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DCPCR's

CHILDREN FIRST

Journal on Children's Lives

Children's Issues and their Rights



DELHI COMMISSION FOR PROTECTION OF CHILD RIGHTS (DCPCR)
Govt. of NCT of Delhi

CHILDREN FIRST

JOURNAL ON CHILDREN'S LIVES

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(Children's Issues and their Rights)

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Chief Advisor:

Justice (Retd.) Madan B. Lokur, Former Supreme Court Judge

Aim & Scope:

Children First Journal on Children's Lives is a bi-annual and peer-reviewed journal, launched by Delhi Commission for the Protection of Child Rights (DCPCR) with the aim of deepening and broadening the discourse on child rights by providing a platform to all persons who are engaged with the rights of children in varied capacities to share their learnings, views and experiences in this context.

The Journal's previous issue, published in December 2022, focused on the new challenges that emerged over the pandemic period that could impinge on the rights of young children in terms of violence and abuse, lack of care and protection, nurturance and all-round development, as also measures to address these challenges.

This issue explores concerns across multiple domains and multiple disciplines, like law, protection and destitute care to social marginalization, educational quality regulation, and an even wider spectrum of issues pertaining to sensitivity and ethics vis-a-vis research on children, child marriages, investment in adolescence and women's employment.

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Child Contributors:

Mridul Manna, Riya Monteiro, Urvesh Dubla, Umaimah Islam, Lavisha Gupta, Priya, Ritika Choudhary, Ashraf Ali, Tanishi, Sparsh Aggrawal, Barnavo Bagchi, Farzana, Karishma Dalal, Raisha Jha, Bhumi, Aarohi Dolare

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Focusing on Adolescents: How Children Taking Charge Can Help Tackle Malnutrition

Archana Sinha | Sana Elahi Ansari

Introduction

In India, 35 per cent of children under five years of age are stunted or chronically undernourished (NFHS-5, 2019-21). Nearly half of all child deaths globally are thought to be attributable to stunting and other forms of undernutrition (CNNS, 2019). Stunting in children is linked, among other factors, to undernutrition in mothers (Black et al., 2013). Undernourished girls are more likely to become undernourished mothers who, in turn, have a greater chance of giving birth to low birth weight babies, perpetuating an intergenerational cycle (Women's Nutrition, n.d.-b). It is, therefore, critical to work with adolescents to improve their nutrition awareness and nutritional status and prevent malnutrition.

Nutrition programmes primarily focus on providing services and awareness during the 1000-day window (from conception to 2 years of birth). For example, giving pregnant women supplements and educating them about the importance of breastfeeding. Additionally, they also focus on delivering supplements and school meals to adolescents. There is a lack of an integrated programme that leverages schools as a platform to reach out to children and adolescents and develop their capacity to improve their nutrition by creating a solid base of knowledge about nutrition and a healthy lifestyle and behaviour.

In addition, there is a dearth of data on adolescents'

(10-19 years) health and nutrition, as the primary focus is on measuring health indicators for children under 5 years and pregnant women (IFPRI et al., n.d.). There are no global indicators for school-going children and databases to help make decisions.

As per a 2019 report (Sethi V, Lahiri A et al., 2019):

- Every second Indian adolescent is either too short, thin, or overweight/obese.
- 1 in 2 adolescents suffer from at least two of the six micronutrient deficiencies (iron, folate, vitamin B12, vitamin D, vitamin A and zinc)
- Only 1 out of 5 adolescents (20%) consume pulses and green leafy vegetables.
- 6 out of 10 adolescents reported zero consumption of fruits even once a week

By helping children take charge of tackling malnutrition, we can help reverse these trends. This is essential as social and behavioural changes around food, lifestyle and dietary transition at the population level are challenging. These require awareness and knowledge and an active and continuous engagement of people with food and lifestyle.

Currently, there are few structured interventions to educate children and adolescents about the

impact of diet and lifestyle on their health and well-being and to help them to make the right food and lifestyle choices while keeping their preferences in mind. A recent study by SNDT University, Mumbai, based on intervention in 12 weekly sessions with adolescents and 3 parents’ sessions over three months, has shown improvements in mean knowledge, attitude, and practices related to diets in pre- to post-assessments (Moitra et al., 2021).

Intervention

To address this lack of structured interventions focused on schoolchildren, Nourishing Schools Foundation has covered over 230 government schools and over 60,000 schoolchildren between 2015 and 2022 in Rajasthan, Assam, Maharashtra, Tamil Nadu, and Puducherry. It provides a toolkit to schools to help catalyse change. The target group for this is children from 4th to 9th grade, referred to as future parents” as the Foundation takes the long-term approach to tackle malnutrition.

The toolkit (physical box, now available in digital form as well) includes curriculum, games, and activities (such as making their own soap, building a handwashing station, setting up a school garden, etc.). These activities help children learn about nutrition and how they can improve it, e.g., by understanding various nutrients and managing the school gardens to

access a diverse source of nutrients or building a handwashing station to prevent diseases like diarrhoea. Over two cycles of engagement with the toolkit, children solve nutrition problems in their schools and communities.

The Nourishing Schools toolkit is rolled out in a school over 8-12 weeks through the efforts of “student ministers”, i.e., leaders identified among school children, that use its components to involve their peers in efforts to tackle malnutrition. The toolkit components broadly cover three areas:

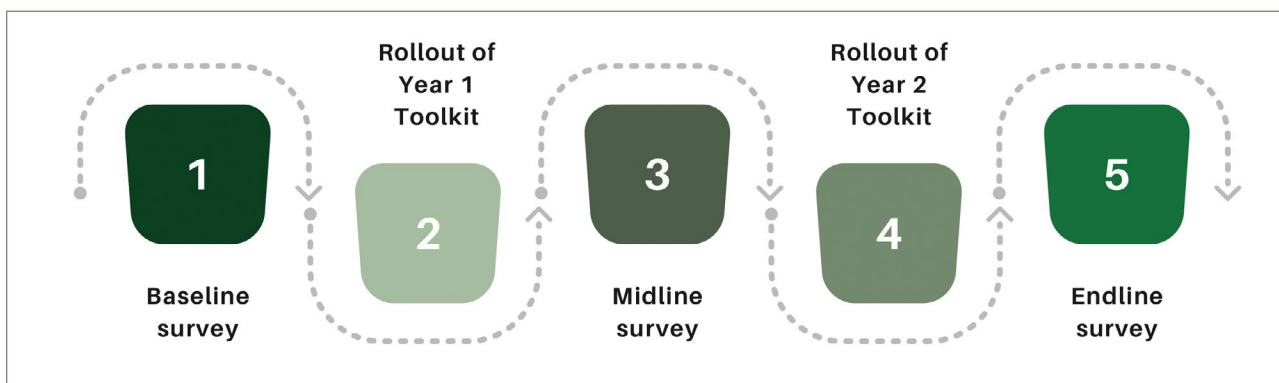
(i) Food and Nutrition:

This part of the toolkit includes games that teach children about foods’ nutritional properties and encourage them to adopt healthy eating habits. For example, the Guess Who game involves guessing the food item on the picture card using hints from the clue cards. It informs students about the benefits of nutritious foods as well as the harmful effects of junk foods.

(ii) Sanitation and Hygiene:

Access to safe drinking water, sanitation, and hygiene (WASH) services significantly impact nutrition. The toolkit encourages children to observe the quality of water, sanitation, and handwashing amenities in their schools and communities.

Figure 1: Programme Implementation Cycle Over Two Years



Source: Nourishing Schools Foundation

(iii) Agriculture:

The toolkit can only reach its full potential if its effects are felt within the community. Our work encourages children to manage a school garden, to improve their access to nutritious foods. The behavioural changes brought about in schools can then have a ripple effect in the community.

Implementation Framework

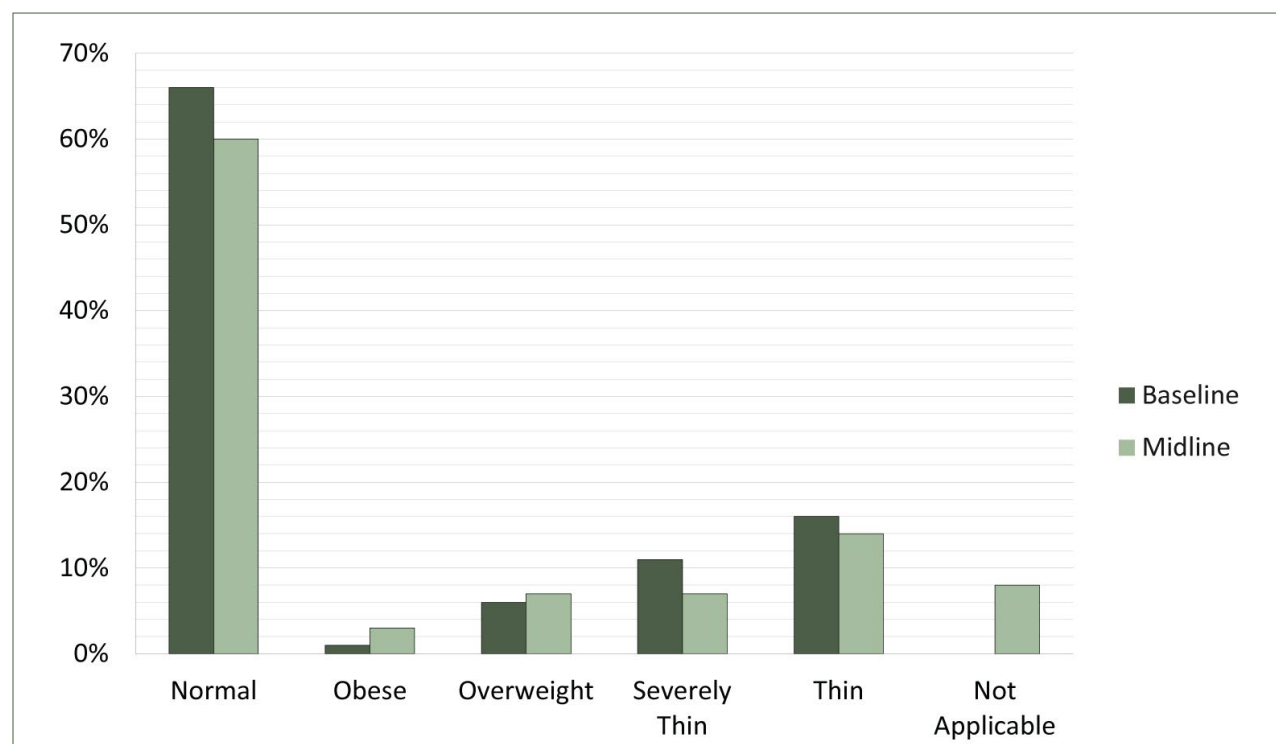
We have developed a ten-step process for the implementation of the Nourishing Schools programme in schools:

1. Schools register interest in nutrition and are selected in consultation with local partners and government officials.
2. Schools conduct a baseline survey of children from 4th to 9th grade.
3. Nourishing Schools Foundation analyses

survey results, and the local partner shares these results with schools and education officials. Based on the survey findings, we help them identify evidence-based priority areas for action.

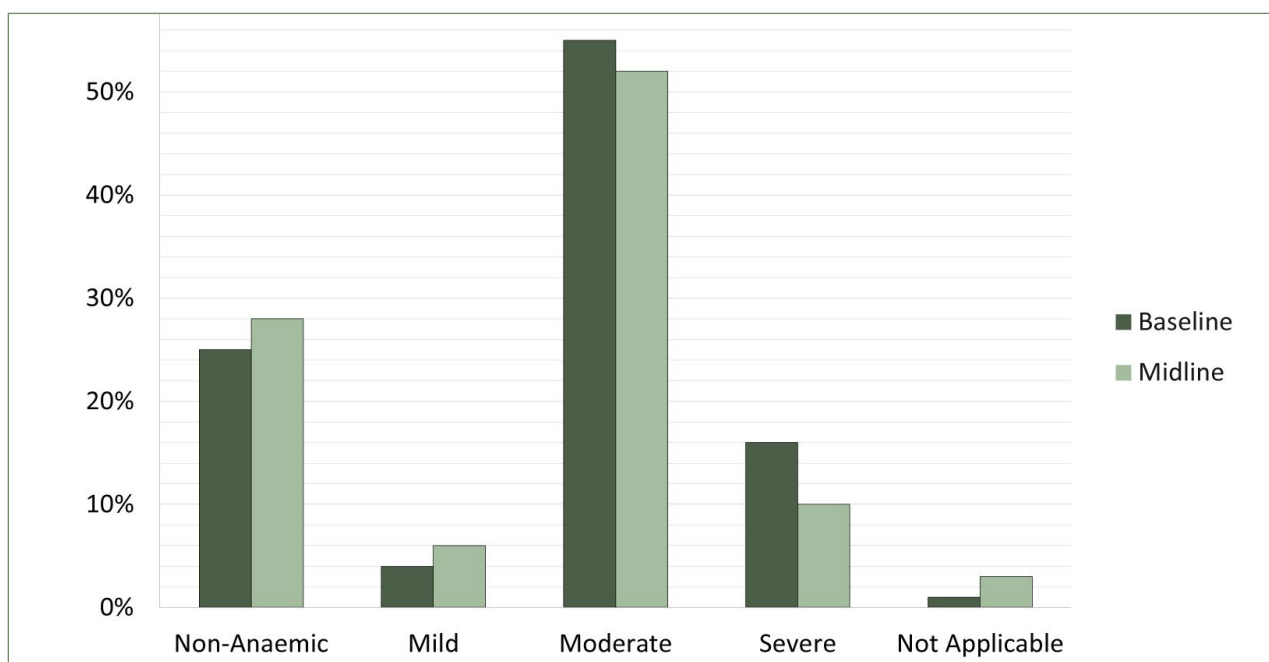
4. Schools receive the Nourishing Schools toolkit.
5. Schools use the toolkit through teachers as a part of various school subjects, and schoolchildren help develop action plans.
6. Local partners monitor the school’s monthly progress and guide them using the toolkit.
7. Schools conduct a midline survey six months to one year after the toolkit launch to assess the impact.
8. Schools share ideas from children, teachers and the community for improving the toolkit.

Figure 2: Nutritional Status of Children From 4th to 9th Grade Based on Body Mass Index Classifications – Baseline and Midline (6,394 responses)



Source: Baseline and Midline Surveys (6,394 responses)

Figure 3: Anaemia Classification of Children From 4th to 9th Grade – Baseline and Midline Survey (6,394 responses)



Source: Baseline and Midline Surveys (6,394 responses)

9. Schools that make significant progress and demonstrate committed implementation get recognised as Nourishing Schools.

10. Schools receive an upgraded toolkit in the 2nd year, which contains additional content to engage schoolchildren and encourages them to conduct more activities in their communities such as setting up homestead gardens. Once the 2nd-year toolkit is implemented, schools conduct an endline survey to assess the programme’s impact.

The surveys are conducted using a random stratified sampling method to select children from 4th to 9th grade. A maximum of 20 students are chosen from each grade. A maximum of 120 students are selected for the baseline survey per school. The subsequent surveys are conducted with the same students who were a part of the baseline survey.

Programme Outcomes

From our pre and post-intervention studies, we see that the percentage of children who were

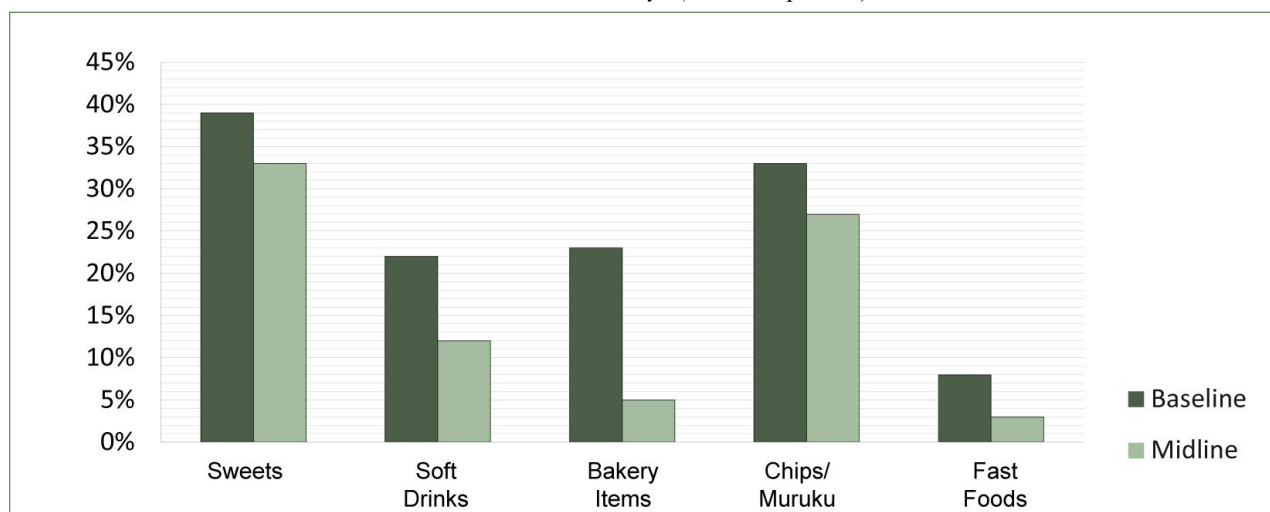
thin or severely thin reduced from 27 to 21 per cent, and the percentage of children that were moderately or severely anaemic reduced from 71 to 62 per cent.

Worryingly, the percentage of children who are obese or overweight has increased from 7% to 10%. In the early years of our programme, this increase used to be significantly greater, in line with national trends. We have since added content that focuses on narrowing the increase in the prevalence of obese and overweight children, such as by reducing the consumption of unhealthy snacks. This has reduced the extent of the increase and we are now working towards decreasing the percentage of obese and overweight children over the course of our intervention.

Further, according to the baseline survey, at least one-third of schoolchildren consumed sweets and chips. This was reduced after the intervention. Over the same period, fruit, vegetable, and milk consumption remained fairly consistent.

From our data, we have seen an increase of 13 percentage points in the percentage of children

Figure 4: Percentage of Children Consuming Unhealthy Snacks From 4th to 9th Grade – Baseline and Midline Surveys (6,394 responses)



Source: Baseline and Midline Surveys (6,394 responses)

washing their hands with soap/sanitiser in schools. It should be noted that liquid soap is often referred to as “sanitiser” in these schools.

The prevalence of children washing their hands with soap at various instances has also improved.

Best Practices

To achieve these outcomes, we have followed certain principles in designing our intervention:

1. Making Children the Ambassadors of Change & involving Schools’ Administration:

Parents are often reluctant to change their diet or try innovative approaches, but if their children encourage them to change their eating habits, they’re more receptive.

2. Partner-Based Expansion:

We implement our programme by working with organisations that are already present in our region of work, helping us scale rapidly and cost-effectively. Our programme gets integrated into the work of these organisations as we help

build their teams’ capacity to adopt our data-led innovation. We also learn from the work of our partners. For example, several partners have applied concepts such as terrace gardening, drip irrigation, and greywater harvesting in school gardens.

3. Standardised Process:

Our standardised 10-step process (mentioned above) ensures consistent implementation across geographies with our partner organisations.

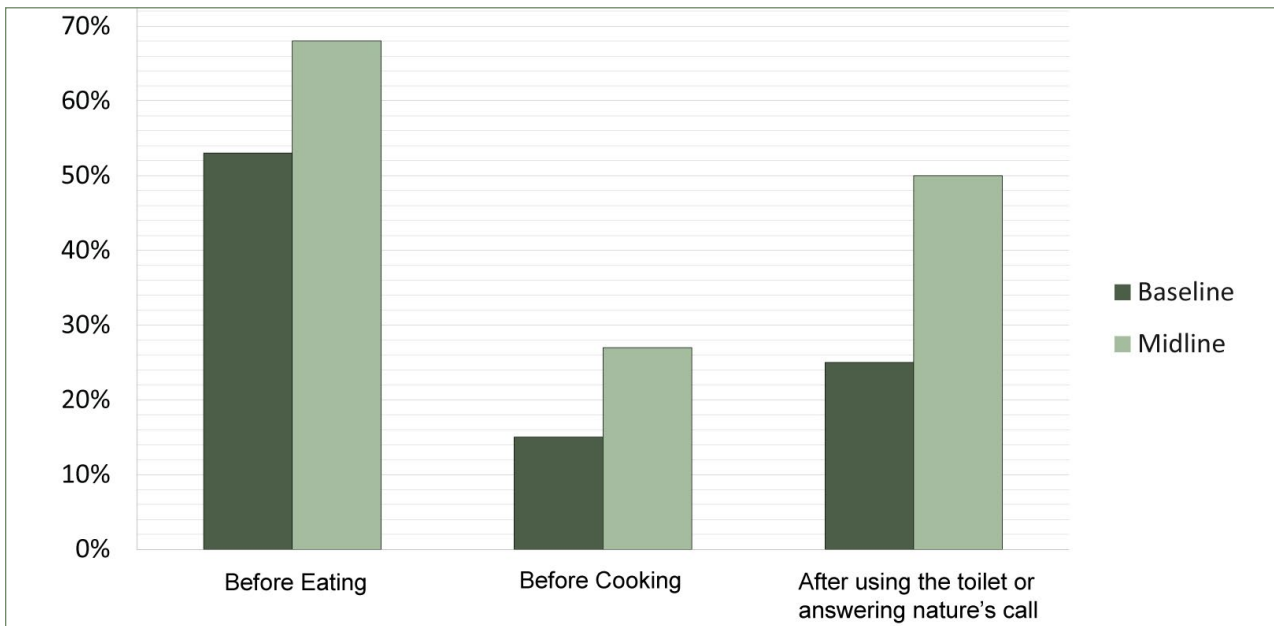
4. Data-Driven Approach:

We conduct a baseline, midline, and endline survey using an Android-based data collection app to ensure rapid learning. These data-based insights are shared with stakeholders such as schools, local NGOs, and government officials to help them identify priority areas.

5. Adaptable & Replicable Toolkit Approach:

The provision of a toolkit adapted according to geography and translated into multiple languages allows us to expand in various states in India.

Figure 6: Percentage of Children From 4th to 9th Grade Washing Hands at Various Instances – Baseline and Midline Surveys (6,394 responses)



Source: Baseline and Midline Surveys (6,394 responses)

6. Government Partnerships:

Integrating our work into existing government programmes or having the government advise us on selecting schools has been integral for the organisation. The Government of Rajasthan has invited us to cover over 1,400 schools in the state, which we are working to fulfil. Our team has also contributed to the Yellow Books, published by the Food Safety and Standards Authority of India (FSSAI), and the Government of India (Eat Right India, n.d.). These books aim to engage children with nutrition and food safety topics.

Programme Challenges

In the process of helping children take charge of tackling malnutrition, we often encounter challenges during implementation. With each challenge, we develop solutions with multiple stakeholders:

- Limited time for school staff to support toolkit use at the school due to day-to-day teaching and other responsibilities: We, therefore, put children in charge through a student ministry framework,

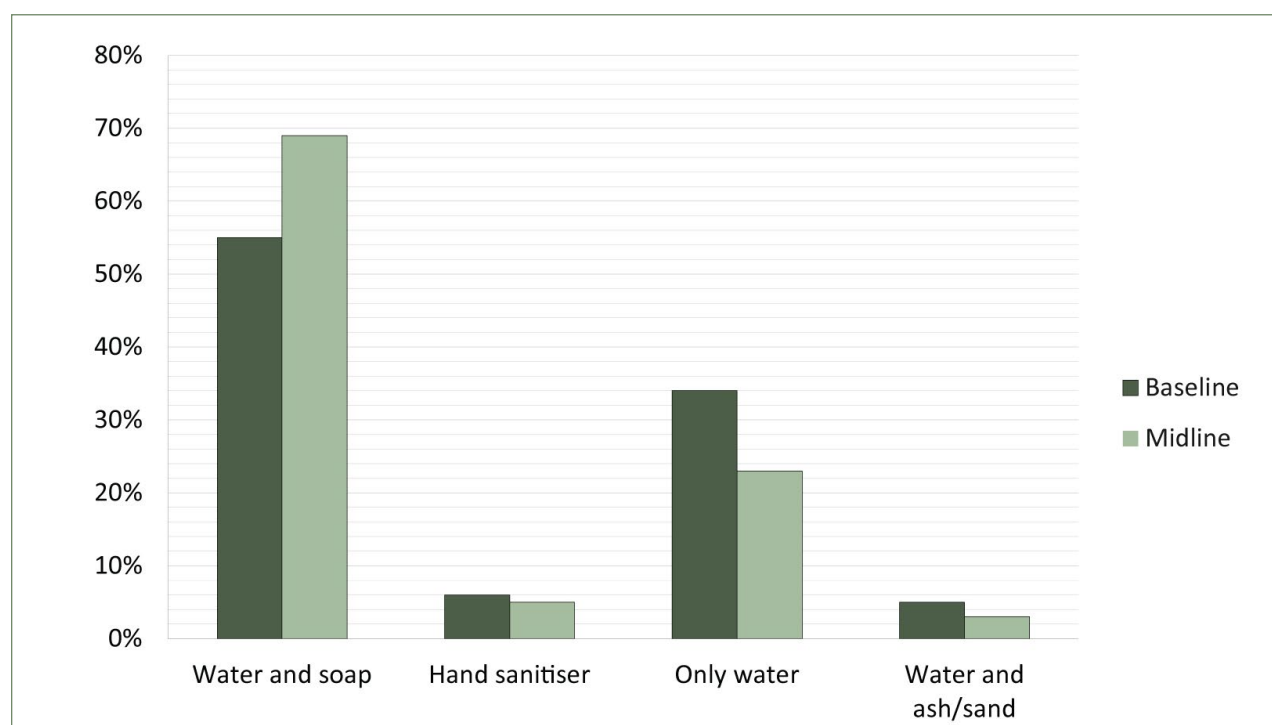
whereby children use the toolkit independently with their peers at school.

- Limited time available to children at school due to academic timetables: We advise schools to use the toolkits on Saturdays when classes are few and play hours are more. For e.g., states like Rajasthan have declared Saturdays to be 'no bag day'.

- Getting resources to set up school gardens is expensive: We have learned from the work of partners who mobilise the community to contribute seeds, material for fencing, and their time to help set up the garden. These success stories are shared in our networks.

- Influencing the demand for nutritious foods: The marketing of unhealthy foods has greatly influenced the dietary habits of children. In one of our schools in Maharashtra, our survey found that students consumed snacks frequently outside the school and these findings were shared with the school administration. As a result, the school administration decided to set up a canteen serving healthy snacks run by children for children to help change their diet.

Figure 5: Percentage of Children Washing Hands With Various Materials From 4th to 9th Grade – Baseline and Midline Surveys (6,394 responses)



Source: Baseline and Midline Surveys (6,394 responses)

Conclusion

Investing in the nutrition of the 1.2 billion adolescents (10-19 years aged population) will shape the world's future. A fifth of these adolescents – 253 million – live in India (Adolescents, Diets and Nutrition, 2019). Among adolescents, India struggles with two levels of

malnutrition - both in its visible (thin, short, and overweight/obese) and hidden forms (anaemia and six micronutrient deficiencies (iron, vitamin B12, folate, vitamin A, vitamin D, and zinc). Helping children take charge of tackling malnutrition through school-based interventions can be an effective approach to improving adolescent health.

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