

CHAPTER 4

CHILDBIRTH AND MATERNITY HEALTH CARE SERVICES

4.1 General

In the present survey of the NSSO 71st Round, comprehensive information regarding institutional childbirth were collected. This includes detailed information on incidence of childbirth, proportion of childbirths that happen in institutional settings, childbirths occurring at different levels of care and nature of treatment received. Moreover, detailed expenditure on account of institutional childbirth as well as incidence and cost associated with pre-natal and post-natal care have been derived for many socio-economic categories to understand the situation in utilization of maternity services.

4.2 Pregnancy of women of aged 15-49 years and outcome of pregnancy

4.2.1 Estimates on Age-Specific pregnancy rate (ASPR) during the 365 days prior to date of survey and 'Wastage of Pregnancy' (per 1000) are given in statement 4.1 for broad age groups of women.

ASPR is defined as Per 1000 no. of women belonging to specific age group years who were pregnant any time during last 365 days.

Wastage of Pregnancy (WOP) is defined as the 'total number of pregnancies which did not result into live-birth during the reference period' per 1000 number of completed pregnancies (not continuing) during the same period.

4.2.2 In deriving this indicator, one needs to know – if a woman was pregnant any time during a reference period, and if so, the outcome of each of the pregnancies during that period. It can be seen that among women in the age group 15-49 years, about 16 per cent in the rural area and 15 per cent in the urban areas were pregnant during the 365 days preceding the date of survey. The highest proportion of pregnancy in both the rural and urban areas is seen to occur at the broad age group of 30-34 years, followed by the age group 25-29 years in urban areas and 35-39 years in rural areas.

Statement 4.1: Per thousand no. of women aged 15-49 who were pregnant any time during last 365 days (ASPR), per thousand no. of wastage of pregnancy (WOP) for each broad age group

Broad age-group	ASPR		WOP	
	Rural	Urban	Rural	Urban
< 20	24	0	0	0
20-24	46	119	0	12
25-29	140	348	23	114
30-34	397	356	28	127
35-39	354	178	337	0
40-44	41	24	0	0
>45	71	21	0	0
All	166	150	136	86

- 4.2.3 The statement also shows that about 14 per cent of the pregnancies were wasted in the rural areas, while the percentage was lower at about 9 per cent in the urban areas. The sub-group viz. the broad age group of 35-39 years in the rural areas is seen to be disproportionately high in case of WOP. In urban areas, the highest proportion of WOP is seen in the age group 30-34 years. Another point that we note is that the age standardized wastage rate increases with age from 25 to 29 to 30 to 34 up to 39 years in rural areas, and in the urban areas, 20 to 24 to 25 to 29 up till 34 years.
- 4.2.4 **Place of childbirth:** Statement 4.2 gives the distribution of women of age 15 to 49 years by place of birth separately for the rural and urban areas.

Statement 4.2: Per 1000 distribution of women aged 15-49 who gave birth during the last 365 days by place of birth

Broad age-group	Per 1000 distribution of women by place of childbirth					
	Rural			Urban		
	Institutional delivery at Public hospital*	Private hospital	Delivery at home	Institutional delivery at Public hospital*	Private hospital	Delivery at home
< 20	1000	0	0	0	0	0
20-24	129	0	871	466	129	405
25-29	123	42	835	413	27	560
30-34	220	14	766	437	165	397
35-39	292	79	629	283	39	679
40-44	864	0	136	520	0	480
>45	123	0	877	158	169	672
All	250	36	714	411	96	493

* includes ANM, ASHA, AWW, HSC, PHC, dispensary, CHC, MMU, Public hospital

- 4.2.5 In rural areas, about 71% of the childbirths were at home or any other place other than the hospitals. The same for urban areas was about 49%. The highest proportion of childbirths taking place at home falls in the age group of 45 plus years for rural areas, whereas the same in the age 35-39 years for urban areas. It is also seen that 25% of childbirths took place in public hospital and about 4% in private hospitals in rural area. In urban areas, however, the corresponding figures were 41% and 10% respectively. The statement also reveals that childbirths in women below the age of 20 in rural areas took place in public institutions alone.

4.3 Cost of Institutional Childbirth

- 4.3.1 **Medical expenditure per Childbirth from Public and Private Sources vis-à-vis level of living:** Statement 4.3 gives the estimates of medical expenditure incurred per childbirth at public and private hospitals (as in-patient) separately for the rural and urban areas during a reference period of 365 days for each quintile class of monthly per capita consumption expenditure.

Statement 4.3: Average total medical expenditure per childbirth during stay at hospital by type of hospital and quintile class of MPCE

Quintile class of MPCE	Avg. total medical expenditure (Rs.) per childbirth hospitalisation case		
	Public	Private	All
Rural			
01	0	0	0
02	1800	0	1800
03	0	0	0
04	0	0	0
05	3229	0	3229
All	2802	0	2802
Urban			
01	5365	0	5365
02	9400	0	9400
03	2446	0	2446
04	17017	0	17017
05	2009	0	2009
All	7437	0	7437

4.3.2 The statement shows that, on an average, the rural population spends about Rs. 2802 per childbirth, while the same in the urban areas costs an average of around Rs. 7437. The statement is also reflective of the urban population in the 4th quintile class to be incurring maximum expenses per childbirth hospitalization case. The same in the rural areas is seen in the 5th quintile class.

4.3.3 **Medical and Non-Medical Expenditure on Institutional Childbirth:** Statement 4.4 gives the estimates of medical and non-medical expenditure per hospitalized childbirth during a reference period of 365 days and the break-up of medical expenditure for rural and urban sectors.

Statement 4.4: Average medical and non-medical expenditure (Rs.) per hospitalized childbirth and break-up of medical expenditure

Sector	Average expenditure (Rs.)							Transport/ other non- medical expenses
	Package component	Doctor/ surgeon's fee	Diagnostic tests	Bed charges	Other medical expenses	Medicines	Total	
Rural	764	0	35	0	0	2004	2802	1209
Urban	0	2508	1085	475	343	3027	7437	1615
All	357	1336	594	253	183	2549	5272	1452

4.3.4 It is seen that, on an average, the rural population spent about Rs. 2802 on medical charges and Rs. 1209 on transport/other non-medical expenses per hospitalized childbirth. The same for the urban areas, on an average, is Rs. 7437 for medical and Rs. 1615 for non-medical respectively. It can also be observed that the maximum medical expenses incurred in both rural and urban sectors per hospitalized childbirth falls in the category of 'medicines'.

4.4 Pre-natal and Post-natal care

4.4.1 Information on maternal care taken by women who were pregnant anytime during the last 365 days was collected in the survey together with the expenditure incurred for availing pre-natal and post-natal services. Statement 4.5 gives the proportion of such women availing these services during a reference period of 365 days by nature of care received separately for rural and urban sectors.

Statement 4.5: Per thousand distribution of women aged 15-49 pregnant any time during last 365 days by nature of pre-natal and post-natal care received

Sector	Per 1000 no. of pregnant women reporting pre-natal care					Per 1000 no. of pregnant women reporting post-natal care				
	Not received	Received			All	Not received	Received			All
		AYUSH	Non-AYUSH	Both			AYUSH	Non-AYUSH	Both	
Rural	86	205	678	32	1000	528	59	405	9	1000
Urban	137	152	679	9	1000	400	145	420	35	1000
All	101	189	678	25	1000	488	86	409	17	1000

4.4.2 The statement shows that about 91% of the pregnant women in rural areas and about 84% of the same in urban areas received some form of pre-natal care during the reference period of 365 days. Out of the proportion of pregnant women who received pre-natal care, Non-AYUSH was found more dominant in comparison to AYUSH treatment in both rural and urban areas, while only a marginal portion of this population received both AYUSH and Non-AYUSH.

4.4.3 It is also seen from Statement 4.5 that the proportion of pregnant women who received post-natal care stood at about 47% in the rural areas and 60% in the urban areas. Out of the proportion of women receiving post-natal care, the 'Non-AYUSH' type was seen to be more common than 'AYUSH' or women using the services of both.

4.4.4 **Average expenses on pre-natal and post-natal care:** Statement 4.6 gives the estimates of expenditure on pre-natal and post-natal care received by pregnant women separately for rural and urban sectors.

Statement 4.6: Average expenditure on pre-natal care and post-natal care by nature of care received

Sector	Average expenditure incurred (Rs.)					
	Pre-natal care			Post-natal care		
	AYUSH	Non-AYUSH	All	AYUSH	Non-AYUSH	All
Rural	3934	1250	1767	6408	2179	1280
Urban	2234	1409	1380	5370	2387	1846
All	3525	1298	1652	5861	2246	1456

- 4.4.5 The statement shows that, on an average, pregnant women spent about Rs. 1767 on pre-natal care in the rural areas and Rs. 1380 in the urban areas respectively. In both rural and urban areas, more expenses were incurred on those availing AYUSH services as compared to Non-AYUSH.
- 4.4.6 It is also seen that pregnant women receiving post-natal care spent an average of about Rs. 1280 in the rural areas and Rs. 1846 in the urban areas. In both rural and urban areas, a larger proportion of expenses were incurred on availing AYUSH services and lesser for Non-AYUSH.
- 4.4.7 **Maternity Care and Age of mother:** Statement 4.7 shows the scenario of having pre-natal and post-natal care separately for rural and urban sectors for broad age group of mothers for a reference period of 365 days.
- 4.4.8 Except for the age group of 35-39 years in the rural sector, for all age groups proportion of women receiving pre-natal care is higher or equal in the rural areas as compared to that in the urban areas. The rural-urban difference was highest in the age group of 40-44 years in availing pre-natal care.

Statement 4.7: Per 1000 distribution of women aged 15-49 who gave birth during last 365 days by nature of pre-natal and post-natal care received

Age-group	Per 1000 no. of pregnant women reporting			
	Pre-natal care		Post-natal care	
	Rural	Urban	Rural	Urban
< 20	1000	0	0	0
20-24	1000	875	165	526
25-29	912	859	544	552
30-34	993	881	595	667
35-39	816	886	401	586
40-44	915	738	513	700
>45	1000	1000	157	761
All	948	748	339	542

- 4.4.9 The statement reveals that the proportion of women receiving post-natal care is higher through all age groups in the urban areas as compared to the rural areas. The sector difference is seen to be highest in the oldest age group of 45 years and more. It can also be seen that the proportion of women availing post-natal care is much lower as compared to receipt of pre-natal care by the same in both rural and urban sectors.