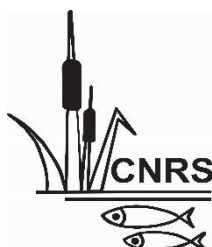


Reducing Dietary Related Risks associated with Non-Communicable Diseases in Bangladesh (RDRNCD)

Successes and Gaps in Reducing NCDs: Policy Recommendations



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Reducing Dietary Related Risks associated with Non-Communicable Diseases in Bangladesh (RDRNCD)

Successes and Gaps in Reducing NCDs: Policy Recommendations

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Abstract

This chapter is an attempt to critically analyze the related policies to prevent and control major Non-Communicable Disease (NCDs) in Bangladesh. It also focuses on the health system response to NCDs that are also aligned with other different NCDs related policies of the country. Data and information were collected through document reviews. The authors reviewed relevant policy documents of the Government. The chapter briefly analyses the policies related to NCD prevention formulated under the ministries of health, agriculture, food, among others. It is evident that with the policy initiatives the Ministry of Health and Family Welfare (MOHFW) is committed to scaling up efforts to prevent the increasing incidences of NCDs in Bangladesh. Since 2003, a line director is made responsible for the Public Health Intervention and NCD Control under the Directorate General of Health Services (DGHS). However, the analysis identifies specific policy gaps that can be brought to the attention of the policymakers for future actions. No doubt that the government has initiated many NCD-related policies and measures. All the new NCD related policies are consistent with the WHO Global NCD Action Plan. However, they lack proper planning, implementation, and monitoring mechanisms. It has been found that the reasons behind limited implementation of NCDs related policies are lack of political commitment, insufficient resources, and technical capacity as well as industry influence. The study suggests that the government should take the initiative to develop collaboration among different institutions related to NCD care, including education to include the issue in the curricula and establish standards and protocols for NCD services at all levels of healthcare services. There is a need of increased government commitment to develop a holistic NCD prevention policy to address all risk factors and establish governance mechanisms to attain better policy outcomes considering other contextual factors, e.g., political support, resource allocation that may influence policy implementation.

1. Introduction

Non-communicable diseases (NCDs) are alarmingly on the rise in developing countries, including Bangladesh. A large number of people now suffer from NCDs, and these diseases are increasingly posing challenges to the health and wellbeing of the growing population of the country. The situation warrants that there needs to be concerted actions of concerned stakeholders to address the menace of NCDs that mainly include cardiovascular disease (CVD), diabetes, cancer, and chronic respiratory disease (WHO, 2019). Here, it can be mentioned that the need for combating the NCDs is included in the sustainable development goals (SDGs). It envisages reducing premature deaths caused by the NCDs through prevention, treatment, and promotion of mental health and wellbeing by the year 2030. These are also connected to other SDGs, particularly

SDG 1 (end poverty) (WHO, 2015). In 2017, the WHO Global Conference on NCDs reaffirmed it as a sustainable development priority in the *Montevideo roadmap 2018–2030* (WHO, 2018). The government of Bangladesh and Non-Government Organizations (NGOs) working in the country have undertaken multidimensional approaches to control NCDs. However, the incidence of various NCDs is increasing with the passage of time with growing adverse impacts. The above scenario suggests that Bangladesh needs comprehensive, coherent, and multi-sectoral policies and strategies at national and local levels to combat the spread of NCDs among the growing population. It is against this backdrop that the government of Bangladesh recently formulated and endorsed the *Multisectoral Action Plan for Prevention and Control of Non-communicable Diseases (2018-2025)* and has also set national targets for reducing NCDs and their risk factors. Furthermore, Bangladesh has some other sectoral policies that have links to the prevention of NCDs. The purpose of this chapter is to identify possible policy gaps or opportunities where strategies and efforts could be strengthened.

2. Non-Communicable Diseases in Bangladesh: Prevalence, Historical Trends, and Present Situation

Bangladesh faces double incidences of communicable and noncommunicable diseases. In recent times, NCDs have emerged as one of the most urgent and complex public health challenges in Bangladesh. The WHO has reported that in Bangladesh, cardiovascular diseases, diabetes, cancers, and chronic respiratory diseases cause 67% of all deaths with a sizeable number being premature. Premature deaths and disabilities suffered due to NCDs lead to financial and social problems for the public, family members, and the country as a whole. The high incidences of contagious diseases have been a historical problem in developing and tropical countries like Bangladesh. But, NCDs are rapidly increasing. This upward trend of NCDs can be attributed to various factors, including economic development, changing lifestyles, and nutritional transition accelerated by rapid urbanization (Al-Shoaibi et al., 2018). The growing trend of NCDs is a challenge to the existing healthcare system of Bangladesh, which is mainly geared towards addressing infectious diseases (Al-Shoaibi, 2018).

According to the ICDDR,B, NCDs claim the lives of 59% of all the deaths in Bangladesh (886,000 passings per year). In Bangladesh, both men and women have highly increasing rates of high blood pressure (20% for men and 32% for women). There were about 7.1 million diabetic patients in Bangladesh in 2015. However, a further 3.7 million undiagnosed cases might be there. In 2015, an estimated 129,000 deaths were attributed to diabetes. The impact of NCDs currently represents a more significant extent of disability-adjusted life years than the transmittable disease, maternal and child health issues, and nutrition-related causes combined.

Furthermore, the demographic transition of Bangladesh will lead to 18.8% of the country's entire population being over the age of 60 by the middle of the current century (Streatfield & Karar 2008). The factors like longer lifespans and a higher prevalence of NCDs imply that the time now calls for action in the prevention, diagnosis, and treatment of these conditions (Koehlmoos et al. 2017). The NCDs cause tens of thousands of deaths in Bangladesh, and the problem is considered as one of the development challenges for the country. This is also an important social and economic issue. For example, families are frequently losing their major income earner(s) due to NCDs, which results in poverty leading to financial hardship for the rest of the family members.

The existing prevention practices of NCDs are mainly governed by the available facilities of the health system. But, the government interventions and capacities to deal with NCDs are inadequate in providing health education at the initial or primary level and preventive and clinical treatment at the tertiary level, with little focus on preventive clinical care at the primary and secondary levels. However, the private sector mainly provides treatment services. Furthermore, currently, there is no well-organized process to keep policymakers abreast of all these issues (El-Saharty et al. 2013).

3. Policies and Strategies of the Government

Though the prevalence of NCDs is increasing, Bangladesh has made some noteworthy strides to improve the prevention of NCDs. Bleich et al. (2011) identified three initial national initiatives for NCD prevention. The Center for the Control of Chronic Diseases in Bangladesh (C3D) aims to develop community-based prevention and management programs that examine the link between noncommunicable diseases and poverty. It also identifies the health systems' responses to NCDs. Another critical development was the inclusion of noncommunicable diseases as one of five priority areas for the emerging health sector challenges outlined by the Health, Nutrition, and Population Sector Program. A crucial third effort was the launch of the government's Strategic Plan for Surveillance and Prevention of Noncommunicable Diseases in 2007.

3.1. Strategic Plan for Surveillance and Prevention of Noncommunicable Diseases

So far, this policy was the first strategic plan developed by the Directorate General of Health Services, Ministry of Health and Family Welfare in 2007. This strategy underscored several action plans such as for hospital-based surveillance, inpatient NCD surveillance in specialized institutes, and monthly reporting of morbidity and mortality attributable to NCDs, and inpatient surveillance in medical colleges, district, and Upazila hospitals, review meetings, publication of newsletters, reports, capacity building of the human resources and strengthening of information technology for the improvement of recording and reporting (Biswas et al. 2017).

The 'Strategic Plan for Surveillance and Prevention of Noncommunicable Diseases' was updated in 2011 and identified key risk factors which influence the onset and course of chronic diseases such as tobacco consumption, unhealthy diet (deficient in vegetables and fruits, and high-fat content), physical inactivity, high blood pressure and blood glucose, air, water and soil pollution, etc. To improve the current NCDs situation, it highlighted three significant areas of action in i) surveillance of NCD risk factors and NCDs burdens for generation of evidence for policy formulation and practical action; ii) health promotion and prevention of NCDs through the development of supportive environments, strengthening community actions and capacity building, and orient health services according to people's need. But it is not clear how a supportive environment would be created and what community actions are to be mooted and strengthened; and finally, iii) effective strategies to improve NCD care beginning from the primary healthcare level (Hussain et al., 2017).

3.2. Health, Nutrition and Population Strategic Investment Plan

The Health, Nutrition and Population Strategic Investment Plan (HNPSIP) has identified the key investment areas required to accelerate the pace of development in

the HNP sector in Bangladesh in line with the Sustainable Development Goals (SDGs) and targets, and the 7th Five Year Plan (2016-20) strategies of the government of Bangladesh. The goal is to ensure that quality HNP services are delivered and key services are provided more effectively, with a focus on equity. The longer-term aim is to move towards achieving universal health coverage as targeted in SDGs. The HNPSIP acknowledges the necessity of preventing the highly undesirable outcomes of the swift increase in Non-Communicable Diseases (NCDs) through focusing on public health, and an innovative lifestyle alteration programme and organized multi-sectoral actions to improve nutrition, environmental conditions through interventions on road safety, food safety, air and water pollution and agricultural practices that are currently undermining health. It also recognizes the need to improve social norms, reduce harmful practices, improve gender relations, and tackle the rising mental health problems in rural and urban settings. Under the HNPSIP, four essential action plans related to NCDs were formulated:

1. Development and implementation of effective, integrated, sustainable, and evidence-based public policies for noncommunicable diseases.
2. Strengthening the capacity and competencies of the health system for the integrated early detection, management of noncommunicable diseases, and their risk factors.
3. Development and strengthening of capacity for surveillance of noncommunicable diseases.
4. Provision of services for conventional and non-conventional NCDs, in particular, mental health, gender-based violence, suicide, injuries, and poisoning.

3.3. Multisectoral Action Plan for Prevention and Control of Noncommunicable Diseases

The government of Bangladesh was encouraged by the WHO to undertake a multisectoral action plan for the prevention and control of noncommunicable diseases; this strategy would last from 2018 to 2025, and 30 ministries and agencies would be a part of it. The Bangladeshi government implemented the *Multisectoral Action Plan for Prevention and Control of Noncommunicable Diseases 2018-2025* and established national objectives to decrease NCDs and their risk factors. The formation of a *National Multisectoral NCD Coordination Committee (NMNCC)* is in progress with the involvement of several key ministries, civil society, academia, and development partners to undertake necessary actions. This national multisectoral action plan is a priority blueprint for key stakeholders and includes an operational plan (2018 to 2021) in alignment with the 7th Five Year Plan and the latest Health, Nutrition and Population Strategic Investment Plan (HNPSIP) of the government of Bangladesh.

The implementation of the multisectoral action plan employs a ‘*Health in All Policies*’ approach, engaging actors outside of the health sector to influence public policies on shared risk factors, e.g., tobacco use, unhealthy diet, physical inactivity, harmful use of alcohol, and exposure to poor quality air. The health sector is envisaged to play a central role in mobilizing efforts and obtaining commitments from other sectors. The actions and activities intend to follow the efficiency principle of implementing low-cost measures with high health impact and are grouped into four major strategic areas.

Advocacy, leadership, and partnerships

The Multisectoral action plan approaches for NCD control require meaningful

involvement of a wide range of factors such as non-health government sectors, academia, private sector, civil society organizations, other organizations, individuals, families, and communities for undertaking appropriate actions that contribute to the improvement of health outcomes. Effective leadership is required to foster partnerships among various stakeholders to address the issue of the control of NCDs.

Health Promotion and Risk Reduction

In this area, the major focus is on the promotion and the development of population-wide interventions to reduce exposure to key risk factors. Actions include: full implementation of tobacco control laws; restrictions on the availability of retailed alcohol with comprehensive limits and bans on alcohol advertising and promotion endorsement through the enforcement of alcohol laws or adoption of the *Global Strategy to Reduce the Harmful Use of Alcohol*; replacement of trans-fats with unsaturated fats; mass media campaigns on salt intake reduction and reduced salt content in prepackaged or processed foods; encouraging adequate servings of fruits and vegetables; and providing a network of free public places for walking and cycling. Effective implementation of these priority actions will lead to healthier lifestyle choices among people. It will also lead to the execution of regulations and enforcement actions in tobacco and alcohol use and adherence to food labeling specifications.

Health Systems Strengthening for Early Detection and Management of NCDs and their Risk Factors

Health systems should be strong enough to ensure the success of NCD prevention and control. To improve the coverage of NCD services as extensively as possible, the program needs to be sustained by its inclusion in the universal health package administered through a people-centric approach. Actions under this area aim to improve the efficiency of the health system, particularly the primary healthcare system. The full implementation of the measures in this area should improve access to healthcare services, increase competence of primary healthcare workers to address NCDs, expand community-based approaches for early disease detection, improve referrals, greater integration of NCDs into health sector reforms and plans, empower communities and individuals for self-care, and ensure evidence-based interventions supported by universal health coverage.

Surveillance, monitoring and evaluation, and research

Accurate, available, and timely data is essential for evidence-based policy implementation. This area includes key actions for strengthening surveillance, monitoring, and research in NCD control. The desired outcome is to improve the availability and use of data for evidence-based policy and program development. Health information systems should integrate the collection of NCD and risk factor data from multiple sources and strengthen competencies for the analysis and use of information. The activities should facilitate NCD and risk factor research to enhance the knowledge base for effective interventions, and support the translation of evidence into policies and programs.

3.4. Relevant Sectoral Policies Having Bearings on NCD

In the past, the focus was on maternal and child health and infectious diseases instead of NCD control. However, in response to the rising incidences of NCDs, the government of Bangladesh has taken several steps to include NCD control as one of the priority

health agendas. Multi-national policy documents have acknowledged the rising concern regarding NCDs in the country. Bangladesh has ratified the Framework Convention on Tobacco Control (FCTC) and the *Smoking and Tobacco Product Usage (Control) Act 2005*, which restricts smoking in public places, and advertising. In parallel, a *National Strategic Plan of Action for Tobacco Control, 2007–2010*, has been adopted. For cancer control, the *National Cancer Control Strategy and Plan of Action 2009–2015* has been approved¹. The National Health Policy 2011 outlines an approach of integration of prevention, treatment, and rehabilitation services at all levels of health care, particularly for diabetes, high blood pressure, and heart diseases through lifestyle changes and health promotion awareness.

National policies in sectors other than health such as agriculture, food production, transport, sports, education, taxation, and trade also have a bearing on preventing premature mortality from NCDs. The national agricultural policy 2013 clearly emphasizes the need to diversify the agriculture sector and produce agricultural products with a higher quality of nutrition to satisfy the nutritional needs of the general population. However, there are no clear pathways to ensure the availability of fresh vegetables and fruits for city-dwellers. The *National Agricultural Extension Policy 2012* encourages measures to promote safe production of agricultural products by discouraging indiscriminate use of chemicals and pesticides, and by promoting the widespread application of Integrated Pest Management (IPM) practices. Emphasis is also given on the establishment of improved homestead gardens that grow vegetables and are produced throughout the year. However, the strategy encourages private sector engagement in the production and sale of quality seeds, but access to quality vegetable and fruit seeds, especially for city growers, is not mentioned. It is important to note that these policies reflect food safety needs but no definite reference is made to NCD risk factors.

The *National Safe Food Act of 2013*, formulated under the Ministry of Food (MoF), aims to ensure food safety. The Act empowered regulatory bodies in conducting research on food, standardizing the quality of food, and controlling the production, import, and sale of food products (Biswas et al. 2017). The organization formed in 2015 has been named the *Bangladesh Food Safety Authority*. At the same time, with assistance from the European Union, the Ministry of Food in partnership with FAO-MUCH (Meeting Undernutrition Challenge) is also updating the *National Food and Nutrition Security Policy (FNSP)* and the *Country Investment Plan (CIP)* that aim at creating inter-sector linkages and bringing about multi-sectoral participation. However, it is not yet clear how far the policy formulation team is linking NCD concerns with nutrition.

The *National Consumer Rights Protection Council* has been established under the *Consumers' Rights Protection Act of 2009* as a result of long term advocacy by *Consumers Association of Bangladesh (CAB)*. The Act gives protection to consumer rights if it is violated in anyway by the sale of counterfeit products, adulterated goods, products of low quality, the spread of misinformation, or the purchase of anything to a consumer that might endanger the consumer's health or life. But there, the sale of junk food is harmful to health is not specified. However, the government has imposed a 10%

¹http://siteresources.worldbank.org/SOUTHASIAEXT/Resources/223546-1296680097256/7707437-1296680114157/NCD_BD_Policy_Feb_2011.pdf

supplementary duty at the local supply stage on junk food considering its health risk in addition to a 15 percent VAT in the national budget for the fiscal years, 2017-2018.

Moreover, several policies have been developed that address the need for physical activity and active recreation. The *National Sports Policy 2013* and *The Education Policy 2010* recognize the importance of establishing and maintaining open space or fields in all educational institutions. The *National Integrated Multimodal Transport Policy 2013* under the Ministry of Road Transport and Bridges (MoRTB) emphasizes walking and cycling as a mode of communication. In 2016, it started observing 22nd September as the “World Car Free Day.”

4. Health System Response to NCDs

The *Ministry of Health and Family Welfare* (MOHFW) is responsible for ensuring primary healthcare to the people and is also committed to scaling up efforts to prevent the rising incidences of **non-communicable diseases** in Bangladesh. Since 2003, a line director has been serving for the Public Health Intervention and NCD Control under the DGHS.

NCDC Project

The Non-communicable Disease Control and Public Health Intervention Programme launched by DGHS (NCDC project of DGHS) in 2007 aimed to develop awareness about NCDs and NCD care with an emphasis on CVD and cancer. The principal activities of NCDC Project are to conduct training for healthcare providers at different levels, organizing awareness-building workshops, and supporting selected hospitals/institutes like National Heart Foundation Hospital & Research Institute, Ahsania Mission Cancer Hospital, and the Bangabandhu Sheikh Mujib Medical University by supplying equipment (DGHS 2007). It has been reported that the program has so far successfully developed an awareness of NCDs among senior citizens and provided different types of equipment and material for improving the quality of NCD care (Bleicher *et al.*, 2011)

NCD Corners

The DGHS has established ‘NCD corners’ in selected Upazila health complexes (UHC) in parallel with the existing services. Dedicated to providing services for CVDs, diabetes, and chronic respiratory diseases (asthma and COPD) and screening for certain cancers. This initiative serves as a fundamental approach for NCD service delivery in Bangladesh. Each NCD corner is planned to have dedicated staff and equipment and has been piloted in three UHCs (Alam *et al.*, 2013).

Upazila NCD Project

In 2007, the Ministry of Health and Family Welfare (MoHFW) introduced this project with the aim of developing NCD management capacity among public and private service providers in the Upazilas. It started with three Upazilas and later on expanded its services to 137 Upazilas by 2011/12. The project trained healthcare providers on NCDs and their detection and management at the primary healthcare level. Established dedicated NCD corners with one doctor and two nurses, equipped the Upazilas with the necessary equipment, ensured the availability of conventional anti-hypertensive and anti-diabetes medicines, and developed referral linkage for advanced management of the NCD illnesses (Bleicher *et al.*, 2011). However, the focus of this project is primarily on diabetes and hypertension.

Health Care Development Project (HCDP): A Public-Private Partnership (PPP) Project

The Health Care Development Project (HCDP) is an extensive public-private partnership (PPP) project for general healthcare delivery and is supported by the government of Bangladesh (GoB), the Dutch government, and a consortium of local banks. The aim of the program is to test a model of integrated care service delivery in urban and rural areas focusing on the significant NCDs (Bleichet *et al.*, 2011). A network of 20 hospitals and health centers are being developed in and around Dhaka, as well as in northern parts of Bangladesh. It provides free services (insulin, glucometer, children camp, other services), primary care (clinical service, training on glucometer operation and insulin injection for the patient, behaviour change communication etc.), secondary and tertiary care (diagnostic intervention, advanced surgical interventions, laboratory tests, radiology and imaging interventions), and general healthcare². It is also implementing programmes on awareness, education, and primary prevention of diabetes and other projects on diabetes prevention programme (e.g., diabetes prevention intervention study, the extension of diabetes care, and changing diabetes in children programme) (BADAS, 2012).

PEN Interventions in Bangladesh

The WHO Package of Essential Noncommunicable Disease (PEN) is a conceptual framework for strengthening the equity and efficiency of primary health care in low-resource settings. The PEN identifies core technologies, medicines, and risk prediction tools, discusses protocols required for the implementation of a set of essential NCD interventions, develops technical and operational outlines for the integration of essential NCD interventions into primary care, and evaluation of impact. The WHO supported the government of Bangladesh in piloting a model PEN intervention in Debhata Upazila under Satkhira district in 2012 (Zaman *et al.*, 2016).

A basic minimum intervention package with three strategic focus areas was implemented: (a) strengthening health systems through training and supply of equipment and medicines; (b) promoting medical information systems and evidence generation, and (c) creating public awareness through the observance of NCD related awareness campaigns. The pilot initiative concluded that essential PEN intervention is a feasible and realistic option at the primary healthcare level. Strengthening the skills of health personnel and the provision of essential medicines and technologies can improve the capacity of the primary healthcare system to deal with NCDs. In light of these findings, the government has initiated to scale up similar PEN interventions in several Upazilas.

5. Gaps in Policies to Address the Issue in a Comprehensive Manner

Strategic Plan for Surveillance and Prevention of Noncommunicable Diseases

Significant problems identified by the strategy document include capacity development at different tiers of the health system for providing NCD care, providing essential NCD drugs at the primary healthcare facilities, institutional arrangements for long-term follow-up and care, establishing a comprehensive database, and enforcement of NCD

²<http://sondhan.com/listing/bihs-general-hospital.html>

relevant laws. Additionally, developing intra and inter-ministerial coordination with MoHFW as the lead agency and coordination with non-state sectors, community participation for NCD management, and emphasizing prevention over treatment are other challenges worthy of note (DGHS, 2011).

Multisectoral Action Plan for Prevention and Control of Noncommunicable Diseases

This action plan suggested setting off a multi-sectoral NCD coordination committee (MNCC) by the Prime Minister and be chaired by the Health Minister. The NCDC programme of the DGHS will serve as the Secretariat to the MNCC and will organize six annual MNCC meetings. Among its activities are the engagement of local governments; awareness building for NCD prevention among stakeholders including policymakers and politicians; setting up healthy cities, schools, and workplaces; scaling up PEN interventions in primary healthcare and Upazila health complex, and making necessary NCD drugs available at the primary healthcare level. This document also suggests that the cabinet will be made accessible to stakeholders, donors, and media (GoB, 2018). The first meeting of the National Multisectoral NCD Coordination Committee (NMNCC) was held in November 2018 following the adoption of the plan. Chaired by the Minister of *Health and Family Welfare*, several critical decisions were taken in the meeting, including increasing human resources for the secretariat of the NMNCC, concluding memoranda of understanding with ministries of education, and local government, and establishing local multisectoral coordination committees³.

The success of the implementation of the strategy and the action plan will depend on how much the stakeholders can be involved in bilateral dialogue and partnerships. The document, however, segregates the implementing and the district level taskforces without any linkage between them. This does not reflect positively on the roles, responsibilities, and the ambits of the district level health systems.

Several policy documents on NCDs have been produced by various ministries, primarily by the MoHFW. However, some policy research studies suggest that despite the government’s commitment to operationalizing different policies and directives and establishing coherence among several strategies remains a significant challenge. A lot of exciting ideas are put forward, but the details of how the plans will translate those into action are not completely precise and clear. The NCDC Operational Plan recognizes the importance of coordination and partnership as the solutions for NCDs go beyond the health sector. However, the plans and strategies for collaboration or co-working with the Non-state actors are not elaborately mentioned in any of them.

Table 1: Sectoral Policies: Opportunities and Gaps

No	Policy/Strategy/Acts	Opportunities	Gaps
1	Operational plan (2017-2022) for Non-Communicable Disease Control	Comprehensive. Covers most of the prevention and control issues. Has a special unit on	The factor of the implementation plan is vague, especially the capacity development of frontline healthcare

³<http://www.searo.who.int/bangladesh/multisectoral-action-plan-ncd/en/>

		<p>NCD under DGHS. Includes junk food and food safety concerns.</p> <p>Increased budget allocation.</p> <p>Invites partnerships with NGOs. Talks about coordination</p>	<p>staff.</p> <p>No concrete plan for community screening or awareness-raising.</p> <p>No coordination body has been formed until now.</p>
2.	Essential Service Package 2016	Included NCD screening facilities in essential services, mainly primary health.	Capacity development and monitoring plan is not clear
3.	Agriculture Policy 2013	Talks about crop diversification. Links agriculture to nutrition.	<p>No clear reference is made to NCD.</p> <p>No plan on making fresh vegetables and fruits available to consumers, especially city-dwellers.</p>
4.	National Agricultural Extension Policy 2012	<p>Focuses on the safe production of crops.</p> <p>Encourages homestead gardening.</p> <p>Promotes Private sector engagement in seed production and sale.</p>	<p>No clear reference is made to NCD.</p> <p>Plans for access to quality seeds are not laid out.</p>
5.	Safe Food ACT-2013	Bangladesh Safe Food Authority is formed	<p>Coordination with other agencies is still to be established.</p> <p>No clear reference is made to NCD.</p>
6.	Consumers' Rights Protection Act of 2009	<p>The National Consumer Rights Protection Council has been established.</p> <p>Expresses concern over consumer health caused by adulterated/unsafe food.</p>	Junk food is not recognized as a threat.
7	The National Sports Policy 2013	Promotes physical exercise and mentions establishing open space or fields in all	<p>Not made mandatory.</p> <p>Monitoring is not strong.</p>

		educational institutions.	Linkages to NCD is not made.
9	The Education Policy 2010	Promotes physical exercise and mentions establishing open space or fields in all educational institutions.	Not made mandatory. Monitoring is not strong. Linkages to NCD is not made.
10	National Integrated Multimodal Transport Policy 2013	Emphasizes walking and cycling as modes of primary commute. Announced Manik Mia Avenue will be car-free on the first Friday of every month. Talks about dedicating lanes for cycling.	Implementation is slow and inadequate. NCD linkages are not made.
11	National Food and Nutrition Security Policy (FNSP) and the Country Investment Plan (CIP)	Creating linkages and bringing about multi-sectoral participation	NCD concerns are not central.
12	National Plan of Action for Nutrition	Forging inter-sectoral partnership and coordination.	NCD concerns are not central.

Adopted from Husain, E. (2017)

6. Strategy to address the identified policy gaps

The national multisectoral action plan is seen as ambitious and challenging. There is also a lack of capacity in the *Ministry of Health & Family Welfare*, but it could be achieved through collaboration and adequate technical support. The involvement of different stakeholders from the beginning, along with support from the WHO and academics, are necessary. The sharing of case studies that highlight common challenges and best practices has the potential to support the implementation of the multisectoral action plan. Availability of up-to-date, relevant data, access to technical support for areas such as prioritization of actions, costing the action plan, and monitoring and evaluation methods would significantly improve the process of national NCD multisectoral action plan implementation. Regular opportunities to share national experience will help to achieve the time-bound target of having an operational NCD and contribute to the NCD related SDG targets by 2030.

A meaningful way to control NCDs is to focus on reducing the risk factors associated with these diseases. Low-cost solutions exist for government and other stakeholders to overcome the common modifiable risk factors. Monitoring progress and trends of NCDs and their risks is essential for guiding policy and priorities. A comprehensive

approach is needed, which needs all sectors including health, finance, transport, education, agriculture, planning, and others to work together to diminish the risks and dangers related to NCDs and promote interventions to prevent and control them to lessen the effect of NCDs on individuals and society.

Investing in better management of NCDs is essential. Management of NCDs includes detecting, screening, and treating these diseases, and providing access to palliative care for people is needed. High impact essential NCD interventions can be delivered through a primary healthcare approach to strengthening early detection and timely treatment (Varghese, 2019). Evidence shows such responses are excellent economic investments because, if provided early to patients, they can reduce the need for more expensive treatments.

7. Conclusions and Recommendations

The burden of NCDs is increasing rapidly in Bangladesh. So the focus of the health system should shift to continue to meet the needs of people, especially the poor (El Saharty 2013). On the other hand, Bangladesh has made efforts to develop NCD prevention policies, which are consistent with WHO Global NCD Action Plan. However, with increasing NCD burden and related adverse impacts, it is necessary to address the gaps of the existing NCD prevention policies and accelerate the implementation of the most effective interventions. Juma et al. (2018) made some recommendations for five African countries, which can be regarded as a relevant example to the context of Bangladesh.

- First, the government should reinforce the inclusion and implementation of 'best-buy' interventions in NCD-prevention legislation and policies across all relevant sectors.
- Secondly, enhanced efforts by regional and national policy-makers, NGOs, and other stakeholders are needed to ensure future NCD policy and implementation improvements.
- Thirdly, the availability of local evidence is needed to inform policy development, monitoring, and evaluation.
- Fourthly, there is a need to develop strategies to minimize undue interference by industries including alcohol, tobacco and food industries.
- Finally, further research is recommended in various areas. For example, assessing the impact of policies at mass level, contextual factors influencing both policy formulation and implementation.

As the risk factors for NCDs are determined by the social, environmental, and economic settings, coordinated action across multiple sectors is required. The sectoral policies, including finance, transport, education, justice, and local government, shape these environments, and therefore, a comprehensive government approach is needed to contain NCDs. For example, increasing the price of tobacco and sugary drinks through effective taxation reduces demand and consumption of these unhealthy products and leads to health benefits. Enforcing tobacco control legislation including smoke-free public places and bans on advertising and promotion reduces tobacco use and exposure to passive tobacco smoking. Measures should be taken, for example, to develop a common platform for surveillance with the participation of all stakeholders, prevention and management of NCDs in the community, and promoting research for cost-effective

delivery of NCD services. Effective leadership, multisectoral partnership, and community mobilization, apart from other interventions that have been cited in all NCD-relevant documents, e.g., advocacy, research, surveillance, etc., are essential for the prevention and management of non-communicable diseases. The government should take the initiative to develop collaboration among different institutions related to NCD care, including education to include relevant materials in the curricula and establish standards and protocols for NCD services at all levels of health care services.

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