Pakistan

World Health Organization
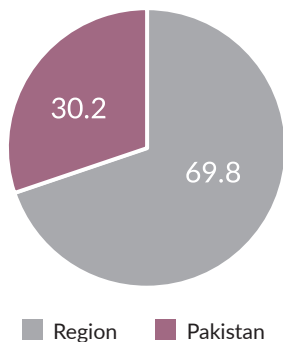REGIONAL OFFICE FOR THE **Eastern Mediterranean**
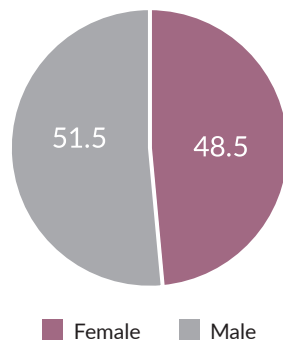
Demographics

|	
Total population (2020)	220 892 331
Life expectancy at birth (years) female/male (2019)	68/66
Under-5 mortality rate (per 1000 live births) (2019)	67
Gross domestic product per capita (current US$) (2020)	1193.7

Population as percentage of regional total, 2020

30.2
69.8

Region / Pakistan

Percentage of female and male population, 2020

51.5
48.5

Female / Male

Population aged 0–14 of total population, 2020
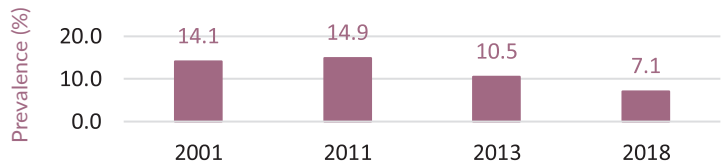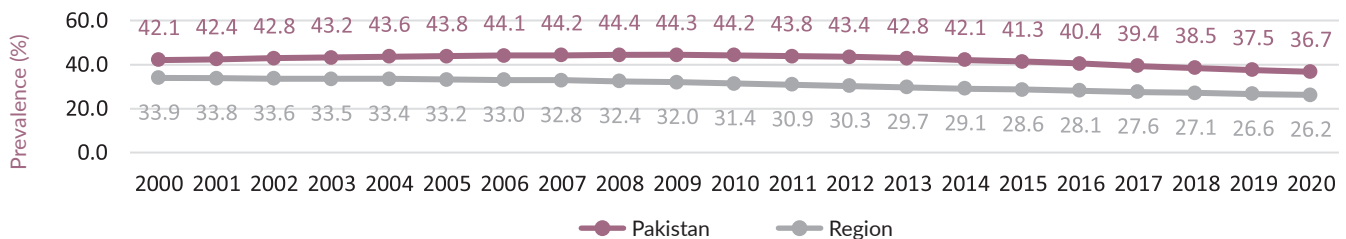

34.8

0–14 / > 14
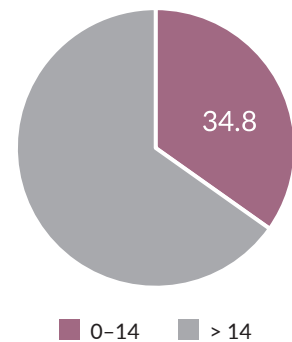
Source: The World Bank

Child malnutrition

The prevalence of wasting in children under five in Pakistan decreased from 14.1% in 2001 to 7.1% in 2018. The prevalence of stunting has decreased from 42.1% to 36.7% over the past two decades. During the same period, the prevalence of overweight in children under five has decreased from 4.8% to 3.4%.
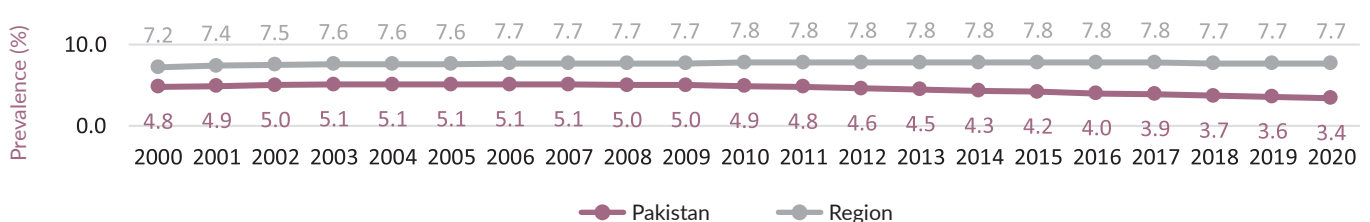
Wasting prevalence among children under 5 years of age

Prevalence (%)

2001	2011	2013	2018
14.1	14.9	10.5	7.1

Stunting prevalence among children under 5 years of age

Prevalence (%)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Pakistan	42.1	42.4	42.8	43.2	43.6	43.8	44.1	44.2	44.4	44.3	44.2	43.8	43.4	42.8	42.1	41.3	40.4	39.4	38.5	37.5	36.7
Region	33.9	33.8	33.6	33.5	33.4	33.2	33.0	32.8	32.4	32.0	31.4	30.9	30.3	29.7	29.1	28.6	28.1	27.6	27.1	26.6	26.2

Overweight prevalence among children under 5 years of age

Prevalence (%)

|	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Region	7.2	7.4	7.5	7.6	7.6	7.6	7.7	7.7	7.7	7.7	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.7	7.7	7.7
Pakistan	4.8	4.9	5.0	5.1	5.1	5.1	5.1	5.1	5.0	5.0	4.9	4.8	4.6	4.5	4.3	4.2	4.0	3.9	3.7	3.6	3.4

Source: WHO Global Health Observatory.

Note: The UNICEF/WHO/WB joint child malnutrition estimates for stunting and overweight are modelled at logit (log-odds) scale using a penalized longitudinal mixed-model with a heterogeneous error term. The country modelled estimates are generated using the JME country dataset, which uses the collection of national data sources. Due to this method, estimates may differ from official estimates of Member States (i.e., the stunting prevalence from a household survey for a given country in a given year is not reported as the prevalence for that country in that year; rather, it feeds into the modelled estimates). The methodology is described here: https://www.who.int/publications/i/item/9789240025257. Wasting is defined as a percent weight-for-height that is two or more standard deviations below the median. Stunting is defined as a percent height-for-age that is two or more standard deviations below the median. Overweight is defined as a percent weight-for-height that is two or more standard deviations above the median.

Infant and young child feeding

The prevalence of early initiation of breastfeeding (within one hour of birth) in Pakistan decreased from 25.9% in 2006 to 19.6% in 2018. The prevalence of exclusive breastfeeding remained relatively steady between the years 2006 (37%) and 2013 (37.7%) but increased to 47.5% in 2018.

Breastfeeding practices
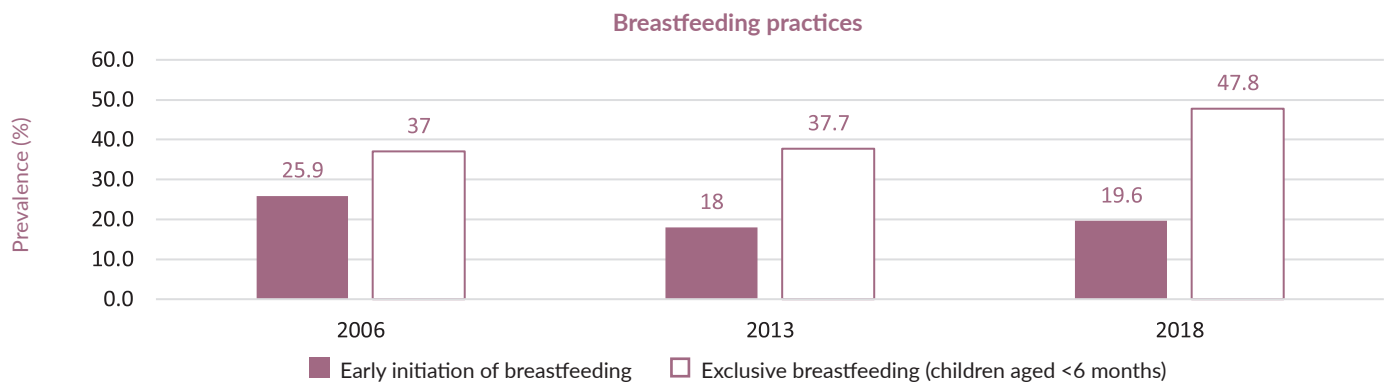
Sources: UNICEF.

Anaemia in women of reproductive age

The prevalence of anaemia in women of reproductive age (pregnant and non-pregnant women combined) has remained at a high and steady level throughout the past two decades, with the lowest prevalence rate of 40.6% in 2000–2001 and the highest prevalence rate of 42.8% in 2011.
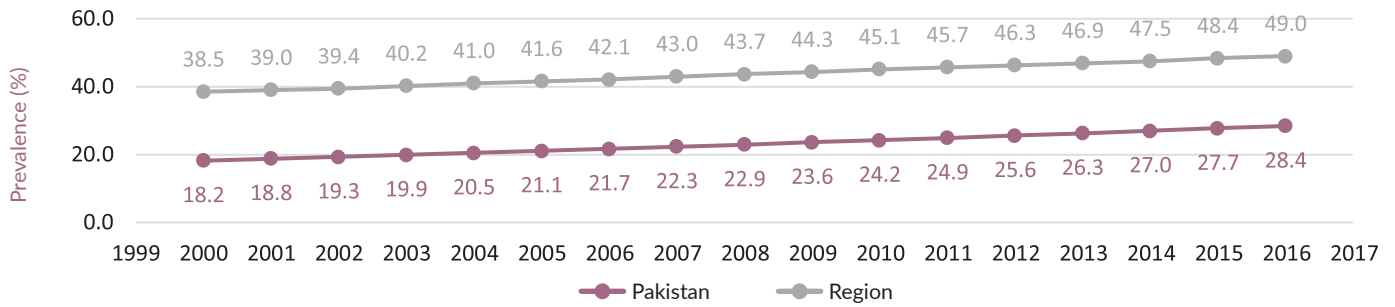
Anaemia prevalence in women of reproductive age (15–49 years)

Source: WHO Global Health Observatory.

Note: The WHO global anaemia estimates are derived from a hierarchical Bayesian mixture model that uses all available data to make estimates for each country and year. In the model, estimates for each country are informed by data from that country itself, if available, and by data from other countries, especially those in the same region. Due to this method, the estimates may differ from official estimates of Member States. The methodology is described here: https://cdn.who.int/media/docs/default-source/anaemia-in-women-and-children/hb-methods-for-gather.pdf?sfvrsn=da0fbb5f_11 and here: https://pubmed.ncbi.nlm.nih.gov/25103581/.
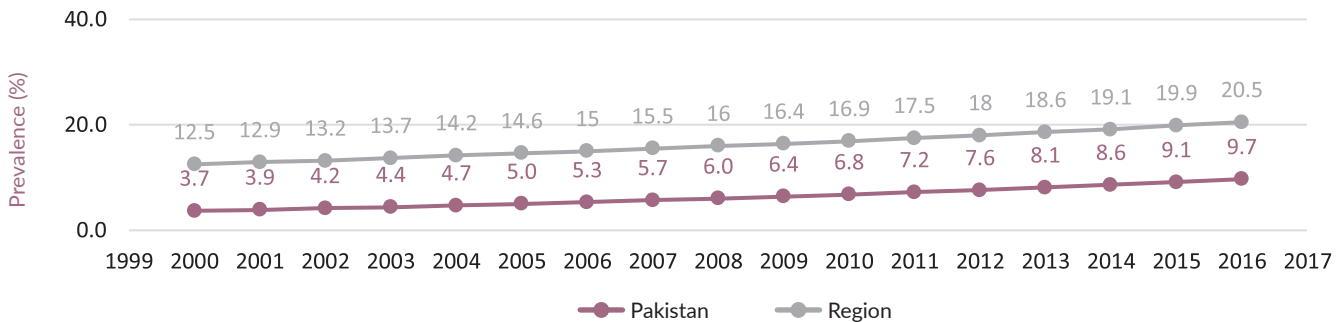
Overweight and obesity

An increase in the prevalence of overweight among adults in Pakistan has been recorded between the years 2000 and 2016 (from 18.2 to 28.4%). Also, the prevalence of overweight among children and adolescents aged 5–19 has risen from 3.7% in 2000 to 9.7% in 2016.

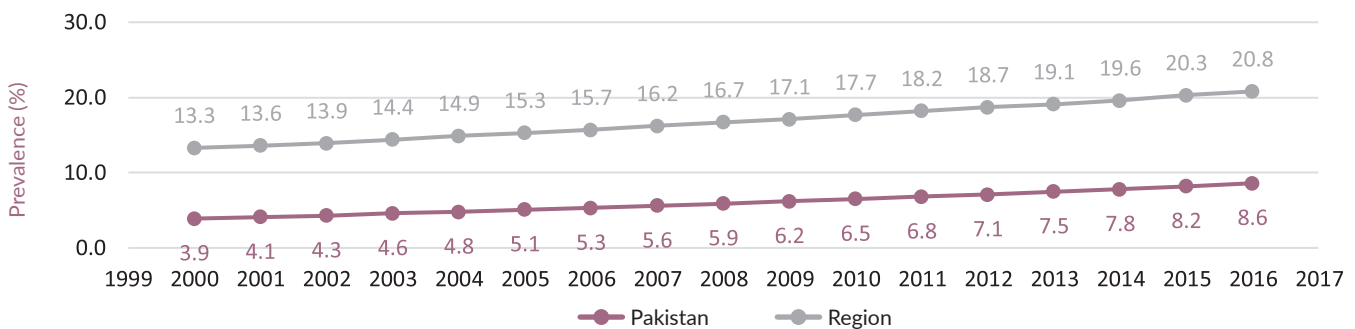## Overweight prevalence among adults (BMI ≥ 25), (age-standardized estimate)

Prevalence (%)

Region: 38.5, 39.0, 39.4, 40.2, 41.0, 41.6, 42.1, 43.0, 43.7, 44.3, 45.1, 45.7, 46.3, 46.9, 47.5, 48.4, 49.0

Pakistan: 18.2, 18.8, 19.3, 19.9, 20.5, 21.1, 21.7, 22.3, 22.9, 23.6, 24.2, 24.9, 25.6, 26.3, 27.0, 27.7, 28.4

Years: 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

● Pakistan ● Region

Overweight prevalence among children and adolescents (5–19) (BMI > +1 SD above the median), (crude estimate)

Prevalence (%)

Region: 12.5, 12.9, 13.2, 13.7, 14.2, 14.6, 15, 15.5, 16, 16.4, 16.9, 17.5, 18, 18.6, 19.1, 19.9, 20.5

Pakistan: 3.7, 3.9, 4.2, 4.4, 4.7, 5.0, 5.3, 5.7, 6.0, 6.4, 6.8, 7.2, 7.6, 8.1, 8.6, 9.1, 9.7

Years: 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

● Pakistan ● Region

BMI = body mass index. (Overweight in adults is defined as a BMI of 25 or greater, and in children and adolescents as a BMI one or more standard deviations above the median. Obesity in adults is defined as a BMI of 30 or greater, and in children and adolescents as a BMI two or more standard deviations above the median.)

Despite the low incidence of obesity among adults, the prevalence of obesity in Pakistan has increased from 3.9% to 8.6% between 2000 and 2016. Similarly, the prevalence of obesity among children and adolescents aged 5–19 in Pakistan has significantly increased between 2000 and 2016 from 0.8% to 3.1%.

Obesity prevalence among adults (BMI ≥ 30), (age-standardized estimate)

Prevalence (%)

Region: 13.3, 13.6, 13.9, 14.4, 14.9, 15.3, 15.7, 16.2, 16.7, 17.1, 17.7, 18.2, 18.7, 19.1, 19.6, 20.3, 20.8

Pakistan: 3.9, 4.1, 4.3, 4.6, 4.8, 5.1, 5.3, 5.6, 5.9, 6.2, 6.5, 6.8, 7.1, 7.5, 7.8, 8.2, 8.6

Years: 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

● Pakistan ● Region

Obesity prevalence among children and adolescents (5-19) (BMI > +2 SD above the median), (crude estimate)

Prevalence (%)

Region: 3.9, 4.1, 4.3, 4.5, 4.7, 5, 5.2, 5.4, 5.7, 6, 6.2, 6.5, 6.8, 7.1, 7.5, 7.8, 8.2

Pakistan: 0.8, 0.9, 0.9, 1.0, 1.1, 1.2, 1.3, 1.4, 1.6, 1.7, 1.8, 2.0, 2.2, 2.4, 2.6, 2.8, 3.1

Years: 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

● Pakistan ● Region

Source: WHO Global Health Observatory.

Note: The WHO estimates for overweight and obesity are derived from a Bayesian hierarchical model, which uses NCD-RisC database of population-based data. The model has a hierarchical structure in which estimates for each country and year are informed by its own data, if available, and by data from other years in the same country and from other countries, especially those in the same region with data for similar time periods. Due to this method, the estimates may differ from official estimates of Member States. The methodology is described here: https://pubmed.ncbi.nlm.nih.gov/29029897/.

Micronutrient status

In 2018, the prevalence of vitamin A deficiency (serum retinol <0.70 µmol/L) in Pakistan was 51.5% among preschool age children (aged 6–59 months).[1,2] However, the iodine intake was adequate (defined as 100–299 µg/L) despite a slight downregulation in the values measured, as the estimated median urinary iodine concentration among school children was 126 µg/L in 2011[3] and decreased to 123 µg/L in 2019.

Median urinary iodine concentration among school children (µg/L)

Year	Urinary iodine concentration (µg/L)
2011	126
2014	124
2019	123
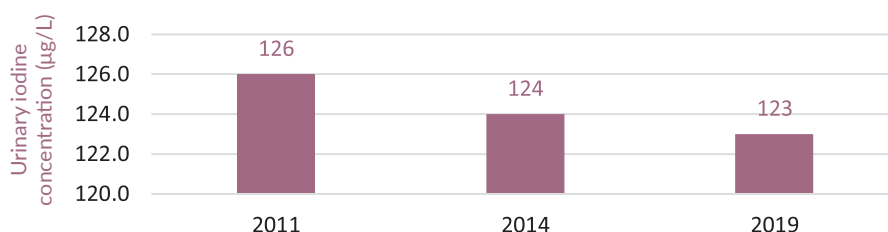
Source: WHO Micronutrients Database. Vitamin and Mineral Nutrition Information System. Ministry of National Health services of Pakistan.

Nutrition policies and strategies

Key national programmes

Programme		Date
Development of national nutrition strategy or action plan [a]	✓	For 2018–2025
Plan of action for obesity prevention [b]	✗	
Strategy or plan of action on infant and young child feeding [b, c]	✓	For 2016–2020
Code of marketing of breast milk substitutes [d,e]	✓	Updated 2018
Child growth monitoring [b, c, d]	✓	Since 1997
School feeding programme [b]	✗	
Community-based management of acute malnutrition (CMAM) [b, e]	✓	

Policies	Policy to reduce salt/sodium consumption	Tax on sugar sweetened beverages	Policy to limit trans-fatty acid intake [f]	Policy to reduce the impact of marketing of food to children [e]	Policy on salt iodization [a, b, g]	Front-of-pack nutrition labelling for food	Wheat flour fortification [a, b, h]
	✗	✗	✓	✓	✓	✗	✓
				2020	2020		2016

✓ =Policy/programme implemented   ✗ =Policy/programme not implemented

[a] Policies in Pakistan: In: Global database on the Implementation of Nutrition Action [website]. Geneva: World Health Organization; 2022 (https://extranet.who.int/nutrition/gina/en/policies/1521, accessed 13 July 2022).

[b] Programmes in Pakistan: In: Global database on the Implementation of Nutrition Action [website]. Geneva: World Health Organization; 2022 (https://extranet.who.int/nutrition/gina/en/programmes/1521, accessed 6 July 2022).

[c] Al Jawaldeh A, Sayed G. Implementation of the International Code of Marketing of Breastmilk Substitutes in the Eastern Mediterranean Region. East Mediterr Health J. 2018(1):25–32. doi:10.26719/2018.24.1.25.

[d] Marketing of breast milk substitutes: national implementation of the international code, status report 2020. Geneva: World Health Organization; 2020 (https://www.who.int/publications/i/item/9789240006010, accessed 6 July 2022).

[e] WHO Eastern Mediterranean Regional Office database.

[f] Al-Jawaldeh A et al. A systematic review of trans fat reduction initiatives in the Eastern Mediterranean Region. Front Nutr. 2021;8:771492. doi:10.3389/fnut.2021.771492.

[1] National Nutrition Survey 2018. Islamabad: Ministry of National Health Services; 2018 (https://www.unicef.org/pakistan/media/1951/file/Final%20Key%20Findings%20Report%202019.pdf, accessed 15 July 2022).

[2] Saad F, Rogers L, Doggui R, Al-Jawaldeh A. Assessment of vitamin A supplementation practices in countries of the Eastern Mediterranean Region: Evidence to Implementation. J Nutr Sci Vitaminol (Tokyo); 2021;67(1):1-12. doi:10.3177/jnsv.67.1.

[3] Global Scorecard of Iodine Nutrition 2014–2015, Ottawa: Iodine Global Network; 2015 (https://www.ign.org/cm_data/Scorecard_2015_August_26_new_intake.pdf, accessed 6 July 2022).

[g] Doggui R, Al-Jawaldeh H, Al-Jawaldeh A. Trend of iodine status in the Eastern Mediterranean Region and impact of the universal salt iodization programs: a narrative review. Biol Trace Elem Res. 2020; 198, 390–402. doi.org/10.1007/s12011-020-02083-1.

[h] Al-Jawaldeh A. E. The regional assessment of the implementation of wheat flour fortification in the Eastern Mediterranean Region. Int J Sci Res Manag. 2019; 7(03), 28–37. doi:10.18535/ijsrm/v6i3.ft01.

Success stories

High-level commitment to tackling malnutrition in Pakistan

Nutrition was identified as a priority In Pakistan in the five year plan adopted by the Government, and the Prime Minister has identified "malnutrition and stunting" as prime health challenges, and made efforts to tackle them his priority. A national multisectoral nutrition strategy for 2018–2025 has been approved and a health and nutrition dashboard has been created by the Ministry of Health Services, Regulation and Coordination to integrate programme data from the country's provinces. Provincial multisectoral plans have been costed. In addition, the biggest poverty eradication programme in Pakistan, EHSAS, is being implemented with the aim of changing the lives of at least 3.3 million poor people within four years. Funding of around US$ 2 billion was allocated in 2015–2016 and 2016–2017 for nutrition-sensitive and nutrition-specific programmes. Multisectoral nutrition steering committees are functional in some provinces and districts. At the national level, coordination mechanisms and advisory bodies include the National Nutrition Working Group, Community Management of Acute Malnutrition Technical Working Group, Infant and Young Child Feeding Technical Advisory Group and Early Childhood Task Force.

Improving adolescent nutrition in Pakistan

In January 2020, the Government of Pakistan launched Adolescent Nutrition Supplementation Guidelines. The guidelines recommend screening adolescents in schools, health facilities and in the community and enrolling at-risk adolescents in programmes where they will be assessed and provided with counselling. In addition, the guidelines recommend daily iron and folic acid supplementation, provision of multiple micronutrient tablets to underweight non-pregnant married women and antenatal counselling on healthy diet. Other recommendations to improve adolescent nutrition include improving the intake of fruit and vegetables, prohibiting the sale of unhealthy snacks and drinks in schools and introducing nutrition standards for school meals and measures to increase participation in physical activity.

Improving the management of severe acute malnutrition in Pakistan

WHO has extensively supported the training of care providers in Pakistan on the management of severe acute malnutrition. By 2017, 14 stabilization centre kits had been provided across the country, and the Department of Health had supported capacity-building and training in severe acute malnutrition treatment guidelines. In addition, sentinel surveillance sites for severe acute malnutrition have been established in all provinces.

Nationally representative survey in Pakistan

In 2018 the Government of Pakistan and UNICEF carried out a national nutrition survey. The survey, which included children, women of reproductive age and adolescent boys and girls, was the fifth national nutrition survey carried out since 1965 and the first to provide district-representative data and to include adolescents. The cross-sectional, household-level survey combined quantitative and qualitative approaches. A national, province and district representative sample of 76 742 children under 5, 145 847 adolescents (10–19 years of age) and 145 324 women of reproductive age (15–45 years of age) was selected from 115 600 households.

The survey assessed nutritional status — stunting, wasting, underweight, overweight and micronutrient status (anaemia, iron, zinc, vitamins A and D, iodine). It also evaluated infant and young child feeding practices, implementation of universal salt iodization, household food insecurity, social protection and water, sanitation and hygiene. The survey highlighted that the double burden of malnutrition is becoming increasingly apparent, with almost one in three children under five found to be underweight, while the prevalence of overweight in the same age group was 9.5% and had almost doubled from 5% in 2011. The survey was also able to highlight differences between urban and rural areas, by gender and by province/region.

Ministry of Health Website: https://nhsrc.gov.pk/

WHO-EM/NUT/302/E