Extended Abstract:

Trends in utilization of Reproductive and Child Health Services among Urban Poor in India

I. Introduction:

Eradication of poverty in its all form, as a global effort was commonly agreed by developing and developed countries in United Nations millennium declaration (UN, 2000). In subsequent years, universal access to reproductive health was acknowledged as the key strategy in achieving at least three of the eight millennium development goals, namely, reduction in child mortality, improvement in maternal health and combating HIV/AIDS (UN, 2005). But the progress towards these goals is slow and unequal across and within the countries (Houweling, T.A *et al*, 2007, Lawn JE *et al*., 2006). Moreover, the expanded health services in a transitional population may not necessarily benefit the poor as it typically reaches the better off group more than the disadvantageous ones (Gwatkin DR, 2005). These propositions are also corroborated with the fact that inequalities in health are always disadvantageous to the poor, varying largely across space and socio-economic inequalities in health seems to be widening rather than narrowing (Wagstaff A, 2002).

II. Need of the Study:

Research and programme in India has been increasingly focusing on the health and health care utilization of the rural population. The recent National Rural Health Mission (NRHM), a strategic approach for improving the health and determinants of health is operational in many parts of the rural India. Very little attention is paid to the urban areas, may be under pretext that utilization of health care services are higher in urban areas. But the pattern of rural-urban migration, rising cost of health care services, and increasing income inequality makes health care utilization unaffordable and inaccessible for the poor and marginalized in urban areas.

III. Objectives:

The main objective of this paper is to examine the trends in rich-poor gap in four basic reproductive and child health services, namely, antenatal care, natal care, contraceptive use and child immunization in urban India and two disparate states, namely, Maharashtra and Karnataka.

IV. Methodology:

The first challenge in such an exercise is "how to define the urban poor". In the absence of data on income and expenditure, the Demographic and Health and Surveys (DHS) uses the composite index based on economic proxies such as consumer durables, housing qualities and durables, sanitary facilities and land ownership and size etc. The composite index so computed, named as wealth index or standard of living index reflects the long term economic status of household and used in understanding the economic differential in health outcome and health care utilisation (Filmer and Pritchett, 2001, Rutstein et al, 2000). The wealth or standard of living index is even increasingly used to reflect the economic inequalities in health services and health outcome. In doing so, the wealth quintiles (first or first and second) are often used to demark the poor, as policy makers invariably need these segregations for implementation of their programmes. But the wealth index is subject to criticisms as it does not consider rural-urban and regional differentials in computation of composite index. Further, it uses almost all variables without considering their theoretical rationale or statistical significance. As a first step, we propose to recomputed a composite index based on selected variables which and classify the population as poor and non-poor based on poverty estimates of Planning Commission, Government of India, close to the survey period. For example, according to planning commission estimates, about 28 percent urban population were living below poverty line in 2005-06 and we provide the same estimates and used to examine the health differentials of the poor and non-poor. In doing so, we have carried out the exercise only for urban India and the factor score of the variables is shown in appendix 1. Further we have used the four critical health care variables, namely, basic childhood immunization for children below five years, three or more antenatal visit, institutional delivery (medical assistance at delivery) and contraceptive use as dependent variables. Non-poor to poor ratio, concentration index and bivariate analysis is used to understand the trends in health

care utilization among poor and non-poor in India and two selected states, namely, the state of Maharashtra and Karnataka. These two states are selected as the percentage of urban population is higher in these two states.

V. Preliminary results:

The preliminary results derived for two period, 1998-99 and 2005-06 on trends in RCH care utilization is shown in table 1. The service coverage of the poor has either stagnated or declined for immunization of children, antenatal and institutional delivery (delivery in health facility) for the country as well as the selected states. However, the overall use of these services are even lower than the estimates for rural areas of the country and the respective states. For example, the delivery in health facilities has declined from 42 to 40 percent for the poor during 1998-2006 while it has increased from 74 to 77 percent for the non-poor in India. The similar pattern is noticed for the state of Maharashtra and Karnataka. In the case of all basic hood immunization, the decline is noticed among the poor in India as well as in two progressive states. However this is not the case in contraceptive services. The use of contraceptive services has increased in a much faster pace among the poor compared to non-poor in India as well in both the states. While the service coverage in basic health services has declined, it has increased in case of contraception.

With respect to gap in non-poor to poor (table 2), the ratio has increased from 1.6 to 1.8 for immunization, from 1.8 to 1.9 in case of institutional delivery and remained same at 1.6 for three or more ANC services for the country during 1998-2006. In case of contraceptive uses, the ratio has declined from 1.7 to 1.4 indicating narrowing gap in wider acceptance of contraception among the urban poor. The pattern is similar among the states. The concentration index has shown increase for all the services except that of contraception indicating rising economy inequality in utilization of basic reproductive and child health services.

This calls for improving the health care services for the urban poor so as to realize the millennium declaration.

Note: The present analysis is for 1998-99 and 2005-2006. We are continuing the analysis for the 1992-93and will complete the trend shortly.

Table 1: Trends in Utilization of reproductive and child health services among <u>urban poor and non poor</u> in India, Maharashtra and Karnataka, 1998-2006
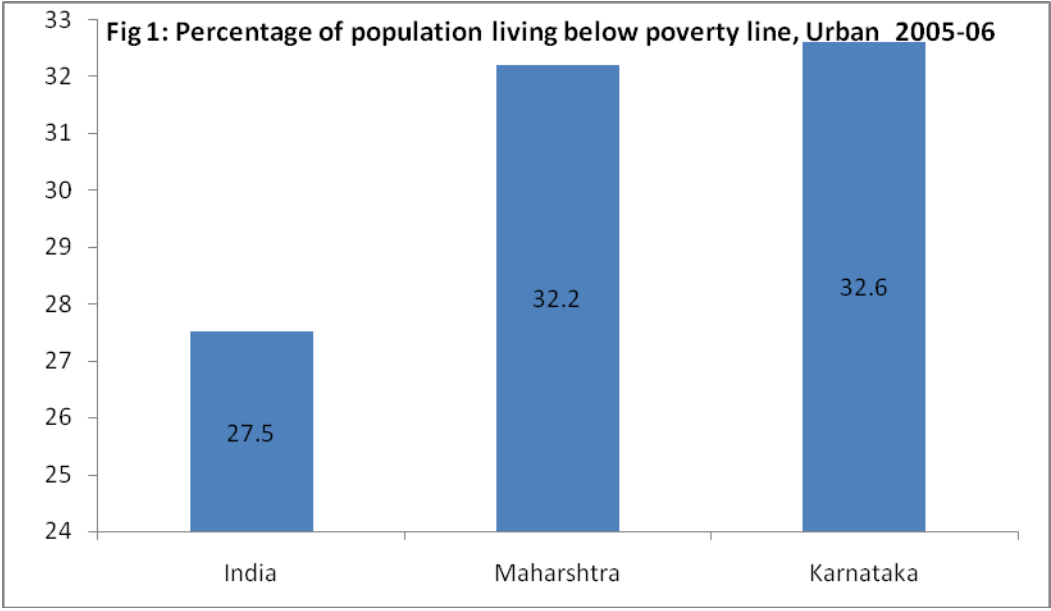
	India				Maharashtra				Karnataka			
	Urban poor		Non-poor		Urban poor		Non-poor		Urban poor		Non-poor	
	1998-99	2005-06	1998-99	2005-06	1998-99	2005-06	1998-99	2005-06	1998-99	2005-06	1998-99	2005-06
Immunization												
No immunization	12.80	8.87	4.15	1.64		0.61		0.51	6.91	11.54	5.02	3.51
Partial immunization	48.37	54.81	35.63	33.62	49.67	57.03	22.68	28.6	69.12	50	34.78	32.46
Full immunization	38.83	36.31	60.22	64.74	50	42.36	77.32	70.89	23.97	38.46	60.19	64.04
Anc visit												
3 and more	48.5	51.43	78.01	83.13	64.13	66.92	85.66	92.45	62.8	71.9	93.47	95.87
Contraceptive used												
Any method	26.83	43.02	45.89	59.7	24.72	53.63	38.36	54.59	32.41	45.3	46.04	57.63
Place of delivery												
Institutional delivery	42.16	40.44	74.2	77.06	63.81	53.83	85.45	88.61	68.77	53.07	82.19	91.2

Table 2: Trends of non- poor to poor ratio in utilization of reproductive and child health services in India, Maharashtra and Karnataka, 1998-2006

T services	India		Maharashtra		Karnataka	
	1998-99	2005-06	1998-99	2005-06	1998-99	2005-06
Full immunization	1.55	1.78	1.54	1.67	2.51	1.67
Three and more ANC Visit	1.61	1.62	1.34	1.38	1.49	1.33
Institutional delivery	1.76	1.91	1.34	1.65	1.20	1.72
Contraceptive use	1.71	1.39	1.55	1.02	1.42	1.27

Appendix 1: Mean, SD and factor score of variables used in computation of urban poor in India, 1992-2006

	NFHS-1, 1992-93			NFHS-2, 1998-99			NFHS-3, 2005-06		
	Mean	Std. Dev	Factor score	Mean	Std. Dev	Factor score	Mean	Std. Dev.	Factor score
Type of house									
Pucca	0.565	0.495	0.280	0.659	0.473	0.251	0.746	0.424	0.234
Semi pucca	0.262	0.439	-0.121	0.244	0.429	-0.170	0.198	0.398	-0.196
Kaccha	0.172	0.377	-0.227	0.958	0.294	-0.150	0.367	0.188	-0.111
Type of toilet facility									
No toilet	0.241	0.428	-0.265	0.192	0.394	-0.240	0.212	0.409	-0.217
Pit toilet	0.155	0.362	-0.061	0.168	0.374	-0.047	0.056	0.231	-0.060
Flush toilet	0.600	0.489	0.273	0.638	0.480	0.233	0.730	0.443	0.232
Main fuel of cooking									
Electricity	0.352	0.477	0.300	0.483	0.499	0.314	0.524	0.499	0.271
Coal/charcoal	0.313	0.463	-0.043	0.263	0.440	-0.118	0.127	0.333	-0.057
Wood/etc	0.334	0.471	-0.262	0.253	0.434	-0.241	0.347	0.476	-0.244
Ownership of house	***	***	***	0.782	0.412	0.034	0.784	0.411	0.036
Person per room									
Less than 2	0.522	0.499	0.160	0.581	0.493	0.190	0.142	0.349	0.104
2 to 4	0.317	0.465	-0.073	0.290	0.454	-0.115	0.512	0.499	0.061
More than 4	0.159	0.366	-0.125	0.128	0.334	-0.125	0.345	0.475	-0.141
Separate kitchen	0.629	0.483	0.206	0.640	0.479	0.224	0.887	0.315	0.129
Motorcycle	0.192	0.394	0.219	0.249	0.432	0.243	0.300	0.458	0.225
Television	0.517	0.499	0.297	0.272	0.445	0.266	0.463	0.498	0.252
Sewing machine	0.355	0.478	0.206	0.354	0.478	0.189	0.308	0.461	0.162
Refrigerator	0.200	0.400	0.246	0.288	0.452	0.282	0.285	0.451	0.245
Electric fan	0.827	0.377	0.254	0.821	0.382	0.218	0.823	0.381	0.183
car	0.325	0.177	0.107	0.434	0.203	0.133	0.481	0.214	0.129

Fig 1: Percentage of population living below poverty line, Urban 2005-06

Based on Uniform Recall Period