ORIGINAL RESEARCH PAPER

Economics

ANALYSIS OF STATUS AND DISPARITIES IN DELIVERY AND POSTNATAL CARE IN DISTRICTS OF KARNATAKA

KEY WORDS: Health Index, Education Index, Human Development index

Dr Sabira Firdous

Associate Professor, Government Women's College, Hunsur.

ABSTRACT

Health is the major component of human development. Maternal deaths are strongly related with availability of institutional facility at affordable prices. In this background provision public health facilities played vital role in reducing the maternal mortality rates. Accordingly, the present paper analyzed the status and disparities in institutional deliveries in Karnataka. The secondary cross-section data are used for the analysis with comparison of mean statistical tests like, t, F, ANOVA and Duncan multiple comparison tests. It is found that there is lesser percentage of births delivered in private hospitals compared to private hospitals. Therefore, in Karnataka the people have been largely depending on public hospitals compared to private hospitals. It has been also found that in the districts of Bagalkot, Bangalore, Belgaum, Bijapur, Dakshina Kannada, Gulbarga, Mandya, Mysore and Udupi the institutional deliveries in public hospitals are significantly less. In the districts of Bagalkot, Bangalore, Belgaum, Dakshina Kannada, Mandya, Mysore and Udupi the institutional deliveries in private hospitals are significantly high. Hence, except Bijapur, in the districts of Bagalkot, Bangalore, Belgaum, Dakshina Kannada, Mandya, Mysore and Udupi institutional deliveries in public hospitals are low and institutional deliveries in private hospitals are high. Hence, there is need of proper state interventions for focus to providing better facilities in public hospitals for poor and needy people to avail the health facilities.

INTRODUCTION:

Health Index is a major component of Human Development Index. Life expectancy at birth is considered as a major indicator to capture HDI. The institutional deliveries also a proxy variable to measure the health index. WHO defines institutional deliveries as "The proportion of births occurring in health facilities in the area, or 'institutional births' or 'institutional deliveries". Since time immemorial there was less significance attached to the institutional deliveries, But in recent past governments across the countries are taking various measures for promoting deliveries through health facility.

There are various reports which publish data on this aspect. Prominent among them are NFHS and NITI Aayog. As per the recent findings of NFHS 97 % of births take place in health facility which are predominantly Government. There has been an increase in this rate from 94 % in NFHS- 4 to 97% in NFHS-5. Another important finding is that these births are more witnessed in private health facility areas, educated sections and first birth. The reason behind these is also that women to extent of 11 % received financial assistance in the JSY scheme popularized by government of Karnataka. Majority in public health facility areas received benefits than in private health facility areas.

Review Of Literature:

There is extensive literature on institutional deliveries. Few authors have conducted studies on health service delivery. The study concentrates on studying the status of deliveries mechanisms in developing countries and public health system to be made effective and suggests that market failures are witnessed which hamper institutional deliveries. **(Brajendra Saikia, 2014).** A retrospective study was also conducted to study the cost effectiveness of institutional care in Rajasthan. The study highlighted the fact that the home delivery amounted to minimal cost but the institutional deliveries costed more than it. Most families opted for loans to meet private health costs. There needs to be more educational awareness and also government spending. **(Sharad D. & et.all, 2009)**

Methodology:

The study is based on secondary data. Data is collected from National Family Health Survey (NFHS-5) India 2019-20 Karnataka. Independent sample t test was carried out to know the differences in deliveries between public and private hospitals. The F test was used for variation and Duncan multiple comparison tests were carried out in order to know the differences between high, medium and low districts. The comparisons of access to health facility for deliveries among the divisions were made separately for public, private and in between them. The differences were accepted at five percent level of significance.

Districts have been identified as high, medium and low;
High: Average + half standard deviation
Low: Average - half standard deviation
Medium: Between Low and High

Table 1: Proportion Of Institutional Deliveries District Wise

Sl No	District	Percentage of Births Delivered in a Public Health Facility	Percentage of Births Delivered in a Private Health Facility	Percentage of Births Delivered in a Health Facility
1	**Bagalkot**	57	38.2	95.2
2	**Bangalore**	54.7	44.6	99.3
3	**Bangalore Rural**	72	28	100
4	**Belgaum**	60.6	36.9	97.5
5	**Bellary**	76.8	18.9	95.7
6	**Bidar**	73.4	25.6	99
7	**Bijapur**	59.6	32.2	91.8
8	**Chamarajanagar**	82.7	17.3	100
9	**Chikkaballapura**	83	16	99
10	**Chikmagalur**	77.8	20.5	98.4
11	**Chitradurga**	68.8	29.5	98.3
12	**Dakshina Kannada**	41.8	58.2	100
13	**Davanagere**	68.9	29.4	98.3
14	**Dharwad**	69.2	30.5	99.7
15	**Gadag**	67.5	28.7	96.2
16	**Gulbarga**	60.5	28.1	88.7
17	**Hassan**	71.7	28.3	100
18	**Haveri**	82.6	14.6	97.2
19	**Kodagu**	73.3	25.1	98.4
20	**Kolar**	76.1	23.5	99.6
21	**Koppal**	68.2	22.6	90.7
22	**Mandya**	60.2	39.3	99.5
23	**Mysore**	56.2	43.8	100
24	**Raichur**	64.4	24.5	88.9

25	**Ramanagara**	68.8	31.2	100
26	**Shimoga**	74.1	25.6	99.7
27	**Tumkur**	66.9	33.1	100
28	**Udupi**	37.6	61.3	98.9
29	**Uttara Kannada**	69.5	29.8	99.3
30	**Yadgir**	73.4	20	93.3
Karnataka		67.24	30.17666667	97.42

Source: (NFHS-5) India 2019-20 Karnataka.

The percentage of births delivered in public hospital is 67.24 percent, and percentage of births delivered in private hospital is 32.2 and percentage of births delivered in health institutions is 97.42 percent. Hence there is lesser percentage of births delivered in private hospitals. Three zones have been identified based on average and standard deviation as high, medium and low. Green represents high percentage of deliveries, yellow represents medium percentage of deliveries and red represents low percentage of deliveries.

The status of institutional deliveries is shown through radar graph.

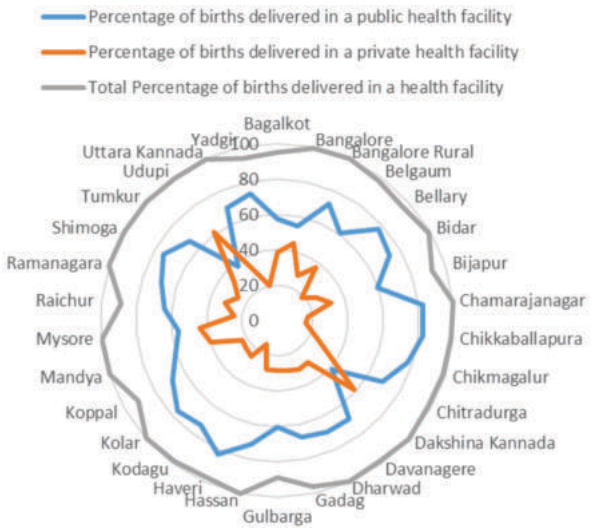

Table 2: Comparison Of Deliveries Between Public And Private Hospitals (In %)

Description	Type of Hospitals	N	Mean	Std. Deviation	Std. Error Mean
Hospitals	Public Hospitals	30	67.2433	10.73161	1.95931
	Private Hospitals	30	30.1767	10.99500	2.00740
F-Test	F: 0.010, Sig: 0.921				
t-test	t: 13.214, df: 58, Sig: 0.000				

The level of deliveries in public hospital is 67.24 percent and level of deliveries in private hospital is 30.18 percent.

The F test is not significant at 5 percent level. Accordingly, there is no variation in level of delivery in Public hospitals or private hospitals or between the public and private hospitals. The t test is significant at one percent level. Accordingly, the level of delivery is significantly high in public hospitals and significantly low in private hospitals. Therefore, in Karnataka the people have been largely depending on public hospitals compared to private hospitals.

Table 3: Level Of Delivery In Public Hospitals In Karnataka (In %)

Delivery in Public Hospitals				
Scheffe Test				
Level	N	Subset for alpha = 0.05		
		1	2	3
Low	9	54.2444		
Medium	11		68.7182	
High	10			77.3200
Sig.		1.000	1.000	1.000
ANOVA: F: 44.32, df: (2,27), Sig: 0.000				

The above table presents the information on level of deliveries in public hospitals in Karnataka. It is found that in **9** districts of Karnataka the level of deliveries in public hospitals is low and means delivery in these districts is 54.24 percent. These districts are Bagalkot, Bangalore, Belgaum, Bijapur, Dakshina Kannada, Gulbarga, Mandya, Mysore and Udupi.

In **11** districts of Karnataka the level of deliveries in public hospitals is medium and mean delivery in these districts is 68.72 percent. These districts are Bangalore Rural, Chitradurga, Davanagere, Dharwad , Gadag, Hassan, Koppal, Raichur, Ramanagara, Tumkur and Uttara Kannada. In **10** districts of Karnataka the level of deliveries in public hospitals is high and mean delivery in these districts is 77.32 percent. These districts Bellary, Bidar, Chamarajanagar, Chikkaballapura, Chikmagalur, Haveri, Kodagu, Kolar, Shimoga,Yadgir.

Table 4: Level Of Delivery In Private Hospitals In Karnataka (In %)

Delivery in Private Hospitals				
Scheffe Test				
Level	N	Subset for alpha = 0.05		
		1	2	3
Low	9	19.7667		
Medium	14		28.9357	
High	7			46.0429
Sig.		1.000	1.000	1.000
ANOVA: F: 49.876, df: (2,27), Sig: 0.000				

The above table presents the information on level of deliveries in private hospitals in Karnataka. It is found that in **9** districts of Karnataka the level of deliveries in private hospitals is low and mean delivery in these districts is19.7667 percent. These districts are Bellary, Chamarajanagar, Chikkaballapura, Chikmagalur, Haveri, Kolar, Koppal, Raichur,and Yadgir. In **14** districts of Karnataka the level of deliveries in public hospitals is medium and mean delivery in these districts is 28.9357percent. These districts are Bangalore Rural, Bidar, Bijapur, Chitradurga, Davanagere, Dharwad , , Gadag, Gulbarga, Hassan, , Kodagu, Shimoga, Ramanagara, Tumkur and Uttara Kannada. In **7** districts of Karnataka the level of deliveries in public hospitals is high and mean delivery in these districts is 46.0429 percent. These districts are Bagalkot, Bangalore, Belgaum, Dakshina Kannada, Mandya, Mysore and Udupi.

CONCLUSION:

The present paper analyzed the status and disparities in institutional deliveries in Karnataka. It is found that there is lesser percentage of births delivered in private hospitals compared to private hospitals. Therefore, in Karnataka the people have been largely depending on public hospitals compared to private hospitals. It has been also found that in the districts of Bagalkot, Bangalore, Belgaum, Bijapur, Dakshina Kannada, Gulbarga, Mandya, Mysore and Udupi the institutional deliveries in public hospitals are significantly less. In the districts of Bagalkot, Bangalore, Belgaum, Dakshina Kannada, Mandya, Mysore and Udupi the institutional deliveries in private hospitals are significantly high. Hence, except Bijapur, in the districts of Bagalkot, Bangalore, Belgaum, Dakshina Kannada, Mandya, Mysore and Udupi institutional deliveries in public hospitals are low and institutional deliveries in private hospitals are high. Hence, there is need of proper state interventions for focus to providing better facilities in public hospitals for poor and needy people to avail the health facilities.

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