



SC Adolescent Intervention Endline Survey Report

April 2024

Executive Summary

This report presents findings from the evaluation survey of SNEHA Centre programme's adolescent intervention which was implemented in two clusters of Mumbai's M-East ward, namely Janta Nagar and Indira Nagar during 2022-24. This was a cross-sectional study with baseline-endline design conducted with adolescents who are enrolled in the programme. The objective of the study was to measure trends since the Baseline in the understanding and practices of adolescents on nutrition and sexual and reproductive health, gender attitudes and civic engagement in order to assess the impact of the intervention.

Programme overview

Sneha Centre had enrolled adolescents into the intervention in two batches of 500 adolescents each in 2019-20 and 2020-21. In the third year of the program (2021-22), no new adolescents were enrolled. Instead, the program focussed on conducting refresher sessions for the onboard adolescents and creating a cadre of adolescent change makers (ACM). For the 2022-24 project cycle, the program stood poised to strengthen the existing intervention processes as well as plan sustainability.

Programme impact

The end line evaluation results demonstrate the successful achievement of program objectives across all its set indicators. Minimum dietary diversity among adolescents increased from 61% in the Baseline to 71% in the Endline. An enhancement occurred in the knowledge of pubertal changes and sexual and reproductive health (SRH); this increase in awareness was comprehensive because the summary metric (which is cumulated over a range of knowledge indicators) increased from 23% to 55% for high pubertal knowledge score and from 3% to 21% for high SRH knowledge score among older adolescents. More adolescents were gender egalitarian. Among adolescent change makers, there was increased self-efficacy and community participation keeping in line with the programme's vision of their role in peer facilitation and leading civic action in the community.

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Acronyms

SNEHA	Society for Nutrition Education and Health Action
RMNCH+A	Reproductive, Maternal, New born, Child and Adolescent Health
GEM Scale	Gender-Equitable Men Scale
SRH	Sexual and Reproductive Health
STI/RTIs	Sexually Transmitted Infections/Reproductive Tract Infections
HIV/AIDS	Human Immuno-deficiency Virus/Acquired Immuno-deficiency Syndrome

BMI	Body Mass Index
M&E	Monitoring and Evaluation
SD	Standard Deviation
CDC	Centres for Disease Control and Prevention
ACM	Adolescent change maker
UNICEF	United Nations Children's Fund

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Introduction

[Society for Nutrition, Education and Health Action \(SNEHA\)](#) is a Mumbai based non-profit organization invested in building viable urban communities by fostering preventive and promotive healthcare among women and children in informal settlements. SNEHA's Integrated Hybrid Intervention works to improve reproductive, maternal, new born, child and adolescent health (RMNCH+A) through collaborative action with the community and the public health system for awareness generation and strengthening access and utilization of RMNCH+A services. The programme revolves around the effective delivery of bundled interventions, focussing on the first 1000 days and adolescent phase of life addressing the inter-generational cycle of poor health and malnutrition in urban slums. Adolescent component of the intervention includes group education on nutrition and key health issues, sexual and reproductive health and gender through interactive sessions, nutritional counselling and referrals. Parental and community involvement is an integral part of intervention along with building a cadre of change agents. The program has enrolled adolescents in the 10-19 years age group in two batches – the first batch of 500 adolescents in 2019-20 and the second batch of 500 adolescents in 2020-21. Evaluations adopting a pre and post implementation design have been conducted for both batches.

In the year 2021-22, adolescents from these two cohorts were engaged in refresher sessions along with building a cadre of adolescent change makers who were especially trained in facilitation skills, leadership development and soft skills envisaging their role in peer facilitation and leading civic action in the community.

The goal of the next phase of the adolescent intervention (2022-24) was 'to sustain the knowledge and skills of adolescents about health'. Keeping in mind the importance of an enabling ecosystem, in this phase the programme also conducted meetings with parents to support adolescents by creating safe spaces at homes. In order to achieve its goal, the program had adopted the following objectives:

1. To improve the nutrition status of adolescents
Outcome indicator
 - i. Increase in adolescents achieving adequate minimum dietary diversity
2. To improve the knowledge and skills of adolescents about gender and sexual and reproductive health
Outcome indicators
 - ii. Increase in adolescents with high score in test of knowledge about pubertal changes
 - iii. Increase in adolescents with high score in test of sexual and reproductive health knowledge (15 years & older)
 - iv. Increase in adolescents with high gender equitable attitudes
3. To increase adolescent engagement and contribution for civic action and peer support
Outcome indicators
 - v. Increased self-efficacy among adolescents changemakers
 - vi. Increased civic engagement by adolescent change makers

Evaluation

Context and scope of evaluation

Evaluation design of the project included baseline and end line surveys. The baseline assessment was conducted at the beginning of the current phase of the program to assess the understanding and practices of adolescents on nutrition and sexual and reproductive health, gender attitudes and civic engagement, estimate the prevalence of key program indicators and accordingly set targets. The endline assessment was conducted to evaluate the impact by measuring status of program indicators with respect to predefined targets. The specific objective was to compare program indicators at baseline and endline, accordingly inferring program accomplishment.

Study design

Cross-sectional quantitative surveys were conducted during baseline and endline assessments. The Baseline survey was conducted in April 2022 while the Endline survey was conducted in April 2024. Face to face interviews were conducted with adolescents enrolled in the program followed by anthropometric measurements.

Sample size and sampling

Sample size was determined using Stata v.14. To be able to detect a 11 percent difference in the gender equitable attitudes of adolescents¹ at 80 percent power with a two tailed test and 95 percent confidence, 341 respondents needed to be interviewed. Assuming a 10% non-response rate, the total sample size was estimated to be 375. Stratification was done on cluster (Janta Nagar and Indira Nagar) and a random list of adolescents was generated from each area based on the sample size.

For survey with adolescent change makers, complete enumeration survey method (census) was adopted and all the onboard adolescent change makers were included in the study.

Data collection

A team of 12 surveyors, led by two field officers, was responsible for data collection. Interviewers were trained on thematic topics related to adolescent health, interview schedule, obtaining informed consent/assent from participants and electronic data collection. Surveyors sought informed written consent from adolescents aged 18 years and older and the parents of adolescents aged 10-17 years. Prior to conducting the interview, informed verbal assent was sought from adolescents aged 10-17 years. Each interview lasted for about 20-25 minutes. The supervisors were responsible to ensure that the surveyors followed protocols throughout the data collection; data collection was also monitored by the Monitoring & Evaluation Coordinator through direct observation of 5% of the interviews. Data was collected in CommCare (Dimagi, USA), an open-sourced mobile-based platform with a cloud-based server.

Survey Tool

A single standard questionnaire to gather information on the wide variety of topics related to adolescent health was not found. The survey tool was therefore adapted from other survey instruments like the 'Youth in India: Situation and Needs 2006-2007' Report, 'Minimum Dietary Diversity for Women: A guide to measurement', 'Gender-Equitable Men (GEM) Scale' and 'Rosenberg Self-efficacy Scale'. It consisted of the following sections as depicted in Table 1.

Table 1: Summary of survey questions

¹High gender equitable attitudes were seen among 43% of adolescents in the Baseline survey conducted in April 2022

	Sections	Questions
01	Administrative	Intervention cluster, unique ID, name of adolescent
02	Socio-demographic information	Age, sex, religion, occupation, education, family details, household details, type of drinking water and toilet details, school details
03	Diet and nutrition	Minimum Dietary Diversity (24-hour recall)
04.A	Understanding of sexual and reproductive health (SRH)	Changes during puberty, menstrual hygiene management
04.B	Understanding of sexual and reproductive health (15 years & older)	Pregnancy, contraception, STI/RTIs including HIV/AIDS
05	Gender equity perspective	GEM Scale. It consisted of different questions for the two age groups under the following sub-domains: <i>gender roles</i> , <i>gender attributes and gender violence</i> and an additional sub-domain: <i>sexual relations</i> for adolescents age 15 years & older
06	Anthropometry	Height and weight measurement
07	Adolescent participation and civic engagement	Exclusive to adolescent change makers. Self-efficacy, participation in SNEHA's events and activities

At the end of the interview, the adolescents' anthropometric measurements were taken by the surveyors. Adolescents' height and weight were measured and body mass index (BMI) was calculated using the formula $\text{weight}/\text{height}^2$. Weight was measured using a well-calibrated, portable bathroom scale and height was measured using a portable stadiometer, which consists of an anthropometer with a simple moveable headboard.

Data quality assurance and data management

The database management system included built-in skip patterns, acceptable ranges, and constraints to ensure reduction in errors associated with data collection and data entry. Quality control was also ensured through supervision i.e., spot-check (ongoing supervision of 25% interviews) by field officers. After data collection, the encrypted data was electronically transferred to a secure, password protected cloud repository. A data officer exported survey data to Excel which were then imported into STATA (v.14) for analysis. Frequencies were run on all variables in the data set to look for outliers. In case of discrepancies, corrective measures were taken. Review and feedback meetings were conducted with investigators and field supervisors on a fortnightly basis. All data collection and data management were supervised by the M & E Coordinator. Access to data was restricted to the data officer, M & E Coordinator, M&E Manager and the Research Director. Datasets were backed up on a password protected server.

Data analysis

After cross-checking for discrepancies and data cleaning, data analysis was conducted using Stata version 14. Continuous variables like age, family size, age at menarche etc. were summarized as Mean

and Standard Deviation if they were normally distributed. Categorical variables like gender, educational attainment etc. were summarized as proportions.

Ethical considerations

Investigators respected the privacy and confidentiality of all participants, and made sure informed consent was obtained prior to interview. Care was taken to maintain confidentiality at all times by not sharing information provided by participants or discussing any of the details of interviews with others. Confidentiality of the information was maintained in data processing and the final data sets did not include participants' name.

Any adolescent participating in the survey if found to be in need of assistance for health issues or violence, received the support through SNEHA Centre programme's adolescent intervention team and clinical psychologist or was referred appropriately.

Results

Section I: Adolescent indicators

Socio-demographic profile of the adolescents:

The Baseline survey was conducted with 407 adolescents (April 2022) whereas 384 adolescents were interviewed in the Endline survey (April 2024).

Table 2 presents the socio-demographic characteristics of the survey respondents. The sex distribution was similar in both rounds with close to three-fifths of the participants being female. Being a cohort, the age progression was evident with a mean difference of +2 years between Baseline and Endline. Majority belonged to nuclear families and more than half were Muslims. The average household size was 6. Majority lived in their own houses and most were pucca. All lived in households with an improved water source², though only a little more than half of the surveyed adolescents had access to improved toilet facilities³. This however increased from 40% in the baseline to 54% in the endline.

Table 2: Socio-demographic characteristics of the surveyed adolescents

Socio-demographic characteristics	Baseline (Apr'22)		Endline (Apr'24)	
	N=407		N=384	
	n	%	n	%
Sex				
• Female	239	59	233	61
• Male	168	41	151	39
Age				
• 10-14 years	204	50	64	17

² Unimproved drinking water sources: Unprotected well, Unprotected spring, Rivers or ponds, Vendor-provided water, Bottled water, Tanker truck water

³ Unimproved sanitation facilities: Public or shared latrine, Open pit latrine, Bucket latrine

• 15-19 years	203	50	271	71
• 20 years & older	-	-	49	13
Mean (SD) age	14.6 (2.06) years		16.6 (2.19) years	
Family type				
• Nuclear	345	85	298	78
• Joint	62	15	86	22
Religion				
• Muslim	225	55	211	55
• Hindu	180	44	171	45
• Other	2	1	2	1
Average household size	6		6	
House ownership				
• Own	289	71	279	73
• Rented	118	29	105	27
Type of house				
• Pucca	344	85	344	90
• Semi pucca	59	14	34	9
• Kutcha	4	1	6	2
Improved source of drinking water	407	100	384	100
Improved sanitation facility	161	40	207	54

Educational characteristics:

There were differences in the education levels of the surveyed adolescents between the baseline and endline with the shift being more adolescents having completed secondary education and moving to senior secondary level (Table 3). Majority were enrolled in private schools (61% in the baseline and 72% in the endline) and were currently in education/training (89% in the baseline and 76% in the endline) at the time of interview.

Table 3: Educational characteristics of the surveyed adolescents

Indicators	Baseline		Endline	
	N=407		N=384	
	n	%	n	%
Education level				
• No schooling	1	<1	-	-
• Primary (1-4 years of schooling)	17	4	5	1

• Secondary (5-8 years of schooling)	222	55	126	33
• Senior secondary (9-12 years of schooling)	164	40	234	61
• Graduation (13-15 years of schooling)	3	1	19	5
Type of educational facility <i>Among those currently in education</i>	N=369		N=316	
• Government	144	39	87	28
• Private	225	61	229	72
Current occupation				
• Student	352	86	273	71
• Student and working	11	3	19	5
• Not in Education or Training but in Employment	17	4	43	11
• Not in Education, Employment or Training	27	7	49	13

Parental characteristics:

The socio-demographic characteristics of the respondents' parents were also collected, including their survival status, education and occupation. The parental characteristics of the surveyed adolescents were similar in both baseline and endline. Among most of the adolescents, both their parents were surviving. Around one-fifths of the respondents' fathers had never gone to school compared to close to half of their mothers who had no schooling. A little more than half of the fathers were employed in occupations which didn't require any special skills or training whereas close to three-fifths of the mothers were homemakers. Results are presented in Table 4.

Table 4: Parental characteristics of the surveyed adolescents

Indicators	Baseline		Endline	
	N=407		N=384	
	n	%	n	%
Survival status*				
• Both parents alive	372	91	350	91
• Father expired; mother alive	31	8	27	7
• Mother expired; father alive	3	1	7	2
Educational attainment of father[§]				
• No schooling	78	21	72	20
• Primary (Standard 1-4)	30	8	28	8
• Secondary (Standard 5-8)	144	39	133	37

• Senior Secondary (Standard 9-12)	88	24	105	29
• Graduate and above	10	3	8	2
• Don't know	24	6	11	3
Educational attainment of mother[^]				
• No schooling	200	50	177	47
• Primary (Standard 1-4)	24	6	24	6
• Secondary (Standard 5-8)	114	28	116	31
• Senior Secondary (Standard 9-12)	47	12	47	12
• Graduate and above	7	2	8	2
• Don't know	9	2	5	1
Occupational status of father				
• Unemployed	6	1	14	4
• Unskilled labour	205	55	192	54
• Labour work in factory/driver	65	17	54	15
• Makes products	54	14	54	15
• Shop/hotel worker	29	8	17	5
• Others	16	4	26	7
Occupational status of mother				
• Unemployed	239	59	242	64
• Unskilled labour	94	23	85	23
• Makes products	56	14	39	10
• Shop/hotel worker	10	2	8	2
• Others	4	1	3	1

**Data for survival status of parents missing in the Baseline for one adolescent*

\$ Data for educational status of father missing in the Baseline for one adolescent

^ Data for educational status of mother missing in the Baseline for two adolescents

Objective 1: To improve the nutritional status of adolescents

Indicators:

1. Proportion of adolescents with adequate dietary diversity
2. Proportion of adolescents who are underweight

The results of assessment of the dietary intake of adolescents are presented in Table 5. The adolescents were asked about their diet on the previous day and night of the interview (24-hour recall). Those who had partaken of more than or equal to 5 out of ten defined food groups were classified as having adequate dietary diversity, a proxy indicator for higher micronutrient adequacy.

Adolescents who had adequate minimum dietary diversity increased from 61% in the baseline to 70% in the endline. Food groups which saw a marked increase between the two rounds were nuts and seeds (43% to 56%), flesh foods (34% to 41%) and other fruits (54% to 62%). However, consumption of dark green leafy vegetables (rich in Vitamin A and folate) and eggs (good source of bioavailable protein and Vitamin B12) remained low.

Table 5: Dietary diversity of the surveyed adolescents

Indicators	Baseline		Endline	
	N=407		N=384	
	n	%	n	%
Minimum dietary diversity				
• Adequate	248	61	268	70
• Inadequate	159	39	116	30
Consumption pattern of food groups				
• Grains, white roots and tubers	405	99	381	99
• Legumes and pulses	375	92	354	92
• Nuts and seeds	173	43	215	56
• Milk and milk products	125	31	136	35
• Meat, poultry and fish	138	34	158	41
• Eggs	83	20	57	15
• Green leafy vegetables	88	22	92	24
• Vitamin A rich fruits and vegetables	217	53	209	54
• Other fruits	221	54	238	62
• Other vegetables	260	64	240	63

Height and weight of the adolescents were measured and BMI was calculated using the formula weight/height². BMI-for-age z-scores were computed with a Stata macro for the 2000 CDC Growth Reference (*Growth Reference 2-20 Years - BMI-for-Age Charts*, n.d.). Adolescents with BMI-for-age less than 5th percentile of the CDC growth charts' reference population were classified as underweight, between 5th and 85th percentile were considered to have normal weight, greater than or equal to 85th but less than 95th percentile were considered to be at risk of being overweight. Adolescents who had BMI for age greater than 95th percentile were considered to be obese.

There was an increase in adolescents who were underweight, 29% at Endline compared to 27% at Baseline. Simultaneously, there was also an increase in the number of adolescents who were in the overweight/obese category – 9% in the baseline compared to 12% in the endline. This indicates the double burden of malnutrition in the adolescent age group.

Table 6: Nutritional status of the surveyed adolescents

Indicators	Baseline		Endline	
	N=402		N=381	
	n	%	n	%
BMI categories (CDC BMI-for-age growth charts)				
• Normal	259	64	226	59
• Underweight	109	27	111	29
• Overweight	30	8	33	9
• Obese	4	1	10	3

Objective 2: To sustain knowledge and skills of adolescents about gender and sexual and reproductive health

Indicators:

1. No. (%) of adolescents with high score in test of knowledge about pubertal changes
2. No. (%) of adolescents with high score in test of sexual and reproductive health knowledge (15 years & older)
3. No. (%) of adolescents displaying gender equitable attitudes

Adolescents' current understanding of puberty and associated changes were assessed through their awareness of physical changes during puberty, correct knowledge of wet dreams (that their occurrence is normal and a part of growing up) and rejection of misconceptions regarding menstruation (namely, that girls should eat separately, should not enter the kitchen or touch anyone during their menstrual period). The results are presented in Table 7.

There was an overall improvement in the awareness of pubertal changes among adolescents from the baseline. More adolescents had a comprehensive knowledge of the different bodily changes taking place during puberty, almost half of the adolescents said that wet dreams are normal and a part of growing up compared to 31% at baseline and more than four-fifths of the adolescents rejected myths associated with menstruation and said that girls should consume iron rich food especially during their period compared to 55% at baseline.

The questionnaire used to assess knowledge of puberty consisted of 10 correct responses for questions on changes occurring during puberty, correct knowledge about wet dreams and rejection of menstrual myths. A summary score was prepared based on the number of correct responses with scores ranging from low to high. It was found that 55% of the adolescents had high score (score of 7-10) compared to 23% at baseline on awareness of pubertal changes.

Table 7: Awareness about puberty and changes during growing up among surveyed adolescents

Indicators	Baseline		Endline	
	N=407		N=384	
	n	%	n	%
Bodily changes during puberty (Multiple choice response)				
• Increase in height & weight	366	90	337	88
• Menstruation	249	61	308	80
• Hair growth in armpits & private parts	222	54	302	79
• Growth of breasts	206	51	267	70
• Deepening of voice	174	43	292	76
• Wet dreams	60	15	108	28
• Broadening of hips	15	4	38	10

• Don't know	5	1	0	0
Response to “how should a friend react if a boy tells them about his first experience of wet dreams”				
• Correct knowledge (It is normal and part of growing up)	127	31	190	49
• Incorrect knowledge (Something is wrong with his body/ To visit a doctor/ He/she should make fun of him in front of friends/Don't know)	280	69	194	51
Rejecting myths associated with menstruation				
• Correct knowledge (Girls should consume iron rich food especially during their period)	225	55	323	84
• Incorrect knowledge (Girls should eat separately during their period/Girls should not enter the kitchen during their period/Girls should not touch anyone during their period/Don't know)	182	45	61	16
Summary scores				
• High score (7-10)	94	23	211	55
• Moderate score (4-6)	168	41	134	35
• Low score (0-3)	145	36	39	10

Older adolescents were probed on their current understanding of sexual and reproductive health through questions on awareness of contraceptive methods, sexually transmitted infections, transmission of HIV/AIDS and correct knowledge regarding pregnancy (that a girl/woman can get pregnant at first sexual intercourse). The results are presented in Table 8. When probed whether a girl can get pregnant the first time she has intercourse, 53% correctly said yes. 83% had knowledge of at least one modern contraceptive method. 59% had knowledge of at least one symptom of sexually transmitted disease. When asked to mention all the ways through which HIV/AIDS can be transmitted, 80% knew of at least one method of HIV transmission.

A summary score⁴ was prepared based on the number of correct responses with scores ranging from low to high. It was found that 21% of the adolescents had high score (score of 7-9) compared to 3% at baseline, 45% scored medium (score of 4-6) compared to 22% at baseline on awareness of sexual and reproductive health. There was a reduction in adolescents with low score from 75% in the baseline to 35% in the endline (Table 8).

⁴ Knowledge of modern contraceptive methods (knowledge of condom, IUD and pills were taken into calculation), knowledge that a girl could get pregnant the first time she has intercourse, knowledge of at least one STI symptom, comprehensive knowledge of HIV/AIDS transmission

Table 8: Awareness about sexual and reproductive health among surveyed adolescents aged 15 years & older

Indicators	Baseline		Endline	
	N=203		N=320	
	n	%	n	%
Can a girl get pregnant the first time she has sex?				
• Yes	81	40	171	53
• No			123	38
• Don't know			26	8
Contraceptive methods				
• At least one modern contraceptive method known	104	51	267	83
• No method known			53	17
STI symptoms				
• At least one symptom of STI known	76	37	189	59
• No symptom known			131	41
Causes of HIV transmission				
• At least one cause known	90	44	255	80
• No cause known			65	20
Summary score				
• High score (7-9)	6	3	66	21
• Medium score (4-6)	44	22	143	45
• Low score (0-3)	153	75	111	35

Gender norms are often defined as culturally shared expectations about the characteristics that men and women should possess and how they should behave (Yu et al., 2017). Gender attitudes are defined as an individual's perceptions, beliefs, or support of gender norms (Kågesten et al., 2016). Gender attitudes can be equitable or inequitable depending on the gender norm. Gender-equitable attitudes are often constructed during adolescence making this a critical time to alter gender perceptions.

The attitudes of the adolescents towards gender equity were assessed through the Gender-Equitable Men (GEM) Scale. The scale was administered differently for different age groups; for the 10 to 14 age group, there were a set of 15 statements clustered around three themes: gender roles (e.g., "Since girls have to get married, they should not be sent for higher education"), attributes (e.g., "Boys are naturally better than girls in subjects like mathematics and science") and violence (e.g. "There are times when a boy needs to beat his girlfriend") and the responses could be - "agree", "not sure" and "disagree". Those with scores less than 10 were classified as having low gender-equitable attitude, scores 11 to 20 as having moderate equity and greater than 20 as having high equity. For older adolescents, there were 12 statements with an additional theme: sexual relations (e.g., "Men have a

greater need for sex than women”). The responses could be “agree”, “somewhat agree” and “disagree”. Those with scores greater or equal to 28 were classified as having high equity.

It was seen that 80% of the respondents in the 10–14-years age group and 58% in the 15-19 years age group displayed high gender equitable attitude (Table 9). Overall, the proportion of adolescents who were gender egalitarian (high gender equitable attitude score) increased from 43% (n=177, N=407) at Baseline to 62% (n=238, N=384) at the endline.

Table 9: Gender equitable attitudes of the surveyed adolescents

Gender equitable attitude scores	Baseline		Endline	
	N= 204		N= 64	
10-14 years	n	%	n	%
• High equitable	98	48	51	80
• Moderate equitable	100	49	12	19
• Low equitable	6	3	1	2
15 years & older	N= 203		N= 320	
• High equitable	79	39	187	58
• Moderate equitable	97	48	116	36
• Low equitable	27	13	17	5

Section II: Adolescent change makers (ACMs)

Socio-demographic profile of the ACMs:

At Baseline, there were 116 ACMs onboard at the time of the survey, however only 101 could be interviewed (response rate of 87%). At Endline, there were 107 (attrition rate ~8%) ACMs onboard at the time of the survey, however only 98 could be interviewed (response rate of 92%).⁵

As seen from Table 10, majority of the ACMs were female (83%). There was a mean increase of 1.6 years in the age of ACMs from Baseline to Endline. ACMs living in nuclear families reduced from 86% to 70%; other socio-demographic characteristics like religion, average household size, house ownership, type of house and improved sources of drinking water remained consistent between the two survey rounds. ACMs who had access to improved sanitation facilities improved from 47% to 53%.

Table 10: Socio-demographic characteristics of the ACMs

Socio-demographic characteristics	Baseline		Endline	
	N=101		N=98	
	n	%	n	%
Sex				
• Female	78	77	81	83
• Male	23	23	17	17
Age				
• 10-14 years	36	36	11	11
• 15-19 years	61	60	69	70
• 20 years & older	4	4	18	18
Mean (SD) age	15.6 (2.2) years		17.2 (2.2) years	
Family type				
• Nuclear	87	86	69	70
• Joint	14	14	29	30
Religion				
• Muslim	47	46	43	44
• Hindu	51	51	52	53
• Other	3	3	2	2
Average household size	6		6	
House ownership				
• Own	72	71	74	76
• Rented	29	29	24	24

⁵ Reason for non-response was ACMs being unavailable in the community at the time of survey

Type of house				
• Pucca	88	87	88	90
• Semi pucca	11	11	10	10
• Kutcha	2	2	0	0
Improved source of drinking water	101	100	98	100
Improved sanitation facility	47	47	52	53

Educational characteristics:

There were differences in the education levels of the surveyed ACMs between the baseline and endline with the shift being more of them having completed secondary education; at Endline 70% had completed senior secondary education (Table 11). Majority were enrolled in private institutions. 73% of the ACMs were currently in education/training when compared to 89% at the time of Baseline.

Table 11: Educational characteristics of the ACMs

Indicators	Baseline		Endline	
	N=101		N=98	
	n	%	n	%
Education level				
• Primary (1-4 years of schooling)	1	1	-	-
• Secondary (5-8 years of schooling)	35	35	21	21
• Senior secondary (9-12 years of schooling)	59	58	69	70
• Graduation (13-15 years of schooling)	6	6	8	8
Type of educational facility				
	N=88		N=77	
• Government	29	33	25	32
• Private	59	67	52	68
Current occupation				
• Student	84	83	65	66
• Student and working	6	6	7	7
• Not in Education or Training but in Employment	4	4	11	11
• Not in Education, Employment or Training	7	7	15	15

Objective 3: To increase adolescent engagement and contribution for civic action and peer support

Indicators:

1. Increased self-efficacy among adolescent change makers
2. Increased civic engagement by adolescent change makers

Adolescent participation is defined as when adolescents (individually and/or collectively) form and express their views and influence matters that concern them directly and indirectly. The terms participation, engagement and civic engagement are inter-linked and mutually reinforcing. Civic engagement is a subset of engagement, which focuses on participation in public spheres to improve the well-being of communities or society. (UNICEF, 2020)

Meaningful participation can result in empowerment and influence. UNICEF defines sense of self-worth or self-esteem as an outcome of participation. Self-esteem plays an essential role in enabling young people to translate new knowledge – whether in education, livelihoods, or health – into action. In our study, we have measured the adolescent change makers’ self-esteem using Rosenberg Self-Esteem Scale which is considered as a reliable and valid quantitative tool for self-esteem assessment. It consists of ten statements (five positively worded and five negatively worded) and measures global self-worth by measuring both positive and negative feelings about the self. The scale ranges from 0-40 with higher scores indicating higher self-esteem.

The mean self-esteem score of the ACMs increased from 28.9 to 30.6. 42% of the ACMs were found to be in the high self-esteem category when compared to 24% at Baseline (Table 12)

Table 12: Self-esteem of the ACMs as measured by Rosenberg Self-Esteem Scale

Indicators	Baseline		Endline	
	N=101		N=98	
	n	%	n	%
Self-esteem categories				
• High (31-40)	24	24	41	42
• Medium (16-30)	77	76	57	58
• Low (0-15)	-	-	-	-
Mean self-esteem score	28.9		30.6	

The ACMs were also probed about their participation in different activities like mobilisation of beneficiaries, community campaigns, engagement in peer facilitation etc. in the preceding one year. The proportion of ACMs who had participated in community campaigns increased from 49% to 52%; the proportion of adolescents who had taken up civic initiatives in their community like writing to the ward office, addressing sanitation issues etc. increased from 39% to 68%. 8% of the ACMs had not participated in any activity in the preceding year of the Endline survey (Table 13).

Table 13: Civic engagement by ACMs

Indicators	Baseline		Endline	
	N=101		N=98	
	n	%	n	%
Civic engagement by adolescent change makers (No. of ACM participating in community campaigns/civic action in preceding year)	65	64	78	80
List of activities				
<i>Multiple choice</i>				
• Mobilisation of beneficiaries	71	70	68	69
• Conducting sessions for adolescents	63	62	56	57
• Distribution drives like ration distribution	53	52	44	45
• Behaviour change communication through home visits	52	51	43	44
• Community campaigns including street play, wall painting etc	50	49	51	52
• Referral of beneficiaries	40	40	53	54
• Civic action like writing letters to Ward Office, addressing sanitation issues in the community etc.	39	39	67	68
• None	3	3	8	8

Conclusion

This report presents the profile of sampled adolescents in terms of socio-demographic, parental and educational characteristics. It also captures data on knowledge, attitude and practices of adolescents in terms of dietary patterns, sexual and reproductive health and attitude towards gender norms. Adolescent change makers' self-esteem and civic participation have also been captured.

The findings suggest that the programme has been successful in achieving its planned targets through an integrated model of group education and community mobilization. Minimum dietary diversity among adolescents have improved. However, two fifths of the adolescents were malnourished (including undernutrition and overweight/obesity) highlighting the unique and important opportunity for integrated action on malnutrition in all its forms in order to address the double burden of malnutrition among adolescents.

There was an expanded understanding among adolescents on changes occurring during puberty and sexual and reproductive health from Baseline to Endline. There was also a change in perceptions among adolescents pertaining to gender role stereotypes with more adolescents in the Endline having high scores for gender equitable attitudes when compared to the baseline. This is a cornerstone in the programme's vision for breaking the inter-generational cycle of ill health because studies have reported significantly greater HIV knowledge, self-efficacy related to refusing sex or condom use, fewer sexual partners, lesser prevalence of early sexual activity and teenage pregnancies among students who received comprehensive sexuality education.

The mean self-efficacy score among ACMs showed increase over time. Self-efficacy is often described as an outcome of participation and it was observed that more adolescent change makers had participated in SNEHA's activities when compared to Baseline, highlighting enhanced sense of community and peer leadership to become change agents among the adolescents. The program could further identify which activities align most to the ACMs' interests so that they are kept motivated to devote time to volunteering and community participation amidst their other engagements in career/future plans.

In summary, recognition is growing that investing in adolescence yields triple benefits - bringing health, social and economic gains to today's adolescents, tomorrow's adults and future generations. This study provides important evidence on the state of adolescent health and well-being for programming and highlights priority areas for investment and action.

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Annexure 1

Table 14: Adolescent intervention outcome indicators (Baseline-Endline survey comparison)

Indicators	Target (2024)	Baseline survey (Apr'22)	Endline survey (Apr'24)
Adolescents achieving adequate minimum dietary diversity	65%	61%	70%
Adolescents with high score in test of knowledge about pubertal changes	30%	23%	55%
Adolescents with high score in test of sexual and reproductive health knowledge (15 years & older)	10%	3%	21%
Adolescents with high gender equitable attitudes measured using Gender Equitable Men Scale	53%	43%	62%
Increased self-efficacy among adolescents changemakers (Rosenberg Self Efficacy Scale)	27%	24%	42%
Increased civic engagement by adolescent change makers (No. of ACM participating in community campaigns/civic action in preceding year)	74%	64%	80%