

RESEARCH

Skill gaps in nursing and corporate governance challenges

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Nurses play a vital role in healthcare delivery, yet in South and South Asian countries, particularly during the COVID-19 pandemic, nursing standards have been low and access to quality care has been limited for economically disadvantaged patients. Literature indicates a pressing need for enhanced education and training among nurses, who often lack adequate preparation and, in some cases, a caring approach. In countries like Bangladesh, nursing is perceived as an arduous profession, with its reputation adversely impacted by cultural, religious, and socio-economic factors. This study seeks to explore the challenges faced by economically disadvantaged patients stemming from gaps in nurses' skills and education, along with the wider implications for patient care. The research employs a mixed-methods approach, combining quantitative analysis of 350 survey responses with qualitative insights drawn from 56 interviews conducted via Google Forms and 30 in-person interviews with patients impacted by COVID-19 and other key stakeholders. Additionally, a quantitative survey of 171 nurses, 32 key informants, and 15 doctors provided further evidence. Findings reveal widespread deficiencies in nursing skills and education, underscoring the need for policy interventions. These insights advocate for focused training initiatives to improve healthcare outcomes for vulnerable populations, including men, women, children, and people with disabilities.

Keywords: healthcare, nurses, skill gaps, education, vulnerable patients, policy reform

1 Introduction

Certain barriers like slowing economic growth, delays in achieving key targets such as income poverty reduction, gender equality, and the accessibility of affordable healthcare continue to impede South Asia's progress toward Sustainable Development Goals (SDGs). Current research supports these observations, noting that significant challenges in healthcare access persist, particularly in countries like Bangladesh, and are exacerbated by socioeconomic divides [Niaz, Savoia, and (1)]. A recent study by WHO (2) emphasizes that South Asia's health infrastructure is increasingly strained, often failing to meet the needs of vulnerable populations.

Income inequality, driven by social, cultural, and governance deficits, results in disparities in wealth

distribution across classes. Social determinants, including sexual and gender identity, age, and ethnicity, exacerbate these inequalities, further widening the divide between social classes and heightening "status anxiety." This phenomenon has been linked to health disparities and adverse socioeconomic outcomes (3). Research on COVID-19's impacts has highlighted the disproportionate vulnerability of marginalized groups, including people with disabilities, who, despite forming around 10% of Bangladesh's population (4), face heightened discrimination and economic hardship (5).

The COVID-19 pandemic has exposed profound weaknesses in Bangladesh's healthcare infrastructure. Reports document critical gaps in medical expertise, limiting the quality of care available to the public. In 2020 and

2021, many patients with severe symptoms, COVID-related or otherwise, suffered as they were transferred from one hospital to another due to a lack of facilities or staff, often denied by private hospitals which are highly renowned (6). This dire scenario forced the economically essential working class to assume significant health risks while commuting between urban and rural areas for livelihoods.

The pandemic further intensified issues such as healthcare inaccessibility, job insecurity, educational inequality, and increasing social disparity. Bangladesh saw an increase of over 16.4 million new individuals living below the poverty line (7), with recent updates indicating that inflationary pressures continue to exacerbate economic struggles, especially in rural areas. With an estimated 15.2 million COVID-19 cases and a healthcare system strained beyond capacity (8), the need for inclusive and sustainable solutions has never been clearer. The evidences from reports underscore the importance of strengthening policies aimed at reducing inequalities and addressing gaps in social protections to promote long-term resilience. To attain the objective of reducing inequalities and addressing service needs, more nurses were recruited. Earlier, nurses were inadequate to manage a Pandemic. Registered nurses and midwives are 83,029 (9). This shortfall in number of nurses was somewhat bridged, although without much training in dedicated specializations; refer **Table 1** [Directorate General of Nursing and Midwifery (DGNM), (10)], and **Table 2**.

2 Literature review

Physically consulting physicians proved an incredibly daunting task for patients in this contagious. A significant number of non-COVID-19 patients have not received treatment from hospitals and clinics on suspicion of COVID-19 (electronic and social media). Since 1993, telemedicine has offered a plethora of options for the few, technically savvy.

COVID-19 sparked nationwide concern following the detection of the first three cases on March 8, 2020. The healthcare delivery system underwent a significant shift, with medical groups rapidly embracing digital health solutions,

TABLE 1 | Categories of health workforce and unfilled positions in the public healthcare sector.

Category	Authorized positions	Occupied positions	Vacant positions
Nurses in service	32,861	32,189	672
Nurses in College/Institute	511	396	115
Midwives	2,996	1,741*	1,255
Non-nursing staff	1,126	862	264
Total	37,494	35,188	2,306

*Includes 1,148 diploma midwives and 1,600 certified midwives.
Source: DGNM-PMIS Report, February 2019.

placing telemedicine (telehealth) at the forefront of care (11). In the face of the highly contagious virus, telemedicine transitioned from an optional service to a crucial one. The pandemic heightened fear for all types of patients, including those with COVID-19 seeking medical care via telemedicine. Following the outbreak, many doctors and nurses fell ill or died from the virus, creating further anxiety and leading to hesitance among healthcare providers to offer consultations (11).

Begum (12) notes that people with disabilities were often treated as isolated individuals subjected to cultural stigma. However, the issue is more complex. From a structural-functional perspective, it has been argued that individual actions can be hindered by broader socio-economic and environmental structures (13–15). One's personal actions can be shaped by these larger socio-economic and structural forces, with predetermined perceptions often influencing individuals unconsciously and molding their social and economic relationships. This paper seeks to explore the rights of persons with COVID-19 and disabilities, acknowledging that structural barriers can complicate coping mechanisms and undermine individuals' rights.

Persons with disabilities encounter cultural and attitudinal stigmas that often obscure the structural barriers they face. Mehrotra and Karen (16) highlight that Disability Studies (DS) literature in the Global South has focused on the structural barriers impacting individuals with disabilities over the past two decades. The focus has expanded from a narrow cultural and representational perspective to a broader approach that encompasses the entire socio-economic environment. They advocate for national and

TABLE 2 | Projected demand for nurses based on alternative assumptions and indicators.

Indicators	Basis	2025	2030	2035
Population (in millions)		178	189	200
Demand for nurses based on population/nurse ratio:				
WHO population/nurse ratio	(1,000: 0.768)	136,608	144,945	153,792
Indian average (2012)	(1,000: 1.1)	195,662	207,604	220,275
Demand for nurses based on doctor-nurse ratios:				
WHO	1.01	45,536	48,315	51,264
doctor-population ratio of 1,000: 0.25	1.02	91,072	96,630	102,528
combined with different doctor-nurse ratios	1.03	136,608	144,945	153,792
South Asian	1.01	133,406	141,458	150,187
population-doctor ratio of 1,000: 0.75, combined with different doctor nurse ratios	1.02	266,812	283,096	300,374
	1.03	400,218	424,644	450,561

Source: Author's estimate.

international policies that incorporate social justice within diverse multicultural contexts.

In Afghanistan, four decades of war, ethnic conflict, and economic instability have resulted in nearly a fifth of the population living with significant physical, sensory, intellectual, or psychosocial disabilities (17). Women with disabilities in Afghanistan are particularly marginalized, often being “doubly stigmatized” due to both gender disparities and perceptions of physical incompetence.

The discussion above reflects the coping mechanisms used by people with disabilities to navigate structural challenges that hinder their ability to function as active citizens. In some countries, schools remained open and safe throughout the pandemic, but strategies such as social distancing and hygiene practices, crucial for preventing the spread of COVID-19, were not easily applicable to children with disabilities. As a result, education systems were forced to make difficult choices about the allocation of educational opportunities, often overlooking students with disabilities (18).

In Bangladesh, the Rights and Protection Act for Persons with Disabilities (19) outlines the rights of individuals with disabilities, including the protection of women with disabilities, the establishment of committees for advocacy, and legal routes for grievance redress. However, these policies have not been fully effective in addressing the challenges faced by persons with disabilities during the pandemic. Nayara and Srilatha (20) document the struggles of young people with disabilities during COVID-19, noting that their access to public health services, urban infrastructure, and education was contingent upon their ability to adapt to the crisis.

Bano (21) explores the impact of COVID-19 on vulnerable groups, especially individuals with disabilities, citing previous pandemics like the Russian Flu, Spanish Flu, and Swine Flu. A common theme across these crises has been the lack of knowledge and awareness regarding the needs of persons with disabilities, compounded by the absence of comprehensive policies during the COVID-19 pandemic.

Kandasamy et al. (22) discuss how a public health disaster, coupled with a constitutional crisis like that in Sri Lanka, exacerbates the situation for the most vulnerable groups, particularly people with disabilities. Similarly, Bezbaruah (23) recounts the deep isolation and fear of death faced by the elderly during the pandemic, with many fearing they would die alone, unattended, and without the comfort of family members.

Mizan (24) examines the legal framework for the rights of poor patients in Bangladesh, noting that the Constitution guarantees fairness for all citizens, with specific provisions for those with disabilities. The government has taken steps to address the needs of persons with disabilities, such as establishing the National Coordination Committee on Disability and enacting the National Policy on Disability in 1995. However, the 2001 Act failed to address the full

spectrum of needs for persons with disabilities, and redress mechanisms remained inadequate. Surveys reveal that the progress made in addressing child marriage during COVID-19 was undermined, particularly among girls.

In 2005-06, Bangladesh launched a disability allowance program, the Disability Detection Survey, and employment initiatives for persons with disabilities (25). The Rights and Protection of Persons with Disabilities Act 2013 (RPPD Act) replaced the 2001 Act and provided better protections for individuals with neurodevelopmental disabilities. Despite these efforts, there have been complaints that the specific needs of persons with disabilities were ignored during the pandemic. Information regarding COVID-19 safety measures was not adequately communicated to people with disabilities, and many were excluded from receiving essential updates. Evidence from surveys in Bangladesh and Kenya (26) indicates that persons with disabilities, especially those who rely on hand mobility, were disproportionately affected.

Bezbaruah (23) discusses the psychological and social impact of the “new normal” of social distancing during the COVID-19 pandemic, particularly for elderly individuals with disabilities. The loss of regular support systems and physical connections during the crisis has exacerbated social distress among this group, highlighting the intersectional nature of disability and aging.

Overall, the literature underscores the multiple layers of disadvantage faced by persons with disabilities, particularly during the COVID-19 pandemic. These individuals experience significant barriers in accessing healthcare, education, and employment, with women often bearing the brunt of these challenges.

3 Methodology

The primary objective of this study is to empirically examine the skill gaps among nurses in Bangladesh, with a specific focus on how these gaps affect patient care and contribute to challenges during the COVID-19 pandemic. The study also investigates the barriers and disparities in healthcare access, particularly for patients with disabilities and those affected by COVID-19.

The study was conducted in three distinct phases:

1. Initial Assessment (January 2020–March 2020): The first phase assessed the state of hospitals and healthcare facilities before the pandemic. Data were collected from 50 hospitals and 171 nurses across various locations. Due to the severity of the virus’s spread, face-to-face interviews were infeasible by the end of 2020. Instead, data collection pivoted to virtual means where possible.
2. Institutional and Professional Feedback (June 2021): Following the second wave of the pandemic, 12 doctors were interviewed to understand the healthcare

service level after experiencing this intensified phase. Additionally, a Google Form survey involving 75 respondents (including patients, nurses, hospital managers, and doctors) was conducted to gather a broad range of perspectives.

3. **Qualitative Analysis and Specialized Surveys:** To gain deeper insights into the healthcare system's capacity and the preparedness of hospitals and staff, qualitative methods were used. This included 8 focus group discussions and 32 key informant interviews with nurses, patients, and hospital administrators. Furthermore, 56 interviews with individuals with disabilities, 15 COVID-19 patients, and 15 healthcare stakeholders were conducted to provide a nuanced understanding of healthcare challenges and guide future policy.

Throughout the study, a total of 350 responses were collected via direct and virtual interviews, phone calls, and email surveys. These responses were analyzed to assess the preparedness of hospital staff, resource allocation, and the skill levels required to meet patient needs during this critical period.

4 Hypothesis

The study hypothesizes that healthcare in Bangladesh is substandard due to significant skill gaps, limited training, and insufficient education among nurses. This situation is further exacerbated by weak governance within the healthcare sector, which hampers improvements in healthcare quality.

5 Objective of the study

The aim of this study is to examine the systemic inequities in healthcare access experienced by economically disadvantaged patients, with a particular focus on the increased challenges during the COVID-19 pandemic. Such disparities are widespread in many low-income countries, and Bangladesh is no exception.

The nursing profession plays a crucial role in healthcare delivery, yet in Bangladesh, nursing is often perceived as a burdensome profession, influenced by cultural, religious, and socio-economic factors that further reduce its appeal. This perception has contributed to a shortage of skilled nursing staff, which has negatively affected the healthcare system's capacity to respond effectively during crises like the COVID-19 pandemic. As reported by the Bangladesh Nursing and Midwifery Council, there were 83,029 registered nurses and midwives as of May 2022, highlighting the ongoing gap in specialized nursing skills.

6 Study context

The study context focuses on the pervasive inequality in healthcare access that disproportionately affects low-income and disabled patients in Bangladesh. COVID-19 has amplified these disparities, with poorer patients often facing reduced access to necessary healthcare services. This situation is compounded by a critical shortage of skilled healthcare workers, especially given the World Health Organization's standards for Sustainable Development Goals, which highlight the need for a well-balanced and equitably distributed healthcare workforce.

Bangladesh's healthcare financing is primarily out-of-pocket (OOP), which imposes a significant financial burden on low-income households. OOP expenses accounted for 67% of total healthcare spending in 2015, up from 55.9% in 1997 (27). This high OOP spending has resulted from a gradual decline in government healthcare funding, from 22 to 18% between 2005 and 2016 (28). Studies indicate that this financial model negatively affects low-income households, often leading to a cycle of worsening health and income status.

The study highlights the additional challenges faced by disabled patients impacted by COVID-19. These individuals face considerable obstacles in accessing the labor market, as well as essential healthcare services. Due to systemic barriers, they are often excluded from paid employment, social support networks, and health awareness initiatives, which intensifies their vulnerability in times of health crises. Addressing these issues requires policy reform aimed at improving healthcare accessibility and affordability for all citizens, particularly those most disadvantaged.

7 Analysis of primary data

Figures 1–13 analyze 56 patients and stakeholders' opinions (**Figures 14–22**): the voices of patients have been expressed in the boxes. All names of patients are pseudo-names. Several respondents were interviewed via telephone, with many coming from underprivileged and remote areas in Bagerhat, Barguna, and Satkhira, Bangladesh.

Observations from hospital heads and senior staff nurses were gathered from prominent hospitals in Dhaka, Chittagong, and Rajshahi.

Figure 1 illustrates the responses of 49 respondents who are persons suffering from Corona and the majority also suffer from some form of disability. The extent of financial problems faced while meeting expenses related to healthcare during the COVID-19 period, was rated on a scale of 1 to 10, with 10 denoting greatest difficulty. **Figure 1** reveals that 30.6% felt that they faced the greatest financial difficulty while meeting medical expenses incurred during COVID-19. All respondents unanimously agreed that healthcare expenses posed a significant challenge. Nearly one-third of them stated

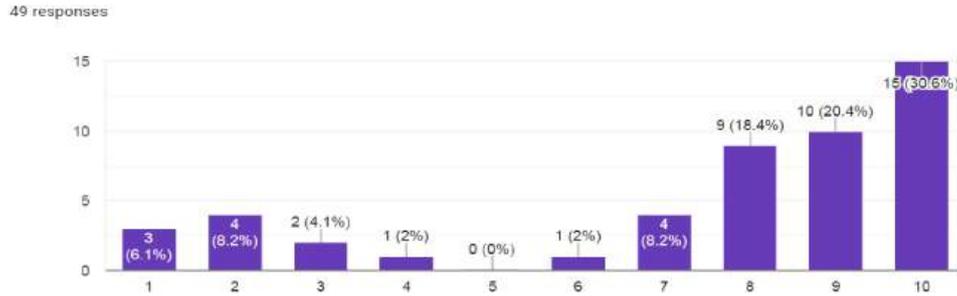


FIGURE 1 | Please rank the level of problems you had in meeting expenditure for health service.

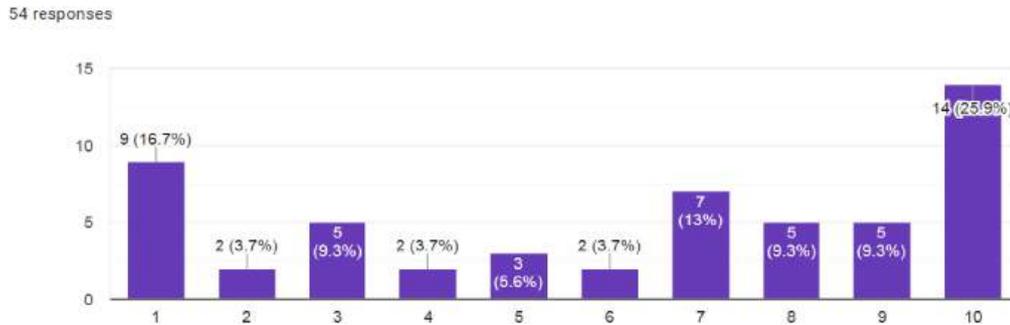


FIGURE 2 | If you are a person with disability, please rank the level of problem you suffer, on a scale given below:

that health-related costs were prohibitive, as they often lack sufficient resources.

Box 1 depicts the distressed voice of a patient (Figure 1).

Box 1

Healthcare service is so expensive. Doctor. Hospital staff's behaviour is not friendly towards poor persons. There is little care and no oxygen. People have to die here. (Female aged 56 in Barguna).

Figure 2 exhibits the level of suffering in accessing healthcare that patients experienced due to their disability, gauged on a scale of 1 to 10, with 10 being the greatest difficulty. Out of 54 responses, not a single respondent said that they did not suffer. Around 16.7% said that their suffering was minimal on the scale. However, approximately one-third (25.6%) of respondents reported experiencing significant difficulties in accessing healthcare during the COVID-19 pandemic. Box 2 expresses the expense incurred by them (Figure 2). Physical distancing was not possible, as delineated in Box 3.

Box 2: The hospital doctor and staff were rude and misbehaved; they spoke to me very disrespectfully. Sometimes, staff even took bribes from us. The costs of travel and the long wait for a service provider were also a problem. There was negligence from the doctor, and I did not receive proper treatment. Doctors were often unavailable during their duty hours. It was difficult for me to move around, and despite having a high fever, I couldn't get admitted due to a shortage of beds. (Male, 20 years old from Barguna)

I have cerebral palsy and require physical therapy, speech therapy, and muscle exercises. I also experience pain in my legs, for which I need ongoing medical care. It is very expensive, and my parents have to accompany me everywhere. (13-year-old girl from Barguna)

Figure 3 displays the responses to the question of whether respondents believed that individuals with disabilities who contracted COVID-19 faced more challenges in accessing healthcare compared to the general patient population. The

56 responses

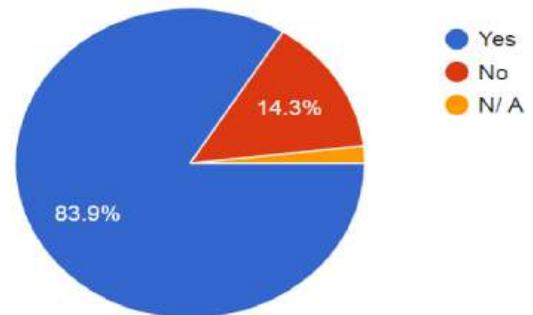


FIGURE 3 | Do you believe that individuals with disabilities who contracted COVID-19 faced more challenges in accessing healthcare compared to the general patient population during the pandemic?

majority, 83.9% felt that the COVID-19 period struggle to access healthcare, transportation, caregiver, resources etc. onerous. Out of 56 responses, 14.3% did not find it too difficult, while 4% could not give an answer to this question (Figure 3).

Box 3. I had to take a taxi to the hospital, which was expensive. I had to bring my son with me to assist. The COVID-19 infection made it difficult to stay in a closed vehicle, and at the hospital, we had to remain in isolation. (Male patient from Charfasson)

I needed to be accompanied and transported in an ambulance, and the cost was very high. (Female COVID-19 patient in Dhaka)

Figure 4 depicts 56 responses on whether a dearth of education and wealth, creates challenges for the ill and those suffering physical health problems. Almost a

56 responses

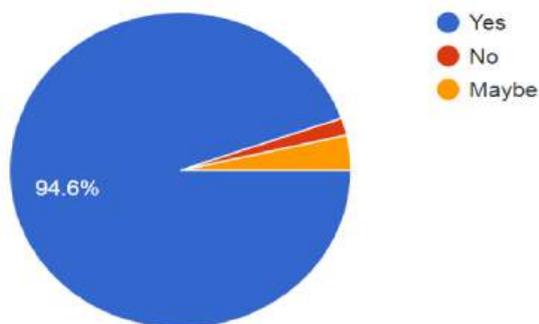


FIGURE 4 | Does a lack of education and income (financial resources) make individuals with disabilities more vulnerable?

56 responses

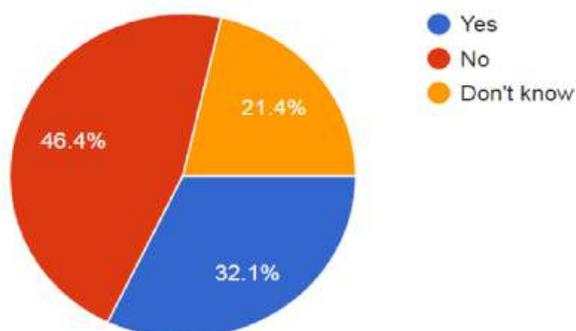


FIGURE 5 | Service by specially trained doctors and nurses capable of handling patients with disability.

hundred percent, i.e., 94.6% responded in the affirmative. Approximately 7% said that perhaps it could adversely affect them, while around 3% or less said that it does not. Box 4 below, recounts the problem of being underprivileged and female (Figure 4).

Box 4.

We are very poor and getting high quality treatment for my ailment is almost impossible for our family. Besides the cost of medicine and diagnosis there are incidental financial costs that they cannot afford. During my visit to the doctor either of my parents, or sometimes both have to accompany me, which becomes prohibitive. (young girl aged 16 years, Bagerhat)

I am disabled and dependent on assistance from another adult during my hospital trips. My challenging situation is exacerbated: often I am unable to get service as I cannot express myself. All the time I require assistance and I am often humiliated. I would rather not take medical treatment (63 year old lady ,Sathkira).

Figure 5 is a graph showing the type and level of diagnostic checks accessed by 56 patients with disability. This was an important question as negligible health providers can provide specialized physicians and nurses for caring ill persons who have physical challenges. Around one-third (32.1%) of respondents confirmed that they received assistance from trained doctors and nurses, while 46.4% disagreed. Some patients were unsure whether their caregivers were trained,

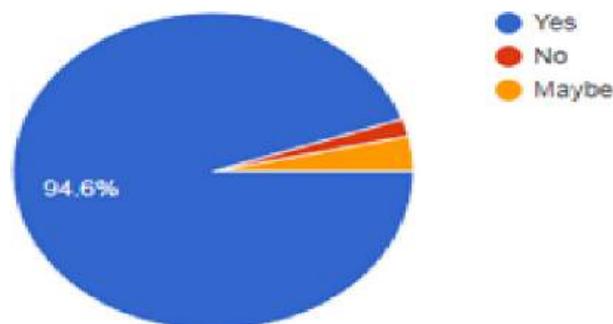


FIGURE 6 | Does lack of information and lack of friends (not being connected to know personnel in Media care), make patients with disability more vulnerable?

and these responses may be included in the 32.1% who answered affirmatively, as some untrained nurses mentioned that they still did their best to care for patients. Reports from the field, particularly from leaders of specialized organizations for individuals with disabilities, indicated that there were no doctors or nurses specifically trained to handle patients with disabilities. The Skills Gap of Nursing Survey in Bangladesh for LMS/SEIP (29) also highlighted similar findings (Figure 5).

Figure 6 presents responses from 56 respondents. The overwhelming majority 94.6% expressed their vulnerability on account of their lack of knowledge and connections. Approximately 7% said that maybe, while around 3% or less denied it (Figure 6).

Fifty-six respondents evaluated the quality of healthcare services received by COVID-19 patients, as shown in Figure 7. The rating scale ranged from 1 to 10, with 1 representing the worst service and 10 representing excellent service. A significant portion, 28%, rated their service as very poor, followed by 16.1% who considered the service acceptable. Only 3.6% rated their service as excellent. Around one-third (41%) believed the service was just passable. Box 5 below highlights the trauma experienced by patients who were mistreated (Figure 7).

Box 5

Sufia (a pseudonym) traveled from Charfasson to an eye hospital in Dhaka with her youngest daughter, where they waited for an appointment. Sufia sadly shared her experience: "After the eye specialist examined me, he became rude and told me that I was destined to go blind sooner or later—treatment was unnecessary. I am subservient to men, and I know that if my husband had been with me, the doctor's words would not have been so harsh. We are poor, and as a result, we are deprived of rights and a voice. Being poor is a curse, and being a woman makes it even worse. My daughters must study and become independent. My husband took medicine for COVID-19 from the pharmacist, but we will not seek treatment for my own infection. We may die, but at least that would be a release."

Figure 7 shows whether healthcare centers had accessible structures (such as entrances and toilets) for patients with disabilities. Many respondents, particularly those who are blind, were unable to describe the structural environment of the hospitals they visited. About a fifth, 16.1% of the respondents affirmed the existence of enabling structures, while 53.6% said that there was the absence of easy entrant. About a third of the interviewees, 30.4% were unsure, and responded maybe (Figure 8).

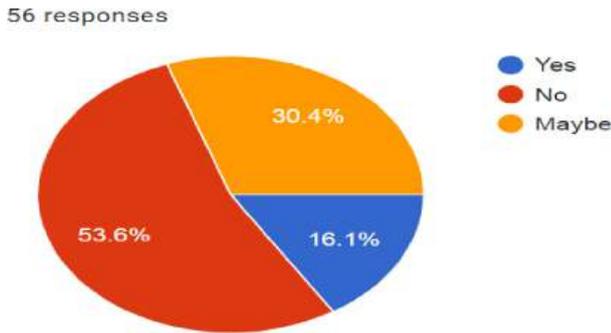


FIGURE 7 | Healthcare centers have enabling structures (access, restroom) for patients with disability.

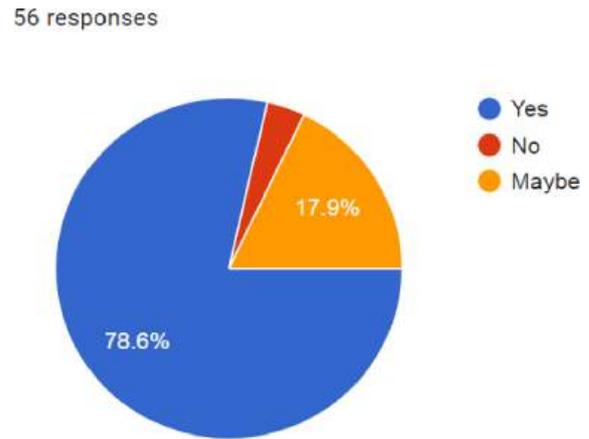


FIGURE 9 | Has the COVID-19 infection worsened the challenges faced by patients with disabilities more than those experienced by able-bodied patients?

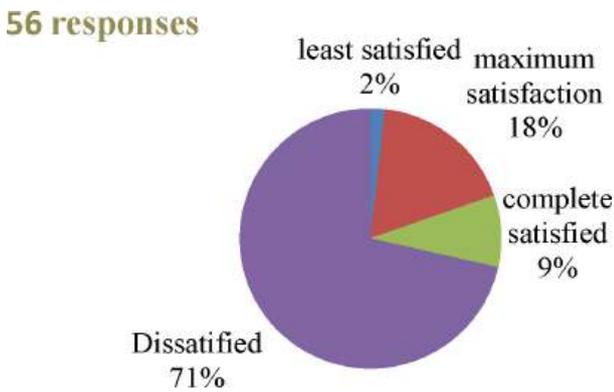


FIGURE 8 | Do you believe that patients and individuals with disabilities were satisfied with the healthcare services they received during the COVID-19 pandemic? Please rate their satisfaction on a scale of 1 to 10, with 1 being very dissatisfied and 10 being very satisfied.

Figure 8 shows the level of satisfaction of 56 respondents with the service provided during COVID-19. The responses were scaled from 1 to 10, with 1 being the least satisfied and 10 denoting maximum satisfaction. The majority were dissatisfied (Boxes 6 and 7), with only 9% articulating complete satisfaction at the time of COVID-19 (**Figure 8**).

Box 6

I use a crutch to walk. I am lame and sick. I could not access health care for my legs. Health service now is only for flu. Now I am in capacitated. (a female respondent/ patient with disability in Satkhira).

Just like any other person, people with hearing impairment also need health service: they get sick, and due to lack of communication they remain unaware about how to protect themselves, which makes them more vulnerable to infectious diseases like COVID-19 (a Nurse in Dhaka).

Respondents were asked whether COVID-19 exacerbated the challenged health seekers, more than the normal patients. **Figure 9** shows that the majority, 78.6%, said that it did not intensify illnesses, at the same time as 17.9% said maybe, it did. Very few, 3.5%, disagreed with the proposition (**Figure 9**).

Box : 07

Just like any other person, people with hearing impairment also need health service: they get sick, and due to lack of communication they remain unaware about how to protect themselves, which makes them more vulnerable to infectious diseases like COVID-19 (a Nurse in Dhaka).

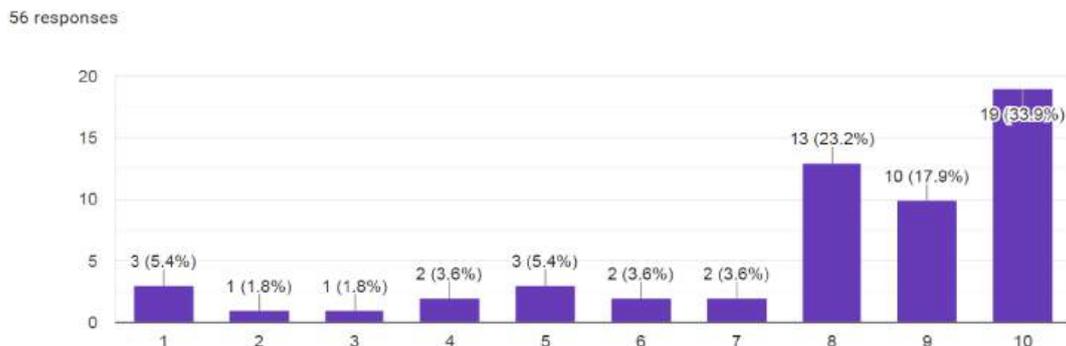


FIGURE 10 | Please rank the level of challenges faced by patients and individuals with disabilities on a scale of 1 to 10, with 1 being minimal problems and 10 being severe problems.

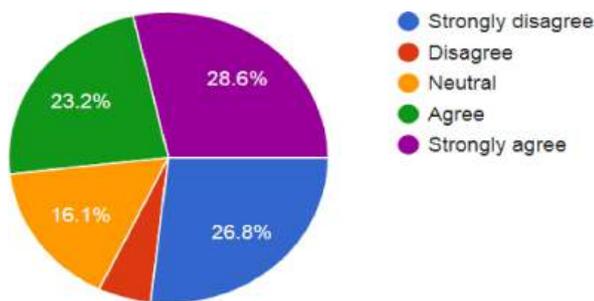


FIGURE 11 | Do you agree that the after-effects of COVID-19 vary from severe to mild, with mental illness occurring in about one in five patients?

In **Figure 10**, all the respondents ranked the extent of constraints faced by them. They ranked their answers on a scale of 1 to 10, with 1 being the least problematic and 10 denoting maximum problems. One-third reported that they faced the maximum problems, while 17.9 and 23.2% opined that their tribulations were on a scale of 9 and 8, respectively.

They were queried about the after-effects of Corona and whether the range is from high to low, with a probability of mental illness for one person in five who are infected. About a third, 28.3% agreed strongly while 23.2% were in agreement and 16.1% wanted to remain neutral. About 26.8% strongly disagreed while 5.4% of the respondents could not answer the question (**Figure 11**).

In **Figure 12** respondents were asked to compare patients, male and female, with a disability on a scale of 1 to 10. Here, 1 denotes the least hardship while 10 denotes the maximum hardship.

Figure 13 summarizes the responses and it shows that 26.8% chose maximum hardship, and opined that disabled woman experienced greater suffering than their male counterparts. Almost the highest level was chosen by 32.1% while level 8 was accepted by 17.9%, followed by level 7, which was chosen by 5.4%. 12.5% of the respondents were of the opinion that there is no difference between men’s and women’s hardship (**Figure 13**).

This analysis is based on data gathered from a structured questionnaire distributed to fifteen key informants who lead management in hospitals and healthcare units. The focus was on whether individuals with disabilities are able to access these services. Among the prominent and high-cost hospitals included in the survey, some respondents acknowledged that individuals with disabilities may attempt to access care, but noted that the high costs often create an imperceptible barrier, making access difficult for many (Box 7).

Figure 14 outlines the responses of fifteen participants regarding access to healthcare for individuals with disabilities at their hospitals. The majority, 80%, confirmed that patients with disabilities do access healthcare services, while 6.7% disagreed, and 13.3% were uncertain, responding with “maybe” (**Figure 14**: refer to endnote).

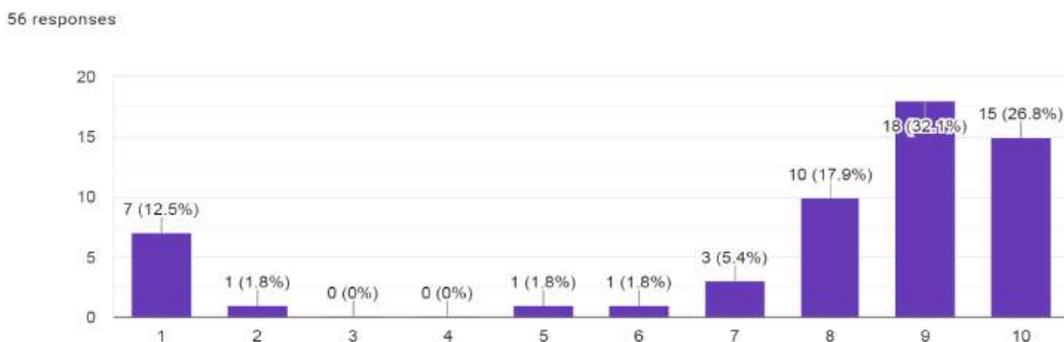


FIGURE 12 | Female patients with a disability, suffer much more hardship than male patients with a disability, on a scale of 1 to 10. Note: number of respondents 56.

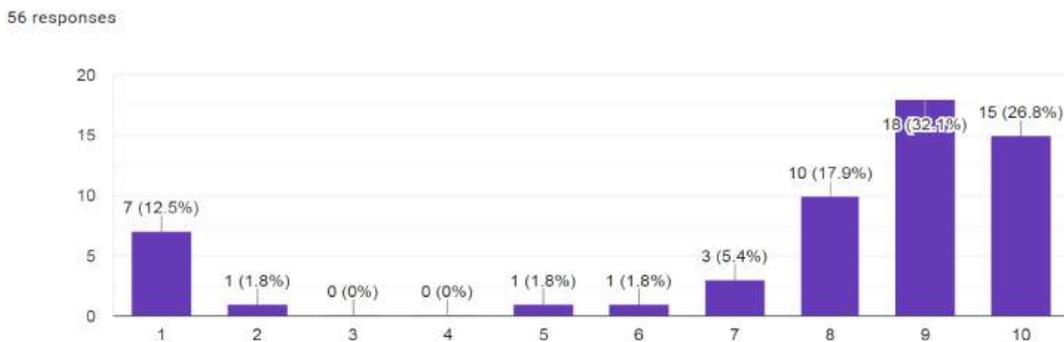


FIGURE 13 | Maximum hardship: woman endure additional hardship compared to their male counterparts on a scale of 1 to 10. Note: number of respondents 56.

8 Analysis of Discussion with Key Stakeholders

This analysis comprises information that has been collected from a structured questionnaire administered to fifteen key informants who head management in hospitals and healthcare units. The question posed to administrators and nurses of renowned hospitals was whether persons with disabilities come to access their services. As some of the most reputed and expensive hospitals were included in this survey, some answered maybe patients with disability do access their service, but mostly the costs are prohibitive and hence present an invisible barrier to access. Many poor patients are unaware about the services available in the renowned hospitals. They and their attendants and well-wishers avoid using these services as price is an important factor here, opined a nurse of Evercare hospital. It makes access to service prohibitive for needy individuals. The figure below illustrates the phenomenon of patient's access to hospital service.

The pie chart illustrates the responses from 15 key stakeholders (hospital heads in Dhaka) regarding whether poor patients use their services.

A significant majority (10 out of 15 respondents) confirmed that poor patients do access their hospitals. This suggests that many large hospitals offer some level of service to financially disadvantaged individuals, either through government initiatives, charitable programs, or corporate social responsibility (CSR) activities. Three stakeholders indicated that poor patients do not use their hospitals. This raises concerns about the accessibility, affordability, or perceived exclusivity of these healthcare institutions.

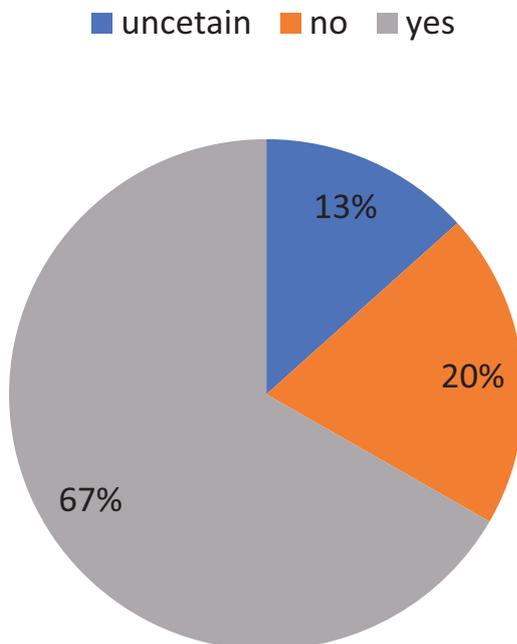


FIGURE 14 | Responses from fifteen heads of hospitals in Dhaka regarding the use of their services by poor patients.

Two respondents (heads of organization) were uncertain, indicating a possible lack of clear data on the socio-economic background of their patients.

With regard to perceived social discrimination, some patients might feel unwelcome or intimidated in high-end hospitals, leading to a psychological barrier in seeking care from such institutions. Also, limited availability of free services seems to be a deterrent because while some large hospitals offer charity programs, these are often limited in scope and capacity, making it difficult for poor patients to benefit from them consistently.

The findings indicate that while a majority of large hospitals in Dhaka serve poor patients, a notable portion either do not or are uncertain about the extent of their outreach. Addressing cost barriers, improving awareness, and enhancing government and NGO collaborations could help increase accessibility for the underprivileged population.

Figure 15 analyzes the responses to the question regarding the percentage of total patients each month who are individuals with disabilities and have utilized hospital services. The majority of hospitals reported referring these patients to other facilities, such as Shishu Hospital, Dhaka Medical, or Chittagong Medical, citing a lack of caregivers trained to handle patients with disabilities, are Shishu Hospital and Chittagong Medical Hospital. The rest have reported 5% usage and among these are Birdem, BSMMU, Bangladesh Medical College and Hospital, Ibn-Sina Hospital, Kurmitola Hospital, and Holy Family Hospital. The latter two were Corona-dedicated hospitals in 2020. Box 8 has information from Service providers that shows clearly how stigmatized patients have to adjust to the changing policies of hospitals and how services have suffered for underprivileged patients (**Figure 15**).

Box 8

I do not know the fate of Corona patients because my hospital does not admit patients with disability or Corona disease. In case patient is a child with disability, we refer to Shishu Hospital in Agargaon (Senior Staff Nurse of Crescent Hospital, Uttara)

Box 9

Only the entrance is enabling but toilets are usual, with provision of commode. Most of the time, however, we are referred to other hospitals. We have found that majority of the hospitals lack trained nurses and doctors who can treat and manage patients with some form of disability. We have been lobbying to have more hospitals with trained staff (59 year old Corona patient, working in CDD in Savar, Dhaka)

Figure 16 presents the responses to the question of whether disabled patients faced more challenges than physically and mentally able patients when accessing healthcare during the COVID-19 period (Box 9). The majority, 80%, agreed, while 13.3% responded with “maybe” and 6.7% disagreed. Boxes 10, 11 illustrate the difficulties faced by these patients (**Figure 16**).

15 responses

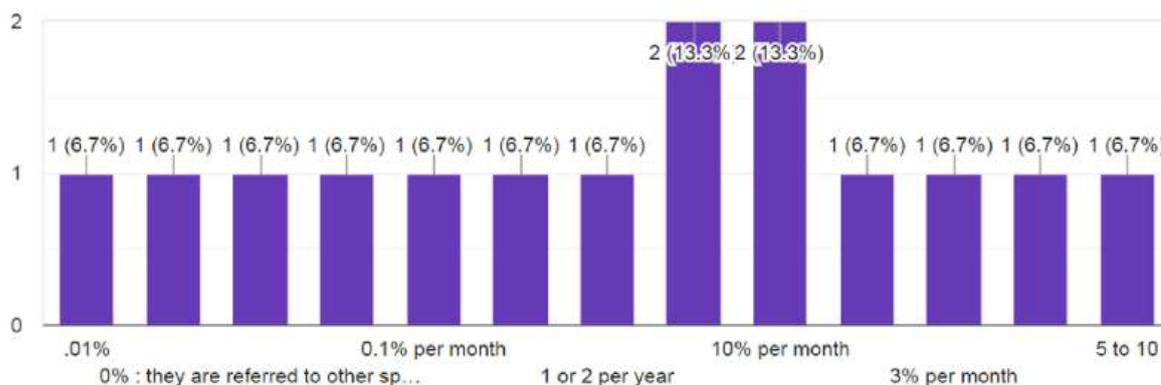


FIGURE 15 | What percentage of the total patients (per month or year-please state), were disabled patients (actual or rough estimate)?

15 responses

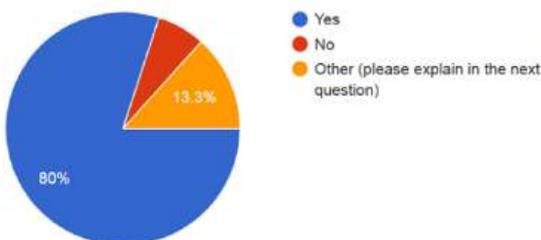


FIGURE 16 | Do you think that disabled patients faced more challenges (compared to physically and mentally able patients), when accessing healthcare, during this COVID-19 period?

15 responses

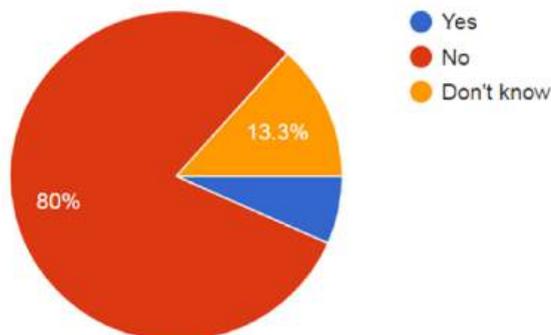


FIGURE 17 | Do you have specially trained doctors and nurses, who are able to handle disabled persons?

Box 10

"I suffer from Cerebral Palsy and often require physical therapy, speech therapy, and muscle exercises. These services were unavailable during the COVID-19 pandemic."
— Young girl from Bagerhat, Chaperoned.

The respondents answered in almost similar vein when they were questioned on the presence of doctors and nurses in their hospitals who were capable of handling patients with disability. In **Figure 17**, the majority of respondent, around 80% answered negatively, while 13.3% said “don’t know.” About 6.7% said “yes.” **Box 11** shows the policies followed by specialized hospitals (**Figure 17**).

Box 11

"Senior doctors determine whether disabled patients should be admitted to the Neuro Science Hospital. Almost all patients with disabilities are referred to other hospitals. They are only kept here if critical brain issues arise in patients with disabilities."
— Senior Staff Nurse, Neuro Science Hospital, Agargaon.

Figure 18 presents information on the level of healthcare received by disabled COVID-19 patients in these hospitals. Respondents were asked to rate the quality of care on a scale from 1 to 10, with 1 representing the least quality and 10 the highest. Neither extreme scores (1 or 10) were

selected, as no hospital workers were willing to characterize the care as either exceptionally poor or excellent. Instead, 20% of caregivers chose level 8, while 33.3% selected level 9. Four respondents rated the care at levels 5 or 6, reflecting a preference for describing the care as average. **Box 12** details the experience of a patient in Chittagong (**Figure 18**).

Box 12

I have a bad experience with a government hospital because their behavior is not friendly towards a disabled person (Patient who suffered from Corona in Chittagong)

Majority in **Figure 19**. It has been confirmed that COVID-19 infection aggravated the problems of disabled patients more than those of able-bodied patients. A total of 86.7% affirmed this, while 13.3% responded with “maybe.” **Box 13** explains why COVID-19 proved to be a greater challenge for patients with disabilities (**Figure 19**).

15 responses

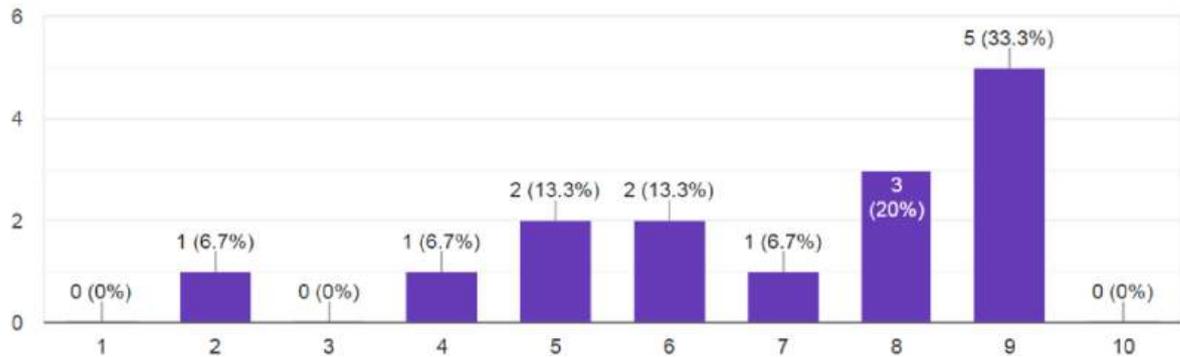


FIGURE 18 | What is the level of healthcare that disabled Corona patients receive, in your hospital?

15 responses

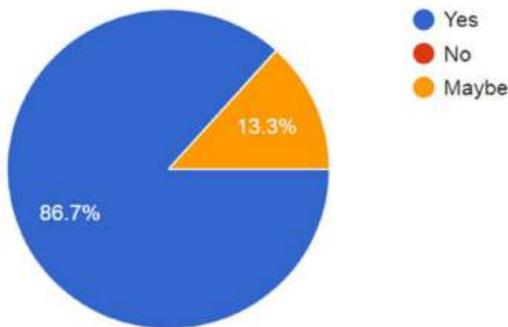


FIGURE 19 | Has Corona infection aggravated the problems of disabled patients, more than the able patients?

Box 13

Most of the patients who suffer from physical disabilities; deaf or blind, all require companions, sighted chaperons to guide them. (Head of CDD)

Figure 20 ranks the magnitude of challenges confronting disabled women health seekers, on a scale of 1 to 10. Opinions of health seekers were solicited on a scale of 1 to 10, with 1 being least problematic and 10 being extreme problems. Levels 3 and 5, which denote average barriers, were identified by 6.7% of the respondents. Majority of answers were close to 7 (26.7%), 8 (26.7%), and 9 (20%) (Figure 20).

Figure 21 shows patients' satisfaction with the health services, graded on a scale of 1 to 10. The average scores 4 and 5 showing the passable level of service were not chosen. Sub-standard provision symbolized by level 3 was chosen by 20% of the patients, who believed that they did not have the skills for managing immobilized patients and often referred them to other, more devoted institutions. Levels 6 and 7 were selected by 13.3% of patients respectively. Levels 8 (26.7%),

9 (6.7%), and 10 (20%) were chosen by 53.4%, which is, a sizeable number of respondents (Figure 21).

Most hospital administrators and experienced personnel, in spite of the lack of special specialized skills of their doctors and nurses, opted for higher performance levels with reference to their own assistance for patients suffering from disability. This underscores the common gap in understanding such patient's needs (Figure 22).

Another primary data collection exercise was administered to inform the Corona-19 situation; in March and November 2020. This was in the form of 32 qualitative key informant interviews. The survey was carried out among a cross-section of hospital heads in Dhaka and Chittagong, the two largest cities in Bangladesh. Solicitations were on the state of preparedness. All hospitals, especially the large hospitals, said that they have had awareness building among their nurses and doctors through training. However, the secondary-level hospitals and particularly the lower-tier of secondary hospitals were completely unaware during March 2020. Large hospital nurses and doctors were acquainted with only the theoretical aspects but it was more pertinent to understand whether there was physical preparation especially with regard to screening devices to check temperatures of patients and visitors as well as staff, keeping sanitizers, PPE, testing service, ICU and adequate disinfecting material, etc. Regarding preparedness, almost all hospitals agreed with their inability to counter the Pandemic. In fact, in April and May 2020, most of the largest hospitals refused to admit patients with symptoms of coronavirus infection. Following two months of procrastination, each of these leading hospitals established small units, with approximately 15 to 25 beds, specifically designated for patients who tested positive for COVID-19. In these hospitals, persons with disability were practically nil, and this was corroborated by the majority of the CEOs of hospitals and Senior Nurses.

Most of those who were interviewed were unanimous in conceding that nursing skills of empathy, counseling, efficient handling of patients, good manners, personal skills, etc., were lacking among the largest component of the

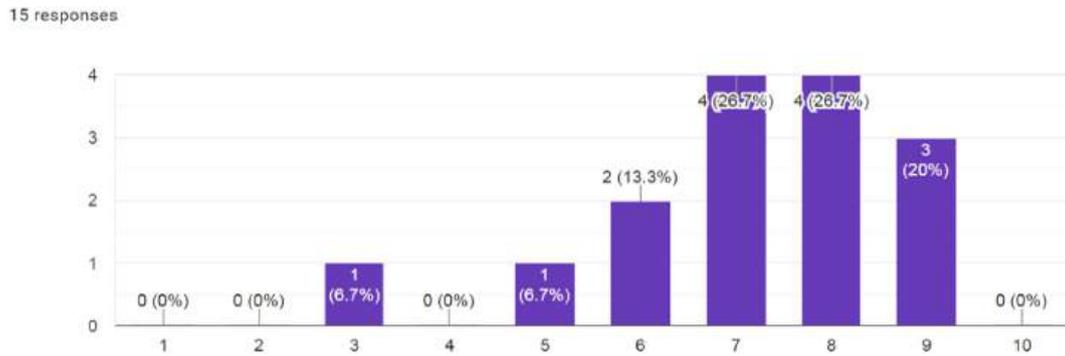


FIGURE 20 | Ranking the level of problems faced by disabled female patients: scale of 1 to 10.

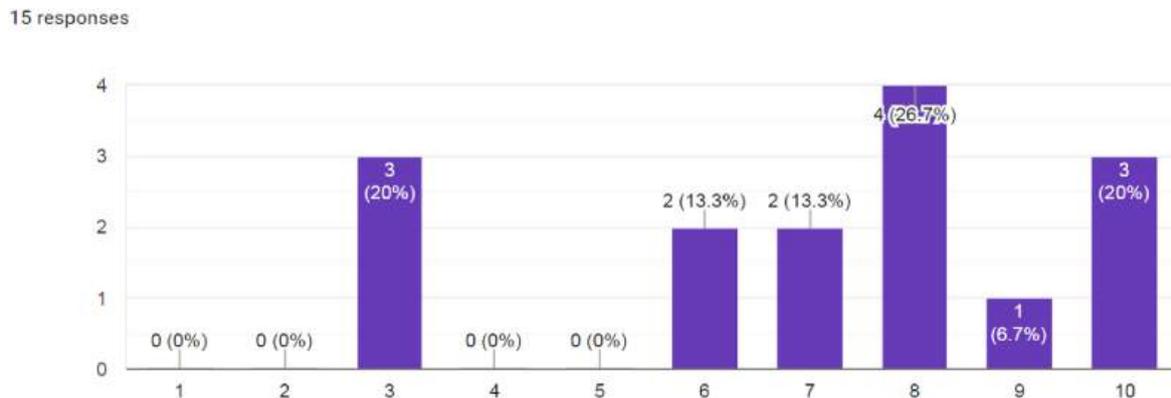


FIGURE 21 | Do you think disabled patients were satisfied with the service in your hospital? Please rank on a scale of 1 to 10.

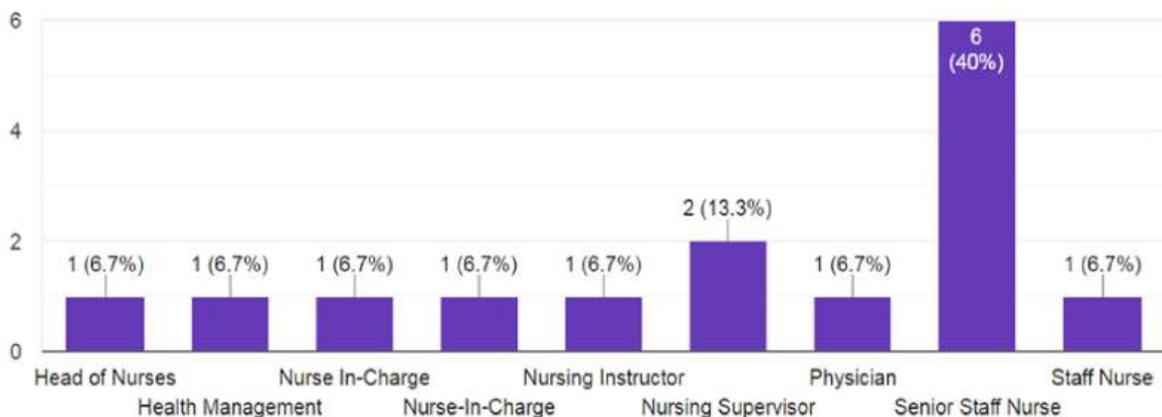


FIGURE 22 | Professional level of nurses giving service in hospitals of Dhaka.

nurses. They conceded that their training curriculum was not designed for managing complicated patients, and especially those with a disability; Future requirements for specialization could be concentrated into four wide segments. The focus is on emergency treatment, infectious disease control and management, chronic systemic disease care, and geriatric services. As a result, priority is given to patients who require the highest level of diagnostic support and intensive care (30). In Bangladesh, women have traditionally been marginalized in a culturally restrictive environment (30).

For poor patients in public hospitals, e.g., Norsingdi Sadar, Mymensingh, Comilla, Pongu, and similar hospitals, the cost of bed is free. However, it is almost impossible to get access to a bed as the pressure is tremendous. Patients queued for days without access to beds or ventilators in the months of March to August 2021. The National Institute of Cancer Research and Hospital (NICRH) charges Taka. 1,500–2,000 (Normal bed) and 7,000–8,000 (Intensive Care Unit: ICU bed), per day. This is somewhat affordable for the upper middle-income groups. With this Pandemic, however, many have lost a steady source of income as jobs have been cut and

workers retrenched and minimized to cut losses. Out of six hospitals surveyed in the private sector (secondary category) like Crescent, Bashundhara, Addin, etc., the average cost per day is Taka 2,500–3,000 per day (Normal bed), and 7,000–10,000 per day (ICU bed). The tertiary-level hospitals like Anwer-Khan Modern, Square, United, etc. are charging Taka 7,000–11,000 (Normal bed) and Taka 20,000–60,000 (ICU bed) per day. In critical cases they have even charged Taka 70,000 to 80,000 per day. The cost of PPE for nurses and bearers for each trip to the patient has been separately charged at 30 takas (per day costs of such trips have been quite high for patients who are critical) with the inclusion of informal payments of tips to nurses and bearers. Each injection has cost Taka 1 lac, fifty thousand. Patients, who were treated in Tertiary hospitals, spent Taka 18 to 24 lacs after suffering from Corona for nearly a month.

In a Specialized hospital, a bed in ICU costs Taka 10,500 per day; while a cabin costs Taka 7,500 to Taka 16,500 plus all other charges mentioned above, will apply. For Corona patients' ICU begins from Taka 11,000 with additional service fees, Doctor's fees, and other charges, which may go up from Taka 60,000 to Taka 70,000 per day. Beds for Corona patients in the wards begin with Taka 6,600 plus a service fee, while cabin for Corona patients, albeit the most economically priced are in the range of Taka 8,500 or Taka 10,000 with an additional service fee of Taka 1,600. Some middle-income couples have spent all their savings of Taka 10 to 20 lacs for treatment of Corona illness. Corona treatment for individuals has been exorbitant, and despite civil society cautions hospitals have reaped substantial profits.

9 Limitation of this study

This research could have been based on a bigger sample size, given the magnitude of this Pandemic but contagion precluded attempts at scaling up.

10 Entry points for care

The COVID-19 Pandemic is especially poignant for poor persons and patients with disability. In a cultural milieu where a stigma exists, their survival is compromised.

Measures need to be institutionalized to formally guarantee that people with physical or individuals with mental limitations can be educated about their rights to access healthcare, water, and sanitation facilities. They require awareness of public health information and the services they need. This is crucial, as those with such limitations are often entirely dependent on caregivers. The reasons for this are fundamental.

Individuals with disabilities may face increased challenges due to COVID-19, as essential hygiene measures, such as frequent hand washing, may not be feasible for them to

implement. If they use wheelchairs, hand-basins might be on a higher level; sinks or water pumps may be actually unreachable; or a person may have physical difficulty rubbing both hands meticulously. Persons with a disability might have limited capacity to understand public health safeguards. Depending on their overall health, underlying vulnerabilities, or co-morbidities, individuals with disabilities may experience more severe effects if they contract the virus. Additionally, there is an increased risk for them due to their inability to seek care independently when infected.

COVID-19 has the effect of aggravating co-morbidity; primarily for those suffering from poorer respiratory conditions, low immune system, heart ailment, or diabetes. Individuals with disabilities face various barriers to accessing medical care. The challenges experienced by people with disability can be minimized if key policies create an enabling scenario. Due to the COVID-19 pandemic, women were unable to perform their exercises, or carry out daily activities properly in the absence of caregivers.

Poor patients face a distinct set of challenges, which are further intensified when they contract COVID-19.

11 Conclusion

Since the onset of COVID-19, chronic patients requiring consistent medical attention—such as those with asthma, myocardial infarctions (MI), chronic renal failure (CRF), and cancer—have faced severe disruptions in care. As healthcare systems focused resources on COVID-19, non-COVID patients often endured long waits for essential tests and treatments, with tragic outcomes reported by medical professionals as many patients succumbed to preventable complications (31).

For individuals with COVID-19 and disabilities, the pandemic has highlighted and exacerbated financial and social dependencies. These populations need additional resources, including financial support, accessible infrastructure, specialized care, and basic supplies like free masks and sanitizers. However, resources for these needs remain scarce, leaving these vulnerable groups with few practical options to manage daily life and health effectively (32).

Bangladesh's policymakers must address the severe shortage in healthcare human resources, characterized by an imbalanced skills mix and inequitable distribution of qualified providers. Strengthening the health system to replace high out-of-pocket expenses with a pro-poor, equitable healthcare model is critical to reducing the income drain caused by illness (3). Nurses remain in critically short supply, and people with disabilities frequently encounter inadequate healthcare services, leading to lower quality of life and increased health risks.

The limited access women have to healthcare, employment, income, and education is largely rooted

in deep-seated patriarchal structures, which continue to amplify social disparities. COVID-19 has worsened these issues, highlighting the need for systemic reform to provide sustainable, inclusive healthcare solutions that move beyond entrenched inequalities. Women with disabilities face particularly acute risks, experiencing greater poverty, discrimination, and neglect during health crises, including pandemics (12). As knowledge about COVID-19 evolved, it became clear that many people succumbed to the virus early on due to delayed public awareness and preparedness.

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