the beginning of pregnancy and a child’s second birthday. In 2018 Suaahara II initiated an integrated, school-based, adolescent intervention package in coordination with government actors in 84 secondary schools in disadvantaged areas in four programme intervention districts. Although limited evidence exists to guide adolescent nutrition programming, the WHO Guidelines on implementing effective actions for improving adolescent nutrition were used to design the Suaahara II package. The intervention focuses on younger adolescents (aged 10-15 years) and thus targets students in grades 6 to 8, in part because their beliefs are less ingrained, more of them can be reached in school, and the initiative aligns with the government’s school nurse programme and the newly endorsed adolescent health and development strategy.

To improve adolescent knowledge and practices related to health, nutrition and water, sanitation and hygiene (WASH) and, in turn, decrease malnutrition and poor health, the following topics were selected for inclusion in the integrated nutrition curriculum for teachers and students: dietary practices; taking deworming and iron and folic acid tablets,

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1  Suaahara II (‘good nutrition’) is a USAID-funded, multi-sector programme that has invested USD63 million for a five-year period (2016-2021) to support rollout of nutrition-specific and nutrition-sensitive strategies in 42 of 77 districts (3,353 of 6,741 wards).
2  WHO. Adolescent nutrition: a review of the situation in selected South-East Asian countries. Regional Office for South-East Asia: WHO 2006.
Design of the pilot began with internal discussions, including consultation with local and global experts, in order to have consensus on the aims and focus areas. Key to this was to create effective programme materials, including a diary for the students and teachers with key performance guidance, which also acts as a job aid. Materials were revised after concept-testing in schools and shared with government authorities and other local and international experts. Next step was to train three selected teachers per school and the local government health and education coordinators, along with Suaahara technical officers and field supervisors, to use the curriculum package in order to facilitate peer discussions. Documentation and monitoring of the programme are part of ongoing activities.

**Peer-to-peer learning**

Once the trainings are complete, the trained students, known as resource students, will share their new knowledge with their peers at the ratio of 1 resource student: 5 peers, anytime informally and formally while visiting the sathi (friend) corner. These corners are being established in the selected secondary schools; they will have adolescent health, nutrition and WASH materials available and will also be used for regular meetings, sharing and other interactions among the students/peers. *Suahara II* has also created episodes based on this peer curriculum to be integrated into a pre-existing radio programme for teens called ‘Chatting with my best friend’. Students will thus be able to listen to the programme and discuss its contents with each other in the sathi corners. A system of school health and nutrition scoreboards are being created and used to review progress and gaps semi-annually. The scoring, to assess performance of the students and resource students, as well as knowledge and practices of all participants, will be done in the presence of teachers, students, school management committees and parents’ representatives.

**Next steps**

*Suahara II* also has a learning agenda focusing on the health and nutritional wellbeing of adolescent girls aged 10-19 years old and will be following a cohort of more than 1,000 for at least four years to get a better understanding of this understudied population and help fill local and global knowledge gaps, particularly around adolescents’ aspirations and their knowledge and practices in nutrition, health and WASH.

After successful completion of the initial phase, the programme plans to scale up in 2020 to the remaining 102 schools which cover grades 6 to 8 in the four focal districts, in collaboration with the Ministry of Health and Ministry of Education and local governments.

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6  www.who.int/nutrition/publications/guidelines/effective-actions-improving-adolescent/en/