RESULTS



Nutrition in adolescents

Nutritional requirements increase in adolescence (10-19 years). These increases are vital to enable adolescents to reach their full physical, cognitive and development potential in adulthood. Among adolescent girls the onset of menstruation results in a higher demand for nutrients such as iron, protein, calories, calcium, and vitamins. Deficiencies of nutrients, such as iron and folic acid, contribute significantly to anaemia which compromises growth and results in fatigue, dizziness, weight loss, and reduced immunity.

Good nutrition contributes significantly to reducing episodes of illness and improving school retention and concentration. However, malnourished adolescents go on to losing around 10% of their lifetime earnings as adults, from reduced physical and intellectual productivity. Malnutrition underlies losses of around 11% of Gross Domestic Product in many countries in Asia and Africa².

Whilst the Sustainable Development Goals (SDGs) now entrench 'meeting nutritional needs of adolescent girls' as a priority within Goal 2; improving nutrition will also accelerate progress towards the other SDGs on health, education, and gender.

Scale of the problem



RESULTS

Nutrition and reproductive health

The majority (90%) of adolescents live in low and middle income countries, many of whom are nutritionally stunted⁵. Children who suffer stunting in their early years are more likely to grow into stunted adolescents, and poor nutrition in adolescence further impedes any potential of catch-up growth in puberty. The graph below shows that these countries are likely to present high rates of adolescent fertility alongside higher nutritional stunting in children. The combination of high fertility rates and poor nutrition exacerbates health complications among adolescent girls.



*Prevalence of stunting, height for age (% of children under five) – World Bank Data, WHO Global Database on Child Growth and Malnutrition http://data.worldbank.org/indicator/SH.STA.STNT.ZS Accessed 27 October 2016

**Adolescent fertility rate (births per 1,000 women ages 15-19) – World Bank Data, United Nations Population Division, World Population Prospects. http://data.worldbank.org/indicator/SPADO. TFRT Accessed 27 October 2016

Stunted adolescents face a higher risk of pregnancy related complications such as eclampsia and maternal mortality. Early and frequent pregnancy can further deteriorate the nutritional status of an adolescent girl leading to slow and stunted growth. Pregnancy related complications are among the leading causes of death and morbidity among adolescent girls (15- 19 years)⁶.

Inadequate nutrition of the pregnant adolescent also harms the foetus. The risk of negative poor birth outcomes such as low birth weight, intra-uterine growth retardation and stillbirth are increased if the mother is undernourished. These increase under-5 mortality rates and also increase the chances of surviving children being malnourished. Low birth weight contributes to irreversible childhood stunting, which increases the number of stunted adolescents, thus engraining the intergenerational nature of these issues. It is therefore imperative to safeguard nutrition alongside improving sexual and reproductive health for adolescents, aparticularly for adolescent girls.

Adolescent health in India

India has the largest absolute population of adolescents in the world with over 250 million young people between 10 and 19 years. Over half of India's adolescent girls are anaemic whilst nearly half of all adolescent girls are also underweight⁷. Early marriage and pregnancy, a high unmet need for family planning, and inadequate awareness of sexual health are also a major health and nutrition risk for Indian adolescents⁸.



Integrated Efforts in India

RESULTS

Best practices

Government policy prioritisation of adolescent anaemia and sexual and reproductive health

The Strategic Approach to Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCH+A) in India (2013) and the National Adolescent Health Strategy (2014) recognise adolescent anaemia as a major health challenge. The government has set an objective to reduce anaemia in adolescent girls and boys (15-19 years) at an annual rate of 6% from the baseline of 56% and 30% respectively, as per the third National Family Health Survey ¹². To achieve this Iron and Folic Acid (IFA) supplementation, promotion of positive dietary practices, and deworming are outlined as key interventions.

Acknowledging the impact of poor reproductive health on the nutritional status and health of both adolescent girls and birth outcomes, these policies focus on improving knowledge, attitudes and behaviour on sexual and reproductive health, menstrual hygiene and reducing early and frequent pregnancies.

Scale up of targeted nutrition and health interventions for adolescents, and use of multiple platforms for integrated delivery

India has launched a nation-wide Weekly Iron and Folic Acid Supplementation (WIFS) programme in which 100mg iron and 0.5mg folic acid are administered free of cost to adolescent girls and boys attending government schools on a weekly basis. The same is also provided to out-of-school adolescent girls at designated sites in the community.

The 'blue'IFA tablets provided under the WIFS programme differ from those provided at antenatal check-ups to facilitate easy recognition and programme roll-out targeting adolescents only. Additionally, screening for anaemia, supplementary nutrition and fortification, and control of helminthic infections through biannual deworming are conducted in both schools and in the community¹³ alongside nutrition, health, and hygiene education. This programme has been able to reach over 100 million adolescents so far, and in 2015 was further promoted through the engagement of media and celebrities.

To offer support to adolescent girls on health, nutrition and to discuss other issues concerning this group Adolescent Friendly Health Clinics (AFHCs) have been established at various levels of the health system. These clinics also provide information on prevention and management of reproductive tract and sexually transmitted infections, and services such as sanitary napkins, contraception and referral for safe abortion.

Engagement and capacity building of community health workers and adolescent 'Peer educators' to strengthen nutrition and health services

Three cadres of community health workers; Anganwadi worker, Accredited Social Health Activist, and Auxiliary Nurse Midwife help link health services to the community. They encourage adolescents to consume IFA tablets, provide health and nutrition education, sanitary napkins and non-clinical contraceptives and also refer adolescents to health clinics. In schools, teachers supervise IFA consumption and reinforce messages on their benefits alongside the promotion of good practices relating to nutrition, hygiene and sanitation.

Selected adolescents are also mentored and trained as 'peer educators' in schools and the community to improve outreach, strengthen compliance of IFA consumption and promote awareness on health and hygiene practices. Quarterly Adolescent Health Days are also organised to mobilise adolescent girls in the community towards accessing IFA and deworming, and promote awareness on good nutrition and health practices.

Setting indicators to assess the success of programmes which improve adolescent nutrition and health

To monitor and track the progress of interventions designed to improve adolescent nutrition and health, indicators have been set on the training of community health workers, teachers and peer educators on the WIFS programme. These indicators include testing awareness of health and nutrition issues, coverage of IFA supplementation and deworming. Indicators have also been set on knowledge, attitudes, and behaviour of adolescents on sexual and reproductive health. Establishing indicators also promotes improved data collection and monitoring of the programmes and outcomes.

Collaboration between various Ministries in central and state governments, local government, and development partners for improved coordination, outreach, and impact The above programmes and services are delivered through the synergistic efforts of the Ministry of Health and Family Welfare, Ministry of Human Resource Development (Department of Education) and Ministry of Women and Child Development (Integrated Child Development Services). In the community, local government bodies such as the Village Health Sanitation and Nutrition Committees and Village Panchayat also help to strengthen the outreach of nutrition and health services and mobilise communities to increase acceptance of these services. Development partners also play an important role in supporting the government with technical assistance, capacity building of health workers engaged in providing health and nutrition services, improving outreach and acceptance of services, and monitoring programme interventions.

RESULTS

Integrated Efforts in India

"This (WIFS) campaign is especially important. India is one of the one of the youngest countries in the world....about 60% of our population is under 35 (years).... The statistics for anaemia are so scary, especially with the girl child...what our children eat, what our country is going to be is in the hands of each and every one of us..."

Priyanka Chopra, Artiste, and UNICEF Goodwill Ambassador At the launch of the WIFS campaign (2015)

SUGGESTED RECOMMENDATIONS FOR FURTHER ACTION

Improve the quality and frequency of capacity building and support for community health workers, teachers, counsellors, and peer educators

To improve the demand for, outreach and compliance of IFA supplementation, and promote awareness of nutrition and health among adolescents and care givers, there is a need for continuous capacity building of the agents helping to deliver these services. Frequent and consistent quality training can equip them with the right information to mobilise more adolescents and care givers towards improved health and nutrition behaviour. It can also contribute to better reporting and data collection, thus improving the monitoring of programmatic progress.

Continue increasing domestic investments to sustain the scale and outreach of nutrition interventions

The cost of implementing the WIFS programme in India is less than 1USD per adolescent girl, per year¹⁴. To reach every adolescent girl with an uninterrupted supply of nutrition and health services, train community health workers and health staff, develop and promote information education and communication on nutrition and health of adolescents, and for routine data collection and monitoring there is a need to scale up investments in all these aspects of the programme.

Set a specific, measurable, and time bound objective aligned with the WHA anaemia target

Currently, the lack of a clear time-bound end-line national target on anaemia reduction, especially one that is aligned with the WHA target of a 50% reduction of anaemia in women of reproductive age by 2025, prevents the tracking of India's progress towards this global target. An ambitious and time-bound end goal is essential to accelerate wider efforts in tackling this health and development challenge. This will strengthen accountability for progress, improve monitoring and data collection, and contribute to the achievement of SDG2.

 Improve convergence and accountability through joint ownership, earmarked budgetary allocations, and robust reporting across all stakeholders

Adolescent nutrition and health should not be viewed as the responsibility of only one or two government departments. Each of the ministries playing a role in scaling up the WIFS and reproductive health programmes, and at all levels of government, should prioritise activities under these programmes within their annual plans for improved multi-sectoral and multi-stakeholder efforts. These must be matched with necessary budgetary allocations. Most importantly, all the stakeholders must report against set indicators and be held accountable for the overall progress achieved in reducing anaemia and improving sexual and reproductive health among all adolescents in India.

Footnotes

This policy brief forms a part of a series developed by RESULTS UK to document best practice in integrating nutrition within policy, programmes and investments for Reproductive, Maternal, Newborn, Child, and Adolescent Health (RMNCAH). This brief focuses on the stage of adolescence, taking India as a case study.

 The World Bank (2006). Repositioning Nutrition as Central to Development: A strategy for Large-Scale Action. Directions in Development. Washington, DC.
 International Food Policy Research Institute (2016). Global Nutrition Report 2016: From Promise to Impact: Ending Malnutrition by 2030. Washington, DC.
 UNICEF (2015). The State of the world's children.

Adolescence: an age of opportunity. **4** Save the Children (2015). Adolescent Nutrition. Policy and programming in SUN+ countries.

 B Black, R.E., Victoria C.G., Walker, S.P., et al. (2013).
 Maternal and child undernutrition and overweight in low-income and middle-income countries. The Lancet, 382 (9890); pp.427-451

6 World Health Organisation. Mortality, morbidity and disability in adolescence. http://apps.who.int/adolescent/

second-decade/section3/page2/mortality.html (Accessed 19 October 2016).

7 Raykar N., Majumder M., Laxminarayan R., Menon P. (2015). India Health Report: Nutrition. Public Health Foundation of India. New Delhi, India.

8 Population Council, UNICEF (2013). Adolescents in India: A desk review of existing evidence and behaviours, programmes and policies.
9 ibid

10 Ministry of Health and Family Welfare (2014). National Adolescent Health Strategy. Government of India. 11 WHO, UNICEF, World Bank Group, and United National Population Division (2015). Maternal mortality in 1990-2015. Maternal mortality Estimation Inter-Agency group http://www.who.int/gho/maternal_health/countries/ind. pdf?ua=1 Accessed 28 October 2016 12 Ministry of Health and Family Welfare (2013). A Strategic Approach to Reproductive, Maternal, Newborn, Child, and Adolescent Health (RMNCH+A) in India. Government of India.

13 Ministry of Health and Family Welfare (2012). Operational Framework Weekly Iron and Folic Acid Supplementation Programme for Adolescents. Government of India.

14 Dureja S (2016). Webinar on weekly Iron and Folic Acid Supplementation Program for Adolescents in India. Ministry of Health and Family Welfare, Government of India. Accessed here: https://www.spring-nutrition. org/sites/default/files/events/wifs_webinar_dr__ dureja_23042016_f.pdf (Accessed 20 October 2016).