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RURAL HEALTH CARE SYSTEM IN THE ERA OF COVOD-19: A STUDY FROM MURSHIDABAD (WEST BENGAL)

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Abstract

Due to Covid-19 led lockdown, people had faced tremendous challenges in respect to health and livelihoods. No doubt lockdown hits every sphere of life from both rural and urban areas. This paper argues people from rural areas has suffered most than urban areas in respect to access to health care. Building on the primary data set, this paper intends to understand the extent to inaccessibility to public health care service due to Covid-19 led lockdown in rural Bengal. The data has been collected from 88 patients who had come for treatment to out patient door in Murshidabad Medical College and Hospital, West Bengal during lockdown period.The result indicated increasing out of pocket expenditure due to inaccessibility to public health care system and they had to resort to nearby by quacks including rural medical practitioners since there was no provision for commutation to public health care institutions. Thereby, as learning from this pandemic, it is suggested to strengthen and enhance the efficacy of rural health care public institutions that already have been there.

Key Words: Rural health care, Murshidabad, Covid-19, public health,

Introduction

nCovid-19 was originated in the small city of Wuhan in China and then spread across countries (Salahudin, 2020).Two main strategies-social distancing and lockdown in phases have been employed to contain spreading of virus.It is also undeniable, in one hand, imposition of lockdown has played crucial role to contain spreading of virus putting the whole system in standstill in the country on the other hand, it has slowed down economic activities resulted in livelihoods threatens for poor households in addition to health impact and put the whole system in uncertainty (Dasgupta and Jha, 2020; Carswel and Yujaraj, 2020). Lockdown order has created plethora of plights of poor people, reverse migration led debilitation of livelihoods, joblessness in small and medium enterprise, increasing poverty and poor access to health care system during the pandemic(Shylendra,2020; Bartik et. al,2020; Sumner et. al, 2020). This paper argues the poor householdsfrom rural areas that bear the brunt of lockdown in terms of economic precarity, joblessness and poor access to health care system than the better off households during the period.Hence, this study is designed to understand the challenges in respect to access to public health care system faced by people from Murshidabad, West Bengal. Data for the study havebeen collected through survey method from 88 householdswho had come to Out Patient Door at Murshidabad Medical College and Hospital in Murshidabad, West Bengal during lockdown period. The result indicates majority of the households were not able to access public health care due to lockdown which in turn results in increasing out of pocket expenditure (OOPE) on medical and non-medical like cost on transport system. This OOPE aggravates the degree of suffering more intensely when income of the household tends to zero duress this lockdown period. To meet the OOPE in addition to foods-expenditure the poor households had to come under the clutch of local money lenders mortgaging their small piece of agriculture land, gold-ornaments, selling assets and decreased-saving.As a consequence, poor people from poor households living in a poor district

becomes poorer. As a significant of the study, this piece of work may help in formulating and revising both the health and poverty eradicating policyin an integrated way with a fresh insight. The study is outlined in seven section namely 2. Objective of the study, 3. Methodology and database, 4. About study area, 5. Results and discussion, 6. Conclusion and recommendation

Objective of the study

Challenges could be multifold during the pandemic situation people faced irrespective of households' social and economic condition. But this study proposes to understand the challenges in respect to access to health care system faced by people. Thereby, the study sets twofold objective as follows:

1. To understand socio-economic barriers of the households.

2. To understand the challenges to access to health care system and coping mechanism.

Methodology and data base

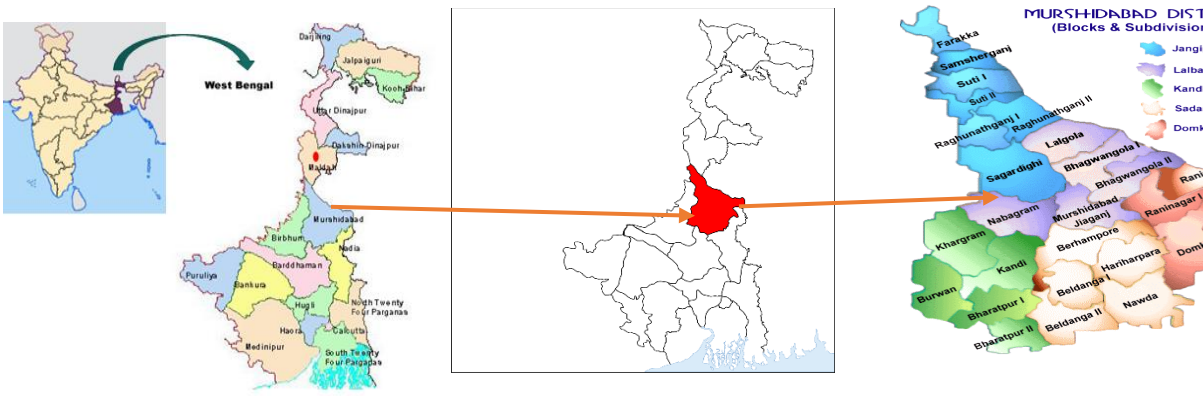
Understanding the challenges access to public health care system, and social and economic bariers of the households during this periodemployed both qualitative and quantitative data. Hence, the study has been designed in descriptive fashion. The study deployed both primary and secondary data. For primary data, self-administered questionnaire was developed to carry out the study. 88 (Eighty-eight) respondents based on random selection were interviewedwith both open ended and closed ended variables. The survey was carried out one week-long at the mid of June,2021. The respondents were selected randomly whosoever came to OPD during the study period for treatment at Murshidabad Medical College and Hospital (MMCH). Rationality behind selection of MMCH is that this is the only district hospital cum college situated in Berhampore, district headquarter where people from different corner of the district including others neighboring districts come for treatment.For secondary data the available research papers, articles,

departmental reports, district gazettes report and census of India including West Bengal have been taken into consideration.

Study Area: An Overview

The available literature reflected Murshidabad is one of the most socio-economical-educationally backward with poor access to health care system and regionally discriminated-inadequately connected to road and market with less institutional support- poverty-stricken(37% living in below poverty line)-poor performance in human development index (0.46) district (District administration office, Murshidabad; District census handbook, Murshidabad, 2011; West Bengal Human Development report, 2004; World Bank Group,2012; Ashraf et al, 2019; Musharuddin, 2017).To apprehend and comprehend the dynamics at granular level, some of the aspects relating to the study to some extend is picturized into six broad overheads in the following section.

Geographical location and Administration



Murshidabad has very rich historical significance and known to world since the battle of Plassey took place in 1757. Before the advent of British in India, Murshidabad was the capital of Bengal. It is situated in the middle periphery of West Bengal with Headquarter at Berhampur locatedapprox. 195kilo meters from capital city, Kolkata. The district is connected with an international border in the eastern side with Bangladesh.Murshidabad comprised of 254 Gram Panchayats, 26 community development (CD) blocks,

5 Sub-divisions and 7 Municipalities (District Census Handbook, Murshidabad, 2011).

(Source: http://wbiidc.org/ , http://www.murshidabad.gov.in/Map.aspx)

a) Demography

The district is the fourth populous district in West Bengal of Indian States providing houses to approx. 7.1 million populations (density 1334/ square km), which is 7.78 % of the state's total population (Census-2011, GoI).The district occupies higher concentration of minority population constituting approx. 67% whereas Muslim proportion is more than 66% and the community is socio-economically and educationally backward in India (Sachar Committee Report, 2006). It could be considered rural-centric district having more than 80% ruralites engaged in agriculture as their main source of livelihoods.

b) Literacy

It is one of the most backward districts educationally having average literacy rate is only 66.59% which is significantly less than state average literacy rate 76.26% (Census-2011, GoI). Female literacy rate is very alarming comparative to male literacy rate in the district constituting 63.09% and 69.95% respectively and even it lies much behind in comparison to the state average literacy rate of male (81.69%) and female (70.54%).

c) Occupation and economic activities

Murshidabad district is not only backward educationally but also one of the most economically backward districts of West Bengal. As per the census 2011, 63.54% of total population (7.1 million) of the district is non-workers whereas only workers' percentage is 36.46. Among the total workers 28.46% makes majority of main workers. If economic activities have been decomposed by foursectors, then it is very much clear that agriculture labors make the majority constituting 32.52% following Households Industry

Workers (17.99%), and cultivators 14.71% but the most striking data is that 34.77% other workers. If we see sex wise economic activities, then female participation is far away from male except household's industry workers representing percentage is 57.68 whereas male percentage is significantly less only 5.92 (District census handbook, Murshidabad, 2011). Out migration is another livelihood option for the poor people of the district. Poverty and unemployment, higher earning inter alia is the main driving force of out migration from the district (Sahidul, 2020; Basu, 2019; Ali, 2018).

d) Poverty and Human development

As per World Bank calculation (2012) West Bengal stands at 17th position in poverty rate among the Indian states constituting approx. 20 % people living in below poverty line. Murshidabad is one of the poorest districts where more than 33% population living under below poverty line and stood at 3rd position in the state. A study reveals out of the 26 blocks of the district, only three blocks are developed whereas rests are under development in terms of human development index (Ashraf, et al 2017). The district is one of the most socio-culturally and economically backward area and suffers from regional disparities in comparison with others districts of the state (Ashraf, et al, 2017, Musharuddin, 2017; District Administration Office, Murshidabad). Though the district is the fourth populous district but the district attained only 0.46 point in human development index which indicates the very poor condition of the district than other districts (Human Development Report, West Bengal,2004).

e) Health and health care system

The district performance in health parameter is underscore in comparative to others districts or at par with West Bengal in terms of health infrastructure and services provided (Report of DHFW, GoWB, 2011; Hati and Majumdar, 2011). Health is one the main indicators for measuring multidimensional poverty or human development (Alkire and Seth, 2010). Based on the MPI, West Bengal lies below the national average (0.164) having the MPI score of

0.114 in 2011-12 (Das, 2018). It is one of the main driving forces of growth and development of any nation (Querci, 2014). Several studies showed the poor quality of services and deprivation of getting adequate resources to medical institutions. The diseases prevalent in this districtinclude Acute Diarrheal, Acute Respiratory Infection, Pneumonia, Acute Poliomyelitis, Tetanus Neonatal, Kala azar inter alia (WBHDR, 2004). Infrastructures and resources including beds, doctors, equipment, support staffs etc. are significantly less (see table.1 for more details).

Table 1. shows public health care status in Murshidabad viz-a-viz West Bengal

Sl. No	Medical Institutions in Murshidabad	distribution	No. of Beds		Per head beds	
			Murshidabad	West Bengal	Murshidabad	West Bengal
1	**Medical College and Hospital**	1	895		**7937**	
2	District Hospital	0	0			
3	State District Hospital	4	1062			
4	State Government Hospital	0	0			
5	Other Hospital	1	350			
6	**Rural Hospital**	17	580		**9833**	**3546**
7	Block Primary Health Centre	10	175			
8	Primary Health Centre	70	574			
9	Hospital under other departments of state government	4	173			
10	Local bodies	1	100			
11	Government of India	3	103			
12	Private/NGO/Nursinghome	87	1225			
13	Sub-Centre	832	0			
	Total	**1030**	**5237**	**122148**	**1356**	**747**

Source: Dept. of Health and Family Welfare, Govt. of West Bengalorganized by authors.

Per head Beds in Urban WB	**278**
Per head Doctor in WB	**1647**
Per head Nurse in WB	**1201**

Source: Dept. of Health and Family Welfare, Govt. of West Bengal.

The above data clearly indicates the shortage of resources particularly in number of beds. Murshidabad is a rural district constituting majority of more than 80% people living but total number of rural hospital is only 17 equipped with total 580 beds. In other words, one bed is provided to 9833 ruralites in the district whereas national average dependency on a bed is 3546. There is also clearly distinction in rural and urban occupancy of beds provided 3546 and 278 respectively. One study calculated the score of inter-districts of West Bengal based on the health-infrastructure and health outcome where score and rank of the district is very poor. In health infrastructure performance Murshidabad scores 50.9 which is much below the state average score of 64.5 and ranked at 17th among the districts. In health outcome indicator, the district scores only 54.5 whereas state average score is 68.5 and ranked at 16th among the state (Hati and Majumdar, 2011). A study on the efficiency of hospitals in West Bengal (2011) also found the severe inequality of distribution of resources including hospital beds, equipment and manpower among the districts of the state (Report of DHFW, GoWB, 2011).

Findings and Discussion

Data have been analyzed into three categories-Social, Economic, and Health as follows.

a) Social Condition

Demographic data shows 40% female out of the total respondents who had come for treatment to hospital and 60% out of total belongs to minority. If we analyze the education level of the respondents (categorizing into illiteracy, primary, secondary, higher secondary and higher education or above 12th) then it is very much clear higher secondary level makes the majority constituting more than 37 % where male representation is less than female representation. Second majority representation is illiteracy (36.36%) whereis again male illiteracy is higher than female illiteracy rate 72% and 18% respectively. Having advantage in educational status of women, but presence of male is higher than female coming to hospital. That is likely because of

majority of the patients constituting 80.68% belongs to Muslim community which is one of the most socially marginalized excluded communities in the district (Biswas, 2015). Majority of the population falls under the age group between 25 and 45 representing 57 % whereas if we observe the most productive age group (18-59) makes the majority of more than 92% that signifies below and above these age group is likely not able to come for checkup during the situation.

b) Economic Condition

Main sources of income of the households of the respondents are cultivation, agriculture labor, day-labors including vendor, hawkers and driver. Data reveals day-labor and agriculture labor makes the majority group constituting more than 46 % out of the total respondents following migration more than 21 %. If we explore gender wise occupation of the respondents, then it is very striking that all female respondents engaged in domestic chores or typically house-wife whereas male respondents engaged in varieties of economic activities. Out of the total households 21% households belongs to below poverty line(BPL) and 51% households owns semi-pucca house following kucha-house 19% with less than 2 katha homestead land. Average annual income from all sources of patients' households as per reported isrupees 82857 or monthly average income is even less than rupees 7000. With that monthly average income, one could hardly think of meeting their daily basic needs. If we categorize their income level, out of the total population more than 55% of respondents falls between 50000 and 100000 whereas approx. 20% manages their family having less than 50 thousand average annual income. Average annual expenditure of their households is rupees 77852 which is though minimally less than annual average income but in annual expenditure category, more than 80% respondents falls under rupees 50 thousand to rupees 1 lakh. While they hardly run their family under this economic constipation, because of lockdown more than 70% of the respondents had to lose their work while rest of those who have owned

agriculture land and self-employed particularly grocery-shop owner continued their economic life style. It is then very intuitive and possibly logical to come in our cognizance while people living in a poor district like Murshidabad is socially backward and disadvantageous with sub-optimal economic constipated hardly manage their daily needs of their households then how do they succeed their family exposed to deterioratinghealth condition amid this pandemic situation?

c) Health Status

Health is one of the most significant dimensions for any nation's holistic development and growth. While pandemic caused lockdown made life standstill then life of common people particularly socio-economically poorer becomes more difficult during this period. The total respondents have been divided into five groups (0-3, 3-6, 6-9, 9-12, and above 12) depending upon the month they are suffering from. The data showsabout 64% respondents suffer from last0-3 months from varieties types of diseases including cold and cough, pregnancy, surgery-infection, ENT, gastro, respiratory problems but they were not able to come to hospital due to lockdown-led unavailability of vehicles and lack of money as the most of the respondents reported. Second majority group of patients constituting 17% suffers from 3 to 6 month. If we look at granular level to understand their expenditure to disease and source of that money since they are hardly managing their household, then the average expenditure to disease between 0-6 month suffering patients is rupees 6813 and the expenditure sources from self-saving, debt from relatives, friends and local lenders, gold loan, selling their agro-goods and animals etc.

Table-2 shows the prevalence of diseases

Disease	Frequency	%
Brain	6	6.82
Cancer	1	1.14
Cardiac	1	1.14
Dental	1	1.14
Dermatology	4	4.55
Diabetics	6	6.82
ENT	11	12.50
Gastro	14	15.91
Orthopedic	8	9.09
Physical weakness	14	15.91
Gynecology	12	13.64
Respiratory	5	5.68
Surgery-Infection	5	5.68
	88	100.00

Source: primary survey data

Table- 3 shows expenditure on diseases and sources:

Suffering by Month	Average Expenditure on disease in Rs.	Self-Saving in %	Debt from relative and friends in %	Selling agro-goods in %	Selling domestic animal in %	Gold loan in %	Land mortgage in %	Group loan in %	Loan from local lender in %
0 -03	6803	41.07	39.29	1.79	3.57	8.93	3.57	0.00	1.79
03 - 06	6860	26.67	53.33	6.67	6.67	0.00	0.00	6.67	0.00
06- 09	7000	25.00	25.00	0.00	0.00	25.00	25.00	0.00	0.00
09 - 12	12500	25.00	25.00	0.00	0.00	37.50	0.00	12.50	0.00
Above 12	53000	0.00	40.00	0.00	0.00	40.00	0.00	0.00	20.00
	17232.6	**34.09**	**39.77**	**2.27**	**3.41**	**12.50**	**3.41**	**2.27**	**2.27**

Source: primary survey data

d) Transport System

Murshidabad district spreads over the area of 5441 square kilometers comprising of 254 Gram Panchayats, 26 community development (CD) blocks, 5 Sub-divisions and 7 Municipalities (District Census Handbook, Murshidabad, 2011). Though the district is well connected with both highways (state and central) and railways, out of the total blocks (26),

people from only 19 blocks comes for checkup. Among the 19 blocks those blocks are closed to MMCH like Berhampore and Beldanga make the majority of respondents constituting 47%. Despite of having adequate numbers of mini-bus and auto-rickshaw counting 248 Auto Rickshaws, 1,216 Mini Buses (District Census Handbook, Murshidabad, 2011), the study highlights majority of respondents come by e-rickshaw paying higher fare reported by respondents as table- 4 shows. The patients suffer from 3 month paid the average higher fare than the other groups of the study possibly because of their degree of sufferings and annual average income higher than annual average expenditure.

Table-4 shows the average annual income and expenditure and fare

Suffering by Month	%	Average Annual Income of households in RS.	Average Annual expenditure of households in RS.	Average distance from home to hospital in KM	Mode of Transport	Average fare paid in Rs.	Fare paid overcharged	
							Yes	No
0- 03	63.64	83919	77041	23	E-rickshaw, Bus and bike	386	62%	38%
03- 06	17.05	92200	82733	46		118		
06 - 09	4.55	74625	73000	35		165		
09 - 12	9.09	71812	73000	51		137		
Above 12	5.68	67200	83950	23		106		
	100.00	**77951.2**	**77945**	**35.6**		**182.4**	**100**	

Source: primary survey data

Discussion

From the above findings, it could be argued that people from rural areas suffered most in terms of accessing to public health care system as they come from on average more than 25km distance. Socially and economically poor households whereas they are hardly managing food expenditure failed to meet the health expenditure and increased sometime out of pocket expenditure. Out of pocket expenditure (OOPE) as defined by World Health Organization is the money paid by individual directly to health care providers has increased duress lockdown since people were not able to access to public health care

system when they were in need. In turn they had to resort to rural medical practitioners or quacks and nearby private medical care providers and bought services directly from them. Though NSSO (2015) report signals slightly increase of access to free medicine and diagnostic test, public health facility for poor class substantially decreased and out of pocket expenditure on medical and medicine increased in West Bengal (Bose and Dutta, 2018). As a whole, the social and economic and health care status of the district Murshidabad as discussed before in details is very poor. In this grim situation people belonging to this district has suffered intensely in accessing to health care system.The most of the respondents reported whereas no *paisa* to buy foods-grains then how we can expense on disease in this situation. Data shows most of the patients who had to hospital is suffering from three months. They (more than 70% of the respondents) were not frequently able to come to hospital for treatment due to unavailability of vehicles, sometime overcharged of fare to hire private cabs, shortage of money at hand. They suffered sitting at home as no option to reach to health care institution, some managed home-remedy to obviate their pain temporarily, forced to resort to nearby quacks for temporal relief.As a consequence, their out-of-pocket expenditure has made them poorer leaving them in dire situation. Under this difficult situation they had to take loan, sell domestic animals to meet the expense of health or out of pocket expenditure during this period. Average expense on health for three months stands rupees 6803 of more than 60% respondents whereas their average monthly income stands rupees 6943.If we see the monthly income level and monthly expenditure on disease is about equal which in turn indicates the reality of their degree of suffering in both economic and health status.

Conclusion and Recommendations

Covid-19 led lockdown has impacted every aspect of people irrespective of worse off and better off households in varying degree but the study shows people from rural areas had suffered most in respect to accessing health care

system. Lockdown, in one hand, has helped some extent to contain the spreading of corona-virus, on the other hand it intensifies sufferings of a poor household particularly from a poor district like Murshidabad. The study has shown degree of sufferings relating to economic, social and accessing health care system amid this pandemic. People has failed to meet their daily needs in addition to out-pocket expenditure for health that leads to depth of poverty.

In light of the findings and discussion, one must have internalized the facts about the people facing challenges due to lockdown in varying degree living in the district. We must have acquainted some certain weakness and strengthens in terms of health care system, infrastructure, economic hardship, and status of some dimensions of human-development in the district. People living in rural areas have been deprived more in accessing to adequate health care at affordable cost and paid high cost for transportation. Some of the potential suggestions that may be helpful in formulating policy and planning could be drawn from the study as we experienced the stark reality of covid-19 led lockdown.

1.Increase medical human-resources to reduce patient-doctor ratio as well as patient-nurse ratio as data show higher burden already exist.

2. Deployment of doctors to rural hospitals with adequate resources including infrastructure since most of the ruralites tends to come in Medical College and Hospital Berhampore which results in increasing burden on doctors and nurse, and OOPE.

3. We need robust and strengthen our primary health care institute. More equipment including medicine should be provided to block level and panchayat level health center so that transaction cost of ruralites gets reduced. It is further recommended to deploy adequate medical professionals including doctors at the ground level institutions.

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