

Public vs. private health care utilisation in India*

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EXTENDED ABSTRACT

Utilisation of private health facilities in India supersedes that of public ones in this phase of transition. Indian National Family Health Survey-3 collected information on pattern of utilisation of health care covering 124385 women from all parts of the Country in 2005-2006. The survey revealed that nearly 36 per cent of the respondents visited any health facility within a 3-month reference period for some reasons (family planning, immunisation, maternal care, treatment for child, treatment for self and others, etc.). Out of these health seekers, more than 62 per cent utilised private health facilities and the remaining less than 38 per cent, public health facilities. Though the Country has nation-wide network of delivering health and family welfare services through publicly funded primary, secondary, and tertiary health care institutions, we witness radical changes in the pattern of utilisation of care favouring the private ones. The present paper examines empirically whether factors related to service delivery in the supply-side economics of health care (waiting time, provider-patient information exchange, respecting privacy, and cleanliness) significantly affect preference for care. The exercise is done by estimating multivariate logit model controlling the above-mentioned need factors with type of locality, geographical region, and economic status of the households. The study finds that all the supply-side factors moderately or strongly favour private health facilities. On the contrary, some demand-side factors (maternal health care, immunisation, etc.) strongly favour public health facilities. The role of the public health care system is, therefore, crucial role in this phase of transition.

KEYWORDS Public health care, private care, service delivery, supply-side economics of health care, utilisation

JEL CLASSIFICATION I1

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Tab. 1: Utilisation of various health facilities in India

Health Facility		Rural		Urban		Combined	
		n	%	n	%	n	%
Public	Government /municipal hospital	3737	16.98	5109	22.34	8846	19.71
	Government dispensary	628	2.85	457	2.00	1085	2.42
	UHC / UHP / UFWC*	56	0.25	109	0.48	165	0.37
	CHC / rural hospital / PHC**	3645	16.56	671	2.93	4316	9.62
	Sub-centre	1028	4.67	141	0.62	1169	2.60
	Government mobile clinic	15	0.07	11	0.05	26	0.06
	Camp	170	0.77	100	0.44	270	0.60
	Anganwadi/ ICDS Centre	618	2.81	104	0.45	722	1.61
	Other public sector health facility	128	0.58	198	0.87	326	0.73
	<i>All public</i>	<i>10025</i>	<i>45.55</i>	<i>6900</i>	<i>30.17</i>	<i>16925</i>	<i>37.71</i>
Private	Private hospital	10094	45.87	14410	63.00	24504	54.60
	Private mobile clinic	347	1.58	642	2.81	989	2.20
	Pharmacy / drugstore	327	1.49	240	1.05	567	1.26
	Other private sector facility	930	4.23	290	1.27	1220	2.72
	NGO or trust shop	108	0.49	231	1.01	339	0.76
	Other	177	0.80	159	0.70	336	0.75
	<i>All private</i>	<i>11983</i>	<i>54.45</i>	<i>15972</i>	<i>69.83</i>	<i>27955</i>	<i>62.29</i>
Total	(All facilities)	22008	100	22872	100.00	44880	100.00

* Urban health centres, health points, family welfare centres

** CHC: Community Health Centre, PHC: Primary Health Centre

Tab. 2: Response and predictor variables in the models and definitions

Response and Predictor variables	Definition / description	Code
Response variable: Utilisation	Whether the respondent has visited any public health facility for any reason (in the 3-month reference period)	1 if public, 0 private
Service (1)	waiting time: time waited before being seen	0 if time \leq 1 hour, 1 if time \geq 1 hour
Service (2)	provider-patient information exchange	1 if yes, 0 otherwise.
Service (3)	Respecting privacy: whether privacy was maintained during check-up	1 if yes, 0 otherwise.
Service (4)	Cleanliness: Whether respondent found health premises clean	1 if medium, 0 otherwise; 1 if high, 0 otherwise
Need (1)	Visit for family planning services	1 if yes, 0 otherwise
Need (2)	Visit for antenatal care (ANC)	1 if yes, 0 otherwise
Need (3)	Visit for delivery care	1 if yes, 0 otherwise
Need (4)	Visit for treatment of sick child	1 if yes, 0 otherwise
Need (5)	Visit for child immunisation	
Need (6)	Visit for disease prevention, health check-up	1 if yes, 0 otherwise
Need (7)	Visit for treatment for self	1 if yes, 0 otherwise
Need (8)	Visit for treatment for others	1 if yes, 0 otherwise
Economic Status	A composite index of wealth of households, which is readily available in NFHS-3 based on considering type of house, toilet facility, source of lighting, main fuel for cooking, source of drinking water, separate room for cooking, ownership of house, ownership of agricultural land, irrigated land, livestock, and ownership of durable goods. Score: low, medium, high	1 if medium, 0 otherwise; 1 if high, 0 otherwise
Type of locality	Two categories: rural and urban	1 if urban, 0 otherwise
Geographical region	Captures differences in economy, geography, governance, etc. Three categories: Northern India (Bihar, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Jharkhand, Madhya Pradesh, New Delhi, Punjab, Rajasthan, Uttaranchal, Uttar Pradesh, West Bengal), North-Eastern hilly region (Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura), and Southern India (Andhra Pradesh, Chattisgarh, Goa, Karnataka, Kerala, Maharashtra, Orissa and Tamil Nadu)	1 if north, 0 otherwise; 1 if north-east, 0 otherwise

Tab. 3: Descriptive statistics

Variable	Category	Rural		Urban		Combined	
		n	%	n	%	n	%
Utilisation	Private	11983	54.45	15972	69.83	27955	62.29
	Public	10025	45.55	6900	30.16	16925	37.71
Service (1) Waiting time	≤ 1 hour	10350	47.03	11799	51.58	22149	49.35
	≥ 1 hour	11658	52.97	11073	48.41	22731	50.65
Service (2) Information-exchange	No	916	4.16	671	2.93	1587	3.54
	Yes	21092	95.84	22201	97.06	43293	96.46
Service (3) Respecting privacy	No	1893	8.60	1495	6.53	3388	7.55
	Yes	20115	91.40	21377	93.46	41492	92.45
Service (4) Cleanliness	Low	333	1.52	262	1.2	597	1.33
	Medium	9039	41.07	6709	29.33	15748	35.09
	High	12634	57.41	15901	69.52	28535	63.58
Need (1) Family planning	No	21687	98.54	22638	98.97	44325	98.76
	Yes	321	1.46	234	1.03	555	1.24
Need (2) Antenatal care	No	20532	93.29	21498	93.99	42030	93.65
	Yes	1476	6.71	1374	6.01	2850	6.35
Need (3) Delivery care	No	21445	97.44	22348	97.70	43793	97.58
	Yes	563	2.56	524	2.30	1087	2.42
Need (4) Treatment of child	No	14779	67.15	15768	68.94	30547	68.06
	Yes	7229	32.85	7104	31.06	14333	31.94
Need (5) Child immunisation	No	20094	91.30	21551	94.22	41645	92.79
	Yes	1914	8.70	1321	5.78	3235	7.21
Need (6) Disease prevention	No	20018	90.96	20490	89.59	40508	90.26
	Yes	1990	9.04	2382	10.41	4372	9.74
Need (7) Treatment for self	No	10567	48.01	9831	42.98	20398	45.45
	Yes	11441	51.99	13041	57.02	24482	54.55
Need (8) Treatment for others	No	21368	97.09	22184	96.99	43552	97.04
	Yes	640	2.91	688	3.01	1328	2.96
Economic Status	Low	8131	36.95	1171	5.13	9302	20.73
	Medium	5527	25.11	2508	10.96	8035	17.90
	High	8350	37.94	19193	83.91	27543	61.37
Type of locality	Rural	-	-	-	-	22008	49.04
	Urban	-	-	-	-	22872	50.96
Region	South	7946	36.11	9849	43.07	17795	39.65
	North	10665	48.5	10485	45.84	21150	47.13
	North-East	3397	15.44	2538	11.09	5935	13.22
Total (each variable)	-	22008	100.00	22872	100.0	44880	100.00

Tab. 4: Odds ratios of utilisation of public health facilities in contrast to private ones (India)

Predictor variables	Exp (β)
Service (1): Waiting time (rc: ≤ 1 hour)	
≥ 1 hour	1.146 ¹
Service (2): Information-exchange (rc: no)	
Yes	0.389 ¹
Service (3): Respecting privacy (rc: no)	
Yes	0.679 ¹
Service (4): Cleanliness (rc: low)	
Medium	0.426 ¹
High	0.157 ¹
Need (1): Family planning (rc: no)	
Yes	3.303 ¹
Need (2): Antenatal care (rc: no)	
Yes	1.400 ¹
Need (3): Delivery care (rc: no)	
Yes	1.209 ¹
Need (4): Treatment of child (rc: no)	
Yes	0.696 ¹
Need (5): Child immunisation (rc: no)	
Yes	5.787 ¹
Need (6): Disease prevention (rc: no)	
Yes	ns
Need (7): Treatment for self (rc: no)	
Yes	0.752 ¹
Need (8): Treatment for others (rc: no)	
Yes	1.094 ²
Economic Status (rc: low)	
Medium	1.145 ¹
High	0.794 ¹
Type of locality (rc: rural)	
Urban	0.667 ¹
Geographical region (rc: Southern India)	
Northern India	0.833 ¹
North-Eastern Hilly region	2.144 ¹
Constant	12.637 ¹
Model summary	
n	44880
-2 Log likelihood	50653.02
Cox & Snell R Square	0.179
Nagelkerke R Square	0.243

rc: reference category; ns: not significant; ¹p<0.01, ²p<0.05, ³p<0.10