A RAPID ASSESSMENT

IMPACT OF COVID-19 ON ESSENTIAL HEALTH SERVICES IN BANGLADESH

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BANGLADESH UNIVERSITY OF HEALTH SCIENCES (BUHS)

and

BRAC ADVOCACY FOR SOCIAL CHANGE (ASC)

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BRAC HEALTH, NUTRITION AND POPULATION PROGRAMME (HNPP)

Impact of COVID-19 on Essential Health Services in Bangladesh: A rapid assessment

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We hope this report would be useful to provide some policy insights regarding the policy interventions to improve the essential health services during any emergency like the COVID-19 pandemic.

The research team

EXECUTIVE SUMMARY

The rapid assessment entitled "**Impact of COVID-19 on Essential Health Services in Bangladesh**" was jointly conducted by BRAC's Advocacy for Social Change (ASC) programme, BRAC's Health, Nutrition and Population Programme (HNPP) and Bangladesh University of Health Science (BUHS). The study looked into the i) the experiences of the people who were sick and sought essential health care services in the course of COVID-19 or could not seek services in spite of sickness, (ii) the short-term and long-term consequences of the denial of getting essential health care services during the COVID-19, (iii) the weaknesses and challenges of health care, providing institutions to accommodate essential health care services during the COVID-19 and (iv) the gender dimensions and urban-rural divides in getting essential health care services during the COVID-19. The rapid assessment collected data points from 2,483 randomly selected households having an average family size of 4.89 people residing in 16 districts of eight divisions.

The survey found that more than half of the households reported sickness of their family members during the pandemic, between April and August 2020, which accounts for about 60.8%. More than a quarter of the respondents from the surveyed households which accounts for 28.6% stated that their clinical cost increased during the COVID-19 situation compared to the normal situation. The average monthly cost of treatment of the selected households was around BDT 2,400 in January, which went up to BDT 2,500 in April and BDT 2,677 in July and BDT 2,744 in August. In addition, the survey found that the increased cost of medicine and medical treatment was burdensome as the average income of the households decreased. The average income of the surveyed households decreased by 37.3% in April 2020, compared to the average income in January 2020 (from BDT 16,594 to BDT 10,407), which increased slightly in July (BDT 10,442).

One in ten of the households (9.9%) stated that they faced problems while getting treatment from the hospitals during the pandemic. The key problems the households faced include lack of sufficient beds (70.2%), lack of sufficient nurses (39.6%), lack of medical equipment (38.8%), lack of medicine (38.0%) and higher fees of doctors (20.4%). Moreover, the people also encountered unwillingness of doctors to provide treatment (23.3%), the unwillingness of hospitals to admit patients (20.0%) and bribery (13.9%).People from rural areas complained more about the lack of doctors (75.0% vs. 63.8%) and nurses (42.9% vs. 35.2%), adequate medical equipment (40.0% vs. 37.1%), beds (29.3% vs. 21.9%) and increase of doctor's fees (23.6% vs.16.2%) compared to people from urban areas.

The survey reveals that some essential services were somewhat interrupted due to the COVID-19 pandemic. For example, national health statistics suggest that 19% of women (age 19-49 years) meet the need for family planning for spacing and 44% of women for limiting. However, in the surveyed households, only 20.7% households responded that they could take the family planning service. The survey found that 167 of the households had pregnant women during the COVID-19 lockdown. However, 10.8% of pregnant women did not take regular healthcare services during the lockdown. For those who sought services, they slightly went more to the public health facilities compared to the private facilities during the pandemic (65.8% vs. 62.4%). The women in rural areas used public health facilities more than private facilities (64.6% vs. 59.6%). The study also found that the pregnant women did not get the full healthcare support they needed during their pregnancy which accounts for 54%. The DGHS 2017-18 data reveals that on average 47% of pregnant women get 4+ ANC service. This study reveals that 37.6% of pregnant women got 4+ ANC service, which is around 10% lower than the national average. The situation is much worse in rural areas (30.3%) than in urban areas (52.0%) and both are much lower than the percentage in BDHS 2017-18 (42.7% and 58.7% respectively).

Among the surveyed households, 106 babies were born during the pandemic situation. Half of the delivery was executed in private clinics and around one-third of delivery (29%) was done at home. The survey found that one-fifth of the birth deliveries were done by untrained midwives. In eight cases out of 19 delivery by untrained midwives, the pregnant women experienced some problems. Three women experienced delivery complications, five women faced short term and one woman faced long term difficulties.

More than one-third of the mothers (33.50%) among the 106 new mothers informed that they did not take postnatal care from any health care centre. Of the mothers who did not receive any PNC services 75% of them were from rural area. Moreover, one-fourth of the newborn babies were not vaccinated during the pandemic. During the survey, 49 babies aged from 0-28 days were found in the surveyed households. During their age between 0 to 28 days, it was found that 12 households (24.5%; 8 from rural areas and 4 from urban areas) did not get the BCG or oral polio vaccine within seven days, which was supposed to be given at birth or at the first visit of health worker. Again, 14.29% of babies were not taken to the hospitals in spite of their sickness and requirement to take to the hospitals because of the distance of the health centre, fear of the COVID-19 virus, high transport cost etc., which were faced more by the rural level households.

This is widely claimed that almost 100% coverage has been ensured in some vaccinations such as BCG (99.5%), DTP1 (99.3%), DTP3 (97.9%), Pol1 (99.3%), Pl3 (97.3%), MCV1 (95.3%). The surveyed households have 794 under-five children (32% of total household members). Of them, 5.91% of children (47) were not vaccinated during the pandemic, from April to August—this is more in rural areas compared to the urban level households (6.8% vs. 4.5%). The service providers also acknowledged the initial halting of the EPI campaign.

A considerable number of patients with chronic diseases needed emergency treatment during the pandemic. Among the surveyed households, 22.1% of household's members took treatment for chronic diseases. People from urban areas got more services for chronic diseases, compared to rural level people (23.8% vs. 20.9%). The most common types included conducting regular check-ups (69.3%), conducting diagnostic tests (54.2%) and 15.3% of them sought emergency treatment. Female and male aged between 20-60 years were mostly affected by the chronic diseases that account for 54.3% and 37.7% respectively, and old-aged people (60+) were 29.8%. This data reflects that females aged between 20-60 years are more vulnerable and endangered to chronic diseases. The survey found that more than half of the patients bearing chronic diseases could not continue to take regular treatment due to the fear of coronavirus infection and financial problems, which accounts for 56.32% and 54.51% respectively.

A considerable number of emergency patients experienced problems while seeking services from hospitals during the pandemic, which mostly included unavailability of doctors on time mentioned by 13 respondents and ignorance by healthcare service providers in providing healthcare service mentioned by 13 respondents. Other essential services such as treatment of mental illness, treatment for persons/children with disabilities, adolescents, and the patients who needed physiotherapy could not seek treatment due to the fear of coronavirus infection during the pandemic, financial crisis and other problems. In most cases, the people from rural households suffered the most.

Telemedicine services did not come as a popular alternative during the pandemic—around 6% of surveyed households utilised the option. The respondents from urban areas attained the service slightly more than those of rural areas (6.5% vs. 5.3%). The commonest problem faced while taking telemedicine services was around seven out of ten individuals could not express their symptoms adequately (68.8%). The survey found that 13.2% of users were found to be satisfied with telemedicine service while half of the users expressed their dissatisfaction. Respondents from rural areas expressed more dissatisfaction over the telemedicine services than the urban level respondents (60.3% vs. 35.9%). Interestingly, 72.9% of the respondents wish to use telemedicine services in the future.

From the surveyed households, two in five households (39.5%) that needed to seek essential health services stated that their level of diseases increased due to lack of improper health services during the pandemic. Most of the service providers interviewed also admitted that there was a severe interruption in general health services especially during the initial stage and lockdown situation. The outdoor service was almost closed in most of the areas. They also admitted that immunisation, family planning, maternal and child health services suffered a lot. They identified some limitations of the system, which include inadequate equipment, panic among the service providers, lack of awareness, inadequate human resources and infrastructure, insufficient financial resources, coordination and communication gap, etc. They also mentioned that many health workers were attacked by the coronavirus which also contributed to the interruption of essential health services.

There might have some long-term impacts of the interruption of the essential health services during the pandemic, which should be assessed thoroughly and some immediate and long-term measures should be taken based on the assessment to stop any unintended future damage to the people.

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CHAPTER 1
INTRODUCTION

1.1 Background

First detected in Wuhan City of Hubei Province in China on 31 December 2019, the COVID-19 continues to distress 216 countries, areas and territories around the world. This deadliest disease has infected 16,558,289 people globally and claimed 656,093 lives till 29 July 2020. Bangladesh reported its first confirmed COVID-19 case on 8 March 2020 and recorded the first death of COVID-19 on 18 March 2020[1]. As of 29 July 2020, the death toll stands at 3,035 and total infections jump to 232,194 in Bangladesh[2]. To limit the spread of COVID-19, the government of Bangladesh declared general holidays from late March and the lockdown continued until 30 May 2020. Regardless of the increasing trend of COVID-19 infection and death rates, the strict lockdown was lifted afterwards for the sake of reviving economic activities and thus to regularise livelihood opportunities of the people.

Health systems around the world are in jeopardy with accumulative demand for care of people with COVID-19, intensified by stigma, misperception and restrictions on movement that mess up the health care services (WHO, 2020). In this context, weaknesses of the health care sector have been exposed to a great extent. Bangladesh is no exception in this respect. The ongoing health pandemic triggered by COVID-19 has challenged the country's overall health care system resulting in mobilisation of health-specific resources and diverting to combat the COVID-19 affected patients.

Bangladesh has grave deficiencies of doctors, nurses and medical staff members. According to WHO, Bangladesh's doctor-to-patient ratio is 5.26 per 10,000 people, the second-lowest in South Asia[3]. The COVID-19 pandemic has also exposed these deficiencies to the table of discussion. Moreover, most hospitals ceased normal operation leaving the non-COVID-19 patients left without regular check-up and treatment. Some running hospitals were also unwilling to take in-patients with the panic that they might be contaminated with the virus. The uptake of maternal and newborn health services also reduced, approximately 19 percent. Essential maternal health services such as antenatal care visits and postnatal check-ups in health facilities declined extensively, and deliveries in facilities declined by 21 percent for the period of January to March 2020, compared with October to December 2019[4]. The same report (UNICEF, 2020) also predicts that if there is more decrease in health services in Bangladesh, more than 28,000 children under the age of five could die in the next six months as an indirect result of the pandemic in the worst-case scenario.

Box 1: Health Systems of Bangladesh

Ministry of Health and Family Welfare (MoHFW) is the key decision maker and responsible for health policy design and planning. There are two execution arms under MoHFW: the Directorate General of Health Services (DGHS) and Directorate General of Family Planning (DGFP). The DGHS provides technical guidance to the ministry and is responsible for implementation of all health programmes. The DGFP implements the Family Planning (FP) programmes. To serve the 4,470 unions at the local level, 3275 Union Health and Family Welfare Centres (UHFWCs) are established. Additionally Upazila Health Complexes in 391 rural Upazilas, 64 district hospitals, 13 Government Medical College Hospitals, 6 postgraduate hospitals and 25 specialised hospitals are operating. There are also a further 54 Maternal and Child Welfare Centres (MCWCs) established to provide maternal health services at the district and Upazila level. The government has also constructed Community Clinics at the village level for every 6000 population.

Given the situation, the government of Bangladesh has taken some measures that many analysts felt insufficient. As a result, a noticeable disruption of essential health care services is reported. The Ministry of Health and Family Welfare issued a circular in May 2020 with the instructions for all public and private hospitals to provide health care services to non-COVID-19 patients[5]. Many people are reported to have died without treatment. The government also amended the Communicable Diseases Act 2018 to deal with the health pandemic triggered by COVID-19. Following a Supreme Court directive, the government incorporated the life-threatening COVID-19 in the list of contagious diseases[6].

1 https://www.who.int/docs/default-source/COVID-19e/situation-reports/20200729-covid-19-sitrep-191.pdf?sfvrsn=2c327e9e_2 (Accessed on 30 July 2020)

2 https://iedcr.gov.bd/ (Accessed on 30 July 2020)

3 Ibid

4 https://www.unicef.org/bangladesh/en/press-releases/covid-19-devastates-already-fragile-health-systems (Accessed on 30 July 2020)

5 https://www.mohfw.gov.in/pdf/EssentialservicesduringCOVID19updated0411201.pdf (Accessed on 30 July 2020)

6 https://tbsnews.net/bangladesh/law/ineffective-communicable-diseases-act-helped-spread-covid-19-72337 (Accessed on 30 July 2020)

Experts are raising questions and concerns over whether the healthcare sector is prioritised adequately in policies and budget allocation. It was predictable that the current budget (FY 2020-21) would consider the weaknesses of the entire healthcare systems and allocate more budget, which has not been met substantially. According to the National Preparedness and Response Plan for COVID-19, Bangladesh spends around 3% of its GDP on health. However, the government contribution under the current budget is only 1.02%, and more than 70% is out-of-pocket expenditure.

The national budget for FY21 allocates BDT 292.4 billion for the health sector, which is 23% higher than the revised allocation for FY20. The total allocation for health and family welfare translates to just 1.3% of GDP, which is much lower, compared to WHO standards (15% of the total budget or five percent of the GDP)[7].

Some more solid strategic decisions and resources are required to minimise the weaknesses of the health sector exposed during the pandemic. This rapid assessment is expected to shed light on the deficiencies and weaknesses of health care systems by depicting the experiences of the service seekers who sought essential health services during the COVID-19.

1.2 Research questions

The following research questions were taken into exploring the niche areas of this study:

- What are the experiences of the people who were sick and sought essential health care services in the course of COVID-19 or could not seek services in spite of sickness?
- What are the short-term and long-term consequences of the denial of getting essential health care services during the COVID-19?
- What are the weaknesses and challenges of health care, providing institutions to accommodate essential health care services during the COVID-19?
- What are the gender dimensions and urban-rural divides in getting essential health care services during the COVID-19?

1.3 Scope of the assessment

The World Health Organization (WHO) has circulated a guideline to provide some operational solutions on how to maintain essential health services during the COVID-19[8]. According to the guideline, the high-priority categories of essential health services include:

- Essential prevention and treatment services for communicable diseases, including immunisations;
- Services related to reproductive health, including during pregnancy and childbirth;
- Core services for vulnerable populations, such as infants and older adults;
- Provision of medications, supplies and support from health care workers for the ongoing management of chronic diseases, including mental health conditions;
- Critical facility-based therapies;
- Management of emergency health conditions and common acute presentations that require time-sensitive intervention; and
- Auxiliary services, such as basic diagnostic imaging, laboratory and blood bank services.

The assessment determined its scope by following these above mentioned essential health services stated in the WHO guideline.

7 https://www.bd.undp.org/content/bangladesh/en/home/stories/a-reality-check-for-bangladesh-s-healthcare-system.html (Accessed on 30 July 2020)

8 Interim Guideline of World Health Organization (WHO) [Maintaining essential health services: operational guidance for the COVID-19 context, June 2020]

1.4 Rationale of the study

The study is crucial for several reasons. Firstly, as stated in the background, some evidence needs to be generated through research so that the weaknesses and challenges of health care providing institutions alongside the sufferings of health service seeking people can be figured out. It will help create some knowledge on the COVID-19's impact on essential health care services and the people who sought health services. Secondly, if the weaknesses and challenges of health care providing institutions are figured out, relevant stakeholders will get the ideas of where they should intervene to create a sustainable health care system, which will be resilient to any emergency such as present COVID-19. Thirdly, if the consequences of the disruption of essential health care services on the health service seeking people can be identified, it will also help to advocate for taking some concrete measures for mending the health-related impacts on people. This study might help provide some evidence-based policy recommendations on these issues.

CHAPTER 2

METHODOLOGY

2.1 Study locations and sample size

The locations of the study were chosen from both high COVID-19 affected areas and less COVID-19 affected areas – with the combination of rural and urban locations. The study covered all administrative divisions – two districts were chosen from each of the divisions. One district was chosen from the high-hit districts and another from the low-hit districts of each division. Simple random sampling procedures were applied in the selection of districts. One municipality (City Corporation in applicable district) and one Upazila were chosen from each of the selected districts for data collection. A total of 2,483 households[9] were randomly selected for the sample survey. The ratio of urban-rural respondents was 41:59. Among the rural level households, 8.6% were from hard-to-reach i.e. char, haor, hilly, coastal island or forest areas.

Table 1: Selected districts[10]

Division	Selected district from high-risk districts/cities (Total number of cases on 13 August 2020)	Selected district from low-risk districts (Total number of cases on 13 August 2020)
Barishal	Patuakhali (1122)	Bhola (590)
Chattogram	Cumilla (6058)	Rangamati (714)
Dhaka	Narayanganj (6061)	Manikganj (947)
Khulna	Kushtia (2206)	Meherpur (285)
Mymensingh	Mymensingh (2970)	Netrokona (650)
Rajshahi	Rajshahi (3746)	Natore (629)
Rangpur	Dinajpur (1736)	Kurigram (529)
Sylhet	Sunamganj (1673)	Moulavibazar (1155)

2.2 Methods of data collection

Both qualitative and quantitative research methods were applied in data collection. A survey method using a semi-structured questionnaire was carried out for primary data collection from the respondents. Moreover, the method of key informant interviews (KIIs) was applied to collect qualitative data on the weaknesses and challenges of providing essential health care services during COVID-19, which were collected from crucial healthcare-related stakeholders such as civil surgeons, director of the medical college hospitals, super of government hospitals, Upazila health and family planning officers, medical officers, public health experts and so on. Face-to-face interviews were conducted by maintaining social distancing and taking protective measures. At the very outset of the interviews, consent of the respondents was pursued from the respondents, and it was conveyed that full confidentiality of personal data would be strictly maintained. For the surveying, the KoBo toolbox was used.

9 Household is defined as a person or group of related and unrelated persons who usually live in the same dwelling unit(s), who have common cooking and eating arrangements, and who acknowledge one adult member as head of the household. A member of the household is any person who usually lives in the household. Information was collected from an adult member of each of the selected household who can provide necessary information about the household.

10 The list was collected from IEDCR webpage (https://iedcr.gov.bd/) on 13 August 2020. Based on the confirmed cases of COVID infection on 13 August 2020, the districts have been divided into two groups – high-hit districts and low-hit districts. Then, one district from each group and from each division has been picked through lottery.

Table 2: Data collection methods and techniques

Methods	Number of respondents (households)	Type of respondents	Tools and techniques
Sample survey (face-to-face interviews)	2,483	Female: Pregnant women, women seeking postnatal care including family planning, women with a need of safe abortion care, mothers seeking regular and emergency child care including vaccination, lactating mothers, adolescent girls, old-age women, women with chronic diseases, women requiring regular therapy and check-up, women who had emergency health conditions, persons with disability, women requiring support for violence Male: Old-age men, men with chronic diseases, men requiring regular therapy and check-up, men who had emergency health conditions, person with disability	Questionnaire: Semi-structured questionnaire using Kobo interface
Key Informant Interviews (KIIs)	34	District/Upazila level: Civil surgeons, director of the medical college hospitals, super of government hospitals, Upazila health and family planning officers, medical officers, public health experts	Telephone interview

2.3 Data analysis

The survey data were analysed by using IBM SPSS Statistics 21. An analytical framework was used, which consists of some dependent, independent and intervening variables. The qualitative interviews were audio-recorded, transcribed, and analysed thematically.

Table 3: Analytical framework

Independent variables	Dependent variables	Intervening variables
• Essential prevention and treatment services for communicable diseases, including immunisations; • Services related to reproductive health, including during pregnancy and childbirth; • Core services for vulnerable populations, such as infants and older adults; • Provision of medications, supplies and support from health care workers for the ongoing management of chronic diseases, including mental health conditions; • Critical facility-based therapies; • Management of emergency health conditions and common acute presentations that require time-sensitive intervention; and • Auxiliary services, such as basic diagnostic imaging, laboratory and blood bank services.	• Sufficient doctors, nurses and technologists • Sufficient medical equipment and medicines • Sufficient protective equipment for doctors, nurses and technologists • Sufficient protective measures taken in health care institutions • Training for doctors, nurses and technologists • Motivations/ incentives/ insurance for doctors, nurses and technologists • Integrity of doctors, nurses and technologists • Directives, monitoring and accountability measures from the DGHS and DGFP	• Health seeking behaviours of patients • COVID-19 related awareness and practices among patients • Type and severity of diseases • Location of patients • Gender identity of patients • Level of education of patients • Economic condition of the patient

2.4 Implementation of the research

Tasks	September 2020	October 2020	November 2020	December 2020	January 2021
Concept note development and finalisation					
Tools development					
Data collection					
Data cleaning and analysis					
Report writing, taking feedback and finalisation					

CHAPTER 3

FINDINGS OF THE STUDY: PEOPLES' PERSPECTIVES

3.1 Background characteristics

A total of 2,483 households were randomly selected for the sample survey. The average family members of the households were 4.89, which means that this study represents a total of 12,142 population from 16 selected districts from all eight divisions. The average number of female members of the selected households was 2.40 and the average number of male members was 2.48.

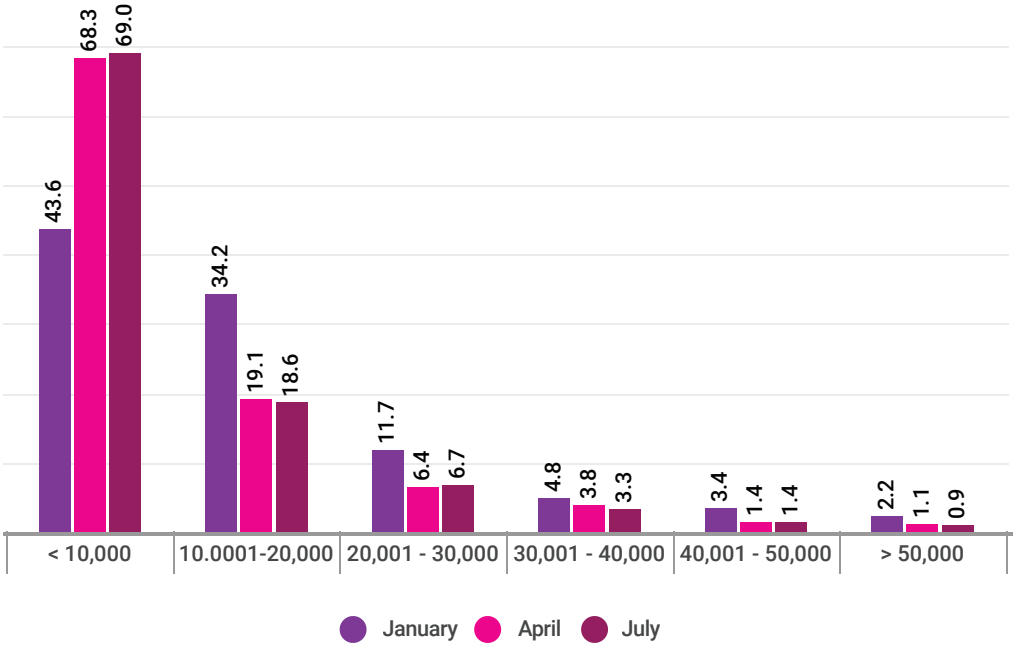
Table 4: Background characteristics of the surveyed households

Background characteristics	Frequency	Percent
1. Area of residence		
Rural	1461	58.8
• Village	1247	50.2
• Remote/Hard to reach area	214	8.6
Urban	1022	41.2
• City corporation	175	7.0
• Municipality	847	34.1
2. Sex of household head		
Male	2351	94.7
Female	132	5.3
3. Marital status of household head		
Married	2322	93.5
Unmarried	88	3.5
Widowed	64	2.6
Separated	9	0.4
4. Education level of household head		
No formal education	709	28.6
Primary or less	509	20.5
Secondary or less	715	28.8
Higher Secondary	237	9.5
Graduate or above	313	12.6
5. Occupation of household head		
Government service	147	5.9
Private service	322	13.0
Business (Big)	90	3.6
Business (Small)	596	24.0
Farmer	332	13.4
Unskilled labour	437	17.6
Skilled Labour	283	11.4
Housewife	53	2.1
Unemployed	31	1.2
Others	192	7.7
Total	**2483**	**100.0**

3.2 Change in the financial condition during the pandemic

During the pandemic, the economic conditions of the households changed dramatically. Among the surveyed households, 43.6% households had an income lower than BDT 10,000 in January 2020, which increased to 69% in July. This change means that around a quarter of the surveyed households entered into the lower category of income threshold.

Figure 1: Changes in household income during the pandemic (%)



The average income of the surveyed households decreased by 37.3% in April 2020, compared to the average income in January 2020 (from BDT 16,594 to BDT 10,407), which increased slightly in July (BDT 10,442). However, the change did not equally happen among the groups such as female-headed households, rural households, the households having less educated heads (below SSC) or the heads involved in small business or skilled or unskilled labours or who were under unemployment. They did not show the sign of recovery in average monthly income in July whereas the households from City Corporations had more average income in July 2020 compared to April 2020. As most of the health expenditure in Bangladesh is spent from own pocket, so there is a significant impact of changing in household financial condition on the capacity to bear health expenses.

Table 5: Change in household income during the pandemic by background characteristics

Background Characteristics	N	Average income [in BDT]			Change in April	Change in July
		January	April	July		
Sex of household head						
Male	2321	16,785	10,505	10,555	-37.4%	-37.1%
Female	131	13,214	8,682	8,439	-34.3%	-36.1%
Area Type						
Rural	1434	13,819	8,322	7,623	-39.8%	-44.8%
• Village	1220	14,420	8,168	7,847	-43.4%	-45.6%
• Remote place	214	10,394	9,194	6,347	-11.5%	-38.9%

Background Characteristics	N	Average income [in BDT]			Change in April	Change in July
		January	April	July		
Urban	1018	20,503	13,345	14,413	-34.9%	-29.7%
• City corporation	175	25,337	13,570	19,026	-46.4%	-24.9%
• Municipality	843	19,499	13,298	13,455	-31.8%	-31.0%
Education of household head						
No formal education	695	10,636	6,469	5,878	-39.2%	-44.7%
Primary or less	508	14,015	8,050	7,709	-42.6%	-45.0%
Secondary or less	707	17,180	10,355	9,992	-39.7%	-41.8%
Higher Secondary	232	24,193	14,844	15,948	-38.6%	-34.1%
Graduate or above	310	27,153	19,898	22,057	-26.7%	-18.8%
Total	**2452**	**16,594**	**10,407**	**10,442**	**-37.3%**	**-37.1%**

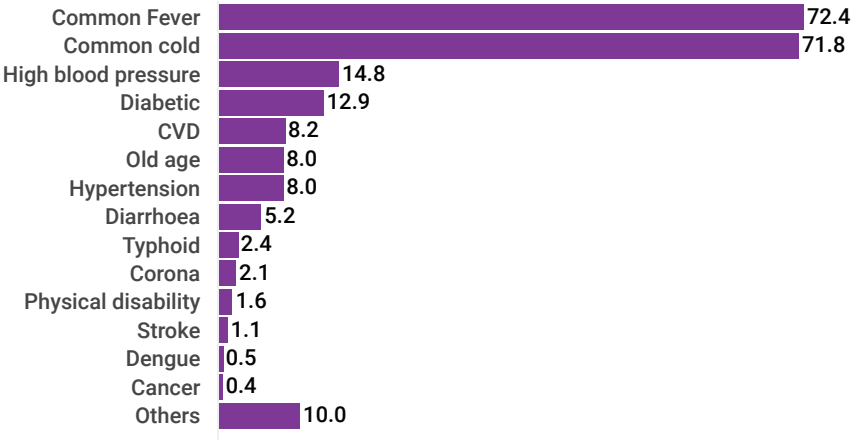
*Missing data=31

Due to the pandemic, 44% of the surveyed household head became unemployed or lost their job, 15.6% had to close their business, and 7.4% did not get a full salary, 6.2% had to move back to their ancestral villages.

3.3 Experience of seeking regular healthcare services during the pandemic

More than half of the households reported sickness of their family members during the pandemic: Among all the respondents, about 60.8% reported that they or their family members fell into sickness at least once from April to August. The most common diseases or sickness experienced by the respondents and their family members during the lockdown period are common cold (72.4%), common fever (71.8%), high blood pressure (14.8%), diabetes (12.9%) and hypertension (8.0%). This is to mention that 2.1% of households had coronavirus infected patients. Among the family members who fell into sickness during the lockdown were mostly aged between 20 and 60. Within this age group, female household members were more affected by different diseases than their male counterparts—male in 55.1% households compared to female in 64.6% households.

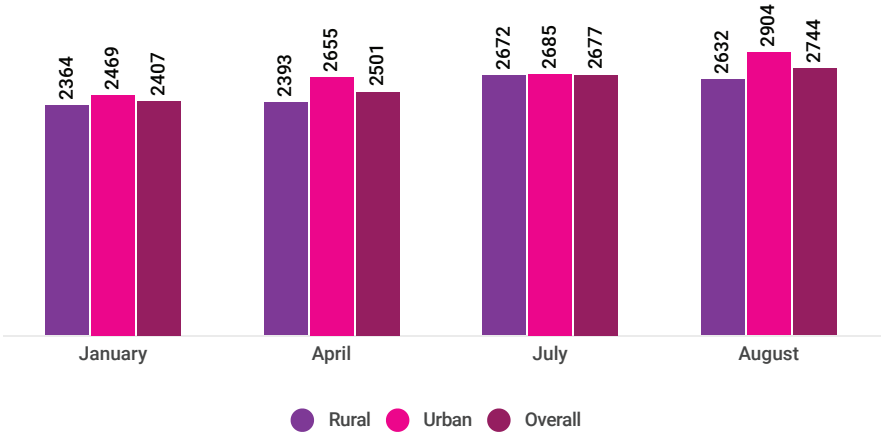
Figure 2: Sicknesses experienced by the household members during the pandemic (%) (Multiple responses, n= 1509)



Treatment cost of essential health services increased during the pandemic: More than a quarter of the respondents from the surveyed households (28.6%) stated that their clinical cost increased during the COVID situation compared to the normal situation. The average treatment cost in the COVID-19 situation was more than that of January. The average

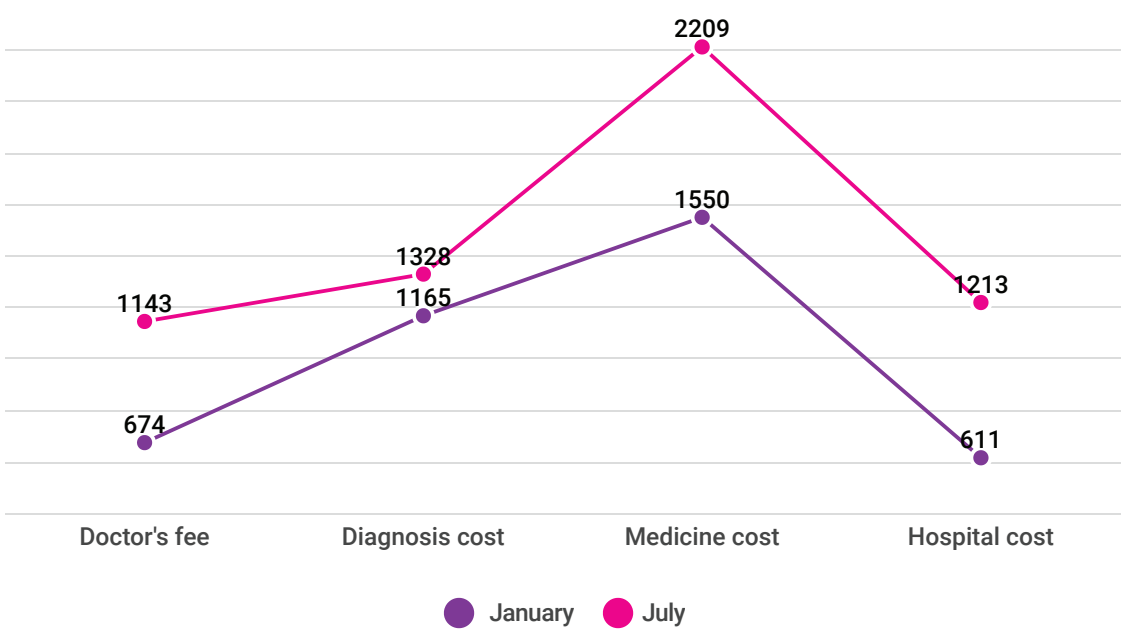
monthly cost of treatment of the selected households was around BDT 2,400 in January, which went up to BDT 2,500 in April and BDT 2,677 in July and BDT 2,744 in August. The clinical cost was higher in the urban level households compared to the rural level households in almost all four months. In August 2020, the average monthly clinical cost in rural level households was 2,632 BDT, which was 2,904 BDT in urban level households.

Figure 3: Average monthly clinical cost of the selected households (in BDT)



According to the information provided by the surveyed households, clinical cost increased in every category, from January to July. Doctors' fee increased from 674 BDT to 1,148 BDT, from January to July on an average. Diagnostic cost also increased, from 1,165 BDT to 1,328 BDT, from January to July on an average. On average the medicine cost increased from 1,550 BDT to 2,209 BDT. The cost of the hospital increased from 610 BDT to 1,218 BDT on average from January to July.

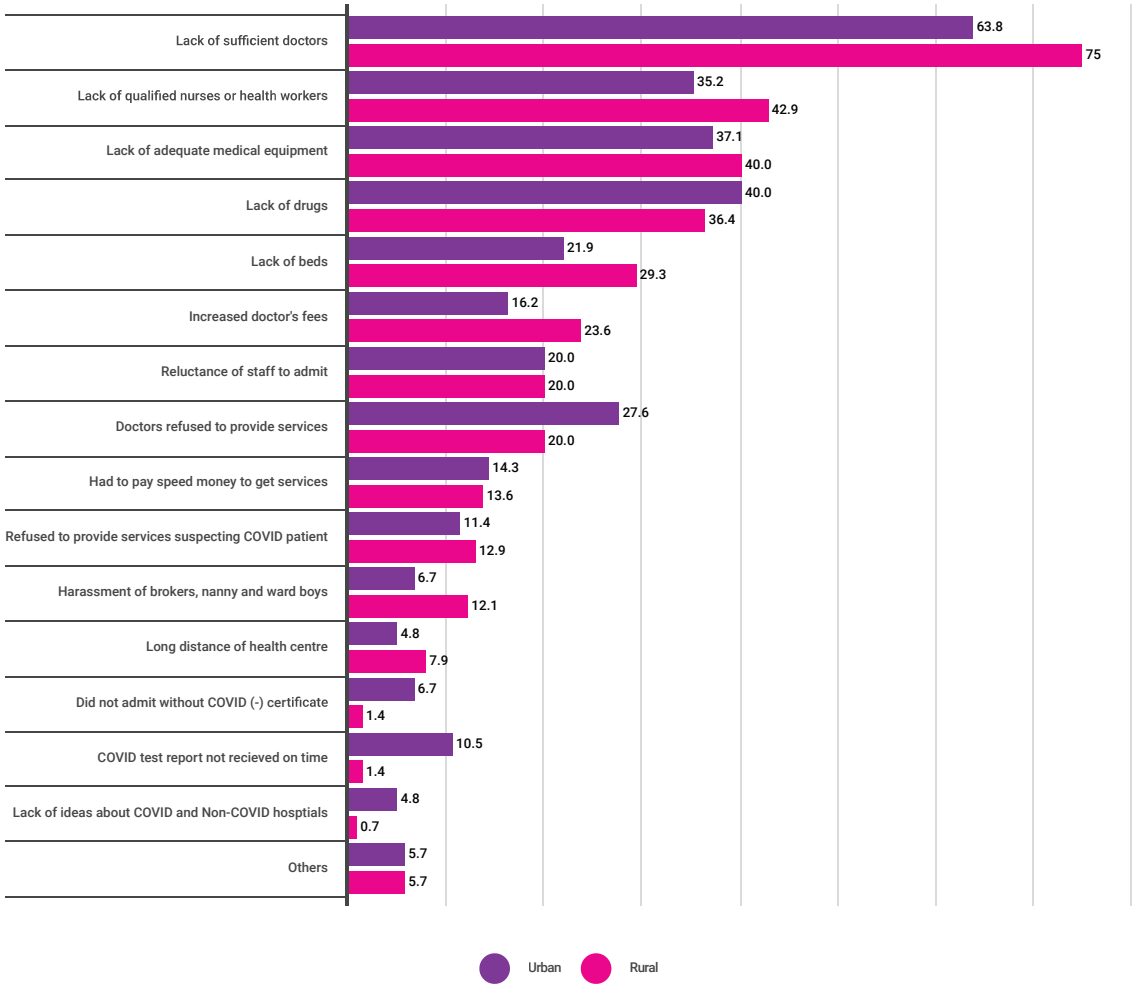
Figure 4: Average clinical cost in January and July according to different categories (n=710)



The increased cost of medicine and medical treatment was burdensome as the average income of the households decreased. Before the pandemic, whereas 43.6% of households belonged to up to BDT 10,000 income category, it went up to 68.3 in April and 69.0% in July [see Figure 1], which clearly shows an income depletion among the surveyed households. From the findings, it can be interpreted that as the average income decreased during the lockdown, the average spending on the clinical cost might have been impacted.

One in ten households reported problems in accessing general healthcare services during the pandemic: The respondents were asked whether they faced any problem during the lockdown in accessing general healthcare services. One in ten households (9.9%) stated that they faced problems during getting treatment from hospitals. The problems include lack of sufficient doctors (70.2%), lack of sufficient nurse (39.6%), lack of medical equipment (38.8%), lack of medicine (38.0%), lack of beds (26.1%) and higher fees of doctors (20.4%). They also faced the unwillingness of doctors to provide treatment (23.3%), the unwillingness of hospitals to admit patients (20.0%) and bribery (13.9%). People from rural areas complained more about the lack of doctors (75.0% vs. 63.8%) and nurses (42.9% vs. 35.2%), adequate medical equipment (40.0% vs. 37.1%), beds (29.3% vs. 21.9%) and increase of doctor's fees (23.6% vs.16.2%) compared to people from urban areas.

Figure 5: Problems faced by the surveyed household members in accessing healthcare services during pandemic (%) (Multiple responses, n=245)



3.4 Experience in seeking family planning services

Risk of coronavirus infection impacted on family planning: One in five households (20.7% overall, 21.3% in rural areas and 19.9% in urban areas) responded that they sought family planning services during the reference period of the study, April to August 2020. The household members of high-income categories (25.0%) and with higher education (24.1%)

sought more services compared to other categories. Services related to contraception (85.6%) were the top reason in these groups of individuals while a minority (16.1%) cited attempt to conceive as their cause for trying to obtain family planning services and 1.8% of them sought other services related to family planning.

National health statistic suggests that 19% women (age 19-49 years) meet the need for family planning for spacing and 44% women for limiting (Unicef, 2019). However, in the surveyed households, only 20.7% households responded that they could take the family planning service.

The risk of coronavirus infection (50.00%) coupled with financial stress (49.58%) impacted more on the services related to family planning as the service seekers reported. The other reasons behind the failure of getting family planning services include the closure of nearest family planning clinics (25.85%), unavailability of doctors (19.49%), the far distance of medical centres (9.75%), transportation problem (8.90%), etc. Some problems such as financial problem, risk of corona, distance of health centres, transportation problem, etc. were experienced more among the respondents in rural areas compared to the urban level respondents (see Table 6).

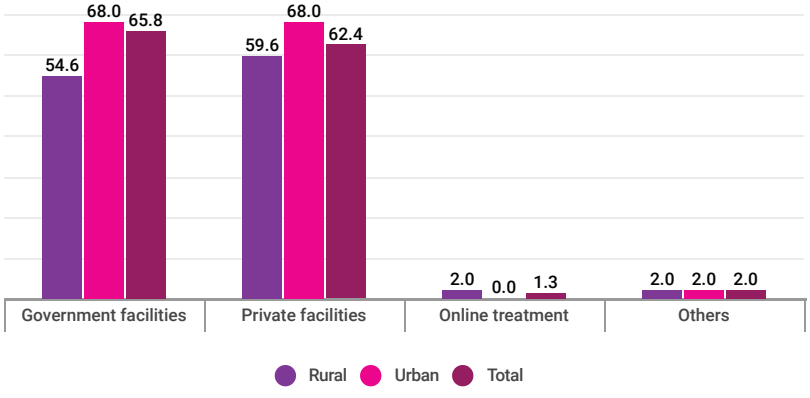
Table 6: Reasons for failure to obtain family planning service (%) (Multiple responses, n=236)

Reasons behind not taking services	Rural	Urban	Overall
Risk of corona	51.4	47.8	50.0
Financial problem	52.1	45.7	49.6
Nearest health clinic was closed	19.4	35.9	25.9
Doctor was not available	15.3	26.1	19.5
Health centre was far away	14.6	2.2	9.8
Transportation problem	14.6	0.0	8.9
Treatment cost increased	6.3	2.2	4.7
Transport cost was high	4.2	2.2	3.4
Address of health centre was unknown	2.1	1.1	1.7

3.5 Experience in seeking health services during pregnancy, child delivery and post-delivery period

More than one in ten pregnant women did not take any healthcare services during the lockdown: Among the surveyed households, 167 households had pregnant women during COVID-19 lockdown. However, 10.8% of pregnant women did not take regular healthcare services during the lockdown. Of those who sought services, around 65.8% took services from public health facilities (22.1% from Upazila Health Complexes, 16.1% from Government District Hospitals, 10.1% Union Health and Family Welfare Centres, 10.1% from Community Clinics). 62.4% of households preferred services from private facilities (48.3% from private clinics and 14.1% from private chambers) and through telemedicine (1.3%). In the rural area, women used public health facilities more than private facilities (64.6% vs. 59.6%).

Figure 6: Healthcare support taken by the surveyed pregnant women during the pandemic (%) (Multiple responses, n=149)



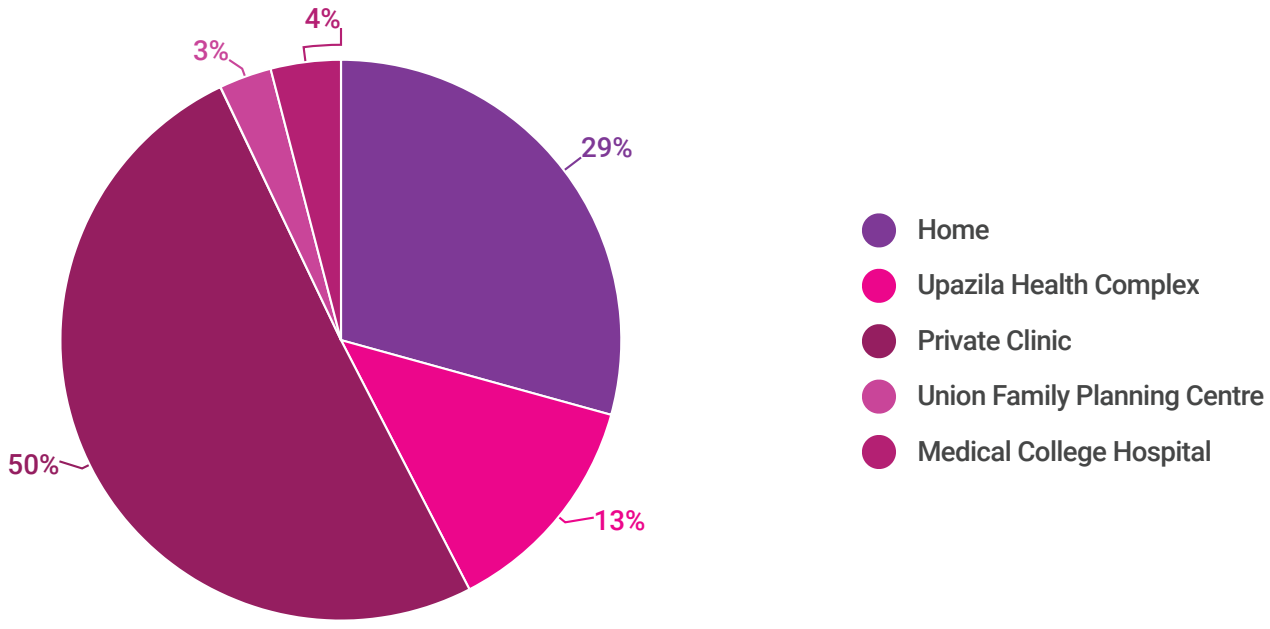
The pregnant women did not get the full healthcare support they needed during their pregnancy: Around 70% of pregnant women needed to take healthcare support more than three times during their pregnancy period. However, 54% of pregnant women could not get the services according to their needs. The pregnant women went to the hospitals for various reasons such as regular check-up (76.5%) and tests (61.7%), vaccination (43.0%) and emergency service (23.5%).

The DGHS 2017-18 data reveals that on average 47% of pregnant women get 4+ ANC service. This study reveals that 37.6% of pregnant women got 4+ ANC service, which is around 10% lower than the national average. The situation is much worse in rural areas (30.3%) than in urban areas (52.0%) and both are much lower than the percentage in BDHS 2017-18 (42.7% and 58.7% respectively).

More than half of the pregnant women (55%) expressed that no family planning or health workers visited them to check their health condition during their pregnancy during the pandemic situation. However, 29% of women were visited once a month and 16% of women once in three months.

Around one-third of delivery carried out at home: Among the surveyed households, 106 babies were born during the pandemic situation. Half of the delivery was carried out in private clinics and around one-third of delivery (29%) was done at home. In 23% of cases, people went to government-owned health facilities such as Upazila health complexes (13%), medical college hospitals (5%) and union family planning centres (3%). In the national data, the percentage of delivery at non-institutional places is 46.4% (Unicef, 2019). The huge difference in the findings with the national data was probably the result of a small sample size.

Figure 7: Place of delivery during the pandemic situation (%) (n=106)



Delivery done by untrained midwives in one in five cases: Although the trained health workers or doctors were involved in delivery in most of the cases, 18% of the birth was attended by untrained midwives. Nationally, almost 41.0% of birth is assisted by an unskilled birth attendant (Unicef, 2019). This was much higher than the study findings. The difference might be a result of a very small sample size.

The birth assisted by unskilled birth attendants mainly resides in the rural area. When the respondents were asked

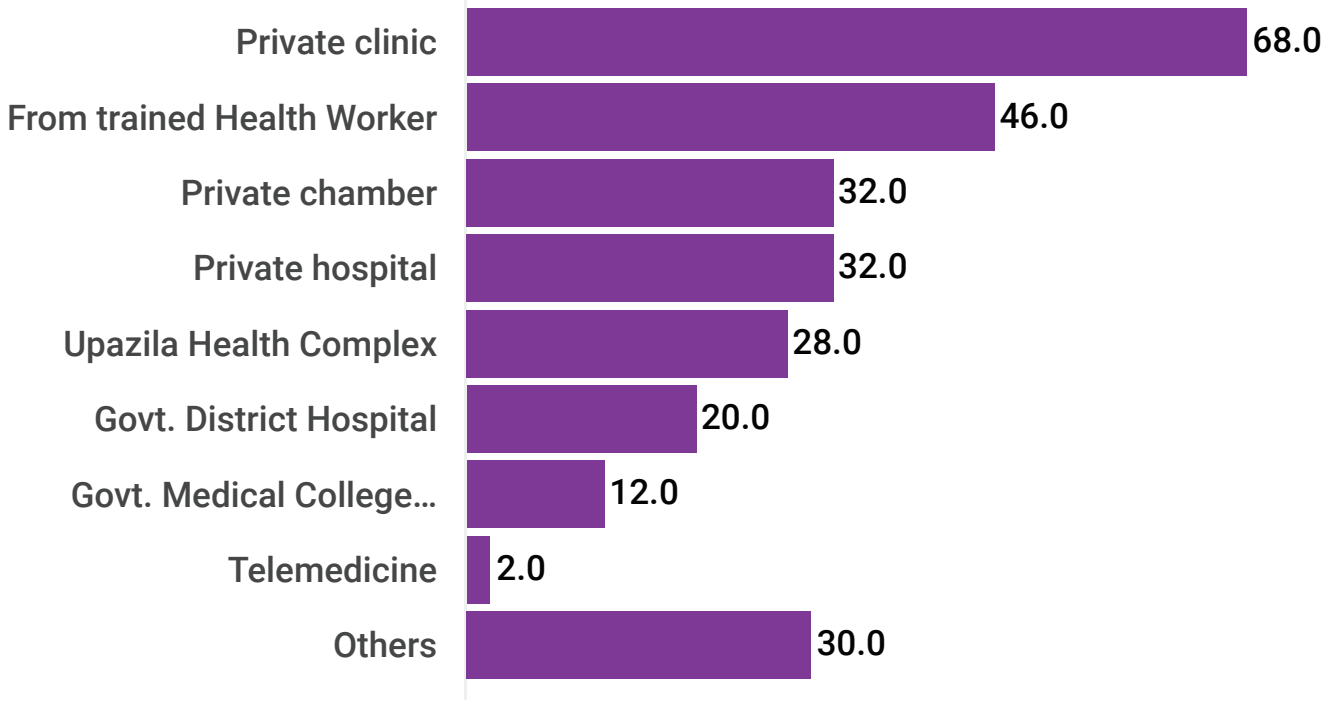
why they did not carry out the delivery with the help of an expert's hand or taking to the hospital, financial problems (7 respondents out of 18) came out to be the main reason. Besides that risk of getting coronavirus infection (6 respondents out of 18) and closure of the nearest health facility (4 respondents out of 18) were the major reasons for that.

Complications created to pregnant women because of not getting delivery support from trained doctors or health workers: In eight cases out of 19 delivery by untrained midwives, the pregnant women experienced some problems. Three women experienced delivery complications, five women faced short term and one woman faced long term difficulties.

One-third of the new mothers did not take postnatal care service during the pandemic: More than one-third of the mothers (33.50%) among the 106 new mothers informed that they did not take postnatal care from any health care centre. The new mothers who took postnatal care gave most preference to private entities (68% in private clinics, 32% in private chambers and 32% in private hospitals), then to trained health workers (46%) and then to government entities (28% in Upazila health complexes, 26% in the district-level government hospital and 12% in government medical college hospitals).

Of the mothers who did not receive any PNC services 75% of them were from rural area. Nationally, 55.3% of new mothers receive postnatal check-ups from a medically trained provider within two days of delivery (Unicef, 2019). However, the study findings suggest that one-third of new mother did not receive postnatal care during the pandemic.

Figure 8: Places of taking postnatal care during the pandemic (%) (Multiple responses, n=50)



3.6 Experience in seeking health services for new-born babies (age 0-28 days)

One-fourth of newborn babies were not vaccinated during the pandemic: The Expanded Programme on Immunisation (EPI) is a priority programme for the government of Bangladesh. According to the Bangladesh Immunisation Guidelines which is based on the international guidelines recommended by the World Health Organization (WHO), children are supposed to receive one dose of the vaccine against tuberculosis (BCG), three doses of pentavalent (DPT, Hib, and

HepB), three doses of polio vaccine (excluding polio vaccine given at birth), and one dose of measles and rubella vaccine to be considered as fully vaccinated. The first dose of BCG should be given at birth or at first contact with health workers. The pentavalent and polio vaccines require three doses and should be given at approximately the 6th, 10th, and 14th weeks. The measles and rubella vaccine should be given immediately after 9 months.

Among the surveyed households, 49 babies aged between 0-28 days were found—69.4% in rural areas and 30.6% in urban areas. During their age between 0 to 28 days, it was found that 12 households (24.5%; 8 from rural areas and 4 from urban areas) did not get the BCG or oral polio vaccine within seven days, which was supposed to be given at birth or at the first visit of health worker. The main reasons for not having the first vaccine mentioned were they "did not know about the vaccine" (9), the health worker did not visit the child (3), the child was delivered in absence of a trained health worker (1), and address of vaccination centre was unknown (1) financial problem (1), and others (1).

Some newborn babies were not taken to hospitals despite having sickness: Out of 49 households, 30 (61.2%) households sought treatment support for their 0-28 day-babies. However, 14.29% of babies were not taken to the hospitals despite their sickness and requirement to take to the hospitals because of the distance of the health centre, fear of the COVID-19 virus, high transport cost etc., which were faced more by the rural level households.

Vaccination of under-five children was not ensured properly during the pandemic: This is widely claimed that child mortality has decreased in Bangladesh as it has ensured almost 100% coverage in some basic vaccinations such as BCG (99.5%), DTP1 (99.3%), DTP3 (97.9%), Pol1 (99.3%), Pl3 (97.3%), MCV1 (95.3%) in 2015 (WHO and Unicef, 2019)11. The surveyed households have 794 under-five children (32% of total household members). Of them, 5.91% of children (47) were not vaccinated during the pandemic, from April to August—this is more in rural areas compared to the urban level households (6.8% vs. 4.5%). The service providers also acknowledged the initial halting of the EPI campaign.

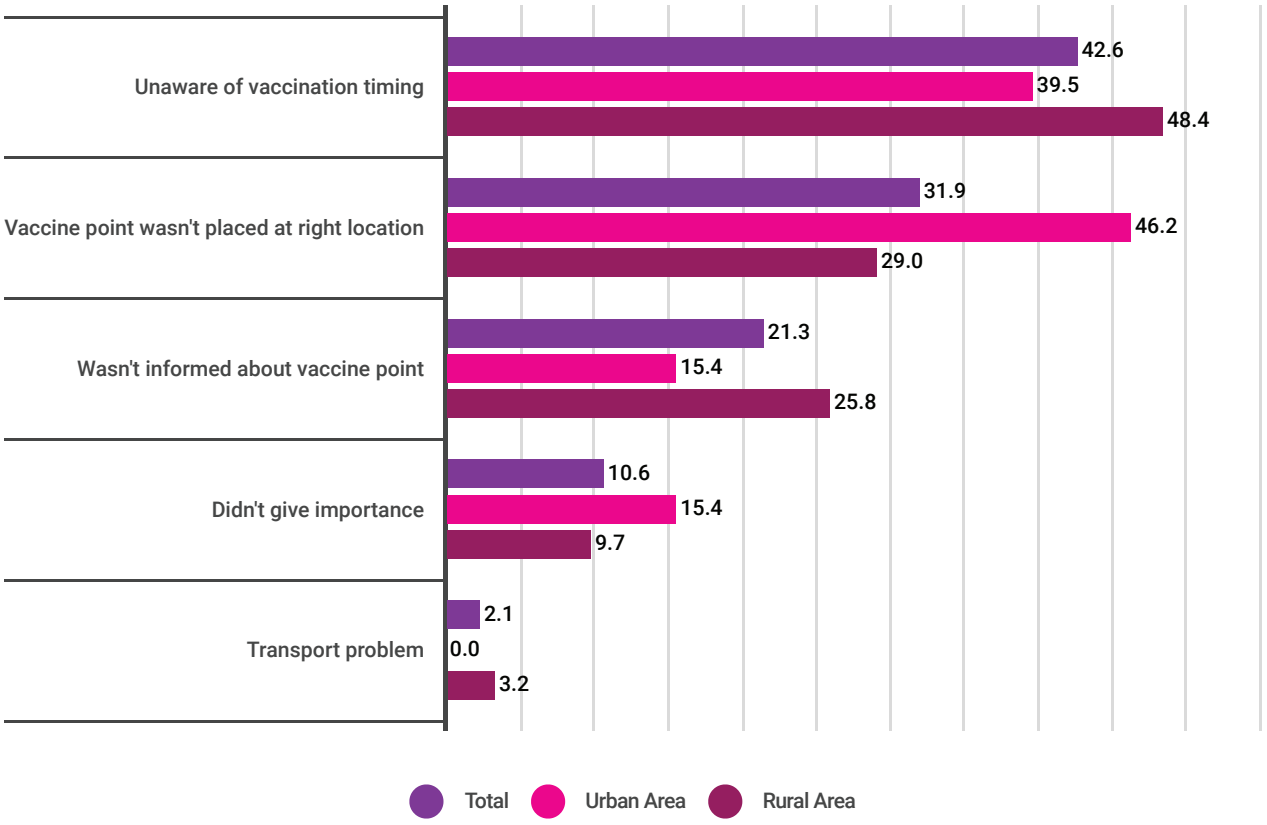
Table 7: Number of the children under five who missed vaccination during the lockdown (Multiple responses, n=47)

Types of Vaccine	Frequency (n)	Percentage (%)
Pentavalent vaccine (Dose-1)	3	6.4
Pentavalent vaccine (Dose-2)	3	6.4
Pentavalent vaccine (Dose-3)	2	4.3
PCV vaccine (Dose-1)	1	2.1
PCV vaccine (Dose-2)	1	2.1
PCV vaccine (Dose-3)	1	2.1
Polio vaccine (Dose-1)	1	2.1
Polio vaccine (Dose-2)	1	2.1
Polio vaccine (Dose-3)	4	8.5
Polio vaccine (Dose-4)	3	6.4
MR vaccine	3	6.4
No Idea	32	68.1
Others	2	4.3

In around one-third of cases, vaccination points were not placed at the right places: There were some reasons behind depriving the under-five children of regular vaccination. In 42.6% of cases, it was unknown to the households about vaccination timings, which was more prevalent among the rural households (48.4% vs. 38.5%). In around one-third of cases (31.9%), it was discovered that the vaccination points were not installed at the right place, which was informed more by urban level households (46.2% vs. 29%). The other reasons include the households having under-five children were not informed about the vaccination point (21.3%), they did not give due importance to the vaccination (10.6%), etc. Service providers also acknowledged that in many places they could not run the satellite centre due to corona.

11 https://www.who.int/Immunisation/monitoring_surveillance/data/bgd.pdf

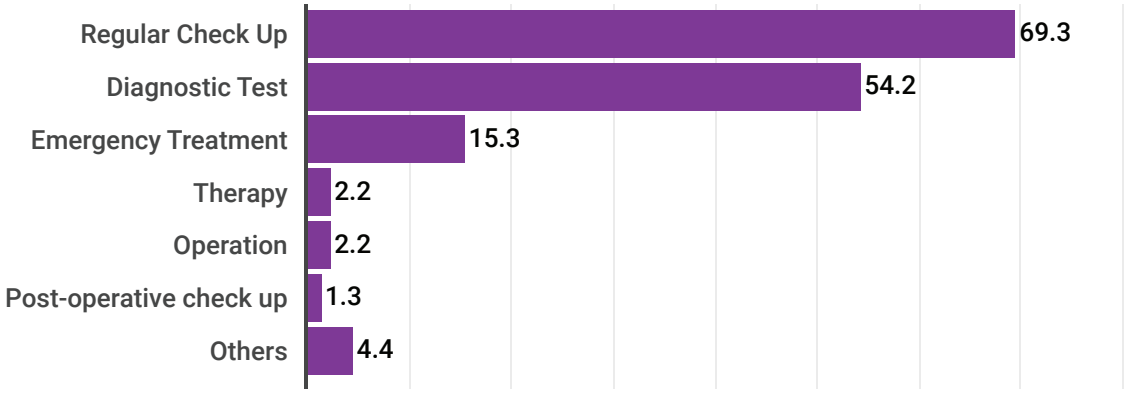
Figure 9: Reasons for missing vaccination of under 5 children during the pandemic (%) (Multiple responses, n=47)



3.7 Experience in seeking health services for chronic diseases

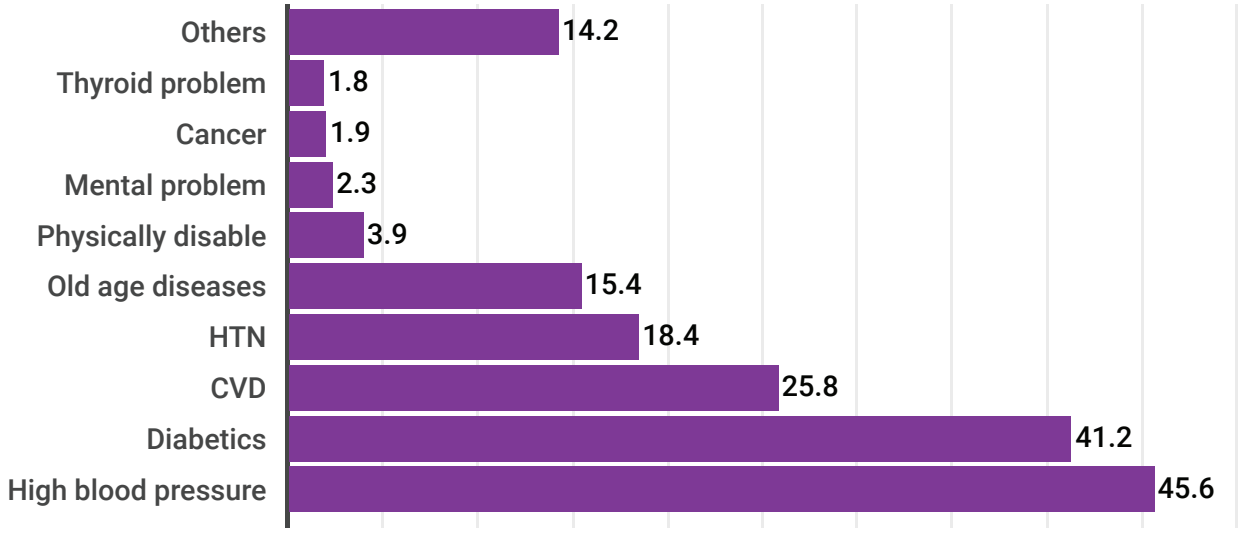
A considerable number of patients with chronic diseases needed emergency treatment during the pandemic: Among the surveyed households 22.1% of households' members took treatment for chronic diseases. People from urban areas got more services for chronic diseases, compared to rural level people (23.8% vs. 20.9%). The most common types of health services taken by the patients with chronic diseases were conducting regular check-ups (69.3%), conducting the diagnostic test (54.2%) and 15.3% of them sought emergency treatment. The remaining patients with chronic diseases sought healthcare services including therapy, surgery, post-operative check-up etc.

Figure 10: Types of treatment sought by the patients of chronic diseases during the pandemic (%) (Multiple responses, n=548)



Female and male aged between 20-60 years were mostly affected by the chronic diseases that account for 54.3% and 37.7% respectively, and old-aged people (60+) were 29.8%. This data reflects that females aged between 20-60 years are more vulnerable and endangered to chronic diseases. The family members were found to be affected by chronic diseases such as high BP (45.6%), diabetes (41.2%), cardiovascular diseases (CVD) (25.8%), hypertension (18.4%), old age diseases (15.4%), disability (3.9%), psychological diseases (2.3%), thyroid (1.8%), cancer (1.9%) and others (14.2%).

Figure 11: Types of chronic diseases the family members were suffering (%) (Multiple responses, n=772)



They sought help mainly from private health facilities (67.5%) and urban people (70.5%) were more dependent on the private facilities compared to their rural counterparts (64.9%).

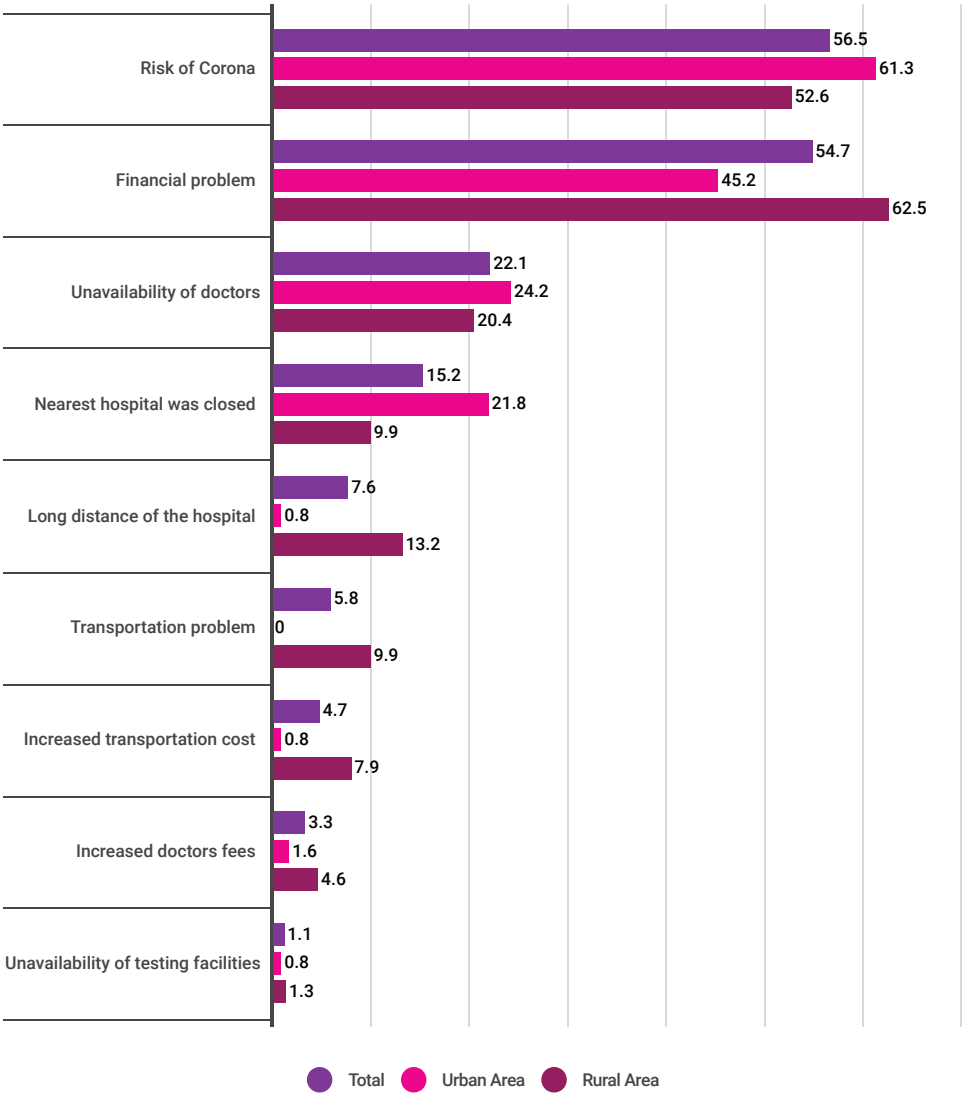
More than half of the patients bearing chronic diseases could not continue to take regular treatment due to the fear of coronavirus infection: While responding about self-exclusion from taking healthcare services from any health facilities, the family members of the surveyed households having chronic diseases consciously opted out from taking healthcare services directly from any health facility which accounts for 56.32% due to risks associated with COVID-19. This was more in urban areas than in rural level households (61.3% vs. 52.6%). The high self-exclusion rate was because they were not comfortable taking healthcare services from any hospitals directly due to the ongoing health pandemic. The probable reason behind this was people suffering from chronic diseases were considered as having a higher propensity to be infected by COVID-19.

Another reason for the self-exclusion from seeking healthcare services was the financial crisis that accounted for 54.51% of the responses. Due to the ongoing health pandemic, people suffered from economic and financial loss that includes joblessness, business closure, and reduction in income. In addition, the cost of healthcare services increased during this time frame that includes the cost of treatment, cost of diagnosis, and cost of medicines. The financial crisis was more mentioned by rural level respondents than the urban ones (62.5% vs. 45.2%).

Unavailability of doctors (22.02%) and closure of nearest hospitals (15.16%) induced the chronic patients to self-exclude from taking health services. Due to the ongoing health pandemic, the government along with the private sector hospitals mobilised doctors and medical professionals to contain COVID-19 infection. As a result, many doctors were reassigned to treat COVID-19 patients and in addition, many doctors were also affected. Some of the self-exclusion reasons include

available hospitals were located at distant places, and unavailability of transportations coupled with higher cost of transportation.

Figure 12: Reasons behind not seeking treatment for chronic diseases during the pandemic (%) (Multiple responses, n=276)



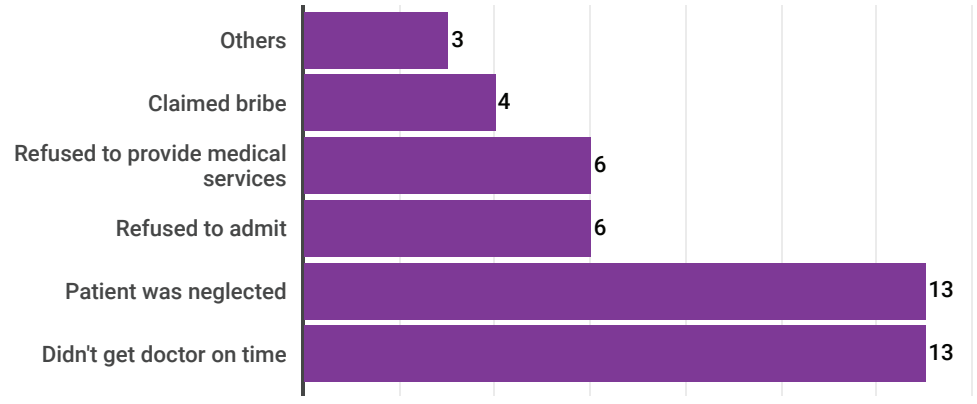
3.8 Experience in seeking emergency health services

A considerable number of emergency patients faced problems while seeking services from hospitals during the pandemic: In response to whether the respondents or their family members had taken any emergency healthcare services due to accidents or violence, the survey found that 5% of households sought emergency healthcare services—slightly more by rural level households compared to the urban ones (5.1% vs.4.8%). More than half of the emergency health service seekers (52%) were victims of street accidents, 38.2% had accidents at the workplace, 4.1% were injured during the fighting and 1.6% had taken emergency healthcare services that occurred due to torture at home.

However, 17.9% of the households (22 households) that sought emergency health services faced any kind of problems while seeking services in hospitals. The problems include unavailability of doctors on time (mentioned by 13), ignorance by healthcare service providers in providing healthcare service (mentioned by 13), the reluctance of health facilities to

admit the patients (mentioned by 6), providing the patient with appropriate treatment (mentioned by 6), claiming extra money to provide emergency healthcare services (mentioned by 4), etc.

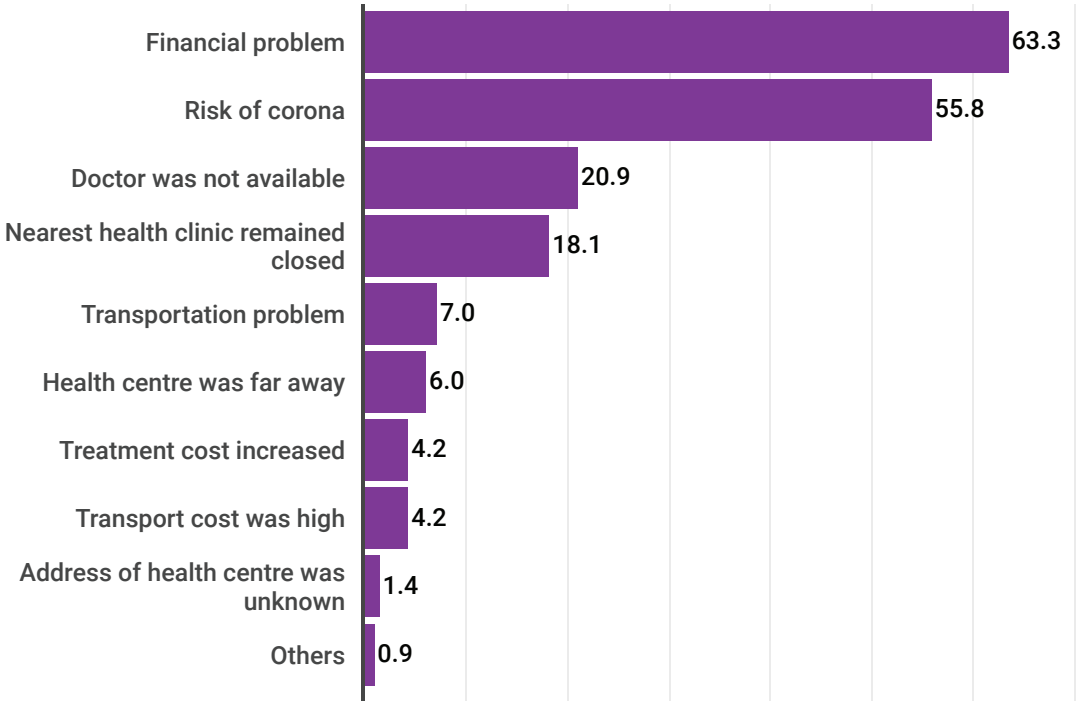
Figure 13: Problems faced while taking emergency health services (Multiple responses, n=22)



3.9 Experience in seeking mental health services

More than half of patients bearing mental illness could not seek treatment due to the fear of corona infection during the pandemic: A total of 37 households (1.5%) reported that some of their family members took mental health-related treatment during the pandemic—slightly more in the urban level households than the rural ones (1.7% vs. 1.4%). The most common services sought by them include regular counselling (48.6%), psychotherapy (35.1%), telemedicine treatment (29.7%), etc. However, a good number of households reported that they did not seek treatment during the pandemic through some of their family members needed the services. The reasons behind not taking the services include the risks associated with COVID-19 (55.81%), financial crisis (63.26%), unavailability of doctors (20.93%), closure of nearest health clinics (18.14%), etc.

Figure 14: Reasons for not seeking mental health services (%) (Multiple responses, n=217)

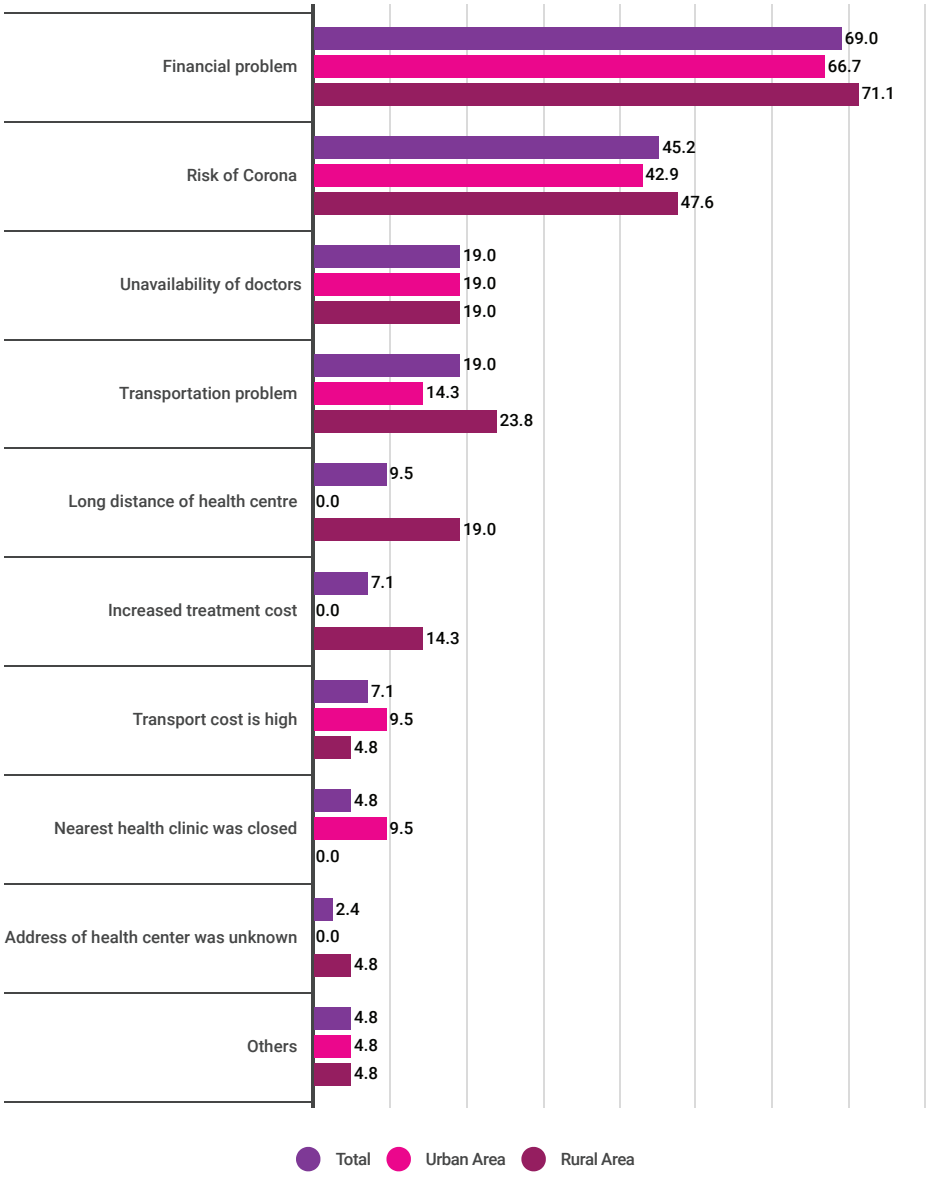


3.10 Experience in seeking health services for persons/children with disabilities

Around half of the persons/children with disabilities could not seek treatment due to the fear of corona infection during the pandemic: The surveyed households have 102 persons/children with disabilities. Less than half of them (44.1%) obtained specific health services—rural level households took more service compared to the urban ones (49.1% vs. 38.8%). Care for accidents (53.3%), regular check-up (51.1%) in this special group of individuals and children were the commonest type of treatment obtained from healthcare centres. However, seven (15.6%) persons/children with disabilities had to take emergency treatment.

The persons/children with disabilities who sought healthcare services during the pandemic failed to avail services due to some reasons. The prominent reasons include fear of COVID-19 (45.25%), financial stress (69.05%), unavailability of doctors (19.05%), transportation problem (19.05%), etc. The risk of the corona, financial problem, far distance, transport problem were more felt among the rural level households than the urban ones (see Figure 15).

Figure 15: Reasons for failure to seek health care for individuals or children with disabilities (Multiples responses, n=42)

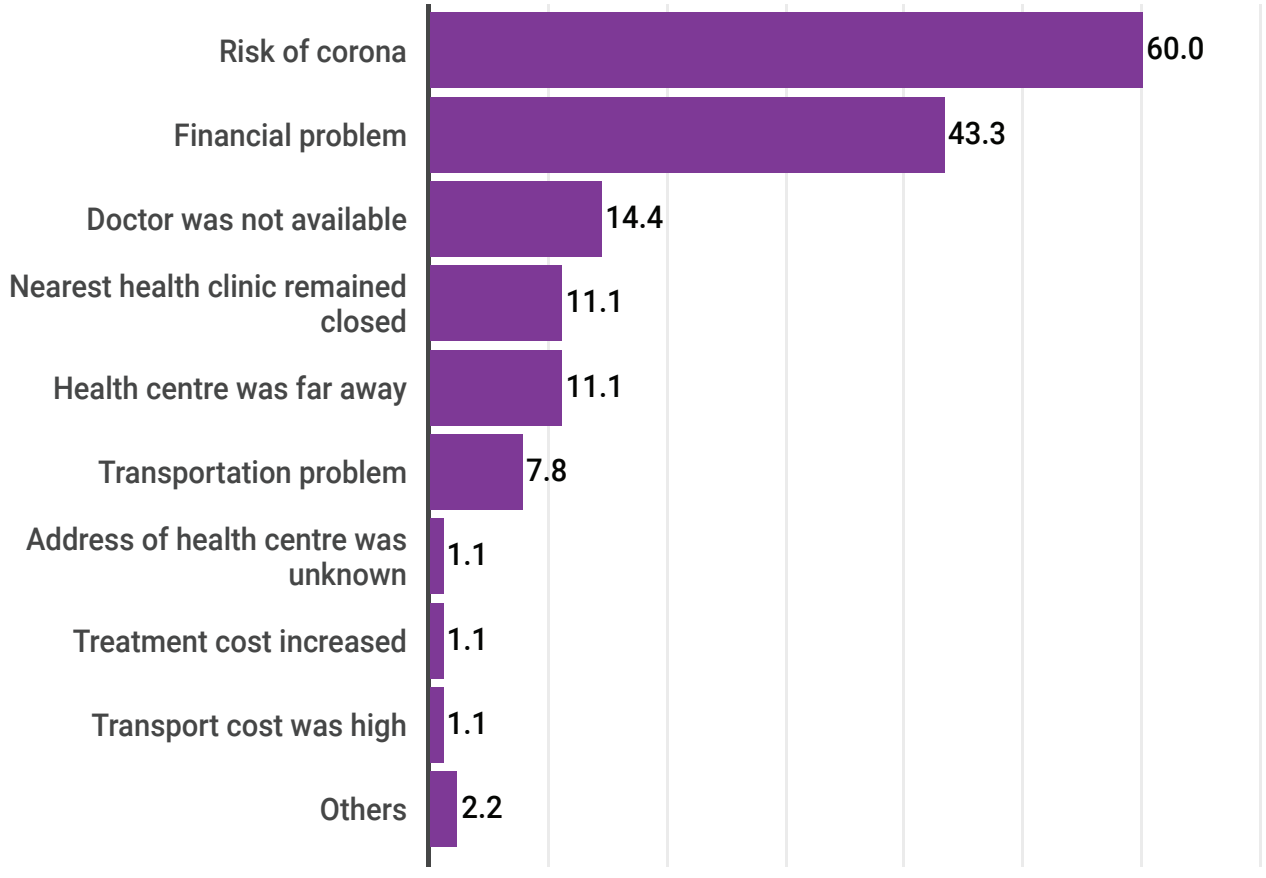


3.11 Experience in seeking adolescent health services

More than half of the adolescents did not seek health services due to the fear of coronavirus infection: Among the surveyed households, 785 households have reported that they have adolescent members (10-19 years). More than a quarter of the adolescents (26.5%) took health-related services during the pandemic—rural level households took more services compared to the urban ones (28.1% vs. 24.3%). The services include treatment for gynaecological problems (40.9%), care for accident cases (55.8%), emergency treatment (14.4%), etc.

The households that failed to seek health services for the adolescents reported some reasons, which include risk of getting the coronavirus (60.00%), difficult financial situation (43.33%), unavailability of healthcare providers (14.44%), closure of the nearest clinics (11.11%), transportation problem (7.78%), etc.

Figure 16: Reasons for failure to obtain health services for adolescents (%) (Multiple responses, n=90)

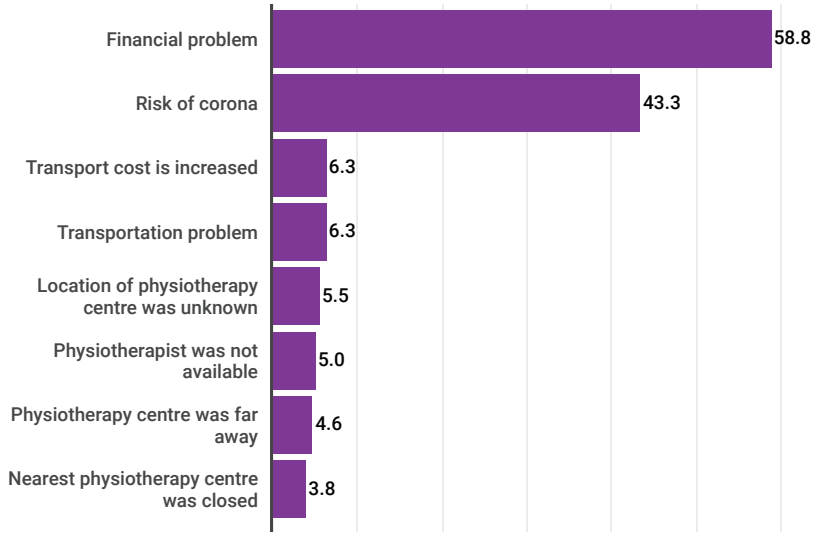


3.12 Experience in seeking physiotherapy services

Around half of the patients necessitating physiotherapy failed to take service due to economic stress and fear of corona infection: From the surveyed households around 2% or 44 individuals obtained physiotherapy services from health care centres. Less than one in five individuals (18.2%) among them could not get the frequency of physiotherapy sessions that they required.

The households that failed to seek physiotherapy service for the household members who required physiotherapy mentioned some reasons, which include financial stress (58.82%), fear of coronavirus infection (43.28%), increased cost of transportation (6.30%), transportation problem (6.30%), unknown physiotherapy centres (5.46%), absence of physiotherapists (5.04%), far distance of physiotherapy centres (4.62%) and closure of nearest physiotherapy centres (3.78%).

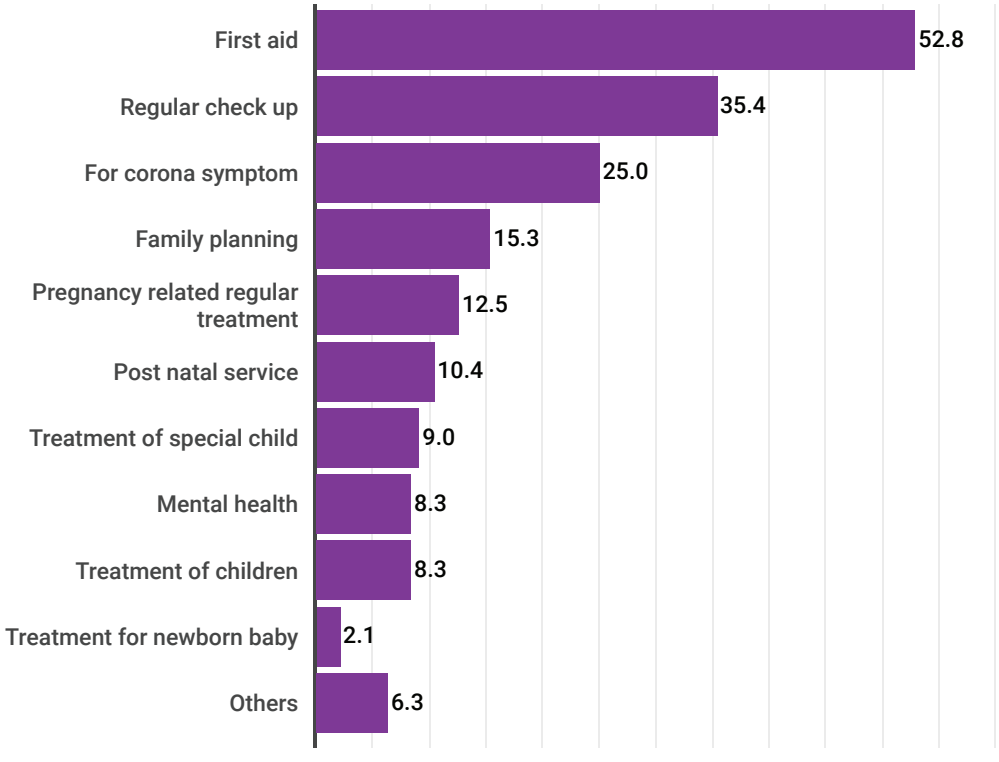
Figure 17: Reasons for failure to obtain physiotherapy service (%) (Multiple responses, n=218)



3.13 Experience in seeking telemedicine services

Telemedicine services did not come as a popular alternative during the pandemic: Nearly 6% of households obtained telemedicine services during the pandemic. Respondents from urban areas attained the service slightly more than those of rural areas (6.5% vs. 5.3%). The range of telemedicine services that were provided by healthcare service providers includes first-aid (52.8%), regular check-up (35.4%), advice on Covid-19 related symptoms (25%), family planning (15.3%), pregnancy-related treatment (12.5%), postnatal service (10.4%), treatment for special children (9%), etc.

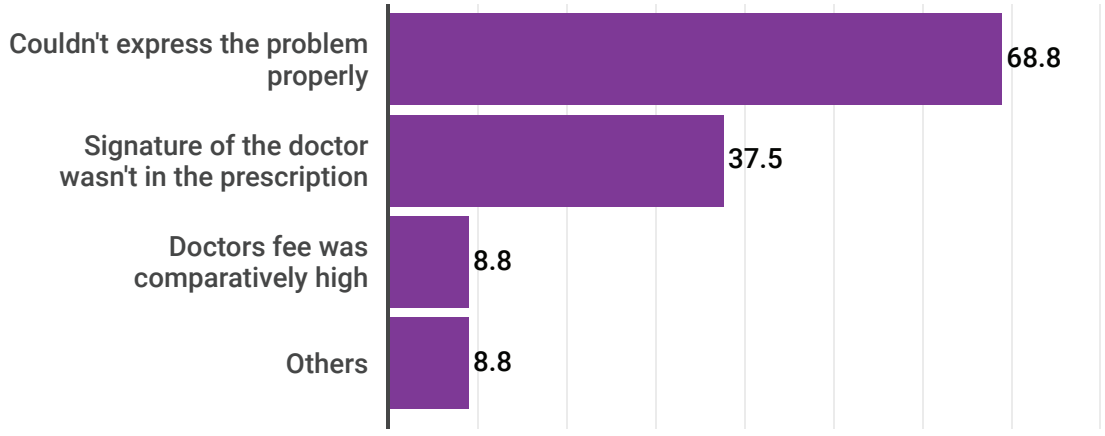
Figure 18: Types of telemedicine service obtained (%) (Multiple responses, n=144)



Of the households which reported that they used telemedicine services, 11.1% of them (16) stated that they encountered difficulty while getting telemedicine services.

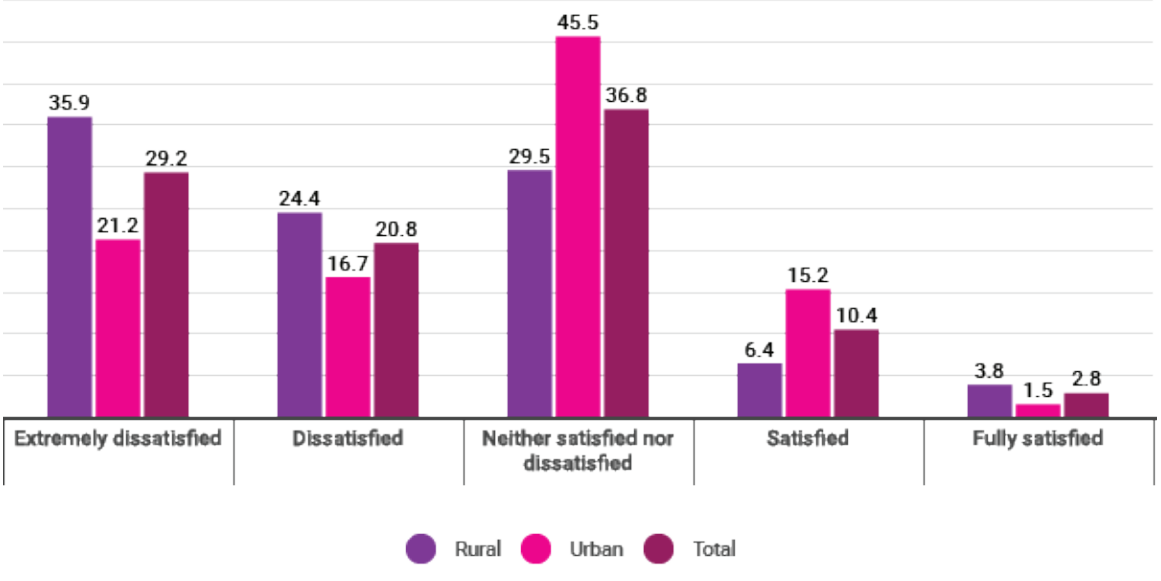
The commonest problem faced while taking telemedicine services was around seven out of ten individuals could not express their symptoms adequately (68.8%). The lack of physical signature on prescription was the next most common problem for these patients (37.5%). Comparatively high fees charged for telemedicine services was another important issue (18.8%).

Figure 19: Problems faced while taking telemedicine services (%) (Multiple responses, n=16)



The telemedicine service lies at the middle of the satisfaction level of the users. 13.2% of users were found to be satisfied with telemedicine service while half of the users expressed their dissatisfaction. Respondents from rural areas expressed more dissatisfaction over the telemedicine services than the urban level respondents (60.3% vs. 35.9%). Interestingly, 72.9% of the respondents wish to use telemedicine services in the future.

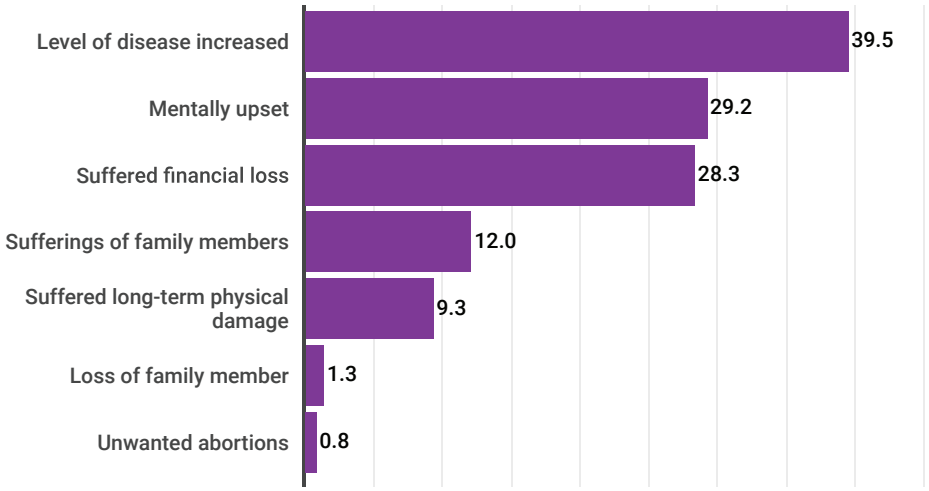
Figure 20: Level of satisfaction on telemedicine services (%) (n=144)



3.14 Impact of getting improper health services during the pandemic

COVID-19 pandemic contributed to increasing the level of other diseases: From the surveyed households, it was found that two in five households (39.5%) that needed to seek essential health services stated that their level of diseases increased due to lack of improper health services during the pandemic. Other losses as reported by the sufferer households include mental stress (29.22%), financial stress (28.3%), sufferings of family members (11.99%), long-term physical damage (9.34%), loss of family members (1.33%) and unwanted abortions (1.33%).

Figure 21: Loss due to no or improper essential healthcare services during the pandemic (%) (Multiple responses, n=1509)



CHAPTER 4
FINDINGS OF THE STUDY: SERVICE PROVIDERS' PERSPECTIVES

4.1 Impact of COVID-19 on essential health services

In general, health care services other than COVID 19 services were interrupted: Except for some key informants among the service providers, most of the providers admitted that there was a severe interruption in general health services especially during the initial stage and lockdown situation. The outdoor service was almost closed in most of the areas. To stop the spreading of the virus, the hospitals discouraged patients to come to the hospital unless it was extremely necessary. The government's instruction was also the same. A respondents said:

"There was a sharp fall in our number of patients. We also discouraged patients to come to the hospital." [HR_5_1]

Another respondent, said:

"The percentage of patients at that particular time was low. Usually, we get 400-500 patients but at that time we got 100-150 patients." [LR_6_1]

For the last six to seven months the number of indoor patients was low, in the initial months of corona time, it was the lowest as there was widespread fear among the patients. One respondent said:

"From April to June, in these 3 months, there were fewer patients. But now, people are no more afraid of corona. They are coming like a normal situation." [LR_3_2]

However, in the low COVID-19 prevalent areas the respondents said they continued to provide the services as usual. For example, a respondent claimed:

"All healthcare services were open including COVID 19 services during the corona pandemic." [LR_1_1]

Another respondent, said:

"There might have some effect in other places, as Upazila Health Complex provides only primary healthcare, so all services were open during the corona." [LR_5_1]

Although there was widespread consensus among the respondents that the emergency services were also interrupted, some respondents claimed that the emergency services were not hampered during the pandemic time. A respondent claimed in the respect:

"No emergency patient was denied ever, no emergency operations were halted." [HR_3_2]

One of the respondents expressed:

"To save their life, emergency patients will come to the hospital anyway." [HR_2_2]

Immunisation hampered: Most of the key informants admitted that the child health services especially the Immunisation programme was compromised during the pandemic. A respondent informed

"Our EPI was almost stopped. We had only 8% EPI coverage in April. Now we are covering those lacking by covering 120% to 130% of the children." [HR_5_1]

Family planning services interrupted: Family planning services were interrupted severely during the pandemic but the situation has improved in recent times as the health workers started providing services. One respondent said:

"At first, the family planning services were interrupted. Later, there was no problem. Now, our FWV and FWAs are going to the field." [HR_7_1]

Demand for the long term and permanent methods decreased significantly. Another respondent said:

"A number of clients taking permanent methods, implant, IUD decreased. These activities almost got stopped. No one came during this period." [LR_5_2]

Maternal and child health services suffered to some extent: During the pandemic, the maternal and child health services were hampered the most. Gynaecological and obstetric services were not available or were available on a very limited scale. Antenatal care and postnatal care reduced. Institutional delivery both caesarean delivery and normal delivery in the hospitals decreased significantly. A respondent described the situation:

"Maternal health has gone through risk. If the "x" hospital was open, they could go to the hospital or can deliver the baby there. Now, they had to deliver at home taking the risk or had to go to other places which are far from here. The main thing is they had to suffer." [HR_5_2]

This reducing number of institutional delivery in government health facilities along with shut down of private hospitals during the pandemic indicates that the home delivery might have increased. A respondent opined:

"As delivery in our hospital decreased, of course, home delivery has increased, otherwise where have all the patients gone? Clinics were almost closed, only government hospitals were open where the number of patients has fallen. And we all know, if one caesarean operation happens in government, ten happens in a private clinic. So, if the caesarean patient decreased in the clinic, it's not that they didn't deliver, they must have delivered at home." [HR_5_1]

However, the number of normal delivery in community-level health facilities e.g. union health and family welfare centre (UN&FWC) is increasing. A respondent said:

"Now, our FWV and FWAs are going to the field. Normal delivery by them has increased during corona. Almost 8-10 delivery is conducting in our union health centres, it was much lower previously." [HR_7_1]

4.2 Limitations and challenges of the health service providing authorities

Panic of getting the virus: Initially the service providers were in great fear. Many of them denied providing services to patients. Many of the senior doctors did not provide services out of their age-related fear (age 60+, had co-morbidity). The lack of PPE at the initial stage was one of the reasons for this fear. Moreover, the news of service providers affecting by the virus at a mass scale and the death of fellow colleagues made the service providers stressed and panicked. However, many of the providers did not care about their own protection or safety and served patients taking a risk on their health and life. A respondent said:

"At first, doctors were also in fear and there were inadequate human resources as well to tackle the huge surge of patients. The number of staff reduced to 1 from 3. Since at the beginning doctors were not provided with quality masks and PPE, they were not comfortable attending patients." [HR_4_1]"

Inadequate equipment: Most of the key informants reported the initial shortage of the PPE. The shortage of PPE is non-existent now except in some places as claimed by a respondent:

"Now, we have a very less number of patients comparatively. Still, we don't have enough supply of gloves. If the supply is not there, we have used hand sanitiser or Hexisol more." [HR_3_2]

The service providers and health service administrators felt the needs for different diagnostic equipment and advanced services such as ICUs in their health care facilities or areas. A respondent said:

"We need central oxygen, improved capacity of the ICU and other support like intubation and the presence of an anesthesiologist." [LR_2_2]

Staff were affected by coronavirus: The quality of health equipment was poor and inadequate. For the lack of adequate quality health equipment, doctors and nurses were affected by the COVID-19. Therefore, the crisis of health workers against the COVID-19 was rising. Most of the health care providers interviewed were infected by the virus. One of the respondent said:

"We have 89 officers and staff in this facility. Almost 40% were infected. One of my pharmacists died on the first day of this month. I, UHFPO and many other colleagues in this Upazila were infected." [HR_5_3]

So, there was a shortage of staff almost all the time, and providers needed to share the extra work burden when one colleague was affected. Another respondent said:

"In our hospital, 7-8 persons were affected at the same time, our two peons were affected. So, there was a shortage of people who will open the office." [HR_2_2]

Lack of awareness among the population: Overall, the patients were less aware of the safety procedure. Many of the patients came to the hospital without a mask. Patients were hiding COVID 19 infections/information, so the doctors were affected by the virus from the patients. Many of the doctors had to go for quarantine due to the exposure of an infected patient unknowingly. Patients expected that the doctors would physically examine them in the usual way but when the doctors did not do that, they were dissatisfied. A respondent expressed:

"…but in the COVID situation, it's not possible to examine all patients physically. You have to maintain social distance, for their own safety. But they were not willing to understand that." [HR_7_1]

Inadequate human resources: Inadequate human resources was always a problem in the Bangladeshi health system. The pandemic put more stress on the pre-existing burden. Almost all the respondents complained about the lack of human resources in their facility. The number of doctors and nurses was less but mostly, the concern of the respondents was about the number of helping staff. The situation can be understood from the following statements. A respondent said:

"Not only in COVID situation, had we also always a human resource problem. We had fewer doctors against the position. The supporting staff are also less than needed." [LR_3_1]

A respondent said:

"We didn't have a human resource problem due to a lack of doctors or nurses but we have a severe scarcity of third and fourth class staff." [HR_3_2]

A respondent also said:

"We had only one cleaner in the corona unit. In the corona unit, we had to dispose of all we used after using them once. We couldn't properly dispose of the PPE because of the manpower shortage." [HR_5_3]

Moreover, the hospitals don't have gatekeepers at the point of entry. So, the 'no mask, no service' was hard to implement. The number of patients gradually increased, so providing treatment by maintaining social distance became tougher and tougher especially in the outdoor. A respondent said in this respect:

"There is no gatekeeper or security guard position in the hospital. If there were security guards, they could have stopped the patients without mask at the point of entry. But now, before the doctor is telling him or her that I'm not going to give you any treatment as you don't have mask, the patient might have already infected many people." [HR_5_1]

The lack of a trained health workforce was identified as a very crucial problem according to most of the service providers. Lack of third and fourth-class staff along with the cleaners was the main concern. A respondent expressed:

"Hospitals need to be more equipped with manpower to maintain ICUs. More skilled technician needs to be recruited. District-wise ICU facility needs to be increased. Outsourcing of nurse and medical officers should be done quickly so that any inadequacy can be handled easily." [HR_1_1]

Some key informants raised the needs for cleaners in the hospitals. A respondent added:

"A 50-bed hospital is running without recruiting a sweeper. It's running through outsourcing. The same goes with the ward boys." [HR_2_3]

However, the key informants mentioned the needs for quality human resources. The health providers repeatedly emphasised the needs for proper training of the workforce. They also highlighted the need of finding out the necessary skills according to the requirement of the health system.

Inappropriate infrastructure: The infrastructure of the hospitals is often too old, not well designed for a hospital. There is a shortage of space for the service providers, very often the environment is unfavourable (hot, humid, and small space) to provide quality service. There was no isolation ward at the Upazila level, when they tried to establish an isolation ward, the shortage of room became more prominent. A respondent said:

"This building is unliveable. Where I'm sitting now is a labour room. As a '----` of this hospital, this should not be my chamber. Our doctors don't have a place to sit. A professor or consultant has to see patients in a narrow room where not more than two persons can enter." [HR_3_2]

Direction and situation did not match: The direction from management sometimes does not match with the ground reality. The number of patients per bed is often three to four times higher than the capacity. So, ensuring quality services with the shortage of beds, logistics and human resource is impossible to achieve. A respondent said:

"We got a circular that no patient should be denied to admit to the hospital saying there is no vacant bed or shortage of logistics or unavailability of doctors. But our capacity is for 'y' number of patients, logistics allocation is also for the same. Now if we get 'z' number of patients (3-4 times of the capacity) how will we provide quality services with this manpower and logistics?" [HR_3_2]

Quarantine facilities and other facilities for the health care workers were not sufficient: The doctors and other health workers were supposed to stay in a separate place after providing services in the corona unit or when suspected to ensure the safety of themselves, their family and the patient. The respondents claimed that the instruction especially the financial arrangement was not clear. In many cases, the hotel (quarantine place/living place) and food were arranged by local leaders or just by the health care provider community.

Insufficient financial resources: The key informants raised the needs for budget increment in health sectors so that adequate health equipment and human resources could be ensured. The respondents also suggested allocating a separate budget for emergencies so that the response in that situation does not delay due to budget constrain or bureaucratic processes. They also expressed the need for proper budget management and capacity building for budget management. A respondent added:

"If you want to develop health facilities, budget is very important. However, utilizing the budget is also a challenge here. There is management related weakness too." [HR_3_1]

Coordination gap with other stakeholders: Severe lack of coordination among different departments was observed and experienced by the key informants which delayed the response during the pandemic. Therefore, they suggested establishing a better coordination mechanism within the different departments of the government and other external stakeholders.

Communication gap: The key informants observed the need for proper communication from the central level to the grassroots level which was missing to some extent during the pandemic. For that reason, essential health services were hampered to some extent.

The gap in motivating the workforces in the health sector: Although the key informants repeatedly mentioned that they were working out of their professional responsibilities they felt, not for any extra financial benefit still the health service providers felt the need for ensuring proper incentives for the health service providers. A respondent mentioned:

"Frontline workers are always at risk. Many of them have to work for earning bread. If they are affected or die because of COVID-19, they should get a risk allowance. It should be ensured." [LR_1_2]

Some key informants also observed the needs for introducing performance-based incentive. Some of them mentioned that the existing system does not motivate the health workers to perform better, so they lose interest to perform better. A respondent said:

"When someone who works hard gets the same salary as a reluctant worker, then a proper evaluation system is non-existent." [HR_3_1]

CHAPTER 5
CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The majority of the surveyed households reported sickness of their family members during the pandemic. Around two-thirds of the surveyed households reported that they experienced common cold and fever, which are the symptoms of coronavirus infection, however, the infection rate in Bangladesh does not suggest a big infection rate. The surveyed households also reported some other sickness and diseases such as high blood pressure, diabetes, hypertension etc., which suggests that people needed essential health services during the pandemic situation.

The cost of medicine and medical treatment increased during the pandemic as the surveyed households reported. On the other side, the average income of the households decreased. Therefore, the increased cost of medicine and treatment was burdensome for the people, which might have impacted the purchasing capacity of the low-income households to afford medicines and medical services.

The COVID-19 pandemic situation was new for all—both the service seekers and service providers. Fear of getting infected was visible on both sides. Among the surveyed households, many of them did not seek health services despite having illnesses of their family members. On the other hand, many a household had to seek health services and it was found that one in every ten households reported problems in accessing general healthcare services. The problems mentioned by the respondents uncovered the untold truth of the entire health sector of Bangladesh. The lack of necessary health service providing resources such as sufficient bed, sufficient doctors and nurses, medical equipment, medicines, skills, professionalisms etc. were exposed and the findings of this survey also suggest that.

The purchasing capacity of most of the people of this country suggests that most of the people would seek health services from government entities as the costs are less compared to the private entities. However, for some essential health services, the majority of the surveyed households opted for the private entities to seek health services during the pandemic, though the average income of the surveyed households decreased.

Many pregnant women also self-excluded to get necessary health services, especially regular check-up, which is inescapable during pregnancy. On the other side of the coin, it was found that there was negligence from the supply side to provide services during pregnancy. More than half of the pregnant women stated that no family planning or health workers visited them to check their health condition during their pregnancy in times of the pandemic situation. This is also alarming that many of the delivery was executed at home and by untrained midwives. This is more alarming that many of the new mothers did not receive any postnatal service and get their 0-28 day-babies vaccinated in seven days. Moreover, many of the under-five children were not vaccinated during the pandemic, from April to August. This will have a potential long-term impact if measures are not taken.

Despite having chronic diseases, many of the surveyed households self-excluded from getting the services. The same kind of self-exclusion was visible in other essential health service sub-areas such as emergency service, psychological support, services for persons/children with disabilities, care for the adolescents, physiotherapy services, family planning, etc. In each of the sub-areas, the surveyed household members indicated some common factors, which include the fear of coronavirus infection, economic stress, unavailability of doctors, closure of medical centres, transportation problem, increased cost of medicine, etc. For most of the sub-areas, the households in rural areas suffered more from the disruption of essential health services, compared to those in urban areas. Moreover, the women and old aged people who had chronic diseases suffered more as they were not able to take necessary services due to the health crisis in the pandemic situation.

The COVID-19 pandemic made a clear disruption in getting smooth health services when people were really needing some unavoidable health services. The surveyed households identified some visible by-products of this disruption such as increased level of diseases, mental stress, financial stress, sufferings of family members, physical damage, loss of family members, unwanted abortions, etc. However, there might have some long-term impacts, which should be assessed thoroughly and some immediate and long-term measures should be taken based on the assessment to stop any unintended future damage of people who will survive the COVID-19 pandemic.

5.2 Recommendations

The rapid assessment identified some gaps and limitations of the entire system relating to providing essential health services to the people. Based on the key findings of the assessment, the following initiatives are recommended.

Service delivery

Revisit the National Health Service Delivery System: Rigorous planning and strengthening of existing health systems for preparedness during future surges in cases or other pandemics need to be ensured. This includes capacity building of service providers on essential infection, prevention and control measures and risk behaviour, ensuring adequate supplies of hygiene equipment and modifications of service delivery mechanisms during pandemics.

Use ICT to improve accessibility: The use of ICT should be increased so that people in emergencies like the pandemic situation can get essential health care services. Particularly, telemedicine was well accepted alternate worldwide during the pandemic. So, the usage of telemedicine and mobile-app based health services as part of primary healthcare services delivery should be recognised and formalised. This can also use for the people from the hard-to-reach area who can get the health services quickly. Existing telemedicine platforms and mechanisms require strengthening for institutionalising these services into the government and private healthcare sphere. Sustained campaigning and campaigning need to be carried out to inform communities on a spectrum of issues and topics related to availing telemedicine services for instance, on how to access these services or on what specific services can be provided in teleconsultation.

Ensure effective coordination: Coordination among relevant stakeholders during any emergency needs to be ensured so that essential services do not disrupt.

Include new services in the essential health service package: Ensure availability of medical professionals to provide physiotherapies, counselling and exercises at both public and private health facilities as part of delivering essential health services to patients.

Health workforce

Ensure availability of health workforce and proper skill mix: WHO recommended ratio of doctors, nurses, and technologists which is 1:3:5 needs to be ensured. So, recruitment of the workforce against the vacant position is necessary. Furthermore, Bangladesh is still far from achieving WHO recommended doctor to patient ratio. Given the size of the population, and the low number of facilities it is crucial that an added emphasis is given to recruiting and capacitating allied workforce at the community level so that hospitals are not overburdened and many of the primary health complications can be addressed at the community level. Immediate recruitment of necessary supporting workforce is extremely necessary as the lack of third and fourth-class staff along with the cleaners was the main concern during the pandemic. Besides, regular capacity-building training according to the need of the health system also needs to be ensured. The competency of health care providers on patient-centric care to treat patients more sensibly needs to be emphasised.

Medical products

Ensure modern diagnostic equipment: Public and private health facilities with modern diagnostic equipment needs to be ensured

Health information system

Strengthen health information system: The collection of quality data/information from grass root level should be ensured to identify and analyse the level of emergency situation. Furthermore, data integration among different streams of health service providers can be highly useful for targeted inventions in situations as such the current pandemic. Moreover, uninterrupted time data flow needs to be ensured from local to central level. Proper communication from the central level to the grassroots level will minimise the gaps in fighting any future pandemic while continuing the essential services should also need to be ensured. At present there is no alternative of investing in digitalisation of health records and quality health data integration and management.

Financing

Invest in health and improve utilisation efficiency: The health budget needs to be increased up to WHO recommended 5% of the total GDP gradually while the capacity of the health administration to utilise the budget properly also needs to be improved. To utilise the resources optimally, technical and allocative efficiency should be ensured.

Separate emergency budget: A separate budget should be allocated for essential health services during emergencies so that the response in that situation doesn't delay due to budget constraints.

Ensure health protection: During emergency or crises, an increase in expenditure to avail health services coupled with decreases in income highlights the urgent need for social safety net programmes and primary health care based insurance schemes. This will strengthen financial protection and extend health services and population coverage, especially to the poorer and vulnerable segments, with the long-term aim to achieve universal coverage. To address inequalities in access to health services, reduce reliance on OOP payments and protect people (especially the marginalised people) from catastrophic health expenditure, a health protection package must be introduced. It can be introduced in the form of health insurance, health card/voucher, providing free of cost service at the point of entry.

Leadership and governance

Separate public health track within the mainstream health service architecture: The gap in the strategy of the awareness campaign and disseminating the right information to the right people at right time has pointed out the need for proper public health wings within the mainstream health service architecture. So, the structure of the health system needs to be reformed. However, the model of reformation needs to be decided through a transparent and inclusive stakeholder consultation involving all relevant public health experts, clinicians, and other stakeholders.

Establish an effective referral system: According to the study findings, people suffered more because of the almost non-functional referral system. So, the referral system needs to be established where it is non-existent; and the existing referral system needs to be strengthened and modified to make it effective. This might be done through digitisation (like "COVID-Contact Tracing mobile app"12) to ensure quick and hassle-free access to essential health services. The patient can be registered, enrolled, traced and referred to other/next level of health facilities through any unique identification card/certificate e.g. NID/Passport/Birth Certificate /Driving License. The data might also use for IPD admission and future follow up, thus, a holistic approach to provide health services can be enabled and ensured. It needs to be integrated with the EMR/EHR/telemedicine system on the healthcare providers' end so that the service providers (e.g. doctors) can access the data, know patients disease history and use it for treatment purpose. There needs to be improvements in availability of services especially during pandemics and strengthening of a functional referral system, particularly at primary level. A long term mentoring on how to deal with patients more sensitively/ empathetically needs to be institutionalized.

Formulate an "Emergency Task Force": The delay in response was the result of a gap in decision making, bureaucracy, work division, and authoritative power which could have been solved by a special task force for health (Or any) emergency. The structure of the task force needs to be finalised through transparent and inclusive stakeholder consultation. The structure and guideline of response division might be adopted from other countries (e.g. The United kingdom) and contextualised according to the administrative structure of Bangladesh

Ensure incentives or risk allowance for the frontline health workers: The declared health emergency stimulus package (incentives) has not yet given to the frontline health workers. Incentives/risk allowance for the frontline health workers should have been ensured so that they were more motivated to work for continuing essential services. In any pandemic, the incentives should be ensured immediately. A performance-based incentive can be a good alternative in this respect. Health emergency stimulus packages (incentives) should be appropriately targeted and reached to the frontline health workers including doctors, nurses, paramedics, cleaners, health technicians, ambulance drivers, and other administrative staff of both public and private health facilities.

12 https://play.google.com/store/apps/details?id=com.shohoz.tracer

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