GOVERNMENT OF INDIA MINISTRY OF HEALTH AND FAMILY WELFARE DEPARTMENT OF HEALTH AND FAMILY WELFARE

LOK SABHA STARRED QUESTION NO.97 TO BE ANSWERED ON THE 3RD DECEMBER, 2021 NATIONAL FAMILY HEALTH SURVEY

*97. SHRI BIDYUT BARAN MAHATO: SHRI GAJANAN KIRTIKAR:

Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state:

- (a) the main objective of conducting National Family Health Survey (NFHS) along with the number of NFHS conducted in the country and the major findings therein, State/UT-wise particularly in Maharashtra, Madhya Pradesh, Jharkhand, Tamil Nadu and Tripura;
- (b) the percentage of children found malnourished, anemic and not provided lifesaving vaccine against diarrhoea and other diseases as per the NFHS 3 and 4, survey-wise and State/UT-wise, particularly in Maharashtra, Madhya Pradesh, Jharkhand and Tamil Nadu;
- (c) whether any improvement has been noticed subsequent to the surveys, if so, the details thereof;
- (d) whether a number of States/UTs were not covered by some of these surveys, if so, the details thereof along with the reasons therefor;
- (e) whether the Government has restructured the format of NFHS, if so, the details thereof; and
- (f) the steps taken by Government to ensure compilation of true and objective data for making its future policies and programmes?

ANSWER THE MINISTER OF HEALTH AND FAMILY WELFARE (DR. MANSUKH MANDAVIYA)

(a) to (f) A Statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO LOK SABHA STARRED QUESTION NO. 97* FOR 3RD DECEMBER, 2021

(a) to (f) The National Family Health Survey (NFHS) in India was initiated in the early 1990s and has emerged as a nationally important source of data on population, health and nutrition for India and its States. So far, five rounds of the National Family Health Survey have been conducted.

The broad objectives of the NFHS are to provide high quality data on population and health indicators as well as data on emerging issues in health and family welfare; and to provide essential information that would assist policymakers and programme managers in setting benchmarks and examining progress over time in India's health sector. Besides this, this survey provides evidence on the effectiveness of ongoing programmes implemented by Government of India.

The performance of India and States/UTs on major health indicators as per the latest round of NFHS. The State/UT wise major findings is placed at Annexure-I. However, some of the major findings in respect to Maharashtra, Madhya Pradesh, Jharkhand, Tamil Nadu and Tripura are:

- Birth registration of children is higher than 90% in all the States except Jharkhand where it is 73.5%.
- The Total Fertility Rate of all the States have reached the replacement level of fertility (TFR 2.1) except for Jharkhand where it is 2.3 children per woman.
- Under-five Mortality Rate is more than 40 in Madhya Pradesh, Jharkhand and Tripura.
- In all the States except Jharkhand (61.7%), about or more than two-third of the currently married women age 15-49 years use any method of contraception to either delay or limit their pregnancy.
- The unmet need for family planning is below 10 percent in all the States except Jharkhand (11.5%).
- In all the States except Jharkhand (38.6%), more than half of the mothers had at least 4 ANC visits for their most recent birth in the last 5 years. In Tamil Nadu, 89.9% mothers had at least 4 ANCs for their most recent birth in the last 5 years.
- Institutional births are more than 90% in all the States except for Jharkhand (75.8%) and Tripura (89.2%).
- Full vaccination of children is more than 70% in all the States except Tripura (69.5%).

- Except for Tamil Nadu (55.1%) and Tripura (62.1%), exclusive breastfeeding of infants under age 6 months is more than 70% in all other States.
- Use of menstrual hygienic products among women age 15-24 is almost universal in Tamil Nadu (98.3%). However, in Madhya Pradesh only 60.5% young women use hygienic methods of protection during their menstrual period.

The State/UT-wise and national estimates on prevalence of malnourishment, anemia and full vaccination of children as per NFHS-3 and NFHS-4 are given in the Annexure-III and Annexure-III. Information on vaccines against diarrhea are not available in NFHS-3 and NFHS-4 publication.

Significant improvements over key health and family welfare indicators have been observed in subsequent rounds of NFHS. The performance of a few indicators across different rounds of NFHS is given at Annexure-IV.

The details of States/UTs not covered by some of these surveys are as follows:

(i) NFHS-1 (1992-93):

- Srinagar region of Jammu and Kashmir was not covered due to law and order situation at the time of fieldwork.
- Sikkim was not covered in NFHS-1 due to non-availability of information on basic parameters for sample selection.
- (ii) **NFHS-1, 2, 3**: The Union Territories except the NCT of Delhi were not covered in the first three rounds of NFHS as the objective of the survey at that time was to provide State level estimates. Further, the size of population in the UTs were very small and consisted less than one percent of the total population of India.

However, since NFHS-4, all the States/UTs and Districts are being covered as the scope of the survey was widened from National level estimates to District level estimates.

The five rounds of National Family Health Survey conducted so far have more or less on a similar structure to maintain the comparability of estimates across various rounds. However, additions, deletions and modifications to the questionnaire are made in subsequent rounds taking into consideration the emerging issues in health and family welfare domain of the country; and requirement of quality data for tracking the ongoing programmes and formulating new policies. The major revisions made in the format of NFHS since its inception are placed at Annexure – V.

MoHFW has always been striving at strengthening quality of data in NFHS by introducing several innovative measures in collection, processing and interpretation. The following are the major steps taken by NFHS in subsequent rounds:

- Comprehensive training and Multilayer monitoring and supervision of field work.
- Minimizing instrumental errors, human errors and transcription errors in collection of biomarkers.
- Developing nested design using a modular approach adopted from NFHS-4.
- Introduction of Computer-Assisted Personal Interviews (CAPI).
- Real time access to data using field check tables, for immediate feedback through online interactions since NFHS-4.
- Developing error messages in the data collected from a Primary Sampling Unit (PSU) by supervisor from NFHS-5.
- Application of Artificial Intelligence (AI) and Machine Learning (ML) for generating Query Reports on selected indicators before completing any PSU to enhance data quality.
- Developing COVID-19 specific SOPs in the second phase of NFHS-5.
- Backchecks in randomly selected Households (HHs) in 10% PSUs in each district and revisits in all HHs in case of deviance in over 10% surveyed HHs in post COVID scenario.

Performance of States/UTs in selected key health indicators, NFHS-5 (2019-21)

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States/UTs	Children under age 5 years whose birth was registered with the civil authority (%)	Total fertility rate (children per woman)	Under-five mortality rate (USMR)	Current use of family planning methods-Any method (%)	Total unmet need for family planning (%)	Mothers who had at least 4 antenatal care visits (%)	Institutional births (%)	Children age 12-23 months fully vaccinated based on information from either vaccination card or mother's recall (%)	Children under age 6 months exclusively breastfed (%)	Women age 15-24 years who use hygienic methods of protection during their menstrual period (%)
India	89.1	2.0	41.9	66.7	9.4	58.1	88.6	76.4	63.7	77.3
Andaman & Nicobar Islands	97.4	1.3	(24.5)	65.8	13.5	83.4	99.0	77.8	(73.3)	98.9
Andhra Pradesh	92.2	1.7	35.2	71.1	4.7	67.5	96.5	73.0	68.0	85.1
Arunachal Pradesh	87.7	1.8	18.8	59.1	12.5	36.5	79.2	64.9	63.4	91.8
Assam	96.3	1.9	39.1	60.8	11.0	50.7	84.1	66.4	63.6	66.3
Bihar	75.6	3.0	56.4	55.8	13.6	25.2	76.2	71.0	58.9	58.8
Chandigarh	97.6	1.4	*	77.4	6.9	78.7	96.9	(80.9)	#	93.4
Chhattisgarh	96.6	1.8	50.4	67.8	8.3	60.1	85.7	79.7	80.4	68.8
DNH & DD	98.1	1.8	37.0	68.0	11.9	86.2	96.5	94.9	79.4	93.6
Goa	100.0	1.3	(10.6)	67.9	8.4	93.0	99.7	81.9	(61.4)	96.8
Gujarat	97.5	1.9	37.6	65.3	10.3	76.9	94.3	76.3	65.0	65.8
Haryana	95.1	1.9	38.7	73.1	7.6	60.4	94.9	76.9	69.5	93.2
Himachal Pradesh	97.9	1.7	28.9	74.2	7.9	70.3	88.2	89.3	69.9	91.5
Jammu & Kashmir	95.3	1.4	18.5	59.8	7.8	80.9	92.4	86.2	62.0	73.4
Jharkhand	73.5	2.3	45.4	61.7	11.5	38.6	75.8	73.9	76.1	74.9
Karnataka	97.5	1.7	29.5	68.7	6.5	70.9	97.0	84.1	61.0	84.2
Kerala	99.0	1.8	5.2	60.7	12.5	78.6	99.8	77.8	55.5	93.0
Ladakh	98.6	1.3	29.5	51.3	7.9	78.4	95.1	88.2	70.9	78.2
Lakshadweep	100.0	1.4	(0.0)	52.6	12.3	88.3	99.6	(86.1)	(67.0)	98.3
Madhya Pradesh	94.1	2.0	49.2	71.7	7.7	57.5	90.7	77.1	74.0	60.5
Maharashtra	96.3	1.7	28.0	66.2	9.6	70.3	94.7	73.5	71.0	84.8
Manipur	87.4	2.2	30.0	61.3	12.2	79.4	79.9	68.8	70.7	82.9
Meghalaya	82.1	2.9	40.0	27.4	26.9	52.2	58.1	63.8	42.7	64.9
Mizoram	99.4	1.9	24.0	31.2	18.9	58.0	85.8	72.5	67.9	89.8
Nagaland	73.2	1.7	33.0	57.4	9.1	20.7	45.7	57.9	43.2	80.2
NCT of Delhi	94.4	1.6	30.6	76.4	6.1	77.2	91.8	76.0	64.3	96.9
Odisha	90.8	1.8	41.1	74.1	7.2	78.1	92.2	90.5	72.9	81.5
Puducherry	99.3	1.5	3.9	66.0	10.5	86.9	99.6	82.0	64.8	99.1
Punjab	97.7	1.6	32.7	66.6	9.9	59.3	94.3	76.2	55.5	93.2
Rajasthan	91.4	2.0	37.6	72.3	7.6	55.3	94.9	80.4	70.4	84.1
Sikkim	96.5	1.1	11.2	69.1	11.9	58.4	94.7	80.6	28.3	86.3
Tamil Nadu	98.3	1.8	22.3	68.6	7.5	89.9	99.6	89.2	55.1	98.3
Telangana	90.0	1.8	29.4	68.1	6.4	70.4	97.0	79.1	68.2	92.1
Tripura	93.8	1.7	43.3	71.2	8.2	52.7	89.2	69.5	62.1	68.8
Uttar Pradesh	79.5	2.4	59.8	62.4	12.9	42.4	83.4	69.6	59.7	72.6
Uttarakhand	91.9	1.9	45.6	70.8	8.8	61.8	83.2	80.8	52.5	91.2
West Bengal	98.2	1.6	25.4	74.4	7.0	75.8	91.7	87.8	53.3	83.0

Source: NFHS-5 National/State/UT factsheets (http://rchiips.org/nfhs/factsheet NFHS-5.shtml)

^{*}Rate not shown; based on fewer than 250 unweighted person-years of exposure to the risk of death.

[#]Percentage not shown; based on fewer than 25 unweighted cases.

Figures in () are based on 25-49 unweighted cases

Percentage of children under age five years classified as malnourished according to three anthropometric indices of nutritional status, according to State/Union Territory, NFHS-3 (2005-06) & NFHS-4 (2015-16)

State/Union Territory	who are stu	nder 5 years nted (height- e)* (%)	who are w	under 5 years asted (weight- ight)* (%)	Children under 5 years who are underweight (weight for age)* (%)		
	NFHS-3	NFHS-4	NFHS-3	NFHS-4	NFHS-3	NFHS-4	
India	48	38.4	19.8	21	42.5	35.7	
Andhra Pradesh [#]	42.7	31.4	12.2	17.2	32.5	31.9	
A & N Islands	-	23.3	-	18.9	-	21.5	
Arunachal Pradesh	43.3	29.3	15.3	17.3	32.5	19.5	
Assam	46.5	36.4	13.7	17	36.4	29.8	
Bihar	55.6	48.3	27.1	20.8	55.9	43.9	
Chandigarh	-	28.7	-	10.9	-	24.5	
Chhattisgarh	52.9	37.6	19.5	23.1	47.1	37.7	
Dadra & Nagar Haveli	-	41.7	-	27.6	-	38.8	
Daman & Diu	-	23.4	-	24.1	-	26.7	
Delhi	42.2	31.9	15.4	15.9	26.1	27	
Goa	25.6	20.1	14.1	21.9	25	23.8	
Gujarat	51.7	38.5	18.7	26.4	44.6	39.3	
Haryana	45.7	34	19.1	21.2	39.6	29.4	
Himachal Pradesh	38.6	26.3	19.3	13.7	36.5	21.2	
Jammu & Kashmir	35	27.4	14.8	12.1	25.6	16.6	
Jharkhand	49.8	45.3	32.3	29	56.5	47.8	
Karnataka	43.7	36.2	17.6	26.1	37.6	35.2	
Kerala	24.5	19.7	15.9	15.7	22.9	16.1	
Lakshadweep	-	26.8	-	13.7	-	23.6	
Madhya Pradesh	50	42	35	25.8	60	42.8	
Maharashtra	46.3	34.4	16.5	25.6	37	36	
Manipur	35.6	28.9	9	6.8	22.1	13.8	
Meghalaya	55.1	43.8	30.7	15.3	48.8	28.9	
Mizoram	39.8	28.1	9	6.1	19.9	12	
Nagaland	38.8	28.6	13.3	11.2	25.2	16.7	
Odisha	45	34.1	19.5	20.4	40.7	34.4	
Puducherry		23.7	-	23.6	-	22	
Punjab	36.7	25.7	9.2	15.6	24.9	21.6	
Rajasthan	43.7	39.1	20.4	23	39.9	36.7	
Sikkim	38.3	29.6	9.7	14.2	19.7	14.2	
Tamil Nadu	30.9	27.1	22.2	19.7	29.8	23.8	
Telangana	-	28	-	18	-	28.3	
Tripura	35.7	24.3	24.6	16.8	39.6	24.1	
Uttar Pradesh	56.8	46.2	14.8	17.9	42.4	39.5	
Uttarakhand	44.4	33.5	18.8	19.5	38	26.6	
West Bengal	44.6	32.5	16.9	20.3	38.7	31.5	

Source: NFHS Reports/Factsheets (http://rchiips.org/nfhs/index.shtml)

^{*} Below – 2 SD from the International Reference Population median.

^{*} NFHS-3 figures for Andhra Pradesh denotes estimates for the undivided State of Andhra Pradesh.

Percentage of Children age 6-59 months classified as having anaemia, and percentage of children age 12-23 months fully immunized based on information from either vaccination card or mother's recall according to State/Union Territory, NFHS-3 (2005-06) & NFHS-4 (2015-16)

mother's recall accordi	ing to State/Uni	on Territory, NF				
			Children age 12-23 months fully immunized based on information from either vaccination card or mother's recall (%)			
	_					
State/Union Territory	are anaemic ((<11.0 g/dl) (%)				
	NFHS-3	NFHS-4	NFHS-3	NFHS-4		
India*	69.5	58.5	43.5	62.0		
Andhra Pradesh [#]	70.8	58.6	46.0	65.2		
A & N Islands	-	49	-	73.2		
Arunachal Pradesh	56.9	54.2	28.4	38.2		
Assam	69.6	35.7	31.4	47.1		
Bihar	78	63.5	32.8	61.7		
Chandigarh	-	73.1	-	(79.5)		
Chhattisgarh	71.2	41.6	48.7	76.4		
Dadra & Nagar Haveli	-	84.6	-	43.2		
Daman & Diu	-	73.8	-	66.3		
Delhi	57	59.7	63.2	68.8		
Goa	38.2	48.3	78.6	88.4		
Gujarat	69.7	62.6	45.2	50.4		
Haryana	72.3	71.7	65.3	62.2		
Himachal Pradesh	54.7	53.7	74.2	69.5		
Jammu & Kashmir [#]	58.6	54.5	66.7	75.1		
Jharkhand	70.3	69.9	34.2	61.9		
Karnataka	70.4	60.9	55.0	62.6		
Kerala	44.5	35.7	75.3	82.1		
Lakshadweep	-	53.6	-	89.0		
Madhya Pradesh	74.1	68.9	40.3	53.6		
Maharashtra	63.4	53.8	58.8	56.2		
Manipur	41.1	23.9	46.8	65.8		
Meghalaya	64.4	48	32.9	61.4		
Mizoram	44.2	19.3	46.5	50.7		
Nagaland	-	26.4	21.0	35.4		
Odisha	65	44.6	51.8	78.6		
Puducherry	-	44.9	-	91.2		
Punjab	66.4	56.6	60.1	89.0		
Rajasthan	69.7	60.3	26.5	54.8		
Sikkim	59.2	55.1	69.6	83.0		
Tamil Nadu	64.2	50.7	80.9	69.7		
Telangana	-	60.7	-	67.5		
Tripura	62.9	48.3	49.7	54.5		
Uttar Pradesh	73.9	63.2	23.0	51.1		
Uttarakhand	61.4	59.8	60.0	57.6		
West Bengal	61	54.2	64.3	84.4		

Source: NFHS Reports/Factsheets (http://rchiips.org/nfhs/index.shtml)

Figures in () are based on 25-49 unweighted cases.

^{*} In NFHS-3, the national estimates for anaemia exclude the State of Nagaland.

^{*} NFHS-3 figures for Andhra Pradesh denotes estimates for the undivided State of Andhra Pradesh.

Performance of key indicators across different rounds of NFHS

Sl. No.	Indicator	NFHS-3 (2005-06)	NFHS-4 (2015-16)	NFHS-5 (2019- 21)
	Population and Household Profile			
1	Children under age 5 years whose birth was registered with the civil authority (%)	41.1	79.7	89.1
2	Population living in households with electricity (%)	67.9	88	96.8
3	Population living in households with an improved drinkingwater source (%)	87.9	94.4	95.9
4	Population living in households that use an improved sanitation facility (%)	29	48.5	70.2
5	Households using clean fuel for cooking (%)	25.6	43.8	58.6
6	Households with any usual member covered under a health insurance/financing scheme (%)	NA	28.7	41
	Marriage and Fertility			
7	Women age 20-24 years married before age 18 years (%)	47.4	26.8	23.3
8	Women age 15-19 years who were already mothers or pregnant at the time of the survey (%)	16	7.9	6.8
	Total fertility rate (children per woman)	2.7	2.2	2.0
	Family Planning			
10	Current Use of Family Planning Methods- Any method (%)	56.3	53.5	66.7
11	Current Use of Family Planning Methods- Any modern method (%)	48.5	47.8	56.5
12	Total unmet need for Family Planning (%)	12.8	12.9	9.4
	Maternity and Delivery Care			
13	Mothers who had an antenatal check-up in the first trimester (%)	44	58.6	70
14	Mothers who had at least 4 antenatal care visits (%)	37	51.2	58.1
15	Mothers who received postnatal care from a doctor/nurse/LHV/ANM/midwife/other health personnel within 2 days of delivery (%)	36.8	62.4	78
16	Institutional births (%)	40.8	78.9	88.6
	Child Vaccination and Child Feeding Practices			
17	Children age 12-23 months fully vaccinated based on information from either vaccination card or mother's recall (%)	43.5	62	76.4
18	Children under age 3 years breastfed within one hour of birth (%)	23.4	41.6	41.8
19	Children under age 6 months exclusively breastfed (%)	46.3	54.9	63.7
	Nutritional Status of Children			
20	Children under 5 years who are stunted (height-for-age) (%)	48	38.4	35.5
21	Children under 5 years who are wasted (weight-for-height) (%)	19.8	21	19.3
22	Children under 5 years who are underweight (weight-forage) (%)	42.5	35.8	32.1
	Women's Empowerment			
23	Women having a bank or savings account that they themselves use (%)	15	53	78.6
24	Women age 15-24 years who use hygienic methods of protection during their menstrual period (%)	NA	57.6	77.3

Source: NFHS Reports and Factsheets (http://rchiips.org/nfhs/index.shtml)

The major revisions made in the format of NFHS since its inception.

- 1. Respondents: The first round of NFHS (1992-93) collected information from ever-married women age 13-49 years, the age range was modified to 15-49 years in NFHS-2 (1998-99). The third round onwards interviewed never-married women age 15-49 and ever-married and never-married men age 15-54 years.
- 2. Coverage: In the first three rounds of NFHS, excluding the NCT of Delhi none of the other Union Territories were covered in the surveys. However, since NFHS-4 (2015-16), the coverage of the survey has expanded to all the States and UTs of the country and estimates are being provided for them.
- 3. The first three rounds of NFHS provided estimates at the National and State level. However, the design of the NFHS has changed since the fourth round to provide estimates of key indicators up to district levels. This has led to tremendous increase in the sample size of the survey from 88562 households in NFHS-1, 91196 HHs in NFHS-2, 109041 HHs in NFHS-3 to 601509 HHs in NFHS-4 and 636699 HHs in NFHS-5.
- 4. Biomarkers: The NFHS-1 collected information on height/length and weight only. The second round added biomarkers like haemoglobin testing and salt iodisation. In NFHS-3 community based HIV testing was done for the first time in India. Blood pressure and random blood sugar measurements were included in NFHS for the first time in NFHS-4. The recently concluded NFHS-5 included all the tests and measurements of the previous round mentioned above except HIV testing and conducted new tests and measurements like waist and hip circumference, HbA1C, Malaria Parasites and anti-malarial drug resistance and Vitamin D-3.
- 5. The third and fourth rounds of NFHS additionally provided estimates of population and health indicators for slum and non-slum populations for eight cities, namely Chennai, Delhi, Hyderabad, Indore, Kolkata, Meerut, Mumbai, and Nagpur.
- 6. Since NFHS-4, Computer-assisted Personal Interviewing (CAPI) method has been incorporated in NFHS to synchronise the data collected from the field to the central office which minimizes the data processing and data cleaning duration to a great extent. The CAPI method also minimizes errors and interviewing duration at the field level.
- 7. Change in age-range for certain indicators: Prior to NFHS-5, information on prevalence of Diabetes and Hypertension for adults was being collected from women age 15-49 and men age 15-54. However, in NFHS-5 this information was collected from adults 15 and above to comply with the indicator of Sustainable Development Goals (SDG). Similarly, information on violence against women in NFHS-5 has been collected from women age 18-49 only instead of 15-49 to comply with Protection of Children from Sexual Offences (POCSO) regulations.