

2021

Investing in Adolescent Development

A Case for India



SUMMARY

- Investing in adolescents can yield “a triple dividend of benefits” for adolescents in their current state, their future adult selves, and the next generation.
- Given that India has the highest adolescent population in the world, and it has entered the phase where it can yield its demographic dividend, the country’s future is inextricably linked to the trajectory of adolescent development.
- There are significant investment gaps that India needs to fulfil in key areas of adolescent development. The study specifically looks into secondary education, anaemia, unmet need for family planning methods, mental health, and child marriage.
- India experiences low enrolment rates beyond primary education. Moreover, India has a high number of people dropping out of the employment-education ecosystem. The study shows that total public expenditure per student for schooling beyond primary education lies between INR 1,82,015 to INR 3,30,774 and the individual benefit in terms of increase in lifetime wages is INR 14,94,591 after adjusting for opportunity cost.
- The programme of the Indian government to address anaemia among adolescents, the Weekly Iron and Folic Acid Supplementation (WIFS) Programme, is likely to miss its targets for 2021. The yearly budget to reach all school-going adolescents and out-of-school female adolescents will cost INR 3250 crores in addition to the current programme cost of running the WIFS programme.
- Similarly, there are vast funding gaps in addressing the unmet needs for contraceptives among adolescents. The total annual cost of ensuring adolescent females and males have access to contraceptives would be INR 52 crores against the current spending of approximately INR 17 crores.
- Further, India absolutely lacks the infrastructure to address mental health concerns of adolescents. As per the study’s estimations, India requires an investment of approximately INR 2,745 crores per year to build a mental health infrastructure that is at par with upper-middle income countries and meet the provisions of the Mental Healthcare Act (MHCA), 2017.
- Lastly, upon reviewing several programmes that aim at addressing the issue of child marriage, the study suggests a conditional cash transfer programme linked with school enrolment. A pan-India program targeting girls aged 13-14 years onwards through a conditional cash transfer scheme till the time they complete school education will cost the country around INR 7000 crores annually.

BACKGROUND

Adolescence is a critical phase of human development that involves rapid and formative changes, which define the transition from childhood to adulthood. Humans undergo numerous biological, psychological, and social changes during this period. Given the importance of this phase in achieving human potential, adequately investing in adolescent development is crucial. In fact, the 2016 Lancet Commission on adolescent health and wellbeing pointed out that investing in adolescents can yield “a triple dividend of benefits”¹: for adolescents in their current state, their future adult selves, and the next generation.

The case for investing in adolescents is even stronger for India. India has the highest adolescent population in the world. Given that these adolescents are the adults of tomorrow, they hold the key to the country's future. Investing in their development and wellbeing will determine the trajectory that the nation will take over the coming decades. And these are crucial decades. Since 2018, India's working age population has begun to grow larger than its dependent population. India is expected to maintain this bulge in the working population until 2055. But it can cash in on this ‘demographic dividend’ only when its working population has adequate capabilities to participate in productive work.

Keeping this in perspective, the Population Foundation of India in partnership with Institute for Competitiveness conducted a study that highlights India's investment requirements in key areas of adolescent development – namely, education, health, and child marriage.

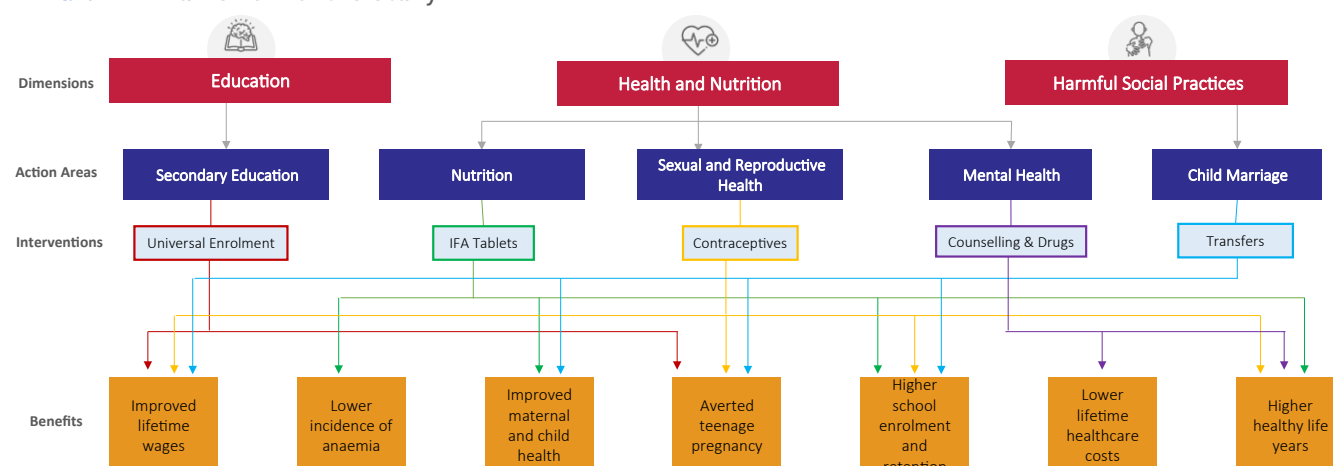
FRAMEWORK OF THE STUDY

While ensuring adolescent development involves addressing a wide range of parameters including schooling, physical, mental, and sexual health, skilling, road injuries, violence, and harmful social practices, the study has focussed on the most pertinent issues facing adolescents. The focus on education and health is driven by their essential role in enhancing the capabilities and wellbeing of adolescents and improving the transition to adulthood. The focus on child marriage in the study is taken as a proxy for the impact of harmful social practices on adolescent wellbeing. As stated, this is not meant to be an exhaustive list for enabling adolescent development but encompasses the leading issues facing adolescents in India.

There are numerous ways in which these aspects of adolescent development can be addressed. But **the study considers specific interventions, which are depicted in the framework below in Exhibit 1.1.** The framework also shows that the benefits from these interventions can be multi-fold. For instance, universal enrolment of adolescents in secondary education will increase school enrolment and retention and can improve their lifetime wages. Meanwhile, addressing anaemia through provision of IFA tablets can also increase school enrolment and retention due to better health outcomes.

Thus, the benefits of making investments towards adolescent wellbeing are multi-fold and spillover across sectors and generations.

Exhibit 1.1. Framework of the Study



COSTS AND BENEFITS

I. EDUCATION: REAPING THE RIGHT RETURNS

Over the year, the Indian government has undertaken several measures to improve the education landscape in the country. However, the focus of most of the governmental policies and programmes have been on children until primary level. Therefore, beyond the elementary level of education, the enrolment rates start to fall drastically.

In this study, we provide a case for investing in improving the enrolment rates by conducting a cost benefit analysis. The costs are estimated by using public expenditure data from the Ministry of Human Resource Development. The calculation of governmental expenditure seems reasonable as we are trying to understand how much the government should spend on educating the children that are currently not enrolled in educational institutes. Since personal expenditure of students will be negligible in these schools, it is safe to only calculate government expenditure.

The public expenditure (per student per class) is INR 12,752 for classes I-VIII and INR 35,940 for classes IX-XII for the year 2012-13. For the year 2016-17 the values stand at INR 25,658 for elementary and INR 63,450 for secondary. **Using these costs as a proxy for the amount required to educate a child, the cost of schooling after primary level lies between INR 182015 to INR 330774.**

The benefits are estimated by using the Mincer equation which states that an additional year of education in India increases the monthly income of individuals by about 7.02 percent on an average.

Using this, we have calculated that **the benefit to cost ratio of investing in adolescent education is between 4.51 and 8.21**. A rupee spent in providing school education (VI-XII) will result in a private return of the amount between 4.51 and 8.21 in terms of increased wages in the future.

A major learning from the study has been that merely making higher investment in education can exacerbate inequality in India. The government

needs to make targeted investments among poorer households and female adolescents to ensure equitable benefits.

II. HEALTH: SHIFTING GEARS

In this study, three action areas related to adolescent health have been explored: nutrition, sexual and reproductive health, and mental health.

A. Addressing Anaemia

About 54 percent of adolescent girls in India are anaemic.

A cost-effective way of addressing iron deficiency and preventing anaemia is through provision of iron and folic acid (IFA) supplements. When taken once a week, they can significantly reduce the risk of anaemia. The Ministry of Health and Family Welfare in India has a Weekly Iron and Folic Acid Supplementation (WIFS) Programme to address nutritional anaemia among adolescent girls and boys. It targets school-going adolescent girls and boys (in VI to XII grade) and out-of-school adolescent girls.

The study estimates that there are about 17.2 crore eligible adolescents for such a programme. As per the latest data available, only about 3.5 crore adolescents were reached under the WIFS Programme as of 2016-17. Therefore, the programme coverage was only about 20 percent eligible adolescents until 2016-17. Based on this deficit, it can be estimated that there is a need for about 650 crore IFA tablets each year. The cost for each tablet averages around INR 5. So, **the yearly budget for scaling up such a programme will be about INR 3250 crore** in addition to the current programme cost of running the WIFS programme. In case such a scale up is continued from 2022 until 2030, it will cost approximately INR 30,000 crore. It must be noted that no study before has estimated the investment gaps in WIFS and it is hoped that this study can help bridge that deficit.

B. Fulfilling the Unmet Need for Family Planning Methods

The access and use of modern family planning services provide a wide range of benefits to women, their families, and the society as a whole. However, a notable proportion of women who want to avoid a

pregnancy – either to delay or stop childbearing – are not using modern contraceptives.

The study has estimated the cost of an intervention for spacing among Indian adolescents, which would involve ensuring access to condoms (for male adolescents) and oral contraceptive pills (for female adolescents). **The total annual cost of the consumables that will be needed annually to ensure contraceptives access among adolescents, thus, is estimated to be INR 51.9 crores.** As compared to the spending requirement of INR 51.9 crores, India spent about INR 17 crores on supplying condoms and OCPs to states for adolescents in 2017-18 as per financial statements provided by the Ministry of Health and Family Welfare (MoHFW).

Based on such an intervention, it has also been estimated that India could potentially reduce the incidence of teenage pregnancies from 3 million to 1.2 million.

C. Tackling Issues of Mental Health

Adolescence is a period marked by the achievement of neurobiological and physical maturity leading to growing psychological awareness and higher levels of social and emotional interactions among peers and adults. As per the National Mental Health Survey 2016, the overall prevalence of mental morbidity among adolescents in India was 7.3 percent.

Studies show that nearly half of all adult psychiatric disorders begin before the age of 14. So, an effective approach to improving mental health across society would be to address the development of mental disorders among adolescents. However, India lacks the basic mental health infrastructure to do so. There are approximately 9,000 psychiatrists in the entire country and 49 child psychiatrists. This amounts to 0.75 psychiatric for every 100,000 people and 0.021 child psychiatric per 100,000 adolescents. For context, the ideal number is anything above 3 psychiatrics per 100,000 people.

The mental health infrastructure statistics are equally concerning. There are a total of 139 outpatient and 45 inpatient facilities for children and adolescents in the entire country. So, we are clearly a long way off

from the requisite mental health human resource and infrastructure facilities.

This study includes one of the first assessment of the cost of meeting the targets set under the Mental Healthcare Act (MHCA), 2017, for ensuring mental health of adolescents. Based on the deficits highlighted, it can be estimated that India needs about 1,300 child psychiatrists, 19500 mental health nurses, and 5200 clinical psychologists. Likewise, there is a need for about 3,900 outpatient facilities and 1,300 inpatient facilities. To fulfil these requirements, India needs to budget at least INR 1,355 crores each year until 2027.

Further, the MHCA, 2017, also puts the onus of providing mental care on the State. The study estimates that this would amount to about INR 1390 crores annually. **Adding all these costs, the approximate spending required on adolescent mental health amounts to INR 2,745 crores per year.**

III. CHILD MARRIAGE: THE UNHEALTHY CONSEQUENCES

India is home to over 223 million child brides. The country accounts for about a third of the global incidence of child marriage. Within the country about one in four young women have been married before 18 years of age.

The study explores multiple interventions that have been implemented around the world to reduce child marriages. An approach that has been generally found successful in most studies is the use of schooling to reduce child marriage rates. There is sufficient evidence that shows that girls who attend schools are less likely to be married than girls who are out of school. Thus, interventions that help adolescent girls stay in school are found to reduce the incidence of child marriage.

Based on the literature and past experience of combating the practice of child marriage, an intervention is proposed combining the most successful strategies found in the literature: a conditional cash transfer to families of the girl child tied to their attendance in schools. A cash transfer of INR 2400 per year (or INR 100 per month) can be

made to unmarried girls enrolled in class VIII onwards in government and government-aided schools across the country provided that they maintain a minimum required attendance. The cash transfer can be made directly into the bank account of girls so that they have more agency over decisions regarding their education.

The annual cost of such a programme would be approximately INR 7000 crores. The benefits from the intervention could yield a benefit amounting to 3.16 times the cost of the programme.

It must be noted that there have been several studies exploring interventions to address child marriage but most have not been successful due to failure in adopting a holistic approach to the problem. Due to this reason, this study combines cash intensives with education of adolescents.

RECOMMENDED POLICY ACTIONS

Based on the analysis presented in the study, the following policy recommendations can help guide government bodies and policymakers in their approach to adolescent programming:

- **Education investment needs to be increased while ensuring equitable benefits**

There is a strong case to target universal enrolment of adolescents in secondary education given the returns estimated in the study. However, a crucial point that needs to be highlighted is that the returns to education are not uniform across income and gender groups. Thus, any investment towards improving adolescent education outcomes have to specifically target the enrolment of economically disadvantaged groups and the female adolescents.

- **Filling the investment gaps in adolescent health interventions**

The study has identified substantial investment gaps in key areas of adolescent health – namely, nutrition, contraceptives, and mental health. However, these are only a few intervention areas that are crucial in improving adolescent health. The

government needs to work on areas highlighted in this study and beyond to ensure the health of adolescents across the country.

- **Child marriage interventions should be multifaceted**

Since there are multiple factors that lead to early marriages – including societal norms and poverty – focussing on any one aspect without addressing the other reduces the effectiveness of interventions. So, any intervention adopted in India needs to be multifaceted. Basically, while incentivising families to delay marriages, it should ensure unmarried girls stay in schools and community awareness is built around the problems of marrying adolescents early.

Beyond these specific policy recommendations, a few additional insights can also be made based on the study:

- **Build a vision for adolescent development:**

The first step towards improving adolescents' developmental outcomes is to build a national vision for the same. Articulation of a broad national vision would attest to the government's commitment towards the policy agenda and act as a guiding principle in setting explicit long-term and short-term goals with regards to adolescent development

- **Accounting for heterogeneity of adolescents:**

Since adolescents are a heterogeneous group, interventions need to account for the disparities arising out of differences determined by one's gender, caste, income group, place of residence, level of education, etc. A broad policy focus may reproduce the existing inequities, or worse, exacerbate them.

- **Interventions operating in different platforms:**

Adolescence is a period when individuals are heavily dependent on their surroundings for their livelihood and well-being and are also considerably influenced by it to the extent of deriving their values, attitudes, behaviours and learnings from their surrounding environment. Hence, interventions need to operate through the various settings that form an adolescent's environment. These can include the family, community, or schools.

- **Participation of adolescents at different levels of programming:**

Adolescents are not only beneficiaries of programmes but can also be useful partners in programming processes as they would be the most knowledgeable about the effectiveness of policies that affect them. Their participation can bring a more wholesome perspective on their needs and issues and inform better policymaking. Their meaningful involvement in decision-making can only be ensured by empowering them enough to be able to voice their needs and aspirations within their family and community.

- **Intersectoral collaboration:**

Adolescent development comprises a broad range of interventions covering areas from health, nutrition, education to behavioural risks, civic empowerment, etc. These are complex problem

areas having interlinkages with each other and require an intersectoral response at the national level. Education and health, for instance, are tightly interlinked, as empirical evidence suggests that higher level of education is associated with better health outcomes.

- **Strengthening data on adolescents:**

High quality data informs evidence-based policymaking and better governance. But the lack of age-segregated data on development indicators for adolescents poses limitations to adolescent programming in India. Improved and reliable databases can lead to better research, and consequently, better policy making and programming for adolescent development.

REFERENCES

1. Patton GC, Sawyer SM, Santell JS, et al. Our future: A Lancet commission on adolescent health and wellbeing. *Lancet* 2016; 387: 2423–78.
2. Ministry of Health & Family Welfare. (2021, April). Weekly Iron Folic Acid Supplementation (WIFS). Link: <https://nhm.gov.in/index1.php?lang=1&level=3&sublinkid=1024&lid=388>
3. Khera. A. et. al. (2018). Forging an Anaemia-Free Future. United Nations Children's Fund. Link: https://anemiamuktbharat.info/wp-content/uploads/2019/09/Field_report_nutrition-web3.pdf
4. Osotimehin, B. (2015). Family planning as a critical component of sustainable global development. *Global health action*, 8.
5. MoHFW (2019). Annual Report 2018-19. Ministry of Housing and Family Welfare. Link: <https://main.mohfw.gov.in/sites/default/files/06%20Chapter%2093AN2018-19.pdf>
6. NMHS 2016 covered adolescents from four states of Gujarat, Tamil Nadu, Kerala and Jharkhand and included about 300 adolescents from each state.
7. Sagar R (2011). Child and adolescent mental health: Need for a public health approach. *Journal of Mental Health Human Behaviour* 16:1-4.
8. United Nations Children's Fund. (2019). 'Ending Child Marriage: A profile of child marriage in India', UNICEF, New York.
9. As per NFHS-4 estimates.
10. United Nations. Conventions of the rights of the child. 1989. Available from: <https://www.ohchr.org/Documents/ProfessionalInterest/crc.pdf>
11. de Groot, R., Kuunyem, M. Y., & Palermo, T. (2018). Child marriage and associated outcomes in northern Ghana: A cross-sectional study. *BMC Public Health*, 18(1), 1-12.
12. Paul, P. (2018). Maternal age at marriage and adverse pregnancy outcomes: findings from the India human development survey, 2011-2012. *Journal of Pediatric and adolescent Gynecology*, 31(6), 620-624.
13. Koski, A., Clark, S., & Nandi, A. (2017). Has child marriage declined in sub-Saharan Africa? An analysis of trends in 31 countries. *Population and Development Review*, 7-29.