November 2020
Developed By
Bangladesh Non-Communicable Diseases Forum

POLICY BRIEF
on NCDs and COVID-19
in Bangladesh
Acknowledgement

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NCDs is the leading cause of death in Bangladesh

Bangladesh is a country of more than 160 million people where the number of NCDs patients is increasing rapidly. In 2013, 80% of all NCDs deaths occurred in low- and middle-income countries while the same trend is still being observed in Bangladesh as 67% of total death is directly contributed to NCDs that turns 886,000 deaths a year. In NCD country profile Bangladesh 2011, more than 50% of NCD death deaths have been shown to be due to cardiovascular diseases and rest from other NCDs. Institute for Health Metrics and Evaluation (IHME) stated that NCDs, especially cardiovascular diseases, diabetes, chronic obstructive pulmonary disease (COPD), and cancer were the key reason for causing death in Bangladesh in the year of 2017. Another data provided by IHME also shows that NCDs not only contribute to the highest mortality rate but also to the disability, reaching it up to 40%.

COVID-19 status and experience in Bangladesh

Although the new-normal lifestyle gives an impression that the COVID-19 situation is being well taken care of, deep down the health experts do fear a different picture. Up to 2nd November 2020, Bangladesh has identified 409,252 COVID-19 cases among which death cases are 5941. In Bangladesh, about 71% adults have one or two risk factors and substantial proportion of people have three or more NCD risk factors. According to WHO Bangladesh COVID-19 Morbidity and Mortality Weekly Update (MMWU), As of 26 October 2020, from Dhaka (capital) division 66.3%, Chattogram 12.5%, Khulna 5.6%, Rajshahi 5.2%, Sylhet 3.3, Barishal 3.5%, Rangpur 4.5% and Mymensingh 2.1% COVID-19 cases were reported. According to BDHS, 2017-18, more than one in every four adult (18+) are suffering from hypertension while one in every ten adults in Diabetes in Bangladesh, such NCDs prevalence is giving a fatal outcome in the context of COVID-19. The Lancet NCDI Poverty Commission said that Non-Communicable Diseases and Injury (NCDIs) covers more than a third of the disease burden of the poorest people globally, resulting in 800,000 deaths per year among the aged who are below 40 years. However, the daily test case percentage in Bangladesh is still high compared to the global trend. As of 5th October 2020, the positivity rate was 18.5 percent though the World Health Organization recommended to achieve positivity rate lower than 5 percent. Furthermore, the acute shortage of quality-PPE and other safety equipments have caused more than 8092 health care professionals infected. The COVID-19 patients who need emergency medical intervention are not being attended by the health care professional due to the shortage of medical-grade PPE. On another, the high expenses regarding the test and treatment of COVID-19 has become a burden for many who are being bounded to go in private hospitals due to the huge pressure at government’s one. A Lancet publication on the unethical approaches of health care system, it states that the government did not allowed the private sectors to do the COVID-19 test and a charge has been applied, which simply indicates that the poor are excluded. Experts fear that a lack in management is making Bangladesh heading towards an “unpredictable destination”.
NCDs services during COVID-19 in Bangladesh

A survey of 155 countries conducted over three weeks in May 2020 by WHO states that prevention and treatment services for NCDs have been severely disrupted since the COVID-19 pandemic started, and low-income countries like Bangladesh are the most affected. In Bangladesh, the patients of NCDs, especially cancer, cardiovascular disease and diabetes are neither receiving proper treatment nor the required medicine. Situation for people living with NCDs is becoming worse due to the ignorance in clinical management, risk communication management, and the health care services of NCDs.

Diabetes

Diabetes is one of the four major types of NCDs that largely contribute to the morbidity and mortality. WHO World Health Day 2016 reveals that more that 80% of diabetes death occur in the Low-and-middle-income countries. Both in urban and rural areas in Bangladesh, the high prevalence rate of diabetes is been seen, weighing the rate of type-2 diabetes from 4.5% to 35.0%. Moreover, the number of COVID-19 patients is increasing in Bangladesh where diabetes has a high rate of prevalence. People with NCDs are shown to be more vulnerable to the severe effects of COVID-19. More than 8.4 million people (10% of the population) are estimated to be living with diabetes and a similar number are at the risk of developing type-2 diabetes (IDF Diabetes Atlas), and the prevalence will be 13% by 2030. Furthermore, as a fast economic growth country, Bangladesh is being experiencing rapid urbanization for the past several decades and such a trend of development is contributing in the raise of chronic diseases as the popularity of processed and altering food habit as a regular meal is increasing along with less physical activity. As the identified cases of COVID-19 is 409,252 among which death cases are 5941, this number provides a sense of importance for the NCDs patients to ensure their access to the health care required to manage their condition.

Cancer

Cancer has become a hidden burden both on a patients’ physical and economical state. In 2018, World Health Organization (WHO) reports that around 150,781 new cancer cases in Bangladesh, among them 83,715 male and 67,066 female cancer patients. Female patients are mostly become the victim of breast cancer while oesophagus remains at the top of cancer list for males in Bangladesh. Near 13 thousand cases made breast cancer accounts for the 8.5% of all cancer patients, and 6,844 of them die of the disease. An estimated prevalence rate of breast cancer among 15-44 years female is 19.3 per 100000, and this incident rate is growing on a daily basis due to the improper screening, maltreatment, lack of awareness and motivation for its treatment and management.

Cardiovascular Diseases

In low- and middle-income countries like Bangladesh, an epidemiological transition of disease pattern is being seen, increasing the prevalence of CVDs, diabetes, cancer etc., and declining the infectious diseases. Among the NCDs, CVDs contribute most, especially heart diseases and stroke, to the mortality and morbidity in Bangladesh. According to World Health Organization, CVD accounts for 30% of death whereas NCDs for 67%.
Mental Health

Psychological complications, such as stress, depression, anxiety, frustration, etc., are expanding their areas, leaning on the shoulder of COVID-19. The uncertainty of life made everyone experience a razor-sharp terror due to the experience of great social isolation targeting on COVID-19. An article published in Lancet states that Bangladesh has around 162.7 million residents, and third of this population are children and adolescents (0-14 years) among whom 24 million has enrolled in school in 2018. The national prevalence of mental disorders among children and adolescents is advancing its grip, ranging from 13.4–22.9%. An online survey indicates a high percentage of depression (46.9%) and anxiety (33.3%) among Bangladeshi students. Another web-based cross-sectional survey on 476 university students reports 82.4% students to experience mild to severe depressive symptoms and 87.7 students to mild to severe anxiety symptoms. Whereas before pandemic according the National Mental Health Survey 2018 revealed the prevalence of depression 6.7% and anxiety 4.5% among the adults. The pandemic hours too have put a translucent picture of the socio-cultural factors that affect the mental health of women. The domestic chores and care activity raised in a drastic manner compared to the pre-pandemic elevation for schools and offices being closed and the new trend of work-from-home. Taking care of the family needs, cooking and other chores without home assistant who are forbidden initially as an act of awareness, in-house adult and sick people care, office work if employed together with extra hygiene precautions leave no room for women themselves. On top of that, the sardonic action and use of mordant words of family members make the realm of mental disturbance of women even more extensive.

Chronic Obstructive Pulmonary Diseases

Chronic Obstructive Pulmonary Disease (COPD) is another important public health concern, and its prevalence of COPD seems to be greater among males, ranging from 7% to 22.0%, compared to females that range 6.4% to 10.6%. The low socio-economic groups (16.3%) are more affected by COPD than the high socio-economic groups (11.1%). Another study suggest that the pooled prevalence of COPD varies on the basis of the chain of age as its prevalence rate seems to be 7.5% in 40-49 years, 21.5% in 50-59 years, and 39.30% in 60-69 years. One of the main contributors that help in developing COPD is indoor biomass smoke exposure, such as wood, cow dung etc. Hence COPD is more prevalent among the rural people, ranging from 16.4% to 17.3% than the urban (9.9%).
Poverty hit people even harder than COVID-19, the fear of being empty stomach was more terrifying than being affected by the coronavirus. During the countrywide lockdown to prevent the quick spread of COVID-19, both urban and rural low-income people experienced a similar kind of loss of income in their respective working zone. The low-income people, either farmer or garments workers, lose the source of income, it so happened that for two or three days there was nothing to cook, they were just leaving on cheap bread. The strict constriction of economic activity has made people to move below the poverty lane, making the low-income and vulnerable people more vulnerable, and helped increase the already existing inequality. The garment industries make 84.21 of the country’s total exports and 20% of the GDP, engaging 4.1 million workers in this sector which was hit very hard by COVID-19, hence lowered the employment rate drastically 27. In such a scenario, it was becoming difficult for these people to provide family with the minimal food for survival. Moreover, the price of drugs and treatment cost was beyond their affordability, making the pocket expenditure in a terrifying level, hence raising medical expenses were a far cry for these people.

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Other Factors Related to NCDs and COVID-19

Educational

To manage any difficult situation, it is important to have a comprehensive communication strategy to make public aware so that they can sort the right out the wrongs. In this pandemic hour, it is necessary to make the young people understand the transmissibility, severity and other related measure that are associated with COVID-19. The inadequate and anxiety-provoking information given by the media built the pervasive community anxiety that ends up entwined with disease outbreak. In social media, the spread of non-scientific information along with falsehoods and rumors shows a conspicuous lack in knowledge regarding the treatment, and management of COVID-19. Interestingly, some of the health care professionals, even the nurses started to prescribe selected medicine for various diseases without even seeing the patients or knowing the symptoms, and a group of people with insufficient health knowledge blindly followed the given instruction which may bring a fatal result.

Nutrition

The staying-at-home initiative of the government of Bangladesh, to ensure the social distancing and prevent the spread of COVID-19, has ultimately reduced the daily movement of both the adolescent and adult people. Being confined within the four walls helped the rate of depressive illness to increase while creating an extra craving for unhealthy diet. Study suggests that people tends to eat more while experiencing symptoms related to depressive illness 28, and closure of educational institutions together with prolonged confinement within the home have aggravated the level of depression, and made to go on binge and take unhealthy snacks. Moreover, the unhygienic way of food process of restaurant and processed food industries are seriously impacting health of its consumers by causing numerous chronic diseases, and the nutrition value of the food is often overlooked 29.

Gender

Gender discrimination has always been in the spotlight in a country like Bangladesh where the woman hardly gets the treatment that is expensive. Although lots of people and organization talk about the high prevalence of gender discrimination, none takes the efforts, in truth, to minimize the gap in between. Less access to legal support and health care service added dimension to the domestic violence while the rape and in-house violence have reached in its peak in this pandemic hour. Despite the law against it, frequent cases of child marriage happened afterwards the closure of educational institutions. Experts fear that the burden of economics stress going to affect the women’s lives on a large scale, their education might hamper to minimize the expenses while the rate of early marriage would be witnessing a sudden rise.
What are the challenges?

- The Health Policy only included recommendation related to the NCDs, leaving a blank room for specific policy recommendation related to pandemic disease management. The access to drugs and private sector management can still have a defined shape in the policy.
- As 67% people of total population are dying due to the NCDs, and 55% are dying by the four major NCDs (Diabetes, Hypertension, Cancer, COPD) yet the treatment guideline for COVID-19 does not address NCDs properly. Moreover, the indoor and outdoor management for COVID-19 gets no priority in the guideline.
- The home-based COVID-19 patient management does not state NCDs related co-morbidities, and the pre-and-post traumatic stress management.
- NCDC Operational Plan lacks information regarding the NCDs management during disaster and pandemic like COVID-19. The scope for telemedicine, public outdoor, and private service for NCDs do not even have a vague portrayal. Resource allocation for management, capacity development, and research on NCDs and COVID-19 seems not be incorporated despite great importance.
- Although the prevalence of NCDs demands a NCDs management Committee including mental health, no initiative is being seen related to its formation.
- Bangladesh SDG National Target Tracker only included the Reduce death rate due to road traffic injuries to 1.2 per 100,000 people. Despite the gigantic rate of prevalence and disruption of services, Diabetes, Hypertension, Cancer, and Mental Health Indicators are not on the act process.
- Wife of ruhul haque sir and nasim, ex health minister
- The corruptions both in the management and health care services have made the mass people suffer beyond their imagination. The expenses related to the treatment and drugs crossed far ago the lane of affordability.
- The health care providers do not have a sense of safety as there is an acute shortage of quality personal protective equipment (PPE) that exposes these frontline warriors to the danger, decreasing their confidence to examine patients closely. Bangladesh Medical Association states that 112 doctors have already died by the COVID-19 infection and total 8125 health care providers have been affected 30.
Success Stories for NCDs in Bangladesh

The turmoil created by COVID-19 makes the world stand fore a mirror and sees the frailty of existing services which ultimately fueled the process of some initiatives, and that’s Our Success Stories.

Telemedicine

Telemedicine has only been a widely enunciated term in health sectors until COVID-19 turned a global pandemic. The growth of telemedicine was fueled when the government of Bangladesh imposed lockdown to prevent the spread of COVID-19. Leaning on the shoulder of development, internet reach and smart-phone use has increased, creating the ecosystem more accessible for both the telemedicine service providers and customers. Many health care professionals are now consulting their patients through video conference, and several healthcare platforms have been launched to facilitate telemedicine.

NCDs in the Limelight

A large number of people are living with NCDs in Bangladesh, yet the treatment guideline and other health service related documents do not address it properly and the NCDs patients themselves lack knowledge and management related the health condition. Interestingly, NCDs patient vulnerability in front of COVID-19 has awake the conscience of both the patients and mass people. To reduce the burden of NCDs by promoting healthy lifestyle while making people aware of its risk factor, various initiatives are being taking along with the online trainings facilities both for the health care service providers and patients. The young people are seem to be now more interested in the subject matters related to health, including diet and indoor management of NCDs for themselves and the parents living with NCDs. Moreover, awareness and guideline for better NCDs management related approaches on behalf of public and private sectors has prioritized the importance of NCDs nationally, making the concerned personalities interested to work and invest to reduce the prevalence of NCDs and making the a better world for the people leaving with NCDs.

What are the recommendation from PLWNCDs and Health Service Providers?

The following recommendations are given by the health services providers and the people living with NCDs.

- The capacity and competencies of the health system should be strengthened for the early detection, resource allocation, and management of non-communicable diseases and their risk factors.
- A health-promoting environment should be created to reduce modifiable risk factors for NCDs and underlying social determinants.
- The health service for the people living with NCDs should not be the generalized one; rather there should be a separate health service for NCDs patients.
- Those who are involved with telemedicine services need training regarding the effective service delivery, meanwhile a central telehealth service initiative should be inaugurated.
- The NCDs patients should be up-to-date regarding the information related to the NCDs, its treatment and management along with its reciprocal relation with COVID-19.
- Ensuring a double-check of the effectiveness of medicines from abroad in the context of Bangladesh, and these medicines should not be prescribed by a doctor or be in the market beforehand.
- A local language knowledge hub facilitated by the senior level mentors should be established where the mentors will give speech and share knowledge.
## Policy Recommendations

The following gaps have been identified with possible recommendations through several consultation meeting to ensure the NCDs in different activities related to COVID-19 Management in Bangladesh.

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<th>Gaps</th>
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<tr>
<td>Health Policy</td>
<td>The Health Policy has included recommendation related to the NCDs, but there is no specific policy recommendation related to pandemic disease management. However, it only mention about preparedness of port to prevent infectious diseases. Moreover, access to drugs and the private sector management are not clearly mentioned in the policy.</td>
<td>NCDs service coverage at the public health sector and private sector should be mentioned clearly in the policy. As NCDs is a major cause for death, it needs to be prioritized in all the recommendations of the policy.</td>
<td>There is no budget indication in the policy which may be included in further review process by mentioning more budget allocation for NCDs.</td>
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<td>Drugs Policy</td>
<td>Drugs Policy did not mention about NCDs related diseases in the part of “Availability to Efficacious, Safe and Quality Drugs”.</td>
<td>Drugs Policy must mention about the affordability and availability to NCDs (Diabetes, Hypertension, Cancer, Mental Health) related drugs for all citizens of Bangladesh.</td>
<td>As NCDs is the major (67%) cause of death in Bangladesh, the Government should ensure access to drugs for treatment.</td>
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<tr>
<td>COVID-19 National Treatment Guideline</td>
<td>The Health Policy has included recommendation related to the NCDs, but there is no specific policy recommendation related to pandemic disease management. However, it only mention about preparedness of port to prevent infectious diseases. Moreover, access to drugs and the private sector management are not clearly mentioned in the policy.</td>
<td>Indoor and outdoor management for COVID-19 patients with NCDs should be described appropriately. Home-based COVID-19 patient management should clearly describe about NCDs related co-morbidities. COVID-19 related pre- and post-traumatic stress management should be included in the guideline. Patient counseling process may also be included as a clinical management of COVID-19 cases.</td>
<td>Technical team for guideline development is found lack of NCDs related experts which is reflected in the guideline content.</td>
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<tr>
<td>NCDC Operational Plan</td>
<td>The Health Policy has included recommendation related to the NCDs, but there is no specific policy recommendation related to pandemic disease management. However, it only mention about preparedness of port to prevent infectious diseases. Moreover, access to</td>
<td>NCDC OP should incorporate activities (health care service, capacity building and research) related to the NCDs and COVID-19 along with future emerging diseases. Mental health must be prioritized in the OP during this pandemic hour.</td>
<td>Upcoming annual review of the OP of NCDC should incorporate our recommendation.</td>
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<td>Points</td>
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<td><strong>Bangladesh Preparedness and Response Plan for COVID-19</strong></td>
<td>drugs and the private sector management are not clearly mentioned in the policy.</td>
<td>There should be a NCDs management Committee, including mental health. All others mentioned activities should focus on the NCDs as a priority issue.</td>
<td>Without focusing NCDs, this plan will not be able to manage COVID-19 in Bangladesh.</td>
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<td><strong>Multisectoral Action Plan for Prevention and Control of Non-Communicable Diseases 2018-2025</strong></td>
<td>This plan mentioned about several committee for COVID-19 management and one committee for mental health which did not include NCDs. Its clinical management, contact tracing, logistic purchase, research, risk communication did not include NCDs issues.</td>
<td>Ministry of Disaster and Relief should be included in this plan. DGDA, DGME&amp;FP, MIS, and NNS should be included to take action related to the NCDs.</td>
<td>As access to drugs is essential to the NCDs patients, DGDA must have a responsibility and activity in the Matisectoral Action Plan for achieving the targets of HNPSP and SDGs.</td>
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<td><strong>SDG National Target</strong></td>
<td>Multisectoral Action Plan did not include Ministry of Disaster Management and Relief which is essential to ensure the services during any disaster and pandemic like COVID-19. Moreover, the document mentioned about different departments of MoHFW which did not include Director General of Drug Administration (DGDA), Health Education, and National Nutrition Services (NNS). These stakeholders are very important within the Health Ministry to ensure the multisectoral</td>
<td>It is essential to include Diabetes, Hypertension, Cancer, and Mental Health related Indicators</td>
<td>As 67% people of total population are dying due to the NCDs, and 55% are dying by the four major NCDs (Diabetes, Hypertension, Cancer, COPD) which demands these diseases related indicators to be in the SDG National Target.</td>
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<td><strong>HNPS</strong></td>
<td>Bangladesh SDG National Target Tracker has only included the reduction of death rate due to road traffic injuries to 1.2 per 100,000 people. It did not include Diabetes, Hypertension, Cancer, and Mental Health Indicators.</td>
<td>NCDC OP should include a systematic program for community engagement and private sector activities.</td>
<td>Without effective community engagement, private sectors involvement</td>
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<td><strong>Child and Young People</strong></td>
<td>NCDs prevention and management for the Children and young people are not mentioned in any activities or documents in Bangladesh.</td>
<td>Other relevant OPs should also include NCDs related activities as per requirement.</td>
<td>and NCDs Service and Clinical Management, the target related to premature death and the overall mortality in Bangladesh cannot be achieved.</td>
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<td><strong>Research</strong></td>
<td>No research, related to the COVID-19 and NCDs, are identified in NCDC, CDC and other relevant Operational Plan.</td>
<td>All the program of Government and donor agencies should include children and youth people focused activities.</td>
<td>Without addressing COVID-19 and NCDs issues for children and young people, Bangladesh will face a huge burden related to the NCDs, especially Mental Health in near future.</td>
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<td>The Government should include the NCDs related research in different Operational Plan, especially in the NCDC and CDC office. The following researches are proposed to include in the Operational Plans: Status of NCDs among the COVID-19 patients need to be identified to understand the NCDs burden among them; Gaps in the Intensive Care for Clinical Management of NCDs patients; Why mortality is lower among the COVID-19 patients in compare to the neighboring and other countries; how and to what extend NCDs patients are affected by the COVID-19 and identify the social determinants of the NCDs and Covid-19; Identify the gaps of the health system to explore the causes for COVID-19 infection among</td>
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<td>Without having research on NCDs and COVID-19, Bangladesh will not be able to manage critical COVID-19 patients.</td>
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## Policy Recommendations

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<td>the physicians and other health care professionals; Health system preparedness related to the future COVID-19 infection dynamics; preparedness and categories on the basis district demography and socio-economic structure related to the NCDs; Scope of telemedicine to provide NCDs services among general people as well as COVID-19 affected people.</td>
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<td>NCDs Budget</td>
<td>Although Bangladesh is experiencing 67% death related to the NCDs, only 2.5% budget is allocated for NCDCs within the Ministry of Health and Family Welfare. As World Bank, ADB and USAID are providing support to Bangladesh Government to manage COVID-19; they have not yet prioritized NCDs within their proposed activities.</td>
<td>Health budget should be allocated 5% of the GDP and the major portion of total health budget should cover the NCDCs. As Government already allocated extra budget for COVID-19 in this year, NCDs should be prioritized in and cover-up by the budget. Moreover, World Bank, USAID, and ADB should include NCDs related activities in their proposed project.</td>
<td>Without resource, NCDs will be ignored and Bangladesh health care system will not be able to manage properly this pandemic.</td>
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Thanksgiving

BNCDF pays a deep sense of gratitude to the following participants (selected) for their functional cooperation and being generous with their time in participating in the virtual meetings that shaped the Policy Brief on NCDs and COVID-19 in Bangladesh. We also pay our heartfelt gratitude to the participants whose names are not included here.
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