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A Report on the Health and Healthcare in the District of Dakshin Dinajpur: Evidences from the District Level Household Survey – 4

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Abstract

This study reports on available healthcare infrastructure and utilisation of maternal care with some descriptive statistics on standard of living and economic condition of the households in the district of Dakshin Dinajpur utilising data from the District Level Household Survey – 4. Data reveal that more than 56 % of the respondents live in kuchha houses and nearly 71% of the households live in houses with two sleeping rooms or less. Although more than 86 % of the respondents live in electrified houses, a good percentage of respondents (30.9 %) do not have any kind of toilet facility, which indicates a lower standard of living. Nearly 44 % of the respondents live under the BPL category. However, on the good side, more than 36 % of the respondents have health insurance coverage. We see that there are 248 SHCs, 19 PHCs and six BPHCs in the district. However, preference for primary healthcare institutions is found too low in the district. If it is translated as demand for care, one can realise that the existing primary healthcare infrastructure in the district is not inadequate. The study considers utilisations rates of antenatal care (ANC) and delivery care. It has been found that 73.8 % mothers utilised ANC from public health facilities and the remaining 26.2 % from private health facilities. In regard to delivery care, 33 % of the deliveries took place at home and 64.5 % at public health facilities. Interestingly, 68.5 % of the institutional deliveries are supported by some governmental schemes or other. As the preference for public health care under the primary healthcare system is too low, the issue should be addressed with sheer attention

Keyword: Antenatal care, Dakshin Dinajpur, Delivery care, Primary healthcare, Utilisation of care

1. Introduction

The National Rural Health Mission (NRHM) in India was launched to provide accessible, affordable and quality healthcare to the rural people (MOHFW 2005). As health is a State Subject, each State or Union Territory (UT) endeavours to provide the best healthcare services to citizens. At the Central level, Ministry of Health & Family Welfare, aims to strengthen the overall health system and extends its support to each State and UT to achieve this goal (MOHFW 2019). In West Bengal, the Health & Family Welfare Department has been vested with the responsibility of maintaining and developing the healthcare system in the State.

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Public health, sanitation and hospitals are the exclusive responsibilities of the State. State provides financial and managerial support for the basic health care support and infrastructural facilities at the rural level, while the State level super specialty Medical Colleges & Hospitals predominantly provides the ambulatory care services[1]. Theoretically, availability of healthcare services or simply the healthcare infrastructure belongs to the supply-side economics of healthcare (Fuchs 1966). Simply by looking at these factors, we cannot say that infrastructure of healthcare in a particular area is adequate or inadequate or else. We need to tally the factors in the supply-side with those in the demand-side economics of healthcare. The factors in the latter can be understood from the preference for care or utilisation rate of various healthcare services, which are influenced by the need and predisposing factors (Majumder 2014).

However, at present there are 23 districts in West Bengal and the objective of this report is to explore the state of health and healthcare in the district of Dakshin Dinajpur using data from the District Level Household Survey - 4 (DLHS – 4). The study also utilises data from some other sources, such as Census and District Statistical Hand Book for information on population and healthcare infrastructure.

As above, this report considers some demand-side factors, particularly those associated with maternal health and availability of public healthcare facilities in the district with some descriptive statistics on standard of living and economic condition of the households. In DLHS -4, fieldwork in Dakshin Dinajpur was conducted during March to May 2013 gathering information from 1354 households, 1325 ever married women, the final report of which was published in 2015 (IIPS 2015).

According to the Census 2011, the district of Dakshin Dinajpur has a population of 1676276, 51 % of which are male (857199) and 49 % are female (819077). Nearly 86 % of the total population live in rural areas. When ethnic categories are considered, 28.8 % belong to the Scheduled Caste category and 16.4 % belong to Scheduled Tribe category. According to Census 2001, there are two major religious categories: Hindu (74.01 %) and Muslim (24.02 %).

2. Basic statistics on standard of living of the households

In order to have an understanding of the standard of living of the households in Dakshin Dinajpur, we first look at the housing conditions and basic amenities. Table 1 displays type of house, where we see that more than 56 % of the respondents live in kachha houses; nearly 17 % live are semi-puccka houses and the rest (nearly 27 %) in puccka houses. Now, without reducing the values of

[1] https://www.wbhealth.gov.in/contents/aboutus (accessed on 23 May 2020)

living in kuchha houses ethically[2], if we follow the standard procedure of evaluation of living condition in different types of house, as followed in large-scale household surveys like NFHS[3], we understand that living in kuchha houses is considered as a feature of lower standard of living in Indian context as compared to that associated with living in puccka houses. So, basic information on housing condition in Dakshin Dinjajpur indicates that majority of the households lead a lower standard of living in general.

Table 1. Type of House in Dakshin Dinajpur

Type of house	Frequency	Percent
Kachha	745	56.2
Semi-puccka	221	16.7
Puccka	359	27.1
Total	1325	100.0

Source: Self-elaboration

If we look at the table 2, we see some more information on number of rooms and number of living rooms available in the households. The average size of households in the district is 4.2 according to DLHS-4 data. However, we see that nearly 14 % of the households have four rooms and only 6.4 % have four sleeping rooms. Fifty-four percent of the respondents live in houses with two rooms or less and nearly 71 % of the households live in houses with two sleeping rooms or less. Information in table 2 also do not indicate higher standard of living. However, that in table 3 goes in favour of the households. More than 86 % of the houses are electrified in the district.

Table 2. Number of Rooms in the Households

Total room	Frequency	Percent	Sleeping room	Frequency	Percent
1	190	14.3	1	306	23.1
2	525	39.6	2	631	47.6
3	334	25.2	3	256	19.3
4	181	13.7	4	85	6.4
5	47	3.5	5	24	1.8

[2] The author made several visits as a part of the project to the district and realised that houses made of clay or mud do not always indicate a lower standard of living.
[3] http://rchiips.org/nfhs/data/bh/bhchap2.pdf

6	25	1.9	6	18	1.4
7	11	0.8	7	3	0.2
8	7	0.5	8	1	0.1
9	1	0.1	9	1	0.1
13	4	0.3	-	-	-
Total	1325	100.0	Total	1325	100.0

Source: Self-elaboration

Table 3. Source of Lighting

Source	Frequency	Percent
No source	1	0.1
Electricity	1145	86.4
Kerosene	179	13.5
Total	1325	100.0

Source: Self-elaboration

Table 4. Use of Toilet in Dakshin Dinajpur

Type of toilet facility	Frequency	Percent
Flush to piped sewer system	21	1.6
Flush to pit latrine	143	10.8
Flush to septic tank	458	34.6
Flush to somewhere	6	0.5
No facility – uses open space or field jungle	410	30.9
Pit latrine with slab	274	20.7
Pit latrine without slab open pit	10	0.8
Pit ventilated improved bio gas latrine	2	0.1
Twin pit composting toilet	2	0.1
Total	1325	100.0

Source: Self-elaboration

Data on the use of toilet facility provide us with very crucial information on standard of living of the households. Standard evaluation procedure (as mentioned

in footnote 2) put higher values on the use of own flush toilet and considers the condition as distressful for uses of open space or field or jungle etc. From table 4 we see that nearly 47 % of the respondents use flush toilet of some kinds and nearly 22 % of the respondents use pit latrines. However, a good percentage of respondents (30.9 %) – nearly one-third - do not have any kind of toilet facility, which indicates a lower standard of living.

An overall assessment of the conditions, as reflected from DLHS-4 data, indicates a living standard, which seems to lie not above the average level. In standard health economics literature, living standard is an enabling factor towards utilisation of healthcare.

3. Economic condition of the households

DLHS-4 also collected information on economic status of the households by asking whether a household is classified by the local authority as BPL category. In table 5, we see that nearly 44 % of the households are classified under the BPL category. Nearly 56 % of the households do not fall under this category.

Table 5. Households under the Below Poverty Line (BPL) Category

Whether belongs to BPL category	Frequency	Percent
No	741	55.9
Yes	584	44.1
Total	1325	100.0

Source: Self-elaboration

Tables 6 and 7 display some information on whether households have health insurance coverage of any kind or other. In table 6, we see that more than one-third of the respondents (36.4 %) have health insurance coverage of any kind or other. Health insurance coverage enables utilisation of healthcare. Table 7 shows different types of health insurance scheme owned by the households. We see that 28.4 % of the total households have Rashtriya Swasthya Beema Yojana (RSBY).

Table 6. Having Health Insurance Policy

Whether households have health insurance	Frequency	Percent
Do not know	12	0.9
No	831	62.7
Yes	482	36.4
Total	1325	100.0

Source: Self-elaboration

Table 7. Different Health Insurance Schemes

Name of the scheme	Frequency	Percent
Employees State Insurance Scheme (ESIS)	7	0.5
Rashtriya Swasthya Beema Yojana (RSBY)	376	28.4
Central/State Government Health Scheme other than RSBY	44	3.3
Medical Reimbursement from Employer	6	0.5
Community Health Insurance Programme	32	2.4
Mediclaim	20	1.5
Other Privately Purchased	8	0.6
Other	7	0.5
No health insurance	825	62.3
Total	1325	100.0

Source: Self-elaboration

4. Healthcare infrastructure in Dakshin Dinajpur

The public healthcare delivery system in a district is featured by a three-tier structure: primary, secondary and tertiary. In the primary tier, there are three types of healthcare institutions, such as (i) Sub Health Centre- for 5000 populations in plain area and 3000 in hilly / tribal area, (ii) Primary Health Centre (PHC) - for 30000 populations in plain area and 20000 in hilly / tribal area, and (iii) Community Health Centre (CHC) / Block Primary Health Centre (BPHC) - for 120000 populations in plain area and 80000 in hilly / tribal area. The

secondary tier comprises Sub-divisional and District Hospitals. The tertiary tier includes Medical Collages and Super Specialty Hospitals.

Table 8 shows healthcare infrastructure in Dakshin Dinajpur District. We see that there are 248 SHCs, 19 PHCs and six BPHCs in the district. The table further shows that public healthcare infrastructure did not improve in between 2009 and 2013. The final column of the table shows a decline of number of doctors in the district in between 2009 and 2013. Although availability of healthcare institutions will not be proportional to total population of a district as per national norms of population coverage, one can realise that there remains space to improve the healthcare infrastructure in Dakshin Dinajpur particularly at the secondary and tertiary levels.

Table 9 compares latest healthcare infrastructure in some selected districts of West Bengal. The table is self-explanatory and one can realise from it that sharp variation in infrastructure exists across the districts and it cannot be explained fully by the size of population in the districts. However, the available primary healthcare infrastructure in Dakshin Dinajpur district may or may not be adequate and it depends of demand and preferences for healthcare.

Table. 8. Medical Facilities Available in Dakshin Dinajpur District

Year	Sub Health Centre (SHC)	Primary Health Centre (PHC)	Community Health Centre (CHC) / Block Primary Health Centre	Rural Hospitals	Hospitals	Other Departments of Govt. of West Bengal including State Govt. Undertaking	Local Bodies	N.G.O. / Private Bodies (Nursing Homes)	Total No. of Beds	Total No. of Doctors
2009	248	19	6	1	2	1	1	8	1134	126
2010	248	19	6	1	2	1	1	8	1134	124
2011	248	19	6	1	2	1	1	8	1134	124
2012	248	19	6	1	2	1	1	8	1134	111
2013	248	19	6	1	2	1	1	9	1147	112

Source: District Statistical Handbook of Dakshin Dinajpur, 2013, Bureau of Applied Economics & Statistics, Department of Statistics & Programme Implementation, Government of West Bengal

Table 9. District-wise Healthcare Infrastructure in Selected Districts of West Bengal (as on 31 March 2018)

District	Population (Census 2011)	Sub Health Centre (SHC)	Primary Health Centre (PHC)	Community Health Centre (CHC)	Sub divisional hospital	District Hospitals
Bankura	35.96	564	69	22	1	1
Birbhum	35.02	484	58	19	1	2
Cooch Behar	28.19	406	29	12	4	1
Dakshin Dinajpur	16.76	248	18	6	1	2
Murshidabad	71.03	832	70	27	4	0
Paschim Bardhaman	28.80	173	34	11	1	1
Purba Bardhaman	48.40	592	72	23	2	0
South 24-Parganas	81.62	1068	60	30	3	2
Uttar Dinajpur	30.10	344	19	9	1	1

Source: https://nrhm-mis.nic.in/RURAL%20HEALTH%20STATISTICS/(A)RHS%20-%202016/District-wise%20Health%20Care%20Infrastruture.pdf

5. Preference for care

In DLHS – 4, it was asked that when members of a household get sick, where do they mainly go for treatment. The answers are summarised in table 10. If we add all the figures related to public health facilities, it appears to be 64 % approximately. So, nearly the remaining 36 % prefer private healthcare.

Table 10. Place of Treatment when Households get Sick

Health facility	Frequency	Percent
At home	4	0.3
Community Health Centre (CHC)	105	7.9
Chemist	4	0.3
Government AYUSH hospital/clinic	1	0.1
Government dispensary / clinic	3	0.2
Government hospital	560	42.3
Home treatment	2	0.2
Non-Governmental Organisation (NGO) or Trust hospital/clinic	3	0.2
Non-medical shop	10	0.8
Other	56	4.2
Primary Health Centre (PHC)	151	11.4
Private AYUSH hospital/clinic	9	0.7
Private dispensary/clinic	376	28.4
Private hospital	7	0.5
Sub-Health Centre (SHC)	33	2.5
Urban Health Centre etc.	1	0.1
Total	1325	100.0

Source: Self-elaboration

Now, for the sake of simplicity, if we assume that total demand for all health facilities is 100 and the share for different healthcare institutions are according the final column of table 8, we may roughly judge whether existing public healthcare infrastructure is adequate or not. We see that demand for primary healthcare institutions is too low. For example, PHCs and CHCs are equipped with various healthcare facilities and manned by doctors and medical specialists and paramedical staff. However, demands for the service from the institutions are 11.4 and 7.9 respectively. The objective of one SHC is to generate demand for public healthcare, particularly under the primary healthcare system. If 2.5 % only

prefers to visit SHC, the demand for public healthcare institutions (under the primary healthcare system) will obviously be low. So, considering the above preference for care, one cannot say that public healthcare infrastructure, particularly under the primary healthcare system, in the district is inadequate.

6. Utilisation of healthcare

We have considered two types of maternal care in tables 11 and 12. In table 11, we see utilisation of antenatal care (ANC). There are 288 cases registered for ANC during the reference period of the survey. If we add the percentage figures, out of the 288 cases, 73.8 % utilised ANC from public health facilities. Remaining 26.2 % utilised ANC from private health facilities. Majority of the mothers utilised ANC from SHCs (53.1 %). This is a good indication that SHCs have been able to influence mothers for utilisation of maternal care from them.

Table 11. Utilisation of Antenatal Care (ANC)

Health facilities	Frequency	Percent
Community Health Centre (CHC)	3	1.0
Govt. Dispensary / Clinic	2	0.7
Home	9	3.1
Govt. Hospital	45	15.6
ICDS Centre	1	0.3
Non-Governmental Organisations (NGO)	1	0.3
Parental home	2	0.7
Primary Health Centre (PHC)	9	3.1
Private Dispensary / Clinic	60	20.8
Private Hospital	3	1.0
Sub Health Centre (SHC)	153	53.1
Total	288	100.0

Source: Self-elaboration

Table 12. Place of Last Delivery

Health facilities	Frequency	Percent
At home	67	30.2
At parental home	6	2.7
Community Health Centre (CHC)	15	6.8
Govt. Dispensary / Clinic	1	0.5
Govt. Hospital	105	47.3
Non-Governmental Organisations (NGO)	1	0.5
Other	1	0.5
Primary Health Centre (PHC)	20	9.0
Private Dispensary / Clinic	1	0.5
Private Hospital	3	1.4
Sub Health Centre (SHC)	2	0.9
Total	222	100.0

Source: Self-elaboration

There are 222 registered cases of delivery during the reference period of the survey. Table 12 shows, around 33 % of the deliveries took place at home. However, 64.5 % deliveries took place at public health facilities. DLHS – 4 data also reveal that 129 cases of institutional delivery were supported by Janani Suraksha Yojona (nearly 58 %) and 23 others (10.4 %) by other governmental schemes. So, nearly 68.5 % of the institutional deliveries are supported by some governmental scheme or other.

7. Conclusion

This study reported on available healthcare infrastructure and utilisation of maternal care with some descriptive statistics on standard of living and economic condition of the households in the district of Dakshin Dinajpur utilising data from the District Level Household Survey – 4. The study also utilises data from some other sources, such as Census and District Statistical Hand Book for information on population and healthcare infrastructure. In DLHS - 4, fieldwork in Dakshin Dinajpur was conducted during March to May 2013 gathering information from 1354 households, 1325 ever married women, the final report of which was published in 2015. Data reveal that more than 56 % of the respondents live in kuchha houses and nearly 71% of the households live in houses with two sleeping rooms or less. Although more than 86 % of the respondents live in electrified

houses, a good percentage of respondents (30.9 %) do not have any kind of toilet facility, which indicates a lower standard of living. Nearly 44 % of the respondents live under the BPL category. However, on the good side, more than 36 % of the respondents have health insurance coverage. We see that there are 248 Sub Health Centres, 19 Primary health Centres and six Block Primary Health Centres in the district. It is further seen that public healthcare infrastructure did not improve in between 2009 and 2013. However, preference for primary healthcare institutions is found too low in the district. If the preference for care is translated as demand for care, one can realise that the existing primary healthcare infrastructure in the district of Dakshin Dinajpur is not inadequate. The study considers utilisation rates of antenatal care (ANC) and delivery care. It has been found that 73.8 % mothers utilised ANC from public health facilities and the remaining 26.2 % from private health facilities. In regard to delivery care, 33 % of them took place at home and 64.5 % at public health facilities. Interestingly, 68.5 % of the institutional deliveries are supported by some governmental schemes or other. As the preference for public health care under the primary healthcare system is too low, the issue should be addressed with sheer attention.

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