COVID-19 related social stigma in management of non-communicable diseases (NCDs) care in Bangladesh: A scoping review

Sawkia Afroz, Abu Hasanat Md. Kishowar Hossain, Sadiya Afrin

Abstract

Since 2021 Bangladesh is celebrating birth centenary of the Father of the Nation, Bangabandhu Sheikh Mujibur Rahman and the Golden Jubilee of the Independent of Bangladesh, the country is dedicated to eradicate all forms of social stigma, inequality in access to healthcare facilities and strengthen the health system through quality stewardship. While under Sustainable Development Goal 3 (target 3.4) along with international community Bangladesh is committed to eradicate one third of premature deaths due to NCDs, the onset of COVID-19 pandemic and the stigma caused by it are creating challenges for the patients of non-communicable diseases (NCDs) to get access to health care services in Bangladesh. This paper aims to identify the role of COVID-19 related stigma to NCDs continuum in Bangladesh. Stigma has been identified as a 'secret' burden of disease that put impact on physical and psychosocial health, health systems, policies related to health promotion.In Bangladesh, patients diagnosed with COVID-19 are stigmatized and the role of COVID-19 related stigma in the provision of NCDs care is not largely understood. In this study, a scoping literature review of newspaper reporting, peer reviewed and grey literature was implemented to identify the role of COVID-19 stigma in the NCDs care continuum in Bangladesh. Twenty two articles met the inclusion criteria of the study. Findings suggest that fear of being infected with coronavirus pandemic, internalized embarrassment, and negative attitude of the health service providers negatively influence NCDs care continuum during COVID-19. Therefore, integrated NCDs and COVID-19 treatment provided by the health facilities, behavior change communication program, good governance and proper management of healthcare system can reduce the stigmatization of COVID-19 and can ensure efficient NCDs care continuum for patients.

Keywords : COVID-19 management, Stigma, Non Communicable Diseases (NCDs), Health Management, Sustainable Development Goals, Bangladesh.

1. Introduction

The novel coronavirus disease 2019 (COVID-19) since its inception in December 2019 in Wuhan, China continues to give rise to a wide ranging global burden of morbidity and mortality(Huang et al., 2020). Meanwhile,COVID-19 is evolving in Bangladesh as a fear of stigma and discrimination though eight phases: phase of false safety, formalizing stigma, community gaining "stigma power", awareness of proximity of the disease, community transmission and the liquefaction of fear, the semiological disaster, phase of mistrust and class-based fear and panic(Rahman, 2020). Stigma and discrimination is a prime social determinant of health which navigates not only morbidity, mortality but also health inequalities (WHO, 2001).

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Globally, stigma is recognized as a major barrier to health care seeking behavior, hindering the ability of health facilities to provide care and treatment (Weiss, 2008) and Bangladesh is no such difference. In Bangladesh, COVID-19 related stigma, in particular, has been cited as one of the most enduring barriers to cause public panic, hatred, bullying and fear to undergo corona test which ultimately resulted in lower test seeking behavior (Ahasan, 2020 ; Anwar et al., 2020; Hasan, 2020; Hossain et al., 2020; Kamal, 2020; Shammi et al., 2020). Another important factors are lack of knowledge, rumors and false information regarding COVID-19 are the prime reasons behind such stigmatization (Hasan, 2020). While the ongoing COVID-19 and stigma caused, by this pandemic, are the major concerns of international community,non-communicable diseases care (NCDs)continuum (health care seeking attitude, prevention, diagnosis, engagement in care, and adherence to treatment) is at the highest risk of negligence which, is contributing to the global burden of disease as well as health inequalities, with consequentialrise in unmet needs for treatment in developing countries like Bangladesh(Anwar et al., 2020; Dyer, 2020; Haider, 2020; WHO, 2020). Conversely, under Sustainable Development Goal 3 (target 3.4), the international community has been committed to end one third of premature deaths due to NCDs (chronic pulmonary disease, cancer, cardiovascular disease, diabetes, depression and anxiety) through prevention and treatment and promote mental health and wellbeing(WHO, 2017). Throughout this pandemic period mass media, different journal articles and reports played highly important role by covering large number of topicson various health issues caused by COVID-19 (Dyer, 2020). Thus, in order to fulfill objective of this study the authors used COVID-19 related stigma's impact on NCDs care continuum in Bangladesh.

1.2 Significance of the study

The pre-existing non-communicable diseases (NCDs) such as: hypertension, diabetics, respiratory and cardiac diseases among people increase their susceptibility of being infected with the serious form of coronavirus which may lead to death in severe cases (BASU, 2020; Fang et al., 2020). With the passage of time prevalence of NCDs are rising in Bangladesh owing to cigarette smoking, harmful use of alcohol, unhealthy eating practice and lack of physical activities(Leung, 2020; Rawal et al., 2017; Zaman et al., 2015). However, persisting stigma and discrimination regarding COVID-19 in health care systems create barriers to avail and access to NCDs care continuum for both COVID and non-COVID individuals (Hasan, 2020). For example: Since the pandemic started, prevention and treatment services for NCDs disrupted throughout the world especially 53 % for hypertension, 49% for diabetes and 31% for heart diseases(WHO, 2020). Therefore, lack of efficient management of integrated COVID-19 and NCDs treatment during this ongoing pandemic may deteriorate the scenario for both of the NCDs care continuum and treatment of the patients infected with coronavirus (Thakur, 2020). To our knowledge, no such study still has been conducted in Bangladesh which has highlighted the COVID-19 related stigma's impact on care of NCDs patient. Additionally, since

COVID-19 is a complete new phenomenon in the field of health related research, this study could be influential for policy decisions in the context of Bangladesh. Hence, in order to minimize NCDs risk and improve NCDs care continuumduring the COVID-19 pandemic, this study may contribute to a better understanding about how stigma related to COVID-19 is influencing the diagnosis and treatment of NCDs.

1.3 Objective of the study

The main objective of this paper was to identify the role of COVID-19 related stigma to NCDs care continuum in Bangladesh. Other objectives were to provide a deep understanding about how COVID-19 related stigma can play crucial role in NCDs care and some policy recommendations to continue integrated NCDs and COVID-19 care during the ongoing COVID-19 pandemic.

2. Methods

In this study, we conducted a scoping literature review to find out existing evidence regarding role of COVID-19 related stigma on the NCDs care continuum. Our objectives were to describe the available resources including reports and articles that documented the role of COVID-19 related stigma on any feature of the care continuum of NCDs in Bangladesh and provide policy recommendations to integrate identify COVID-19 and NCDs care. The term "care continuum" was explained as prevention, seeking care, diagnosis and treatment. A scoping review of existing literatures was considered as the most feasible methodology as it would help us to map all sorts of available literatures supporting this research topic (Arksey & O'Malley, 2005). This framework provides an approach to conducting a scoping review through (1) selecting the research objective (2) identifying relevant studies in the area, (3) study selection, (4) charting the data, (5) summarizing and reporting the findings.

2.1 Identifying relevant studies in the area

We conducted a rigorous search of media reporting, peer-reviewed articles, grey literature abstracts. We searched in Google Scholar and Pubmed to identify peer-reviewed literature. Additionally, we conducted targeted searches of the national daily newspapers of Bangladesh including 'The Daily Star', 'ProthomAlo', 'Bdnews24.com', 'United News of Bangladesh', 'The Financial Express', 'New Age', 'Dhaka Tribune' and international media organization such as: Project Syndicate.org. Moreover, we conducted searches of grey literature databases such as medRxiv, World Heart Foundation, World Health Organization and Care International. We used the following search terms or key words to identify relevant literature "COVID-19 in Bangladesh" combined with either "perspective", "disparities", "fear", "anxiety", "stigma", in addition to NCDs including: "cancer", "chronic respiratory," "cardiovascular diseases", "diabetes" "hypertension," and "chronic kidney disease" as well as "Overall NCDs".

2.2 Study selection

We included studies explaining: (1) COVID-19-related stigma and its impact on NCDs in Bangladesh, (2) reports exploring COVID-19 related stigma and its association to NCDs care continuum in Bangladesh, (3) integrated COVID-19 and NCDs care that explore the stigma, or (5) any reviews that provide insight on the mentioned topics in Bangladesh. In an effort to select the available evidences we only included COVID-19 related reports and articles published since 2020 and written in English. However, in this study we excluded reports and articles studies if they analyzed the relationship between COVID-19 related stigma and smoking or weight gain as well as mental health issues.

2.3 Data charting

We transferred the title, author, newspaper/media reporting/articles, year of publication, disease specific stigma and article overview for studies that met the inclusion criteria into an excel spreadsheet for data charting. We then organized and summarized the key findings into the following divisions: types of stigma related to NCDs, population experienced stigma and key findings then we organized them into classification for example: pattern of stigma, the role of COVID-19 related stigma in NCDs care and integration of NCDs and COVID-19 care continuum in Bangladesh.

3. Results

Following the existing newspaper/media reporting and journal articles in terms of the Non Communicable Diseases (NCDs) care continuum during the COVID-19 pandemic through the scoping review, total 22studies were included in this study to explore the role of the COVID-19 related stigma in non-communicable disease care using the scooping review.

Table 1: List of included studies from defined sources

Study Type	(n=22)
Newspaper/Media reports	16
Reports/Articles	06
Cases Non-communicable Diseases (NCDs)	
Cardiovascular diseases	05
Chronic respiratory	08
Chronic kidney disease	07
Cancer	05

Study Type	(n=22)
Diabetes	02
Hypertension	01
Overall NCDs	02
Newspaper/ Media Investigated	
The Daily Star	05
ProthomAlo	02
New age Bangladesh	02
The Financial Express	02
Dhaka Tribune	02
Bdnews24.com	01
United News of Bangladesh	01
Project Syndicate.org	01
Report/Articles	
PloS one	01
Philosophy, Ethics, and Humanities in Medicine	01
CARE International	01
medRxiv	01
World Heart Foundation	01
World Health Organization	01

Among the studies, 16 were the newspaper or media reports regarding the neglected NCDs care continuum whereas others are 06 journal articles and reports studied stigma towards the following non-communicable diseases (cardiovascular, respiratory, kidney disease, cancer, diabetes and hypertension) (Table 1).

Table 2: Characteristics of the included cases/studies (n=22)

Title	Author	Newspaper/ media reporting and Journal Articles	Year	Disease Specific Stigma and Discrimination	Article Overview
'Admissions to Hospitals: Patients left in quandary'	Islam, Z., & Mollah, S.	The Daily Star	2020	Stigma towards Cancer patient	Cancer patient failed to get chemotherapy because of the travel history from abroad. Resulted in denial of NCDs care.
'Do not let parents become patients'	Staff correspondent	The Daily Star	2020	Stigma and discriminatio n towards patients with NCDs	Massive disruptions of NCDs care as a result NCDs related mortality is on rise in Bangladesh
'COVID-19 exposes fault lines of Bangladesh's healthcare sector'	Ahmed, S. R., Islam, T. U., & khan, N. N.	The Daily Star	2020	Stigma towards patient with acute respiratory infections	Pneumonia patient failed to receive health care services because of doctors' fear of being infected with COVID-19 and eventually died being rejected from private hospitals due to COVID-19 related stigma. Inequality is a great concern to seek health care services in Bangladesh in which higher healthcare cost is a main underlying cause.
'Treat patients or be shut down'	Staff correspondent	The Daily Star	2020	Stigma towards patient with chronic Kidney Disease	Serious patient with chronic kidney disease were refused to be treated in private hospitals without COVID-19 test while COVID-19 testing procedure was not convenient for the poor patients in the existing private health facilities.

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Victims of denial'	Al-Amin	The Daily Star	2020	Stigmatized the asthma, heart attack and kidney patients	NCDs patients having symptoms associated with COVID-19 were denied by private hospitals.
'Coronavirus takes a test of human relations'	Staff correspondent	Prothom Alo	2020	Discriminato ry attitude towards patients with chest pain and pneumonia disease patients	Patients are suffering a lot to receive treatment for respiratory problems, chest pain and pneumonia etc.
Rejected from 6 hospitals, asthma patients dies in ambulance in Sylhet'	Staff correspondent	Prothom Alo	2020	Stigmatized patients with acute respiratory infections	Critical asthma patient died in ambulance in Sylhet after being rejected from hospitals due to fear and stigma associated with COVID-19.
'Health minister vows to punish private hospitals for turning away patients'	Staff correspondent	Bdnews24. com	2020	Stigma and discrimination towards patients NCDs	Patients died because of non-treatment in many private hospitals due to unavailability of the doctors
COVID-19: Health services for non-commun icable diseases significantly impacted'	UNB team	United News of Bangladesh	2020	Negative attitude towards cancer patients due to COVID-19	Postponements of public screening programmes of Breast and Cervical cancer

'DU student 'denied treatment by hospitals' dies'	Financial Express Team	The Financial Expressa	2020	Stigma towards Lung complication s patients	Postgraduate student of University of Dhaka died because of refusals from four renowned hospitals after suspecting him as COVID patient.
'Problems of falling sick'	Zahid, S. H.	The Financial Expressa	2020	Stigma towards kidney patient	During COVID-19 patients with kidney disease are suffering the as they are denied of proper dialysis.
'COVID-19 and healthcare denial'	Akhter, F.	New Age Bangladesh	2020	Stigmatized the patients with stroke and	Patients with stroke and digestive problem died because of the COVID fear, stigma and denial of health care services.
Patients suffer as hospitals limit services'	Kamol, E	New Age Bangladesh	2020	COVID-19 stigma and renal disease patient	Patients suffering from renal diseases died as private hospital denied renal care. Sufferings of the other patients isn't even monitored.
Overcoming the COVID-19 disruption to essential health services'	Manzi, A.	Project Syndicate. org	2020	Stigmatized the chronic Kidney patient	Kidney patient was denied to health care service delivery without having corona test.
'COVID-19 significantly impacts health services for non-commun icable diseases'	WHO	World Health Organization (WHO)	2020	Stigma towards diabetes, cancer and cardiovascul ar disease patients	Disruption of health care services for almost all the non-communicable disease patients- result from a survey conducted in 155 countries.

'Study: A month delay to cancer care might raise death risk'	Dhaka Tribune Team	Dhaka Tribune	2020	Cancer patients and stigma of COVID-19	Delay in treatment for cancer patient cause huge death tolls.
'Deaths from denial of medical treatment on the rise'	Samiul, S., & Anik, B	Dhaka Tribune	2020	Stigmatized the patients with chronic Asthma	Patient with asthma died as a result of denial of medial treatment from public hospitals.
'Bangladesh: Rapid Assessment Findings on COVID-19 Effects on Urban Health'	CARE	CARE International	2020	Disparities towards patients with diabetes, hypertension , respiratory disease, chronic kidney disease and cancer	Urban slum dwellers have higher NCD prevalence rates. Patients with these pre-existing disease are more likely to die from COVID-19 infection. As well absence of doctors and proper medical facilities is causing more deaths.
'COVID-19 across the spectrum: Bangladesh'	Hakim, F.	World Heart Foundation	2020	Cardiac patient and COVID-19	Private hospitals aren't admitting cardiac patients without the COVID-19 test report which takes minimum two to four days and thus results in worsening health condition even deaths for cardiac patients.
'Insights into the first wave of the COVID-19 pandemic in Bangladesh: Lessons learned from a high-risk country'	Siam et al., 2020	medRxiv	2020	Social Stigma and NCDs burden	Gaps is seen in health facilities readiness to protect the NCDs patients in the pandemic situation.

Impact of COVID-19 on Hospital Admission of Acute Stroke patients in Bangladesh	Hasan et al., 2020	PloS one	2021	Acute stroke Patients and social stigma of COVID-19	More than fifty percent reduction of the hospital admission of the acute stroke patients is seen during the COVID-19 situation.
A Duty to treat? A Right to refrain? Bangladeshi physicians in moral dilemma during COVID-19	Swazo et al., 2020	Philosophy, Ethics, and Humanities in Medicine	2020	Stigma towards patient with respiratory problem and kidney disease	Patient with pre-history of respiratory problem died without treatment for kidney disease after nearly a dozen hospitals

The table 2 shows the overview of the NCDs care continuum during the COVID-19 pandemic situation. Lack of awareness, poor management and monitoring are the key issues regarding the disrupted NCDs care continuum.

3.1 Stigma towards NCDs and continuum of care during the COVID Pandemic

A total number of 22 reports was taken in this study to evaluate the role of COVID-19 related stigma towards non-communicable disease patients as well as to frame the NCDs healthcare continuum during the pandemic situation. As regards it was seen that five studies included stigma of the health care service providers towards cardiovascular disease patients wherein eightreports included stigma towards respiratory disease patients of the healthcare providers. Seven studies included stigmatization towards kidney patients. Wherein stigmatization towards cancer patients was reflected in five studies. As well stigmatized perspective of the health care service providers was seen for other NCDs like diabetes, hypertension in the identified studies (Al-Amin, 2020; The Daily Star, 2020, Dhaka Tribune, 2020; Prothom Alo, 2020a; New Age Bangladesh 2020, Hakim, 2020; Samiul, 2020; The Financial Express, 2020).

3.2 Role of stigma on diagnosis and treatment of NCDs patients

Analyzing the role of stigma on diagnosis and treatment of NCD patients it was seen that NCD patients were severely neglected to get health care services in the recent pandemic crisis. There was multifaceted underlying reasons behind these inhuman situation towards

the patients from all walk of life and those reasons are gaps in preparedness, lack of safety facilities of the service provider, accountability or ethical guidelines of the service provider, social stigma towards corona and corona testing(Ahasan, 2020; Ahmed, 2020; Akhter, 2020; Al-Amin, 2020; Anwar et al., 2020;

3.2.1 NCDs stigma and serious disruption of health care services during the pandemic

Service disruption of health care due to NCD stigma was examined in 22 cases findings. Thus the patients were not able to get admitted into hospitals trying several times in many hospitals and it was quite impossible to seek any health care services to the patients having less or serious complications (Ahmed, 2020; Akhter, 2020; Al-Amin, 2020; The pandemic situation made the situation worst ever when doctor fled leaving the patient behind (The Daily Star, 2020).

3.2.2 NCDs stigma and avoidable death scenario

Mortality is rising extensively during the COVID-19 pandemic where co-morbidities increase the death risk of NCDs patients (The Daily Star, 2020a; Prothom Alo, 2020a; S. Islam, 2020; WHO, 2020). As well severe disruption of healthcare services was seen for the existing stigma and discrimination towards NCD patients when the symptoms of the NCDs are very much linked to symptoms of COVID-19. Death reports of many NCD patients due to the severe health care denial reflected the avoidable death scenario of the patients (Akhter, 2020; Al-Amin, 2020; The Daily Star, 2020a, 2020b; Prothom Alo, 2020b; S. Islam, 2020; Samiul, 2020; The Financial Express, 2020; WHO, 2020). Three deaths of the cardiovascular disease patients were seen who suffered from stroke and heart attack. Four patients died without treatment suffering from other respiratory diseases(Al-Amin, 2020; Prothom Alo, 2020b; S. Islam, 2020; Samiul, 2020). Two kidney patients died due to the lack of treatment facilities (The Financial Express 2020; Manzi, 2020).

3.2.3 Harassments of patients to COVID-19tests as a prerequisite for treatment

NCDs patients moved from one hospital to another to get services, wherein it was quite impossible for both severe and normal patients shown in many reports regarding the issue (Akhter, 2020; Al-Amin, 2020; Hakim, 2020; S. Islam, 2020; Zahid, 2020). Harassments of the NCD patients wasn't only for the refusal of the health care provider. As well as testing for COVID-19 as a prerequisites for seeking health care from the service provider made a big dilemma for general people.

4. Discussion

Though many studies have been conducted in Bangladesh addressing the COVID-19 pandemic, to the authors best of knowledge no such study explored the role of COVID-19 related stigma towards the Non Communicable Diseases (NCDs) care continuum which is the main uniqueness of paper. Exploration of this paper shows that there is an overall disruption of health care services of the NCDs patients due to stigmatization. Where in non communicable disease burden is increasing gradually along with the changing population pattern. COVID-19 stigma impacted the whole health care continuum in Bangladesh including prevention, diagnosis, care engagement as well as adherence to treatment of multiple NCDs patients reaffirming to go other study findings (Dyer, O., 2020 & Haider, A., 2020). Following the NCD care continuum, treatment of both COVID and non-COVID NCD patients were mostly disrupted due to the stigmatization of the pandemic state. Patients were not only indiscriminately refused from both the public and private hospitals, but also doctor even field leaving patient behind (The Daily Star 2020). Analyzing the outcome, it was found that there was an overall lack in the whole system or on health management of COVID-19 pandemic which affect the health care services. Since the beginning of the COVID-19, worldwide NCD care services have been impaired severely, wherein the situation is particularly worse in the context of lower middle income countries like Bangladesh (Yadav, et al., 2020). Our findings shows similar pattern with India where fewer people get access to treatment for diabetes, mental illness, and cancer treatment due to stigmatization of COVID-19 (Basu, 2020). As well as results from a WHO survey conducted in person living with non-communicable disease (PLWNCDs) shows that in India, Nepal, Bangladesh, Brazil, Pakistan, Ghana, and Iran people are unable to receive NCD services due to stigmatization because of COVID-19 (Yadav, et al., 2020; Weiss, 2008; WHO, 2020)

Consistent with other studies our findings shows that stigma was one of the significant factor of the disrupted health care services of the NCDs patients (Hasan, M.T., 2020). The overall situation demands framing the health care management considering the pandemic conditions. Otherwise achieving SDG goal 3 (target 3.4) would be a big challenge for Bangladesh, which aims to ensure good health and well-being reducing premature and avoidable death. Our exploration showed that multifaceted underlying reasons: gaps in preparedness, lack of safety facilities of the service provider, accountability or ethical guidelines of the service provider, social stigma towards corona and corona testing are responsible for this condition which must be addressed to shape an inclusive health care management.

5. Conclusion and recommendation

Bangladesh has been successfully combating COVID-19 since last 17 months. Following the global burden of NCDs, Bangladesh is also having a significant percentage of NCDs patients which is likely to be much higher in the near future in terms of the increasing life expectancy and changing disease pattern. There are multifaceted reasons underlying the disruption of NCD care continuum during the pandemic. Thus the death toll due to the lack of the treatment was shown in many report findings as well the death toll is unexpectedly high beyond the reports of the newspaper/media reporting and articles. This literature review based article suggests that fear of being infected with coronavirus pandemic, internalized embarrassment, and negative attitude of the health service providers negatively influence NCDs care continuum during COVID-19. Government should implement behavior change communication program in order to reduce stigmatized view of people regarding COVID-19. Mass media can play a vital role in this regard. Importance of good governance and accountability in health care sector is unavoidable. Beside integrated treatment for both NCDs and COVID-19 can only be a possible solution to this life threatening situation. Cases included in this study found that integrating NCDs and COVID-19 care can both reduce stigma for patients and reduce the barrier to continue for NCDs care. The main limitation of this study is scarcity of available researches that is conducted in Bangladesh. Thus further research must be done in a broader context to explore the role of COVID-19 related stigma in terms of the NCDs patients in order to ensure universal access to health care system to achieve health related sustainable development goals by 2030.