ENGAGING ADOLESCENTS TO ACCELERATE PROGRESS ON THE FIRST 1,000 DAYS



Box 1: Reports, Strategies and Guidelines
That Include Adolescents

- The World Health Organization (WHO) (2014): Health for the world's adolescents: A second chance in the second decade
- WHO (2015): The Global Strategy for Women's, Children's and Adolescents' Health 2016-2030
- The Lancet (2016): Our future: a Lancet Commission on Adolescent Health and Wellbeing
- WHO (2017): Global Accelerated Action for the Health of Adolescents (AA-HA): Guidance to Support Country Implementation
- Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) (2017): Report of the Stakeholders Consultation on Adolescent Girls' Nutrition
- WHO (2018): Implementing Effective Actions for Improving Adolescent Nutrition
- WFP, Anthrologica (2018): Bridging the Gap: Engaging Adolescents for Nutrition, Health and Sustainable Development.

The first 1,000 days, the period between the start of a woman's pregnancy and her child's second birthday, is the most critical time in life for growth and development and also the most responsive to interventions (Prendergast and Humphrey 2014; 1,000 Days 2018). Adolescence (ages 10-19) is another critical period during the life course, and linkages between this generation and the first 1,000 days must be explored and exploited more fully by the global nutrition community.

Adolescents—both boys and girls—play an important yet often overlooked role in family health and nutrition. As parents, future parents, and an estimated one-sixth of the world's population, this generation is contributing to and shaping society in so many ways. Adolescents' growth, health, nutrition, human capital, and societal significance are not only important for their own wellbeing, but also for ensuring optimal maternal health and birth outcomes for themselves and their families now and later in life. This paper will demonstrate how prioritizing and engaging adolescents prior to and during the first 1,000 days can accelerate progress on improving nutrition and contribute to meeting multiple Sustainable Development Goals (SDGs) (United Nations 2015).

BACKGROUND

Supporting nutrition in the first 1,000 days is known to improve fetal growth and birth outcomes, reduce stunting, improve economic prosperity, and, ultimately, save lives (Black et al. 2008; Shekar et al. 2017; 1,000 Days 2018). Growth rates and brain development are faster during the first 1,000 days than at any other stage of life, and children are at the greatest risk of stunting, a significant impediment to human development, during this time.

The importance of meeting women's nutritional needs before pregnancy, maternal and fetal nutritional needs during pregnancy, and the nutritional needs of women and their children during the first two years of life is widely recognized. Support for nutrition investments, especially in the first 1,000 days, is reflected in numerous global initiatives, including: the World Health Assembly Global Nutrition Targets (calling for reductions in stunt-







ing, overweight, wasting, low birth weight, and anemia, and increases in rates of exclusive breastfeeding); the Sustainable Development Goals (specifically Goal 2, calling to end hunger and malnutrition by 2030); the UN Decade of Action on Nutrition (2016-2025); the Second International Conference on Nutrition (ICN2); the Scaling Up Nutrition (SUN) Movement; and Nutrition for Growth Summits.

Missing from many of these global movements, however, is sufficient emphasis on adolescents. The period of adolescence, when growth and development accelerate rapidly, is often referred to as a second "window of opportunity" to make a positive impact on nutrition, after the first 1,000 days (Prentice et al. 2013). If adolescents are nutrient-deprived, their growth may be slowed and existing stunting exacerbated (WHO 2018b). This has implications, not only for adolescents' development, but also for the development of their future offspring, perpetuating intergenerational cycles of malnutrition. Good nutrition during adolescence impacts adolescents' current and future health and may also help to break the cycle of poor nutrition, laying the foundation for improved growth and development for the next generation.

Growing attention is being paid to the importance of adolescent health and nutrition. Numerous reports, strategies, and guidelines issued over the past five years (see box 1) and the papers prepared for the recent Adolescent Nutrition Stakeholder Consultation held in October 2017 have identified both the needs and opportunities for investing in adolescent health and nutrition.¹ Additionally, donor nutrition strategies—including those of the United States Agency for International Development (USAID), the UK Department for International Development (DfID), and the United Nations Children's Fund (UNICEF)—all position adolescents as key actors and beneficiaries.

Many countries are also giving increased attention to adolescents, often through a national nutrition action plan (NNAP) that serves as a road map for implementation of nutrition interventions across government sectors. In a 2018 review of 51 countries with existing and readily available NNAPs or policies,² adolescents were mentioned in 37 (73%) of them, plus two Indian states (Maharashtra and Uttar Pradesh). Of the 51 countries, 32 (63%) and the two Indian states identified specific actions to be undertaken to improve adolescent nutrition.

However, the development and implementation of policies and programs for adolescent nutrition are hampered by a scarcity of nationally representative data. And there is even less information available on effective approaches to improve nutrition in this age group. To accelerate improvements in global nutrition, for young children and ado-

lescents alike, young people must be both targeted and engaged by interventions that meet their specific needs.

THE ROLE OF ADOLESCENT MOTHERS AND THE GENERATIONAL CYCLE OF NUTRITION

Although most adolescents do not fall within the first-1,000-days target group—unless they are pregnant or already have a child or children—their nutrition, development, and role in society can influence that early window of opportunity. There are many synergies worth exploring between interventions targeted toward the first 1,000 days and adolescents. Adolescents experience all forms of malnutrition including undernutrition (wasting, stunting, and underweight), micronutrient deficiency (especially iron, iodine and vitamin A), and overweight and obesity (Akseer et al. 2017). A global analysis of Demographic and Health Survey data found that, in all regions except South Asia and East Asia, adolescent girls are more likely to be overweight or obese than underweight (Rukundo et al. 2018). Adolescent boys, on the other hand, are more likely to be thin than overweight, in all regions. Both obesity and undernutrition in adolescents have implications for their future nutrition and health and that of their children. Little is known, however, about the diets of adolescent boys and girls, and eating practices and diets vary widely from region to region. A systematic review of the diets and eating practices of adolescent girls found that, in general, the diet quality of adolescent girls in low- and middle-income countries (LMIC) is poor, characterized by limited dietary diversity, low levels of fruit and vegetable consumption, and high intakes of high-fat and calorie-rich foods (Keats et al. 2018).

The discussion around the role of adolescents in early childhood nutrition has primarily revolved around the role of many adolescent girls as mothers of young children. An estimated 21 million girls aged 15 to 19 years—and 2 million girls under the age of 15—become pregnant each year, predominantly in LMIC (WHO 2018a). Compared to adult pregnant women, a pregnant adolescent's nutritional needs are increased (Karakochuk et al. 2018). Competition for nutrients between the young mother and the fetus can lead to a reduction in linear growth for the mother and fetal growth restriction in the infant. Adolescent mothers are also often disadvantaged in terms of access to sexual and reproductive health services, including access to family planning and antenatal care, due to stigma and the lack of services that meet their specific needs.

As a result of these compounded risks, children born to adolescent mothers are faced with increased likelihood of preterm birth (born before 37 weeks of gestation), low birth weight (less than 2,500 grams at birth), stunting,

¹ https://www.spring-nutrition.org/events/stakeholders-consultation-adolescent-girls-nutrition-evidence-guidance-and-gaps

² In March 2018, a simple web search was conducted for National Nutrition Action Plan for SUN countries and USAID priority countries. If a plan was located, the keyword "adolescent" was searched and objectives or polices mentioning adolescents were identified.

Program Example 1. **Designing Infant and Young Child Feeding** Services for Adolescent Mothers

The Working to Improve Nutrition in Northern Nigeria (WINNN) program is a DFID-funded six-year program to reduce mortality by decreasing the incidence and prevalence of undernutrition in Jigawa, Katsina, Kebbi, Yobe, and Zamfara States. Implemented by UNICEF, Save the Children, and Action Against Hunger, it includes micronutrient supplementation, institutionalization of routine health services, promotion of appropriate IYCF practices, community-based management of acute malnutrition (CMAM), and advocacy and coordination to leverage government funding for nutrition.

During implementation of the community infant and young child feeding (IYCF) support groups, WINNN found that younger mothers were less able to actively participate because of the influential role older women have on IYCF practices. To address this issue, the program established separate support groups for adolescent mothers and their husbands where they could participate with peers of a similar age. The program also identified and trained "mother leaders" to disseminate key IYCF messages focusing on breastfeeding and complementary feeding practices to all household members within the community.

More information about this program can be found here: https://winnn.org/.

anemia, and maternal and neonatal mortality and morbidity (Branca et al. 2015; Karakochuk et al. 2018; Prentice et al. 2013). In addition to these health risks, adolescent pregnancy also carries economic and social consequences, such as the need to leave school, resulting in fewer skills and opportunities for employment (World Bank 2017).

It is well-documented that malnourished women give birth to malnourished children. For children born to adolescent girls who are already malnourished, the risks of stunting and poor neonatal outcomes are further increased. Research from the Young Lives study found that being born to a stunted adolescent mother was associated with a 15 percent increased chance of a child being stunted, compared with being born to a non-stunted older mother (Georgiadis et al. 2017). Additionally, when an adolescent enters pregnancy with low iron reserves, the risk of adverse maternal and neonatal outcomes increases (Steer 2000; Kozuki et al. 2012). Entering pregnancy overweight or obese also bears consequences. Increases in maternal morbidity, preterm birth, infant mortality, and risk of childhood obesity are all associated with entering pregnancy overweight or obese (Black et al. 2013).

The impact of adolescent pregnancy on early childhood nutrition does not end with birth. Teenage mothers tend to have lower rates of breastfeeding and are more likely to introduce complementary foods before the recommended six months of age (Barlow et al. 2011; Oliveira et al. 2012). Barriers to breastfeeding among adolescent mothers, as reported from Brazil, South Africa, and the United States, include low maternal confidence and self-esteem, stigma, embarrassment, lack of knowledge on the importance of breastfeeding, difficulties with latching, pain, fatigue, issues around milk supply, inadequate social support, aggressive marketing of breastmilk substitutes, and returning to work or school (Sipsma et al. 2013; Pillay et al. 2017).

There is limited information on the complementary feeding and caregiving practices and experiences of adolescent parents. Interviews with adolescent mothers in Sierra Leone reveal that many do not have control over their children's diet and that complementary feeding often starts too late (Lai and Towriss 2014). In one study in Bangladesh among adolescent girls (N=70), perceived barriers to optimal child feeding and care include early marriage, time allocation conflicts, rural life, close birth spacing, and poverty (Hackett et al. 2015).

HOW ADOLESCENTS CONTRIBUTE TO IMPROVING NUTRITION IN THE FIRST 1,000 DAYS AS EARNERS. CAREGIVERS, AND INFLUENCERS

As they grow and develop, adolescents undertake more roles and responsibilities, becoming increasingly engaged by their families and communities for support. This includes livelihood activities, caregiving in the home, daily shopping, and household chores. Adolescents, therefore, can contribute meaningfully to efforts to improve their own nutrition, the nutrition of their family members, and their current or future children. Building, nurturing and respecting adolescents' skills and abilities will enable them to participate in and contribute more fully to nutrition interventions during the first 1,000 days, benefiting themselves, their families, and their communities.

Many of the first-1,000-days interventions are implemented at the community level and target the primary caregivers of children under 2 years old. Not only are adolescents sometimes parents themselves, they often act as caregivers for their younger siblings (Save the Children UK 2015). If they are to support their parents and younger siblings and serve as effective caregivers within their families and communities, both male and female adolescents need balanced and objective nutrition and hygiene knowledge and appropriate context-specific skills to address their own nutrition and nutritional needs during the first 1,000 days. This can be done by providing

Program Example 2. Engaging with Adolescents in Mozambique

Children's Participation, Learning, and Action for Nutrition (PCAAN) is a DANIDA- and USAID-funded program, led by Children for Health in partnership with the Mozambican government, that targets 20 schools in Tete Province. PCAAN is a participatory nutrition education program demonstrating how children and young adolescents can be positive influencers and contributors to nutrition-related practices in their families and communities. The project is part of the Provincial Level Multisectoral Action Plan for Reduction of Chronic Malnutrition (PAMRDC 2012-2017), which aims to reduce chronic malnutrition in children under 5 years of age. PCAAN enables children to work together to create behavior change for themselves, other children, and their families. The project co-created a special curriculum structured around eight messages with provincial policymakers and practitioners. The curriculum strengthens existing content in the primary school syllabus and family health strategy for the province. Children and young adolescents in grades 5-7 participate in school-based activities with adult facilitators. They develop skills and attitudes needed to adapt nutrition and hygiene messages and practices for sharing and discussing with peers at school and with family and community members at home. The PCAAN pilot project has led to significant improvements in breastfeeding, increasing both the knowledge and practice of exclusive breastfeeding for the first 6 months of life, improvements in hygiene knowledge, practice and habits, and improvements in household food sharing using individual plates and ensuring more equity in portion size.

More information about this program can be found here: https://www.childrenforhealth.org/how-we-do-it/children-for-health-partners/pcaan/

capacity-building activities through school-based health education (see program example 2), youth-friendly clinics focused on sexual and reproductive health services, youth groups, and other adolescent-focused programs.

It is important to consider both the benefits and risks associated with adolescents taking on care-giving roles. Data from the Young Lives study show that the amount of time girls spend on unpaid work and care labor in the family increases across adolescence and for boys, there was a decline or small increase (Young Lives 2018). While unpaid care and labor can contribute to learning responsibility and empathy, build self-esteem, increase status in the household and community, and mitigate the effects of poverty, it can also be exploitative, burdensome, and

take time and energy away from other important activities, such as education.

Although interventions targeted at the first 1,000 days are primarily adult-initiated, adult-led, and adult-managed processes, adolescent perspectives and expertise, if actively sought, may help inform adult decision-making within families and communities while also giving adolescents agency to make healthy choices for themselves and their children. There is no "one size fits all" approach. Interventions should be tailored to individual settings and relevant to adolescents' needs and priorities (WFP 2018).

Adolescents are powerful societal assets with great capacities for leadership. The 2018 student-led "March for Our Lives" campaign against gun violence in the United States and the 2010 youth-led pro-democracy protests known as the "Arab Spring" in Egypt, Libya, Yemen, Syria,

Program Example 3. Adolescents as Agents of Change: Guatemala Youth Networks Working Through SUN

In Guatemala, as part of the Scaling Up Nutrition Civil Society Alliance hosted by Save the Children, youth networks and auditors conducted a social audit of the implementation of the national nutrition plan. This included an examination of the first-1,000-day strategy in 32 hardto-reach communities (some of which suffer from levels of stunting as high as 97%) across the four most affected regions, revealing serious gaps and inequity. The social audit approach included observations of nutritional and food education chats, checks of vitamins and vaccines available in the health center, interviews with pregnant women and mothers of children under 2 years, and a health center review with the health care professional. Data was collected by young people and then analyzed and shared with the incoming government, providing data on hard-to-reach areas for the first time.

Currently, the youth networks are actively influencing decision makers and keeping a focus on the reduction of stunting within their working agenda. Their activities include partnering with the Alianza por la Nutricion to complement efforts and gather additional support through strategic partnerships, using innovative approaches (mobile technology and applications) to facilitate youthled data collection, feeding the data into broader data collection efforts, mass awareness-raising of the striking gaps, and proposing steps and solutions for stakeholders to address these gaps together.

More information can be found here: http://scalingupnutrition.org/news/reflections-from-my-mission-to-guatemala/

Bahrain, and other Middle Eastern countries demonstrate that adolescents and youth (age 20-24) are often on the front lines of social transformation. By nature, adolescents are primed to challenge and change social norms (including cultural taboos and harmful gender norms); it is important that first-1,000-days interventions harness these capacities so that adolescents can act as a force for their own health and the health of their families and communities (program example 1).

MAKING THE MOST OF THE ADOLESCENT-FIRST-1,000-DAYS CONNECTION CONNECTION: GOOD FOR BOTH, GOOD FOR ALL

To maximize the potential for improved adolescent nutrition to benefit children within the first 1,000 days, we must first-

- ensure that high-impact interventions to improve maternal and newborn health and nutrition are equitably reaching adolescents
- identify and employ specific strategies targeted to the needs of adolescent mothers
- engage adolescents as key partners in and advocates for their own health and development.

A number of interventions proven effective in improving nutrition and reducing mortality in the first 1,000 days (box 2) have already been identified. While these interventions do not specifically consider the role of adolescent nutrition, there are many areas of overlap with WHO recommendations on adolescent nutrition, particularly around maternal nutrition, healthy diets, and anemia prevention.

To improve adolescent nutrition, the WHO recommends these measures (WHO 2018b):

- promote healthy diets and eating practices among adolescents
- provide additional micronutrients through fortification of staple foods and targeted supplementation (specifically iron-folic acid and iodine)
- promote preconception and antenatal nutrition (including ensuring access to and availability of adolescent-friendly antenatal, maternity, childbirth, and newborn services)
- · prevent adolescent pregnancy and poor reproductive
- manage acute malnutrition

Box 2. High-impact Nutrition Interventions for the First-1,000-Day Period

Promoting and supporting good maternal nutrition, health, and care before and during pregnancy and lactation:

- Dietary interventions and counselling about healthy diets and keeping physically active
- Micronutrient fortification and supplementation interventions (including iron-folic acid supplementation, context specific calcium, vitamin A supplementation, and iodized salt)

Promotion and support of optimal feeding and care for infants and young children:

- Delayed umbilical cord clamping
- Initiation of breastfeeding within the first hour of life
- Exclusive breastfeeding for the first six months of a child's life
- Appropriate and responsive complementary feeding
- Management of moderate and severe acute malnutrition

Sources: Branca et al. 2015; WHO 2016a; Karakochuk et al. 2018

- provide access to safe environment and hygiene
- · promote physical activity
- prevent and manage disease.

Despite these overlaps, nutrition interventions for the first 1,000 days do not typically target adolescents directly, even though adolescents can benefit from and contribute to many of them. More synergy between first-1,000-days interventions and adolescent nutrition programming is needed. Impact can also be improved through increased multi-sectoral coordination and collaboration—for example, by ensuring that agriculture, health, and education policies, strategies, and plans include nutrition objectives.

In addition to existing priority interventions, new strategies and interventions are needed to bridge the divide between adolescent nutrition and the first 1,000 days. Two critical interventions for both adolescent health and child survival are delaying marriage until the age of 18 years and preventing pregnancy until the age of 20 years, when adolescents are fully grown. Adolescents are often not physiologically or psychologically equipped for pregnancy, childbirth, or motherhood, yet approximately 11 percent of all births worldwide involve adolescent mothers (WHO 2011). Complications during pregnancy and childbirth, such as hemorrhage, sepsis, hypertensive disorders, and

obstructed labor are the leading cause of death for adolescent girls aged 15-19 globally (WHO 2018a).

Although many adolescents are already pregnant or parenting (intentionally or unintentionally), strategies for the first 1,000 days are often not adapted to their specific social and developmental needs. Adolescent parents tend to come from deprived backgrounds; have different social networks than adults; lack social support, knowledge about child care and development, and effective parenting skills; and often have unmet developmental needs of their own (Barlow et al. 2011). While efforts to improve adolescent nutrition before and during pregnancy and lactation are essential, actions to improve the infant feeding and care behaviors of adolescent parents are also required. Additionally, health services for adolescents in LMICs are typically uneven in quality, and often not accessible, acceptable, equitable, appropriate, or effective (WHO 2018b).

To reach adolescent populations effectively, including adolescents who are pregnant or already parents, interventions and recommendations must be tailored to the contexts in which adolescents live, learn, work, and play (program example 1). To support adolescent breastfeeding and complementary and responsive feeding practices of adolescent parents, it is important to understand both the context-specific barriers to breastfeeding and young child feeding from the perspectives of adolescents and the factors associated with improved feeding practices. Additionally, specific strategies may be needed to reach disadvantaged adolescents, such those who are out of school, underemployed or unemployed, engaging in risky behaviors, or socially marginalized.

Coordinated actions across multiple sectors to address the immediate and underlying causes of adolescent malnutrition can help avert some of the risk factors linked to poor maternal and newborn health, including pre-pregnancy wasting, pre-pregnancy overweight, iron-deficiency anemia, and maternal stunting (Salam et al. 2016; Özaltin et al. 2010). Examples of actions include—

- ensuring adolescents can access a nutritious diet and essential health services
- enabling adolescents to contribute toward their health through positive behaviors such as improved hygiene and avoidance of early pregnancy
- empowering women and girls
- reducing barriers to learning and keeping adolescents in school (program example 2).

Program Example 4. Niger's Sawki Program: Safe Spaces for Adolescent Girls

Niger's Sawki program, a five-year (2012–2017) USAID-funded initiative, implemented through a partnership between Mercy Corps and Helen Keller International, focused on reducing chronic malnutrition among pregnant and lactating women and children under 5 years with an emphasis on children under two. Program strategies were geared toward increasing household access to nutritious food by diversifying agricultural productivity and rural household income and increasing resilience to shocks.

With a special emphasis on empowering adolescent girls (age 10-18), Sawki created "Safe Spaces," which serve as emotionally and physically safe, private, and accessible environments for girls and women to learn new skills, develop social networks, empower each other, and heal from trauma. Sawki applied two Safe Space Models: 1) Safe Space (35 hours of direct intervention over 8 months) and 2) Safe Space + Livelihood (87 to 91 hours of intervention over 19 to 20 months). Both models taught girls about essential nutrition actions, the risks associated with early marriage and early pregnancy, reproductive health, and the importance of education and basic literacy. The livelihood component provided training on livestock management (i.e., goat production, poultry care, and animal health training), gardening, and savings and loans activities.

Findings from research conducted through the Population Council's Research Initiative for Success in Girl Programming (RISING) demonstrated that girls who participated in Safe Spaces (with and without the livelihood component) subsequently shared their knowledge widely throughout the community. Girls taught and sensitized their friends, siblings, and parents about important issues such as exclusive breastfeeding, maternal health, early and forced marriage, and how to care for and raise livestock (Mercy Corps 2017).

Providing opportunities for adolescents, especially girls, to attain optimal nutrition and health and to reach their full growth potential will help prepare them for the eventual physiological and nutritional changes experienced during pregnancy and lactation and improve first-1,000-days outcomes.

Engaging adolescents and seeking their perspective can simultaneously improve their critical thinking abilities, strengthen their social standing and relationships with adults, build their self-esteem and leadership skills as change agents, and give them a sense of empowerment

(Powers et al. 2006). One opportunity for this may be to involve adolescents in youth-led participatory action research and programming to learn how they can benefit from and support first-1,000-days interventions in their capacities as siblings, sons, daughters, parents, and community health advocates.

CONCLUSION

Including and engaging adolescents—both boys and girls—in interventions prior to and during the first 1,000 days will accelerate progress on nutrition in numerous ways. It will improve adolescent nutritional status; help prepare adolescents for pregnancy, childbirth, feeding, and parenting; and empower adolescents through information and opportunity to support themselves, their families, and communities toward improving nutrition outcomes during the first 1,000 days.

The path to improving adolescent nutritional status before pregnancy, especially with the WHO's new adolescent nutrition guidelines, is gradually emerging. However, supporting pregnant or parenting adolescents requires identifying barriers to optimal maternal health, pregnancy, and birth outcomes and barriers to optimal breastfeeding and young child feeding and care practices. In addition to scaling up proven interventions to improve maternal and child nutrition, services and approaches must be tailored to meet adolescents' specific needs so that they are accessible when necessary and acceptable when adolescents are willing to obtain them. In addition, more evidence is needed on interventions that are not specifically targeted toward the nutritional needs of adolescents, such as delaying pregnancy and marriage. When provided in the right way, available services will be equitable, appropriate, and effective (WHO 2012b).

Adolescents help support nutrition, care, and health during the first 1,000 days as daughters, sons, sisters, brothers, and parents. While adolescents have not tradi-

Adolescents are—

- a dynamic societal force
- frequent family caregivers
- important contributors to family income
- sometimes parents themselves
- powerful change agents
- overlooked as a link to better nutrition in the first 1,000 days.

tionally been engaged in first-1,000-days programming in these roles, opportunities to contribute to the nutrition and health of their mothers, younger siblings, and their own children abound. For example, adolescents can encourage healthy choices while food shopping, assist in child feeding at mealtimes, support handwashing with soap at critical times, care for younger siblings, participate in home gardening activities, and help their pregnant and breastfeeding mothers with daily chores.

More evidence related to multi-sectoral nutrition interventions—designed for and with adolescents—is needed to better understand their nutritional needs, diet and eating practices, and the impact of their role as societal assets, current or future parents, caregivers, and agents of change within their own families and communities. Although the potential impact of adolescent engagement in the first 1,000 days has been overlooked in the past, a growing awareness and documentation underscore the untapped opportunity for adolescents to contribute to improving first-1,000-days interventions and outcomes.

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