Odisha Review — September - 2012

# Annual Health Survey - Key Highlights for Odisha

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#### INTRODUCTION

The Annual Health Survey (AHS) was conceived during a meeting of the National Commission of Population held in 2005 under the Chairmanship of the Prime Minister wherein it was decided that "there should be an Annual Health Survey of all districts which could be published/monitored and compared against benchmarks".

The Annual Health Survey (AHS) aims to yield a comprehensive, representative and reliable dataset on core vital indicators including composite ones like Infant Mortality Rate, Maternal Mortality Ratio and Total Fertility Rate along with their co-variates (process and outcome indicators) at the district level and map the changes therein on an annual basis. These benchmarks would help in better and holistic understanding and timely monitoring of various determinants on well-being and health of population particularly Reproductive and Child Health.

### **OBJECTIVE**

Realizing the need for preparing a comprehensive district health profile on key parameters based on a community set up, the AHS has been designed to yield benchmarks of core vital and health indicators at the district level on fertility and mortality; prevalence of disabilities, injuries, acute and chronic illness and access to

health care for these morbidities; and access to maternal, child health and family planning services.

### **COVERAGE**

AHS is implemented by the Office of Registrar General, India in all the 284 districts (as per 2001 Census) in 8 Empowered Action Group States (Bihar, Jharkhand, Uttar Pradesh, Uttarakhand, Madhya Pradesh, Chhattisgarh, Odisha and Rajasthan) and Assam for a three year period (i.e., a Base-line Survey followed by two updation surveys) spread over 2010-11 to 2012-13. In Odisha 2364 sample units including 1798 rural and 566 urban units comprising a total of 456413 households and 1925439 population has been covered under AHS.

#### **INDICATORS**

In the first phase of dissemination, 9 Core Vital Indicators, viz., crude birth rate, crude death rate, natural growth rate, infant mortality rate, neo-natal and post neo-natal mortality rate, under 5 mortality rate, sex ratio at birth, sex ratio (0-4 years) and overall sex ratio have already been released.

In this phase of dissemination, data on remaining 152 indicators pertaining to Total Fertility Rate, Abortion, Family Planning Practices, Ante-natal care, Delivery care, PostSeptember - 2012———————Odisha Review

natal Care, Immunization, Childhood Diseases, Breastfeeding and Supplementation, Birth Registration, Disability, Injury, Morbidity, Personal Habits, etc., are being released.

### AGENCIES INVOLVED

The field work for the AHS in Odisha has been carried out by M/s. GfK MODE Pvt. Ltd, New Delhi and M/s. Social and Rural Research Institute (IMRB International), New Delhi in the allotted zones. The Third Party Audit work has been done by M/s. Research and Development Initiative Pvt. Ltd. New Delhi. The coordination, supervision and monitoring of the fieldwork in the state are being carried out by the dedicated staff posted at various levels in the Directorate of Census Operations, Odisha.

# THE KEY HIGHLIGHTS COVERED IN THE SURVEY:

- 1. Total Fertility Rate (TFR): TFR represents the average number of children born to a woman during her entire reproductive span. There is a wide variation in TFR across the 9 AHS States. Uttarakhand and Odisha with the TFR of 2.3 each are at one extreme and Uttar Pradesh and Bihar with 3.6 and 3.7 respectively are at the other extreme. Out of 284 districts only 20 districts have already achieved the replacement level of 2.1. In Odisha the TFR is highest in Boudh (3.7) and lowest in case of Anugul, Bargarh, Debagarh, Jharsuguda and Puri (2.0). As good as 10 districts namely Anugul, Baleswar, Bargarh, Debagarh, Jagatsinghpur, Jajpur, Jharsuguda, Khordha, Puri and Sundargarh have achieved the replacement level of TFR i.e. 2.1.
- **2.Abortion:** Abortion as an option was probed for all the pregnancies which resulted into any kind of outcome i.e. live birth, still birth, spontaneous and induced abortion during the reference period i.e. 2007-09. Out of total 5.6% abortion that has

taken place in Odisha, 56.5% cases are institutional. Bargarh district reported the highest percentage of abortion (12.1). In Kandhamal 49.4% of the women went for ultrasound before abortion. Rayagada district ranked the highest with 96.7% of institutional abortions.

- **3.** Current Usage of Family Planning: The Contraceptive Prevalence Rate (CPR) is the percentage of Currently Married Women aged 15-49 years who are using any method of contraception (modern/traditional). In Odisha, the usage of Any Family Planning method is highest in Balassore district (73.4%) and lowest in Kandhamal (28.6%). Female sterilization is reported maximum in Gajapati district (50.5%) and lowest in Kandhamal district (17.9%).
- 4. Unmet Need for Family Planning: The unmet need for Family Planning is a crucial indicator for assessing the future demand for Family Planning services / supplies. Currently Married Women (CMW) who are not using any method of contraception and who do not want any more children or want after a period 2 years are defined as having an unmet need. In Odisha the total Unmet Need varies from a minimum of 6.1% in Balasore to maximum of 48.3% in Boudh district. The rural urban gap is prominent in Puri district.
- **5. Mean Age at Marriage for Female:** Mean Age at Marriage for Female is based on the marriages taken place during 2007-09. Mean Age at Marriage of females varies from 19.8 in Nabarangpur district to 24.0 years in Jagatsinghpur district.
- **6. Marriage among Females below legal age** (18 years): As in the case of Mean Age at Marriage, this is also based on marriages taken place during 2007-09. It varies from 0.5% in Jagatsinghpur district to 24.7% in Nabarangpur district.

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7. Ante-natal Care: Ante-natal care constitutes one of the key elements towards initiatives to promote safe motherhood. This comprises all kinds of care, treatment, tests given to a pregnant woman like administration of Tetanus Toxoid (TT) injections, ultrasound, blood test, consumption of Iron & Folic Acid (IFA) tablets/syrup, etc.

Full ANC comprise 3 or more ANCs, at least one TT injection and consumption of IFA for 100 days or more. Jagatsinghpur has reported the maximum FullANC coverage of 36.0% while Jajpur the minimum (5.4%). Full ANC coverage in urban areas is remarkably better than the rural areas. Jharsuguda, Mayurbhanj, Jagatsinghpur, Cuttack, Ganjam, Kandhamal and Nuapada in Odisha have reported 25% & above coverage of full ANC.

**8. Delivery Care**: The delivery in institutions is considered as the most important indicator under Delivery Care. Deliveries, however, do take place at home also. These can also be made safer by employing trained hands such as Doctor/Nurse/ANM/LHV. Institutional Delivery ranges from 31.8% in Nabarangpur to 91.6% in Puri.

Safe delivery comprises Institutional deliveries and domiciliary deliveries assisted by Doctor / Nurse / ANM / LHV. Nabarangpur has reported the minimum of 35.6% and Puri the maximum of 92.7%.

- 9. Janani Suraksha Yojana (JSY): JSY is one of the most important programmes under the umbrella of NRHM aimed at reducing Maternal Mortality Ratio and Neo-natal Mortality Rate by promoting institutional deliveries. Mothers availing financial assistance under JSY range from 29.1% in Nabarangpur to 80.2% in Puri.
- **10. Post-natal & New-born Care**: Mothers receiving Post-natal Care within 48 hours of delivery varies from 40.1% in Nabarangpur district to 90.0% in Bargarh district of Odisha.

New-born checked up within 24 hours of birth exceeds 50% in all AHS States. It varies from 38.6% in Nabarangpur to 91.0% in Boudh district in Odisha.

- 11. Immunization: Children are considered Fully Immunized if they have received vaccination against Tuberculosis, 3 doses of DPT & Polio and one dose of Measles. Rayagada has reported the minimum percentage (11.9) of children fully immunized whereas Kendrapara the maximum (82.0).
- 12. Exclusive Breast Feeding (up to six months): Exclusive Breast Feeding for the first six months of the child's life is an essential component of the optimal infant and young child feeding practices. In order to assess the situation on ground, the mothers of all living children [last two outcomes of pregnancy(s) resulting in live births during reference period, i.e., 2007-09] were asked how many days/months did they exclusively breastfeed their baby. Based on the responses, percentage for children aged 6-35 months exclusively breastfed for at least six months has been worked out and presented. Kandhamal has reported the maximum percentage of Exclusive Breast Feeding (57.2) whereas in Bolangir it is the minimum (4.4).
- **13. Disability:** The data on any type of disability as on the date of survey was collected in respect of all the usual residents. Type of disability includes mental, visual, hearing, speech, locomotor and multiple. In Odisha the prevalence of any type of disability per 1, 00,000 population is 1990. Kalahandi ranks the highest with 3153 whereas Khordha stands lowest with 914 of disables.
- **14. Birth Registration:** In order to assess the functioning of Civil Registration System in the community, information on whether the birth of the baby was registered with the Civil Authority

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and if so, the birth certificate was received or not in respect of all living children [last two outcomes of pregnancy (s) resulting in live births during reference period, i.e., 2007-09] has been collected. In Odisha a total of 83.7% of births have been registered and 30.4% of children have received the birth certificate. Balangir district has reported the highest percentage of birth registration (95.8) where as Nabarangpur district has the lowest (43.9%). In Nuapada district the highest percentage of children have received birth certificate (51.4), the lowest being in Boudh district (4.3).

15. Other highlights: Besides the above indicators the data on Mortality (Crude Death Rate, Infant Mortality Rate, Under Five Mortality Rate and Maternal Mortality Ratio), Wealth Index, Household characteristics, Sex Ratio, Effective Literacy Rate, Schooling status, Injury, Chronic and acute illness, Personal habits, Childhood diseases and Awareness on HIV/AIDS, RTI/STI, HAF/ORS/ORT and ARI/

Pneumonia have also been presented for the State and the districts.

### **PROJECT OUTCOME**

Availability of 63 indicators (co-variates) on various facets of Mother & Child Care at the district level will help in understanding the dynamics of composite indicators like IMR, U5MR and MMR. For the first time, the data on TFR, Injury, Morbidity and Personal Habits are available at the district level. This would provide new insight in evidence-based planning and facilitate appropriate interventional strategies.

The results of AHS would also enable direct monitoring of UN Millennium Development Goals on Child Mortality and Maternal Health at the district level; help in identifying high focus districts meriting special attention in view of stark inter-district variations in the AHS States; and provide critical inputs to assess the milestones of various interventions including NRHM and pave the way for evidence-based planning.

### 1. TOTAL FERTILITY RATE

	State/District		Total Fertility Rate			
		Total	Rural	Urban		
	Odisha	2.3	2.4	1.9		
Highest	Boudh	3.7	-	-		
Lowest	Anugul, Bargarh, Debagarh, Jharsuguda and Puri	2.0	-	-		

### 2. ABORTION

Indicators		State/District	Total	Rural	Urban
Pregnancy to women aged group 15-49yrs resulting in Abortion (%)	Highest Lowest	<b>Odisha</b> Bargarh Nayagarh	<b>5.6</b> 12.1 1.7	<b>5.5</b> 12.1 1.6	<b>6.3</b> 11.4 NA
Women who received any ANC before Abortion (%)	Highest Lowest	<b>Odisha</b> Nuapada Malkangiri	<b>61.6</b> 81.7 31.6	59.6 79.6 25.4	72.1 NA 44.4

Women who went for Ultrasound before Abortion (%)	Highest	<b>Odisha</b> Kandhamal	<b>17.3</b> 49.4	<b>15.5</b> 49.4	<b>26.7</b> 60.0
	Lowest	Balasore	9.7	10.0	8.0
Average month of Pregnancy at the time of abortion (%)	Highest	<b>Odisha</b> Rayagada	<b>3.0</b> 5.7	<b>3.0</b> 5.8	<b>2.8</b> 5.4
	Lowest	Samabalpur	2.6	2.7	2.5
Abortion performed by Skilled health personal (%)	Highest	<b>Odisha</b> Rayagada	<b>60.0</b> 97.7	<b>58.0</b> 100.0	<b>63.1</b> 86.7
	Lowest	Sambalpur	36.6	28.3	41.9
Abortion Taking place in Institution (%)	Highest	<b>Odisha</b> Rayagada	<b>56.5</b> 96.7	<b>56.1</b> 100.00	<b>60.0</b> 85.7
	Lowest	Bolangir	31.0	27.7	66.7

## 3. FAMILY PLANNING PRACTICES

Indicators		State/District	Total	Rural	Urban
Any Method(%)		Odisha	56.2	54.9	62.7
	Highest	Balasore	73.4	72.7	78.6
	Lowest	Kandhamal	28.6	27.5	38.1
Any Morden Method(%)		Odisha	44.0	43.4	47.0
	Highest	Balasore	57.7	57.4	60.1
	Lowest	Kandhamal	28.1	27.0	37.7
Female Sterilisation (%)		Odisha	30.1	30.6	27.4
	Highest	Gajapati	50.5	49.5	57.7
	Lowest	Kandhamal	17.9	17.5	21.1
Male Sterilisation (%)		Odisha	0.3	0.3	0.4
	Highest	Koraput	2.0	2.3	0.6
	Lowest	Bolangir, Bargar have below the			j, Nuapada
Copper-T/IUD(%)		Odisha	0.3	0.2	0.8
	Highest	Kendrapada	0.9	0.8	1.2
	Lowest	Nuapada	0.0	0.0	NA
Pills (%)		Odisha	11.1	10.6	13.8

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	Highest	Balasore	22.8	22.7	23.7
	Lowest	Rayagada	1.3	1.0	2.5
Condom/Nirodh(%)		Odisha	2.1	1.6	4.4
	Highest	Jharsuguda	8.4	7.5	9.9
	Lowest	Rayagada	0.1	0.1	0.1
		Nabarangpur	0.1	0.2	0.4
Emergency Contraceptive Pills	(%)	Odisha	0.1	0.1	0.1
	Highest	Nabarangpur	0.4	0.3	NA
	Lowest	13 districts has	below the	state average	i.e. 0.0
Any Traditional Method(%)		Odisha	12.2	11.5	15.7
	Highest	Keonjhar	26.6	26.0	29.5
	Lowest	Kandhamal	0.5	0.5	0.5
		Malkangiri	0.5	0.4	-
Periodic Abstinence (%)		Odisha	4.6	4.4	5.3
	Highest	Bolangir	13.1	13.0	15.1
	Lowest	Kalahandi and l	Kandhamal	rank lowest	with 0.0
Withdrawal (%)		Odisha	5.9	5.2	9.4
	Highest	Anugul	17.2	16.2	21.7
	Lowest	Boudh, Malkan	giri and Nua	pada rank lov	vest with 0.0
LAM(%)		Odisha	1.2	1.2	0.7
	Highest	Bolangir	4.6	4.7	4.1
	Lowest	11 districts rank	lowest wit	th 0.0	

## 4. UNMET NEED FOR FAMILY PLANNING

Indicators		State/District	Total	Rural	Urban
Unmet need for Spacing (%)		Odisha	10.8	11.3	8.2
	Highest	Nuapada	21.5	21.8	NA
	Lowest	Balasore	5.6	5.3	7.5
Unmet need for Limiting (%)		Odisha	12.4	12.3	13.4
	Highest	Boudh	28.0	28.2	NA
	Lowest	Balasore	0.5	0.0	3.9

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Total Unmet need (%)		Odisha	23.2	23.5	21.7
	Highest	Boudh	48.3	48.8	NA
	Lowest	Balasore	6.1	5.3	11.4
5. MARRIAGE					
Indicators		State/District	Total	Rural	Urban
Females married below legal					
Age (18 yrs) (%)		Odisha	5.9	6.5	3.2
	Highest	Nabarangpur	24.7	25.3	NA
	Lowest	Jagatsinghpur	0.5	0.5	0.9
Males married below legal Age (21 yrs) (%)	Highest	<b>Odisha</b> Nabarangpur	<b>5.2</b> 22.4	<b>5.8</b> 23.0	<b>2.4</b> NA
	Lowest	Jagatsinghpur	0.9	0.8	1.4
		Kendrapada	0.9	0.9	0.0
6. AGE AT MARRIAGE		Tionarapada	0.9	0.5	0.0
Indicators		State/District	Total	Rural	Urban
Mean Age at Marriage for		Odisha	21.7	21.5	22.9
females	Highest	Jagatsinghpur	24.0	24.0	23.3
	Lowest	Nabarangpur	19.8	19.8	NA
Mean Age at Marriage for male	es	Odisha	26.9	26.5	28.6
	Highest	Jagatsinghpur	29.0	28.8	29.4
		Cuttack	29.0	29.2	28.3
	Lowest	Nabarangpur	23.3	23.2	NA
7. ANTE-NATAL CARE					
Indicators		State/District	Total	Rural	Urban
Currently Married Pregnant we	omen	Odisha	68.7	68.5	70
aged 15-49 yrs registered for	Highest	Bargarh	87.3	86.7	93.1
ANC (%)	Lowest	Nuapada	41.1	40.9	NA
Mothers who received any		Odisha	95.6	95.3	97.4
ANC (%)	Highest	Jharsuguda	99.3	99.1	99.5
	Lowest	Nabarangpur	83.3	82.9	NA
Mathamazzla a land full A NIC (0/	)	Odisha	18.6	16.9	28.9
Mothers who had full ANC (%	)	G 62151144			

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	Lowest	Jajapur	5.4	5.1	NA
Mothers received ANC from		Odisha	57.7	59.2	49.0
Govt. Sources (%)	Highest	Mayurbhanj	92.0	93.3	70.7
	Lowest	Malkangiri	41 3	39 2	63 9

### 8. DELIVERY CARE

Indicators		State/District	Total	Rural	Urban
Institutional Delivery (%)		Odisha	71.3	69.2	84.0
	Highest	Puri	91.6	91.5	91.7
	Lowest	Nabarangpur	31.8	30.1	NA
Delivery at Govt. Institutions	s (%)	Odisha	61.7	62.6	56.0
	Highest	Puri	80.7	83.4	66.7
	Lowest	Nabarangpur	30.0	28.6	NA
Delivery at Private institution	n (%)	Odisha	9.2	6.2	27.5
	Highest	Jharsuguda	20.7	11.7	35.3
	Lowest	Malkangiri	0.4	0.2	2.6
Delivery at Home (%)		Odisha	28.1	30.2	15.7
	Highest	Nabarangpur	68.1	69.8	NA
	Lowest	Puri	8.2	8.1	8.3
Safe Delivery (%)		Odisha	75.2	73.3	86.9
	Highest	Puri	92.7	92.7	92.9
	Lowest	Nabarangpur	35.6	33.9	NA

# 9. JANANI SURAKSHA YOJANA (JSY)

Indicators		State/District	Total	Rural	Urban
Mother who availed financial assistance for delivery under JSY (%)		Odisha	61.6	63.4	50.5
	Highest	Puri	80.2	83.9	60.7
	Lowest	Nabarangpur	29.1	27.8	NA
Mother who availed financial assistance for institutional delivery under JSY (%)	Highest Lowest	<b>Odisha</b> Kandhamal Gajapati	<b>83.3</b> 96.2 54.9	<b>88.1</b> 96.3 56.1	<b>59.6</b> 95.2 47.3

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Mother who availed financial		Odisha	94.4	95.5	87.2
assistance for Govt. institutional	Highest	Bargarh	97.4	97.4	97.9
delivery under JSY (%)	Lowest	Gajapati	70.8	69.8	78.5

### 10. POST NATAL CARE

Indicators		State/District	Total	Rural	Urban
Less than 24 hrs .stay in institution after delivery (%) Highes		<b>Odisha</b> Bolangir Dhenkanal	<b>53.5</b> 73.7 73.7	<b>55.7</b> 75.2 74.2	<b>42.8</b> 59.0 68.3
	Lowest	Jagatsinghpur	26.0	24.2	43.4
Mother who received Post-na Check up within 48 hrs of delivery (%)	tal Highest Lowest	<b>Odisha</b> Bargarh Nabarangpur	<b>74.5</b> 90.0 40.1	<b>72.6</b> 89.4 38.7	<b>85.9</b> 96.2 NA
Mother who received Post-na Check up within 1 week of delivery (%)	tal Highest Lowest	<b>Odisha</b> Bargarh Malkangiri	<b>78.5</b> 92.6 48.2	<b>76.9</b> 92.1 46.5	<b>88.6</b> 96.9 69.3
Mother who did not receive a Post-natal Check up (%)	nny Highest Lowest	<b>Odisha</b> Malkangiri Bargarh	<b>19.6</b> 43.7 7.1	<b>21.1</b> 45.1 7.5	10.4 26.6 3.1
New born who were checked within 24 hrs. of birth (%)	up Highest	<b>Odisha</b> Bargarh	<b>74.9</b> 91.0	<b>73.1</b> 90.5	<b>85.8</b> 96.6
	Lowest	Nabarangpur	38.6	37.1	NA

### 11. IMMUNIZATION

Indicators		State/District	Total	Rural	Urban
Children (12-23 months) having	Odisha	94.0	93.7	95.4	
Immunization Card (%)	Highest	Jagatsinghpur	99.1	99.0	100.00
	Lowest	Nabarangpur	76.0	75.1	NA
Children (12-23 months) Fully		Odisha	55.0	54.3	59.5
immunized (%)	Highest	Kendrapada	82.0	81.4	92.3
	Lowest	Rayagada	11.9	12.1	11.1
Children who did not receive		Odisha	0.9	0.8	1.1
any Vaccination (%)	Highest	Gajapati	4.9	5.0	4.7
	Lowest	Boudh and	0.0	0.0	27.4
		Nayagarh	0.0	0.0	NA

September - 2012 -Odisha Review Children With Birth Weight less Odisha 22.3 22.9 19.2 than 2.5 Kg. (%) Highest 30.1 Malkangiri 39.6 41.0 Bolangir

16.0

16.3

12.8

Lowest

### 12. BREAST FEEDING PRACTICES

Indicators		State/District	Total	Rural	Urban
Children Breastfed within one Hour of birth (%)	Highest Lowest	<b>Odisha</b> Nuapada Bolangir	<b>71.5</b> 89.8 36.0	<b>71.2</b> 89.6 36.6	73.3 NA 28.0
Children (aged 6-35months)	Lowest	Odisha	24.8	24.2	28.0 28.1
exclusively breastfed for at least 6 months (%)	Highest Lowest	Kandhamal Bolangir	57.2 4.4	59.3 4.2	37.6 6.5

### 13. DISABILITY

State /District	Prevalence of any type of Disability (Per100,000 Population)								
		Person		Male			Female		
	Total	Rural	Urban	Total	Urban	Rural	Total	Urban	Rural
Odisha	1990	2105	1399	2098	2233	1426	1880	1977	1371
Kalahandi (Highest)	3153	3211	NA	3204	3293	NA	3100	3127	NA
Khordha (Lowest)	914	1318	418	1034	1492	490	786	1139	340

### 14. BIRTH REGISTRATION

Indicators		State/District	Total	Rural	Urban
Birth Registered (%)		Odisha	83.7	82.7	89.6
	Highest	Bolangir	95.8	95.5	100
	Lowest	Nabarangpur	43.9	42.8	NA
Children whose birth was registered and received Birth Certificate (%)	Highest Lowest	<b>Odisha</b> Nuapada Boudh	<b>30.4</b> 51.4 4.3	<b>26.9</b> 50.5 4.0	<b>51.7</b> NA NA

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