



Health, Nutrition and Well-Being in Andhra Pradesh: Preliminary Findings from the 2023-24 Young Lives Round 7 Survey

Introduction

For more than 20 years, Young Lives has followed two cohorts, born seven years apart, from infancy into early adulthood in Ethiopia, India (Andhra Pradesh and Telangana), Peru and Vietnam.¹ This factsheet presents preliminary findings from Round 7 of the Young Lives survey carried out in India in the State of Andhra Pradesh in 2023–24, when the Younger Cohort was 22 years old and the Older Cohort was 29. It provides an overview of the key nutrition, health and wellbeing indicators underlining inter-cohort changes by comparing the Younger Cohort at age 22 with the Older Cohort at the same age in 2016 and documenting the Younger Cohort's progression from age 12 to 22. This cohort comparison, and the development over time for the Younger and Older Cohort, will shed light on the extent to which the latest global crisis (COVID-19 pandemic) might have affected progress toward achieving Sustainable Development Goal (SDG) 2.1², and on the emerging problem and implications of the double burden of malnutrition in the State. This factsheet also provides analysis related to mental health and subjective well-being which are relevant to SDG 3.4³.

Headlines

- A double burden of malnutrition is evident among Young Lives participants in Andhra Pradesh as high prevalence of underweight coexists with high prevalence of overweight/obesity.
- Socio-economic disadvantage affects young people's physical health with those from poorer and rural households exhibiting higher levels of underweight and those from wealthier and urban households having a higher prevalence of overweight/obesity.
- More than half of the Younger Cohort and two third of the Older Cohort at age 22 consumed less than five food groups out of 10⁴ and only 1 out of every 5 participants across cohorts consumed Vitamin A enriched fruit and vegetables⁵ in the last 24 hours. Gender, caste and wealth affect young people's food diversity.
- Subjective well-being has generally improved since the Younger Cohort was 12 years old, though there was a notable decline during the pandemic.
- Five out of ten participants exhibit symptoms compatible with at least moderate stress, while one out of ten has symptoms of at least mild anxiety amongst the Older Cohort at age 29.

1 Round 7 took place in the Young Lives study sites in Ethiopia, India and Peru. On this occasion, data was not collected in Vietnam due to a change in government procedures on the international transfer of personal data.

2 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

3 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.

4 The 10 food groups are: (1) grains, (2) pulses, (3) root and tubers, (4) dairy, (5) meat, poultry and fish, (6) eggs, (7) dark green leafy vegetables, (8) other Vitamin A fruits and vegetables, (9) other vegetables, (10) other fruits.

5 This food group has been highlighted because it is consumed by both vegetarians and non-vegetarians.

Key findings

- **A double burden of malnutrition is evident among Young Lives participants in Andhra Pradesh.** A higher percentage of the Younger Cohort (22%) were overweight/obese at age 22, compared to the Older Cohort (15%) at the same age in 2016 and it is largely an urban phenomenon. Meanwhile, the prevalence of underweight participants remains similar but persistently high at 21% amongst the Younger Cohort and 23% amongst the Older Cohort. At age 29, we find that 41% of the Older Cohort were overweight or obese, with women (37%) significantly less likely to be overweight or obese than men (45%). Increasing numbers of overweight or obese participants alongside a persistently high number of underweight young adults highlight the need for public policy interventions that address the double burden of malnutrition.
- **Socioeconomic disadvantage affects young peoples' physical health.** Participants from poorer and rural households, and those with lower maternal education across both cohorts at age 22, exhibit higher levels of underweight. On the other hand, young adults belonging to Other Castes, and from wealthier and urban households have a higher prevalence of overweight/obesity.
- **Among 22-year-olds, 47% of the Younger Cohort consumed more than five food groups in 2023, compared to 35% of the Older Cohort in 2016.** Men were significantly more likely to consume more than five food groups in the last 24 hours compared to women amongst Younger Cohort. Across cohorts in 2023, only 1 out of every 5 participants consumed vitamin A enriched fruit and vegetables in the last 24 hours.
- **Subjective well-being has improved for both cohorts since age 12.** Despite a notable decline during the pandemic, subjective well-being has recovered post-pandemic, surpassing pre-pandemic levels for both cohorts.
- **While 54% of the Younger Cohort exhibited symptoms resembling at least moderate stress, 8% exhibited symptoms of at least mild depression.** Overall, the anxiety levels increased from 4% during the pandemic to 6% in 2023. Notably, anxiety and depression have increased amongst both young men and women post-pandemic.

The policy context of nutrition and mental health in Andhra Pradesh

According to the latest Economic Survey 2024-25, the State of Andhra Pradesh is the “leading performer” among all Indian States demonstrating sustained economic growth over the years, with a recent Gross State Domestic Product (GSDP) growth rate of 12.94% (Planning Department, Government of Andhra Pradesh, 2024). The State has also made progress in reducing multi-dimensional poverty, which declined by 5.7 percentage points between 2015-16 and 2019-2021 (NITI Aayog, 2023). During the pandemic, the State government launched an additional nutrition support program “YSR Sampoorana Poshana” for all children, pregnant women and lactating mothers from the seven Integrated Tribal Development Agency (ITDAs) and eight districts in Andhra Pradesh (Government of Andhra Pradesh, 2019).

In India, the burden of overweight and obesity has increased with the demographic, epidemiological, and nutritional transition, in which the burden of communicable diseases, as well as fertility, have dropped. However, non-communicable diseases (NCDs) are escalating (Prabhakaran et al 2018). According to the National Family Health Survey-5 (NFHS-5), the prevalence of overweight/obesity among women rose to 36.3% from 33.2% in NFHS-4 in Andhra Pradesh, indicating an upward trend. In

contrast, the prevalence among men declined from 33.5% to 31.1% over the same period (International Institute for Population Sciences and ICF, 2021).

Disability-adjusted life years (DALYs) due to mental disorders in India were 1,974 per 100,000 inhabitants in 2021, higher than the estimate for lower middle-income countries (1,864 per 100,000 inhabitants). The largest increase occurred during the pandemic, with DALYs due to mental health disorders increasing by 11% (WHO 2024a). An analysis of the Young Lives telephone survey conducted in Andhra Pradesh and Telangana during the COVID-19 pandemic reveals that job loss, death of the family's earning member or mishap in the family, and price increases contributed to increased anxiety. The analysis indicates that anxiety levels among women were higher than men because of the increased burden of household chores and childcare responsibilities (Gulati et al., 2023).

The Mental Health Care Act recognises the statutory right to access to mental healthcare and provides a basis to reform policy accordingly (Pathare and Kapoor 2020). However, its implementation has been limited to date (Vashist, Kukreti and Taneja, 2023).

Methods

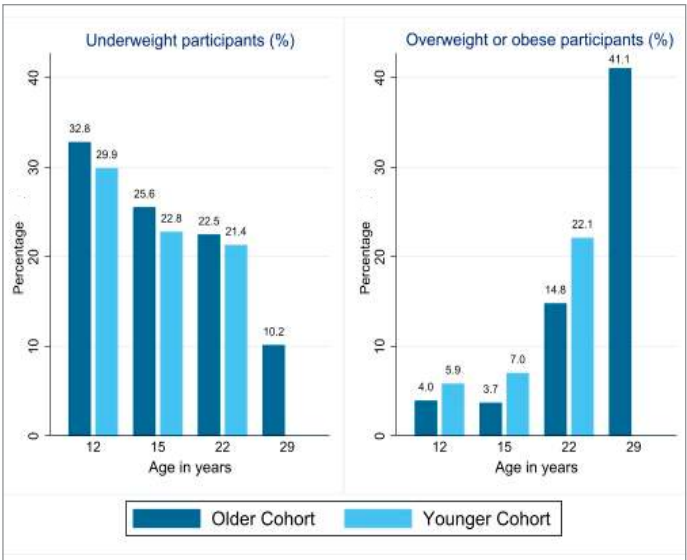
This factsheet uses preliminary data from the Young Lives Round 7 survey, which was collected between August

2023 and January 2024. The sample comprises 1185 from the Younger Cohort and 540 from the Older Cohort in Round 7, covering different socio-economic groups, which represents 87.9% of the original sample in Round 1 (Younger Cohort: 90.7%; Older Cohort: 82.3%). Participants from previous rounds who were not interviewed in Round 7 were excluded from the analysis. The total sample for this factsheet pertains to those who were living in Andhra Pradesh during Round 1 and not those who live in Andhra Pradesh Round 7. Young Lives participants are classified by gender, area of residence (urban and rural) at the time of data collection, household wealth (top, middle and bottom wealth tercile in 2002 and 2016) (Briones 2017), mother’s level of education and caste. Mental health has been assessed in terms of depression, anxiety, and stress.⁶

Double Burden of Malnutrition

The Younger Cohort shows evidence of a double burden of malnutrition, with a high prevalence of underweight (21%) coexisting with overweight/ obesity (22%) in 2023 (Figure 1). The prevalence of underweight is higher amongst the Older Cohort than the Younger Cohort between the ages of 15 and 22. However, we see a steep decline in underweight amongst the Older Cohort at age 29 (10%). The maximum decline in underweight amongst both cohorts occurred between the ages of 12 to 15 (Figure 1). Therefore, late adolescence is a critical window.

Figure 1. Indicators of malnutrition by cohort and age (%) in Andhra Pradesh



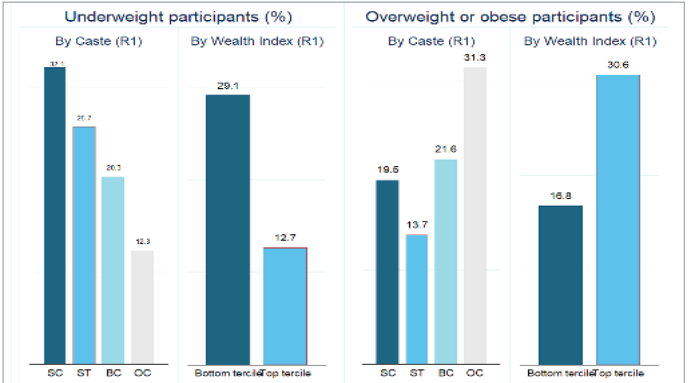
Note: The definitions of underweight, overweight and obesity vary by age. We followed the World Health Organization (WHO) Child Growth Standards to classify children who are 5–19 years old (WHO 2024b). For adults over 19 years old, we used absolute thresholds, also defined by WHO (WHO 2024c). Regarding underweight, for children who

are 5–19 years old, we calculated the prevalence of thinness, defined as children whose BMI-for-age z-score Z is two standard deviations below the median for a healthy reference child of the same age and gender; for adults aged over 19 years old, we calculated the percentage of underweight children, defined as having a BMI lower than 18.5kg/m2. Overweight for children who are 5–19 years old is defined as those whose BMI-for-age z-score is more than one standard deviation above the median for a healthy reference child of the same age and gender; for adults over 20 years old, it is defined by having a BMI higher than 25kg/m2. Obesity for children who are 5–19 years old is defined as those who are more than two standard deviations above the median BMI for a healthy child of the same age and sex; for adults aged over 20 years old, it is defined by having a BMI greater than 30kg/m2. The anthropometric measurements were not measured for the Younger Cohort at age 19 due to the pandemic.

On the flipside, prevalence of overweight/ obese participants has increased significantly across cohorts. At 22, 22% of the Younger Cohort were overweight/ obese, compared to 15% of the Older Cohort at the same age in 2016. A higher percentage of Younger and Older Cohort women are underweight, whereas more men are overweight / obese at 22. This, together with the fact that at age 29, 41% of the Older Cohort are overweight or obese and 23% are prone to cardiovascular risk⁷ with women (33%) at higher risk compared to men (11%) is a cause for concern. This suggests that without targeted policy initiatives, overweight/ obesity and its consequences will become problematic for the Younger Cohort as they age.

In Round 7, underweight is associated with early-life socio-economic conditions amongst the Younger Cohort, while overweight/obesity is associated with wealthier and socially advantaged households. Participants who come from wealthier households have a lower prevalence of being underweight and a higher prevalence of being overweight/obese than their counterparts (Figure 2).

Figure 2. Nutritional Indicators of the Younger Cohort at age 22 by socio-demographic factors (%)



Note: The definitions of underweight, overweight and obesity vary by age. We followed the WHO Child Growth Standards to classify children who are 5–19 years old (WHO 2024c). For adults over 19 years old, we used absolute thresholds also defined by WHO (WHO 2024a). See Figure 1 for further details.

6 Mental health was assessed using standardized measures for anxiety, depression, and stress. Anxiety was evaluated using Generalized Anxiety Disorder (GAD) scale, with scores ranging from 0 to 21. A score of 0-4 indicates minimal anxiety, 5-9 – Mild anxiety, 10-14: moderate anxiety and 15-21 severe anxiety. Depression was measured using Patient Health Questionnaire (PHQ-9) which has a total score range from 0 to 27, categorized as 0-4 minimal depression, 5-9 mild depression, 10-14 moderate depression, 15-19 moderately severe depression, 20-27 severe depression. Stress levels were assessed using Perceived Stress Scale (PSS-10), where scores between 0-13 indicates low stress, 14-26 moderate stress, and 27-40 high stress

7 Cardiovascular risk has been assessed using abdominal circumference, with values greater than 88 cm for women and 102 cm for men indicating high cardiovascular risk.

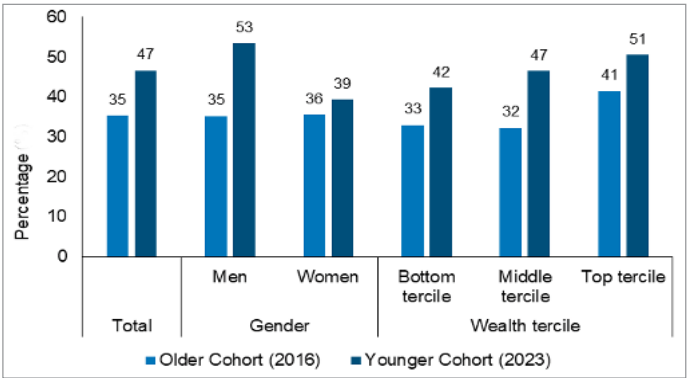
There is also evidence of caste-based inequality, with a higher prevalence of participants from Scheduled Castes and Scheduled Tribes being underweight (32% and 26%, respectively) compared to those who belong to Other Castes (12%). The trend is reversed for the prevalence of overweight/obese participants, with 19% of Scheduled Castes, 14% of Scheduled Tribes, and 31% of Other Castes belonging to this category. There is a higher prevalence of underweight participants and a lower prevalence of overweight/obese participants in rural areas and those with mothers with less education, highlighting how early-life inequalities affect nutritional outcomes.

During young adulthood, individuals experience increased independence, shifting priorities, and greater autonomy, often leading to significant lifestyle changes. These changes, characterized by unhealthy dietary habits and reduced physical activity, are further exacerbated by various environmental and behavioural factors. Thus, contributing to a substantial rise in obesity rates and related comorbidities (Anwar et al, 2024).

Food Consumption and Diversity

Comparing food groups consumed across cohorts at age 22 - There is a marked improvement in consumption patterns of more than five food groups across time, with 47% of the Younger Cohort consuming more than five food groups in 2023 compared to 35% of the Older Cohort in 2016 (Figure 3). Within the top tercile, while 51% of the Younger Cohort consumed more than five food groups, it was much lower for the Older Cohort (41%). Over a seven-year period, there is a steep increase in consumption of five food groups amongst men (18 percentage points) compared to women (4 percentage points) in 2023. Caste differences are evident amongst both Younger Cohort and Older Cohort (aged 22). Among the Younger Cohort, participants from Other Castes consume more diverse food (53%), while the Older Cohort participants from Backward Classes consume more diverse food (41%). Scheduled Tribes had the lowest dietary diversity across both cohorts at age 22 (42% in Younger Cohort and 19% in Older Cohort) (Annex 1).

Figure 3: Dietary diversity- More than 5 food groups (%) among Older and Younger Cohorts at age 22



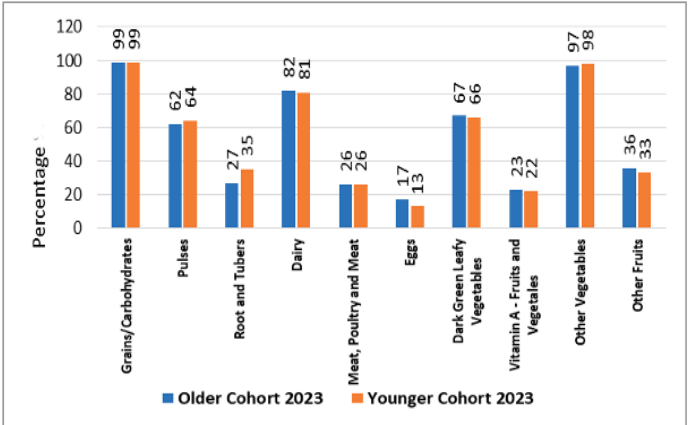
Dietary patterns in 2023

Lifestyle factors such as food diversity and availability of cheap fatty food play a significant role as contributory factors to overweight and obesity. Among Older Cohort participants classified as overweight/obese, 31% consumed fizzy and sweet soft drinks often (at least 2-3 times a week), 36% ate salty and fried snacks and 21% consumed sweet and sugary foods at least twice or thrice a week. Similarly, amongst Younger Cohort classified as overweight/obese, 32% consumed fizzy and sweet soft drinks often (at least 2-3 times a week), while a much higher proportion ate salty and fried snacks (43%) and consumed sweet and sugary foods (27%) at least twice or thrice a week.

The dietary patterns⁸ and differences in food choices between the Older Cohort and the Younger Cohort are illustrated in Figure 4. A smaller number of young adults are observed to consume vitamin A rich fruits and vegetables (22-23% in both cohorts) and eggs (17% in the Older Cohort and 23% in the Younger Cohort). In contrast, a majority of young adults consume grains/carbohydrates and other vegetables.

Amongst Younger Cohort, men and those belonging to top tercile households were significantly more likely to consume more food groups than women and those from bottom tercile households. Comparing the Older Cohort at age 22 and 29, the gender disparity has increased in consumption of food groups, disfavours women and there is a significant disparity in food consumption with Scheduled Tribes being the most disadvantaged across time (Annex 1).

Figure 4: Dietary patterns in Younger Cohort and Older Cohort in 2023



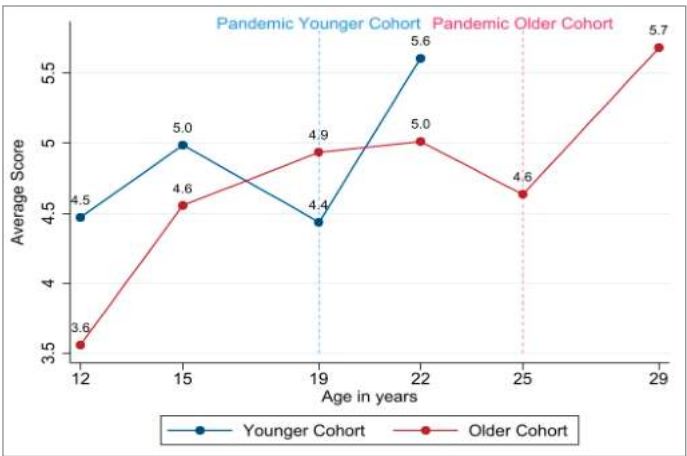
Note: “Vitamin A- fruits and vegetables” include ripe mangoes, ripe papayas, apricots, pumpkin, carrots, squash, red/orange peppers or sweet potatoes. “Other fruits” refers to fruits other than vitamin A- fruits and includes citrus fruits, bananas and pineapple. “Other vegetables” excludes vitamin A vegetables and green leafy vegetables and refers to vegetables such as onion, cucumber, tomatoes, and lady fingers. “Grains/carbohydrates” include roti, rice, and biscuits.

8 The dietary patterns are based on a 24-hour recall period prior to the survey.

Subjective well-being

Throughout the Young Lives study, participants were asked about their subjective well-being using a scale from one to nine, with nine being the best possible option. The average score for the Younger Cohort by age 22 is 5.6, an increase compared to the average score for the Older Cohort (5.0) at the same age in 2016 (Figure 5).

Figure 5. Subjective well-being average score by cohort and age



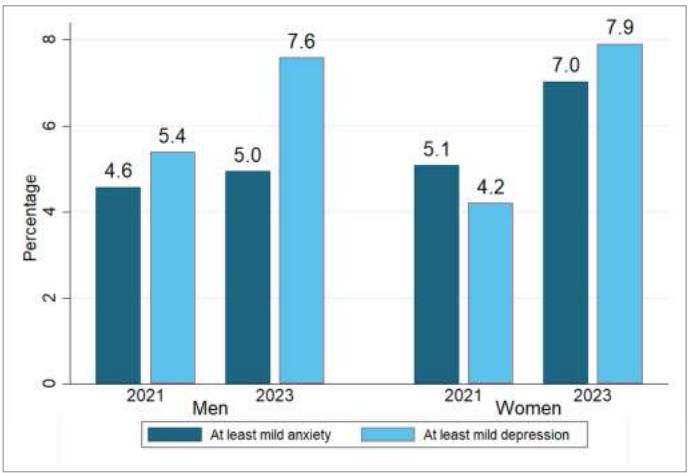
Both cohorts exhibit similar trends, with perceptions of subjective well-being increasing over time, except during the pandemic (at age 25 for the Older Cohort and 19 for the Younger Cohort). Significant differences can be seen in Annex 2, with those born into wealthier households, living in an urban location, and who belong to Other Castes reporting a higher subjective well-being than their counterparts.

Mental health

While around 11% of the Older Cohort at age 29 exhibited symptoms of anxiety, and 7% exhibited symptoms of depression, approximately five out of ten also reported symptoms of at least moderate stress. In 2023, 6% of the Younger Cohort showed symptoms associated with at least mild anxiety and 8% of them showed symptoms associated with at least mild depression (Annex 2). In contrast, many participants reported symptoms associated with at least moderate stress (54% for the Younger Cohort and 52% for the Older Cohort).

In Round 7, both men and women reported higher levels of anxiety than during the COVID-19 pandemic. Using data from Round 6 to compare indicators of mental health during and after the pandemic, we found that in 2023, a larger percentage of both Younger Cohort men and women exhibited symptoms of at least mild anxiety and depression compared to 2021 during the second call of Round 6 (Figure 6).

Figure 6: Anxiety and depression in the Younger Cohort by gender (%)



Conclusions and way forward

The double burden of underweight and overweight/obesity among Young Lives participants suggests that improving nutrition and healthy lifestyle is critical to achieving SDG 2.1⁹. The incidence of underweight is associated with early-life inequalities such as participants belonging to a socially disadvantaged caste, living in rural areas, and those with mothers with less education. A majority of men and those from wealthier and Other Castes households consumed more than five food groups. In addition to these challenges, young people from historically disadvantaged castes showed higher levels of symptoms associated with stress, anxiety, and depression. These findings highlight the importance of public policies to address inequalities that originate in childhood and continue into adulthood. There is a need for comprehensive policies that promote greater food diversity, regulate the consumption of unhealthy foods and enhance access to healthy food, while simultaneously promoting healthier lifestyles.



9 SDG Target 2.1 aims, by 2030, to end hunger and ensure access by all people, in particular poor people and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

Annex 1. Nutrition and food diversity indicators of Andhra Pradesh

	Underweight (%)			Overweight & Obesity (%)			High Cardiovascular Risk (%)		Dietary diversity- More than 5 food groups (%)		
	YC (2023)	OC (2016)	OC (2023)	YC (2023)	OC (2016)	OC (2023)	YC (2023)	OC (2023)	YC (2023)	OC (2016)	OC (2023)
Average of full sample	21.35	22.98	10.17	22.14	14.73	41.07	9.21	22.72	46.67	35.32	43.62
Gender											
Men	16.47	16.59	5.92	24.63	16.59	45.05	3.42	11.71	53.41	35.18	49.81
Women	27.04	29.00	14.17	19.23	12.97	37.31	16.00	33.08	39.37	35.56	38.02
Difference*, ** , *** (t-test)	14.53 ***	12.40**	8.25***	-5.39**	3.62	-7.74*	12.57 ***	21.36***	***	NS	***
Area of Residence (Round 1)											
Urban	13.2	10.7	4	33.5	32	57.6	15.3	33.3	46.8	43.4	51.9
Rural	23.5	25.4	11.6	19.1	10.7	37.2	7.6	20.2	46.6	39	41.7
Difference*, ** , *** (t-test)	12.8 ***	14.7	7.6*	-14.4***	-21.3***	-20.4***	-7.7 ***	-13.1***	-0.1	-4.2	10.2*
Current Area of Residence											
Urban	13.86	15.64	6.80	28.61	26.53	55.10	13.27	32.00	48.86	44.31	47.90
Rural	24.53	25.98	11.78	19.39	10.16	35.61	7.50	19.24	45.75	37.84	41.82
Difference*, ** , *** (t-test)	10.7 ***	10.34**	4.97*	-9.21 ***	-16.36***	-19.48***	-5.77 ***	-12.75**	NS	NS	NS
Wealth index (Round 1)											
Bottom tercile	23.19	21.71	12.10	15.65	12.50	41.40	6.96	17.09	42.22	37.27	36.93
Middle tercile	23.96	28.06	10.95	21.76	9.18	33.33	8.31	20.59	45.18	37.68	45.98
Top tercile	16.89	18.01	7.36	28.76	23.60	50.31	12.37	30.72	52.44	44.97	47.64
ANOVA	**	NS	NS	***	**	*	**	**	**	NS	*
Wealth index (Round 5)											
Bottom tercile	29.12	27.71	12.35	16.76	4.82	34.71	6.76	14.04	42.27	32.92	37.04
Middle tercile	22.91	24.24	9.41	18.85	15.76	38.24	8.81	21.97	46.51	32.37	41.15
Top tercile	12.66	17.42	8.84	30.61	23.03	49.72	11.87	31.52	50.52	41.42	53.25
ANOVA	***	*	NS	***	***	**	***	***	*	NS	***
Caste (Round 1)											
Scheduled Castes	32.11	20.00	11.54	19.47	12.00	41.35	6.84	17.92	50.25	30.77	49.06
Scheduled Tribes	25.68	27.40	17.81	13.66	4.11	27.40	3.82	10.96	41.94	19.48	35.06
Backward Classes	20.27	24.66	10.18	21.64	16.44	41.15	9.72	23.91	43.76	40.68	40.25
Other Castes	12.30	19.66	4.24	31.35	20.51	49.15	13.88	31.93	53.28	39.17	51.24
ANOVA	***	NS	**	***	**	**	***	***	**	***	*
Maternal education (Round 2)											
None	25.73	24.36	11.19	19.15	9.82	37.36	7.93	20.41	48.72	31.72	44.52
1 to 5 years	19.92	31.15	11.29	21.14	13.11	35.48	7.29	17.46	42.75	37.69	40.46
6 to 10 years	17.97	11.36	7.95	24.07	28.41	53.41	12.54	34.44	47.06	39.78	40.86
More than 10 years	10.00	8.33	0.00	37.50	29.17	65.22	11.25	34.78	46.25	50.00	62.50
ANOVA	***	***	NS	***	***	***	*	***	NS	NS	NS
Number of participants	1138	533	521	1139	509	521	1139	521	1183	538	540

Notes: Differences are significant at ***1%, **5%, *10% and NS-Not Significant. Differences are percentage points. Information on maternal education was taken from 2006 (Round 2). Current area of residence refers to the household location in 2023 (Round 7), Household wealth terciles were calculated separately for each cohort using the household wealth index of 2016 (Round 5). Caste uses information from 2002 (Round 1). The indicators of underweight, overweight and obesity, and high cardiovascular disease risk exclude pregnant women.

Annex 2. Subjective well-being and mental health indicators in the Younger Cohort and Older Cohort

	Subjective Wellbeing Score (0-10)		At least Moderate Stress (PSS-10) (%)		At least Mild Anxiety (GAD-7) (%)		At least Mild Depression (PHQ-8) (%)	
	OC (2023)	YC (2023)	OC (2023)	YC (2023)	OC (2023)	YC (2023)	OC (2023)	YC (2023)
Average of full sample	5.68	5.6	51.85	54.12	10.92	5.95	7.03	7.74
Gender								
Men	5.56	5.47	50.78	56.1	7.42	4.95	5.07	7.59
Women	5.79	5.75	52.81	52.02	14.08	7.02	8.8	7.9
Difference*, **, *** (t-test)	0.23*	0.28 ***	2.03	-4.08	6.66**	2.07	3.72*	0.31
Area of Residence (Round 1)								
Urban	6.2	6.2	51.9	48	10.4	4.5	6.6	5.7
Rural	5.5	5.5	51.8	55.8	11	6.4	7.1	8.3
Difference*, **, *** (t-test)	-0.7***	0.7 ***	3.8	7.8**	0.6	1.9	0.5	2.6
Current Area of Residence								
Urban	6.09	5.84	51.76	51.44	10.43	3.46	6.95	4.62
Rural	5.57	5.51	52.17	55.24	11.05	6.99	7.05	9.04
Difference*, **, *** (t-test)	-0.52***	-0.3 ***	0.4	3.8	0.62	3.52	0.1	04.2***
Wealth index (Round 5)								
Bottom tercile	5.25	5.08	50	60.61	11.36	7.54	8.52	10.34
Middle tercile	5.47	5.54	62.64	55.45	12.64	4.87	7.47	6.73
Top tercile	6.27	6.15	43.68	46.63	8.95	5.7	5.26	6.48
ANOVA	***	***	***	***	NS	NS	NS	*
Wealth index (Round 1)								
Bottom tercile	5.34	5.22	52.47	62.46	13.58	7.28	11.11	9.52
Middle tercile	5.47	5.44	53.59	53.04	10.05	5.84	4.31	8.18
Top tercile	6.26	6.17	49.11	47.27	9.47	4.94	6.51	5.71
ANOVA	***	***	NS	***	NS	NS	NS	*
Caste (Round 1)								
Scheduled Castes	5.31	5.27	57.55	55.5	13.21	8.5	9.43	10
Scheduled Tribes	5.51	5.34	59.74	65.41	7.79	8.65	9.09	12.97
Backward Classes	5.6	5.59	52.12	52.53	12.29	6	7.2	7.5
Other Castes	6.27	6.09	41.32	48.25	8.26	1.95	3.31	2.72
ANOVA	***	***	**	**	NS	***	NS	***
Maternal education (Round 2)								
None	5.49	5.33	52.74	56.37	10.62	5.81	6.85	8.61
1 to 5 years	5.39	5.42	58.78	57.75	14.5	6.98	9.16	9.3
6 to 10 years	6.22	5.95	45.16	50.83	8.6	5.28	6.45	5.61
More than 10 years	7.5	6.72	29.17	40	4.17	6.25	0	5
ANOVA	***	***	**	***	NS	NS	NS	NS
Number of participants	539	1175	540	1175	540	1175	540	1175

Note: Differences are significant at ***1%, **5%, *10% and NS-Not Significant. Differences are percentage points. Information on maternal education was taken from 2006 (Round 2). Current area of residence refers to the household location in 2023(Round 7). Household wealth terciles were calculated separately for each cohort using the household wealth index of 2016 (Round 5). Caste uses information from 2002 (Round 1). The indicators of underweight, overweight and obesity, and high cardiovascular disease risk exclude pregnant women.

References

- Anwar, W., Ranjan P, Malhotra, A., Madan n., Kumari, A., Singh, A., Prakash, B., Singh R.J. , Baitha, U., Vikram, N.K. (2024) Understanding obesity among young adults in India: A focus group study, *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, Volume 18, Issue 9, 2024.
- Briones, K. (2017) 'How Many Rooms Are There in Your House?' *Constructing the Young Lives Wealth Index*, Young Lives Technical Note 43, Oxford: Young Lives. https://www.younglives.org.uk/sites/default/files/migrated/YL-TN43_0.pdf (accessed 12 December 2024).
- Dutta, M., Y. Selvamani, P. Singh and L. Prashad (2019) 'The Double Burden of Malnutrition among Adults in India: Evidence from the National Family Health Survey-4 (2015–16)', *Epidemiology and Health* 41: e2019050. <https://doi.org/10.4178/epih.e2019050>.
- Gupta, S., Sunder, N., & Pingali, P. L. (2020). Market access, production diversity, and diet diversity: evidence from India. *Food and nutrition bulletin*, 41(2), 167-185.
- NITI Aayog (2023) 'National Multidimensional Poverty Index: A Progress Review 2023', https://www.undp.org/sites/g/files/zskgke326/files/2023-08/india-national-multidimensional-poverty-index-2023_16_aug.pdf (accessed 15 August 2024).
- Pathare, S., and A. Kapoor (2020) 'Implementation Update on Mental Healthcare Act, 2017', in R.M. Duffy and B.D. Kelly (eds) *India's Mental Healthcare Act, 2017: Building Laws, Protecting Rights*, 251–265. Singapore: Springer.
- Prabhakaran D, Jeemon P, Sharma M, Roth GA, Johnson C, Harikrishnan S, et al. The changing patterns of cardiovascular diseases and their risk factors in the states of India: The global burden of disease study 1990–2016. *Lancet Glob Health* 2018; Volume 6, Issue 12 :e1339-51.
- Singh, G., Agrawal, R., Tripathi, N., & Verma, A. (2023). Overweight and obesity, the clock ticking in India? A secondary analysis of trends of prevalence, patterns, and predictors from 2005 to 2020 using the National Family Health Survey. *International Journal of Noncommunicable Diseases*, 8(1), 31-45.
- Vashist, A., I. Kukreti and P.K. Taneja (2023) 'Implementation of Mental Health Care Act, 2017: Issues and Way Forward', *Indian Journal of Public Administration* 68.2: 257–270.
- World Bank (2024) 'World Development Indicators, World Bank Open Data', <https://data.worldbank.org> (accessed 12 August 2024).
- WHO (2024a) 'Global Health Estimates 2021: Disease Burden by Cause, Age, Sex, by Country and by Region, 2000–2021', <https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates/global-health-estimates-leading-causes-of-dalys> (accessed 2 August 2024).
- WHO (2024b) 'Growth Reference 5–19 Years – BMI-For-Age (5–19 Years)', <https://www.who.int/tools/growth-reference-data-for-5to19-years/indicators/bmi-for-age> (accessed 2 August 2024).
- WHO (World Health Organization) (2024c) 'Body Mass Index – BMI', <https://who-sandbox.squiz.cloud/en/health-topics/disease-prevention/nutrition/a-healthy-lifestyle/body-mass-index-bmi> (accessed 8 November 2024).
- Gulati, N., Nanda, C., & Hora, R. K. (2023). COVID-19 and its impact on mental health as a function of gender, age, and income. *Discover Mental Health*, 3(1), 4.
- Planning Department, Government of Andhra Pradesh. (2024). *Socio-Economic Survey 2024-25*. Planning Department, Government of Andhra Pradesh. <http://www.apsdps.ap.gov.in/assets/publications/Socio-Economic-Survey-2024-25.pdf>
- International Institute for Population Sciences (IIPS) and ICF. (2021). *National Family Health Survey (NFHS-5), 2019-21: Volume I*. Mumbai: IIPS.
- Government of Andhra Pradesh. (2019). *W.D. & C.W. – Implementation of "Y.S.R. Sampurna Poshana" – Providing additional nutrition supplementation*. https://static.vikaspedia.in/mediastorage/document/2019WCDW_MS16.PDF

Acknowledgements

This factsheet is part of a series giving a preliminary overview of key data from Round 7 of the Young Lives survey, covering health, nutrition and well-being. It was written by Renu Singh, Revathi Ellanki and Divya Juneja. Thanks to P. Prudhvikar Reddy, Juliana Quigua Chinchilla, Alan Sanchez Jimenez and Marta Favara for their comments and suggestions. We are grateful to our fieldwork teams and Supervisors- V Malla Reddy, M Bhaskar Reddy, B Narsaiah, B Srinivas, T Dastagiri, A Lakshmi and B Rajkumar for their dedication and enthusiasm in conducting the survey fieldwork and to KT Shyamsunder for data management. We particularly wish to thank the Young Lives respondents and families for generously given us their time and cooperation. Thanks to Ernest Leslie for copyediting and design and to P Raja Narender Reddy for oversight of the publication of factsheets.

Special thanks to the UK's Foreign, Commonwealth & Development Office (FCDO) for funding Young Lives at Work and enabling this research. We also thank Welcome Trust for funding Young Lives research into health and well-being.

The views expressed are those of the author(s). They are not necessarily those of, or endorsed by, Young Lives, the University of Oxford, Foreign, Commonwealth & Development Office (FCDO), or other funders. Photo credit: Young Lives, India. The images throughout our publications are of young people living in circumstances and communities similar to the young people within our study sample.



Young Lives is a longitudinal study of poverty and inequality following the lives of 12000 children into adulthood in four countries (Ethiopia, India, Peru and Vietnam)

©Young Lives - CESS - May 2025